Following *Buai*

The highlands betel nut trade,
Papua New Guinea

Timothy L. M. Sharp

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I hereby declare that this thesis is the result of my own investigations, and where I have drawn on the work of others, due acknowledgement has been made.

The text is no longer than 100,000 words.

Timothy L. M. Sharp
Abstract

This thesis is the first detailed geographic and ethnographic study of Papua New Guinea’s thriving betel nut trade. It tells the story of the trade of betel nut into the highlands of Papua New Guinea (PNG), and examines the daily lives and interactions of the diverse collection of participants involved in the trade – the ‘betel people’ – and how they have contributed to the making of a flourishing, contemporary and indigenous market.

Betel nut is a stimulant that has long been produced, exchanged and consumed throughout lowland PNG, but was absent from the pre-colonial highlands. Since the 1960s increasing numbers of highlanders have started chewing betel nut which has given rise to a long-distance wholesale trade that connects rural lowland producers to the highland consumers. Betel nut is now the country’s most important domestic cash crop, and its sale and resale is a prominent, and potentially lucrative, livelihood activity for rural and urban people in both the lowlands and the highlands.

This thesis is based on thirteen months nomadic ethnographic fieldwork in which betel nut, and the actors that shape its trajectory, was followed from the lowland production areas into the highland marketplaces and beyond. I document the considerable scale and complexity of the trade, the efflorescence of intermediaries within it, and the high level of specialisation amongst its actors.

‘Following’ betel nut and betel people also foregrounds the importance of social relationships, and the associated processes of inclusion and exclusion, to shaping the structure and the dynamics of the trade. The highly competitive and opportunistic nature of the trade leads betel people to transact in the same places and often with the same people, and it encourages them to cultivate and nurture those relationships which provide security and enable access in new places. Betel people trade to make money, but I suggest that trade relationships regularly overflow the marketplace. Further, the transactions within the trade are routinely conceptualised as more than simple commodity transfers. I also seek to frame the trade in relation to the power asymmetries between different actors, and emphasise the diverse manifestations of cooperation and competition in trade negotiations.

Drawing on the growing literature within geography and anthropology concerned with the social embeddedness of ‘economic’ activity, this research emphasises that the making of markets is a dynamic and contested process, one that is always spatial, grounded in particular places. In doing so it contributes to better understanding marketplaces, livelihoods, and the creation of alternative modernities in contemporary PNG. The betel nut trade is full of contradictions and tensions, but also the aspirations of a great number of ‘grassroot’ Papua New Guineans.
To my father, Neil Sharp, to whom I am forever indebted for instilling in me my interest in geography and in other cultures.

To all those who have died in search of green gold.
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Currency, political boundaries and language

The Papua New Guinean national currency is the kina (K). There are one hundred toea in the kina. At the time of fieldwork from January to December 2007, K1.00 was worth around A$0.42. The spending power of the kina has changed considerably over time. To make all kina values cited directly comparable, I have footnoted their equivalent 2007 value. This has been calculated using the Papua New Guinea consumer price index table in McGregor and Bourke (2009:277).

Throughout the thesis I refer to the Western Highlands and Southern Highlands provinces as they were at the time of fieldwork in 2007 and 2010 – prior to the formation of the new Jiwaka and Hela provinces which were excised from the Western Highlands and Southern Highlands respectively in May 2012.

The national lingua franca is Tok Pisin. Throughout the thesis where Tok Pisin terms are used for the first time, the English translation is given either in brackets, or as a footnote where some description is relevant. Tok Pisin translations are often provided throughout the text in order to clarify meanings for those readers familiar with Tok Pisin.

Note: The betel nut illustration at the start of each chapter is from Engler (1895:15).
Chapter 1

Introduction

This thesis tells the story of Papua New Guinea’s flourishing, contemporary and indigenous betel nut trade. It examines the daily lives of the diverse collection of participants involved in the trade, the ‘betel people’, their multiple networks of association and their uneven power geometries. This geographical ethnography of a market explores the sociality of trade, the interactions between different actors, and the agreements, tensions and contestations in the construction of markets. More broadly it is concerned with how a particular group of people make a living through the marketplace, with wider processes of socio-economic change, and with the creation of alternative modernities in contemporary Papua New Guinea (PNG).

Betel nut is a stimulant, the consumption of which involves chewing together three main ingredients; betel nut itself, betel pepper and slaked lime. This thesis uses ‘betel nut trade’ to refer to the trade in these three commodities. Similarly, ‘betel nut’ is used as shorthand for the substances, although distinctions are made where important. All these substances are produced widely in the lowland and coastal areas of PNG but not in the highland areas where the betel nut palm and the betel pepper plant will not grow, and where the shells and coral needed to produce lime cannot be found. Since the 1960s, and particularly from the 1980s, increasing numbers of highlanders have begun chewing betel nut, a significant cultural innovation that has been likened to the adoption of steel and tinned fish (Jackson 1976a:179). The adoption was an outcome of the addictive nature of betel nut, and facilitated by increased mobility, improved access to marketplaces and money. A complex and large-scale trade has emerged connecting the lowland producers to the consumers in the highlands, a region that today represents around forty percent of the national population (NSO 2003; Kenneth 2012).
Chapter One

The trade of betel nut into the highlands is a prominent part of a broader national trade and circulation of the substance. This trade and circulation is almost entirely domestic; nearly all betel nut produced in PNG is consumed domestically, and virtually all betel nut consumed in PNG is produced in the country. The trade into the highlands, the national capital of Port Moresby, the country’s second largest urban area of Lae, and into the resource extraction sites, involves long-distance and complex trading networks. In the smaller urban centres, and in lowland rural areas, the supplying trade involves much shorter, more localised and less complex trade networks. Considerable non-trade circulation of betel nut also occurs throughout the lowlands. The focus of this thesis is the trade into the highlands, including those lowland areas that are incorporated in the highland trade networks, and not the trade and circulation of betel nut elsewhere in PNG.

Betel nut was produced and exchanged widely throughout lowland PNG in the pre-colonial era, both in commodity and gift transactions. A clear disjuncture exists between this and the contemporary trade. The contemporary trade networks are geographically distinct from, and are of a far greater scale than, the pre-colonial exchange networks. They are also controlled by different actors and are more ‘market’ oriented. Today’s trade in betel nut is an innovation rather than an extension or expansion of earlier movements of betel nut. Betel nut continues to be an important item in ceremonial exchanges and of more informal everyday exchanges between kin and friends, but it is the contemporary trade which is the focus of this research.

The central actors within the trade are the highland wholesale traders who travel to the lowlands to purchase betel nut in marketplaces and in the villages of the producers, and transport it over long distances down rivers, along the coast and on roads back to the highlands. In the highlands it is initially sold in large urban wholesale marketplaces to marketplace vendors. Smaller volumes are on-sold to intermediaries who retail in still smaller volumes in roadside marketplaces and on the streets to the end consumers. Most betel nut consumed in the highlands will have passed through these four transactions, sometimes more. Other intermediaries are involved in transport and selling or buying on behalf of others. This proliferation of middlemen distinguishes the betel nut trade from the trade in fresh food, which is dominated by producer-sellers. Middlemen also distinguish the long-distance wholesale betel nut trade into the highlands, from the more locally focused trade of betel nut in the lowlands and into most lowland urban areas.

Throughout the thesis I refer to those involved in the betel nut trade as the ‘betel people’. This follows the way in which actors in the trade refer to each other collectively as ‘betel people’ (ol buai

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1 Small volumes of betel nut are traded across the Papuan (Indonesian) border to Jayapura to meet local shortfall. Very small quantities are exported to Australia and elsewhere to supply Papua New Guinean expatriates.
na daka lain, literally meaning betel nut and betel pepper people/group). The term ‘betel people’ has been used by a number of ethnologists and ethnographers who, interested in questions of cultural diffusion, defined the term in relation to consumption (see Rivers 1914; Riesenfeld 1947; cf. Lutkehaus 1981a). In contrast, by defining ‘betel people’ in relation to the contemporary trade I seek to emphasise the changing role of betel nut in PNG (Chapter 2).

The trade, which is thoroughly monetised and characterised by highly volatile prices, is big business and of considerable scale. For instance, around ninety tonnes of betel nut and seven tonnes of betel pepper is transacted each week at Kaiwei marketplace, the main betel nut marketplace in Mt. Hagen. When sold wholesale this is worth around K35 million per year. By the time it is sold on the street it is worth much more. Around 230 marketplace vendors sell betel nut, betel pepper and lime at Kaiwei marketplace daily. Kaiwei is the largest single marketplace but there are many other significant marketplaces throughout the country and countless small roadside marketplaces and street sellers. The trade cannot be considered marginal, either at the level of the national economy, where it rivals the most important export cash crops, or in terms of household livelihoods.

Despite the ubiquity of betel nut and its trade in PNG today, there has been little research focused directly on the commoditisation of betel nut or on its trade as a whole; this is particularly true of the highlands trade. The thesis outlines the dimensions of the trade: its everyday workings, its structure, the people involved and their interactions, the places which they connect and where they interact. The thesis offers a ‘thick description’ (Geertz 1973) of the trade, attentive to the importance of the social, cultural, historic and geographic context in which social action, including trade, is conducted. It examines the diverse economic practices through which ‘betel people’ produce, transact, arrange and remunerate labour, distribute, accumulate, possess and consume (cf. Gibson-Graham 2006b). Exchange is the central concern while the related processes of production and consumption are more peripheral in the discussion.

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2 Mt. Hagen, known to most simply as Hagen, is PNG’s third largest urban area and is the capital of Western Highlands Province.

3 The Papua New Guinea national currency is the Kina (K). See thesis front matter for details.

4 There is a range of research that focuses on betel nut and to a lesser extent the trade in the substance. For those few studies that deal with the trade, the focus has largely been on one aspect of, or one group’s involvement in, the trade rather than the trade as a whole. Research centres around either producers or the final marketplace vendors and has largely overlooked the important intermediaries that link them. The research on the betel nut trade fits into four broad groups. These are: 1) marketplace studies focused on fresh produce more broadly but with a tangential interest in betel nut (Jackson and Kolta 1974; Jackson 1976a; Walsh 1982, 1986; Bourke 1986a; Benediktsson 2002; Anderson 2008); 2) ethnographic studies which focus upon production communities and their engagement with the trade and associated social change. Most have been concerned with Central Province and the trade into Port Moresby (Hau’ofa 1981; Watson 1987a, 1987b; Hirsch 1990, 1995, 2007; Bergendorff 1996; Mosko 1999, 2005); 3) a focus on betel nut as a drug and the social role of betel nut (Schwimmer 1973,1982; Lepowsky 1982; Marshall 1982, 1987; Iamo 1987; Watson 1987a, 1987b; Lindstrom 1987; Hirsch 1990, 1995, 2007), 4) a number of brief accounts of the trade and the commercialisation of betel nut (Lutkehaus 1981a; Marshall 1987; Connell 1997; Allen et al. 2009), and one ethnographic film (C. Owen 2004).
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The research ‘follows’ betel nut (Marcus 1995; Cook et al. 2004, 2006), in particular the commodity phase of its ‘biography’, that is, when betel nut’s transaction as a commodity is its most important feature (Appadurai 1986; Kopytoff 1986). The commodity provides an entry point into the trade, and it provides a clear focus around which other stories can be told. In PNG, the story of betel nut has most often been presented from the perspective of lowland producers (see Mosko 1999, 2005; Hirsch 1990, 1995, 2007; Bergendorff 1996 and Watson 1987). In contrast, this research set out to investigate the betel nut trade into the highlands as a whole, and to attend to all those actors involved, rather than approaching the trade through a particular group of people or a particular locale. Through the course of the research, however, it became clear that the story of betel nut’s contemporary commoditisation and the trade was necessarily a story about highlanders, and in particular the highland wholesale traders, and of highland locales. Although these traders, as the key drivers of the trade, are central to the narrative, I have endeavoured to trace the entire networks from producer to consumer, albeit with an inevitably uneven coverage. The trade is nonetheless illuminated by an approach that is multi-sited, from multiple perspectives and is somewhat ‘(un)disciplinary’ (Cook et al. 2006:656–7). Such an approach has its strengths and weaknesses and invariably exposes itself to criticism. It is, perhaps, unable to offer the depth of understanding that an emplaced study could; but the aim was always an ethnography of a trade and not an ethnography of a particular trading community.

Trading betel nut is an important livelihood activity for a large and increasing number of people, rural and urban, lowland and highland. The trade connects different economic spaces throughout the country; from remote rural production areas in the lowlands to the hubs of the trade in the urban centres of the highlands, and beyond to the large-scale extractive resource enclaves. Betel nut is the ‘green gold’ of the ‘grassroots’. The trade can be very lucrative but also very risky. The marketplaces are awash with tales of rags to riches and of those who have lost it all, but for most people it provides ‘everyday money’ with which to pay school fees and buy rice, cooking oil, soap and other necessities, and which may afford them a few luxuries.

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5 Appadurai (1986) and Kopytoff (1986) note that in the same way that people have biographies and different phases in their lives, so too do things.
6 Although the Fuyuge people, with whom Hirsch works, as highlanders are not producers for the Port Moresby market, their Mekeo neighbours are. Hirsch illuminates the way in which betel nut’s increasing association with money has influenced Fuyuge cosmology.
7 Chris Owen’s (2004) documentary Betelnut Bisnis approaches the trade from the highland perspective although the focus is on one individual’s early experiments in the trade.
8 I use the term ‘grassroots’ (grassrut) to describe everyday people, as this was so often the way people in the trade described themselves to me, in particular to distinguish themselves from the wage employed, businessmen, or those with a formal education.
Despite betel nut being the ‘quintessential PNG commodity’ (Hirsch 1990:26), and by far the country’s most important domestically marketed cash crop, it remains noticeably absent from, or largely undervalued in, many accounts of the PNG national economy by economists and planners. It puts as much money in the pockets and *bilums* (string bags) of rural people as does cocoa (Allen et al. 2009:286), yet even minor export cash crops overshadow betel nut in most agricultural and economic reports. This is a fate suffered by economic informality more broadly. One objective of this thesis is to present an account of one part of the PNG economy that is central to the livelihoods of a great number of grassroots Papua New Guineans, and to make this visible to development planners, economists and government decision makers.

From the betel nut palm to the chewers’ mouth, the betel nut trade is controlled exclusively by Papua New Guineans, most of whom are grassroots people. This distinguishes betel nut from many other markets, and the trade in other commodities. Export cash crops connect producers into commodity networks, heavily influenced by global market fluctuations and multinational companies, in which Papua New Guinean producers are price takers. Likewise, the products sold in village tradestores are sourced from global markets in which Papua New Guineans are equally peripheral and lacking in power. There has also been no shortage of interventions by government agricultural officers, non-government organisations and commercial buyers that have attempted to improve the performance and efficiency of, or to inculcate particular business practices into, the trade in export cash crops and fresh food (Benediktsson 2002: 118-152; MacWilliam 2009). The betel nut trade has flourished despite, or perhaps because of, the near complete absence of such interventions. The near absence of external regulation and intervention makes this research a valuable study in the formation and organisation of markets, and their informal regulation.

It would however be naive to suggest that the betel nut trade presents a ‘pure’ case. The trade clearly does not exist in isolation from national and international economies. Many people who sell betel nut also grow and sell coffee and cocoa through international commodity networks, and with the money they earn they buy everything from Maggi noodles and mobile phones to Toyota

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9 I saw or heard of no non-Papua New Guineans involved in trading betel nut in 2007. I was however told of a number of European and Asian expatriates who had in the past unsuccessfully tried to gain a foothold in the trade – Williams (1969:5) noted that in the late 1960s Chinese shopkeepers in Lae were buying betel nut for resale. In 2012 I was told of Chinese businessmen in Lae operating as financiers for betel nut sellers, and paying agents to trade on their behalf (M. Namarong pers. comm. May 2012).

10 Some attempts were made by the Department of Primary Industries and Department of Agriculture and Livestock in the 1980s and 1990s to promote betel nut production in particular areas however little can be seen of these efforts today (see Korugl 1993).

11 A number of recent approaches to markets and economy have focused on the role of the state, NGOs, the World Bank and economists in making markets (Callon 1998; Elyachar 2005; Mitchell 2007). In contrast, Papua New Guinea presents a very different context, one in which the state, regularly portrayed as ‘weak’, is very often conspicuous by its absence.
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minivans and the petrol that runs them. Highlanders chew more betel nut during the seasonal coffee flush when people have more money, and less when school fees are due. Although the rise of the betel nut trade has been driven by indigenous Papua New Guineans, its emergence has nonetheless been associated with the development of export cash crop and fresh food markets in the country (Chapter 3).

The betel nut trade does not belong to the ““if you only knew”’ genre’ (Gewertz and Errington 2010:2) that unveils inequalities inherent in the connections between third world producers and first world consumers (e.g. coffee, green beans, sugar and pawpaw) or between first world producers and third world consumers (e.g. Coca-Cola, lamb flaps, instant noodles).12 The betel nut trade has its own unequal ‘relational geometries’ (Yeung 2005a) but they are of the Papua New Guinean betel people’s own making. In observing markets I am drawn to accounts that emphasise the agency people have over their lives, in circumstances where it seems like there is little opportunity to act otherwise. There is always ‘space for manoeuvre’ (Villarreal 1992:248; also see Scott 1985). Global commodity networks always manifest locally, where people actively remake and reshape their engagement with them.13 Papua New Guineans have long resisted innovations that give others control over their lives (Allen 1977:337). That said, for smallholder producers and wage labourers space for manoeuvre is limited; a Papua New Guinean coffee smallholder has no chance of convincing Maxwell House to increase their buying price. By contrast, in the betel nut trade participants possess considerable agency and are not beholden to the dictates of distant consumers, multinational companies and incorporeal markets. The trade is visible and tactile and this holds much of its appeal to the betel people.

Power is an ever present concern. The networks traced are subject to unequal power relations and these have a strong bearing on the function of the trade, who benefits, and who establishes the ‘rules of the game’. These questions are frequently asked in the Melanesian exchange ethnography (see A. Strathern 1971a; Gewertz 1983; Modjeska 1985; Carrier and Carrier 1989; Carrier 1992). Power is always spatial (Allen 2003; Yeung 2005a), so that inequalities between groups change depending on geographical location.

This research is also concerned with the changing nature of marketplaces in PNG. Of interest is the way in which the institution of the marketplace, for the most part a product of the colonial era, has

12 See for example West 2012 (coffee); Freidberg 2005 (green beans); Mintz 1985 (sugar); Cook et al. 2004 (pawpaw); Foster 2008, and Hilton and Flauder 1996 (Coca-Cola); Gewertz and Errington 2010 (lamb flaps); Errington et al. 2012 (instant noodles).
13 See, for example, George Curry’s and Gina Koczberski’s work on cocoa and oil palm smallholders in PNG (Curry 2003; Koczberski and Curry 2005; Curry et al. 2007; Curry and Koczberski 2012).
changed since its early introduction. Marketplaces today are very much informal spaces which everyday Papua New Guineans have shaped and for the most part feel at home in (Benediktsson 2002:140) (cf. Chapter 6). Early manifestations of the marketplace in PNG reflected particular pre-existing social and cultural ideas about trade and exchange (see Brookfield 1969b). To what extent do the changes we now see in the country’s marketplaces reflect back upon broader social and cultural changes? This study is concerned with tracing the continuing change in marketplaces through providing a textured description of betel nut marketplaces in contemporary PNG.

The market is a global and pervasive institution, but is also always manifested locally (Latour 1993). The purpose of this study in not to challenge the market model or the theory of markets, but instead to engage with ‘real markets’ (Benediktsson 2002), and the very real people and places this involves. It starts with the premise that the economic is inherently social and the social inherently economic, reflecting that society and economy are entangled to the extent that it is fruitless, if not foolish, to try to tease them apart (Curry 2003:419; Lee 2006:422). I draw on the social embeddedness of economy and though I talk of the intertwined ‘social’ and ‘economic’ there exists no pure form of either (Polanyi 1944; Lee 2006).

I follow a growing concern within geography for ‘relational concepts of economy’ (Curry and Koczberski 2009, 2012; see Yeung 2005a, 2005b; Lee 2006), drawn from an engagement with sociology and anthropology. Although there is considerable diversity amongst scholars adopting a relational approach to economy, collectively they refuse to give economists, of reductionist and universalist ilk, sole explanatory power over the economy. Rather, they agree that space must be made for social, cultural and political understandings of people’s ‘economic’ behaviour and for an imagining of a different economic future, one in which ‘non-market’ concerns become central. The market should be subservient to the social rather than a situation in which the market comes to be the mechanism by which society at large is organised. This should be a premise for market-led development. Thinking about economy relationally also erodes boundaries of socio-economic activity ‘inside’ and ‘outside’ the market. Transactions, both ‘social’ and ‘economic’, that occur within the bounds of the marketplace are often part of a broader relationship of transactions beyond the marketplace, whether in the trader’s home village or in the interactions that occur between traders whilst travelling. This thesis contributes to a growing body of ethnographically informed work in human geography which highlights the sociality of exchange.

The individual betel people and their relationships with others is a central concern of the research. Though producers, traders and marketplace vendors are discussed as broad groups, I have sought
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to illuminate these discussions with reference to individuals. Broader social structures are important in shaping the betel nut trade, but so too is the agency and lived experiences of individual betel people. This then is an account rich with local voices. Many of the betel people who appear throughout the thesis are referred to by name (pseudonyms) so that a broader picture of their participation in the trade may be constructed, and I hope many of these people will become familiar to the reader.

Attention to space and place also underlies the research. The betel nut trade connects diverse social and ecological spaces. The workings of the trade and the relationships between the participants are shaped by physical and human geographies. Interactions between, for example, a lowland grower and a highland trader are very different depending on whether they are located in the production area, a lowland marketplace or a highland marketplace. Social action does not occur in a dimensionless space. Because place matters this thesis necessarily refers to a large number of locales. Throughout the thesis regular reference is made to the ‘lowlands’ and ‘highlands’. These designations are admittedly imperfect (cf. Hays 1993), but are useful due to their (in)congruency with betel nut production areas. I use ‘lowland’ to refer to low altitude areas – including coastal, low-lying inland, riverine and island areas. These broadly correspond to where betel nut and betel pepper can be produced (Chapter 2). Similarly, ‘highland’ refers to higher altitude (over 1100 m.a.s.l.) areas of Eastern Highlands, Simbu, Western Highlands, Enga and Southern Highlands provinces, where betel nut and pepper cannot be produced.

The research also provides an understanding of the diversity of livelihoods in which people are engaged and the importance of cash incomes to their wellbeing. I am acutely aware of the importance of cash income to the food security of households, and their access to education and health services (see Allen and Bourke 2009). Because betel nut is one of the most important sources of income for rural and urban Papua New Guineans, the trade is intimately tied to broader issues of development, something worthy of consideration for anyone contemplating an intervention.

In what follows I explore a number of key literatures that inform my own academic engagement with the betel nut trade. I utilise these as tools to think about: social change; the construction of markets; the interactions amongst those within the trade and the influences upon trading behaviour; and the nature of the transactions in which they are engaged. These debates are introduced here and elaborated upon throughout the thesis.
INTRODUCTION

CHANGE, HYBRIDITY AND MULTIPLE MODERNITIES

The lives of Papua New Guineans have undergone dramatic changes as a result of colonisation and the introduction of new forms of production, exchange and consumption. Commentators in the 1960-1980s often portrayed colonialism and capitalism as inexorable forces, which Carrier and Carrier (1989) have termed the ‘steamroller model’ of social change. Change was depicted as westernisation, and though the non-capitalist sector might be resilient, penetration was unidirectional. ‘Development’ of the indigenous population was seen as a hierarchical and linear progression from a traditional subsistence sector to a modern monetary sector, with a ‘dual economy’ said to exist whilst the economy was in transition (eg. Fisk 1964, 1966; cf. Brookfield and Hart 1971). This was regularly portrayed as two worlds, between which entrepreneurs and other social brokers would jump (Carrier 1992, eg. Finney 1973). Modernist views at the time were that such a transformation was inevitable and that eventually capitalism and the market, as a mode of organising exchange, would displace and subsume pre-existing economic forms; a singular trajectory to an equally singular modernity (see Carrier and Carrier 1989; Carrier 1992; Curry 2003).

The inevitability of this process was questioned on a number of fronts. Firstly, dependency theorists highlighted that the capitalist mode of production, reliant upon non-capitalist processes to ‘reproduce’ the labourer in the service of capitalism (Fitzpatrick 1980), and emergent class processes, prevented such a transformation and instead created a state of ‘terminal development’ (Howlett 1973). Secondly, ethnographers pointed out that indigenous exchange had not only proved resilient in the face of an introduced capitalism but had in fact effloresced in size and scale (A. Strathern 1971a; Gregory 1982). The transformation would forever remain an unfinished project. Ethnographers have also emphasised the agency of local people, rather than seeing them as subsumed and impotent to larger structural forces (Curry 2003).

A wealth of research in PNG has demonstrated the resilience of non-capitalist economic structures and practices, their articulation with capitalism, and the syncretic and hybrid nature of social and economic change. Pre-existing economic arrangements were deployed to new ends, for instance in the use of unpaid labour of kin in coffee smallholdings (Finney 1973). Equally, the changing economic landscape provided new means to achieve long established objectives such that the market became subsumed to indigenous exchange (Curry 2003). For instance, big men in the Mt. Hagen area used the new economic opportunities for the expansion of competitive gift exchange in

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14 See Carrier (1992) for a detailed overview of these debates and for a discussion of the articulation between capitalism and colonialism with pre-existing socio-economic forms.
pursuit of social prestige (A. Strathern 1971a). *Bisnis* (business or cash earning activity) may also be as much about social objectives as it is about economic profit (Finney 1973; Banks 2006a, 2006b; Imbun 2000; Curry 2005). In the same vein, money was domesticated into logics of gift exchange—money having a dual purpose as both currency and valuable (Healey 1985; Bloch and Parry 1989; Robbins and Akin 1999). Further, ostensibly exogenous introductions, such as banking systems, have been remade at the local level (see Sexton 1982). In a similar way, marketplaces, for the most part a colonial introduction, became distinctly Melanesian. People have incorporated pre-existing ideas about trade, exchange, sociality, gender, group relations, and emerging ideas about development, into these new institutions (Epstein 1968; Brookfield 1969b; Gewertz 1983; Modjeska 1985; Maclean 1989; Hide 1993). These ‘contemporary indigenous forms’ are then the outcome of a complex process of articulation between endogenous and exogenous structures and processes, rather than simply aspects of westernisation and resilience (Carrier and Carrier 1989; Carrier 1992). The ‘capitalism’ and ‘colonialism’ introduced to PNG were complex hybrids composed and contested by a diverse group of planters, miners, storekeepers, missionaries, colonial officers and administrators (cf. Wolf 1982). Equally, what is perceived as ‘traditional’ has already undergone considerable change through the interaction of capitalism and colonialism with pre-existing forms. Indeed, for many Melanesians their conception of *kastam* (custom or tradition) as a cultural category is intimately bound to its opposition to exogenous referents such as church, government and business (Foster 1995:25-66). Even in societies marked by conceptual and moral distinctions between the practices of custom and business, these activities may both be understood in relation to a single underlying logic (Mosko 1999:43-4, 60-1; see also A. Strathern 1991; cf. Foster 1995).

Hybridity provides a position from which to consider the contemporary betel nut trade. I use ‘hybridity’ without the presumption that the process is simply an interaction between two entities, each with primordial purity, with a singular and static outcome. Rather, contemporary trade is part of an ongoing iterative negotiation and articulation between multiple and diverse, exogenous and indigenous, ideas and understandings of exchange and relationality, in which the emergent forms are equally multiple and diverse. The different peoples involved in the trade, as producers, traders and consumers, each have their own conceptions of exchange and sociality that give shape to the trade, and how it is understood. But these ideas have already been shaped through colonial processes, the introduction of the institution of the marketplace and of tradestores, pacification, Christianity and interaction with capitalist practices around the production of cash crops and

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15 Hank Nelson’s (1976) *Black, White and Gold* provides a useful account of ‘contact’ and the nature of early colonial capitalism, and its protagonists, in Papua New Guinean goldfields. The experiences of Papua New Guineans of colonialism and capitalism are intimately tied to the individuals with whom it was introduced.
labouring. Tracing such lineages, and the processes of articulation, contributes to an understanding of the present form of the betel nut trade. Attention to hybridity compelled me to think about the trade as part of a larger process of change, and to the diverse motivations for trading and the resources that can be deployed. Hybridity also helps challenge the dominant view of economy, a point to which I now turn.

**THE SOCIAL EMBEDDEDNESS OF MARKETS**

A recurring debate in social theory surrounds how social relations impact upon behaviour. Within economic anthropology the debate crystallised around the extent to which the economy was shaped by society and the extent to which it could be interpreted by the dominant economic theory. Substantivist anthropologists argued the inadequacy of the neoclassical economic models to account for the behaviour of the peoples they observed, and the different logics inherent in self-provisioning, redistribution and the gift (see Polanyi 1944; Mauss 1969; Sahlins 1972).

Examining the relationship between society and economy, Polanyi (1944) argued that the emergence of the ‘market economy’ in the West had seen the economy become an increasingly autonomous social sphere based on calculative rationality and individualism; the economy had become disembedded from society. This he contrasted to the ‘embeddedness’ of premarket societies, in which social relations had a profound impact upon economic action; an approach echoed closely by Scott’s (1976) ‘moral economy’.

In response to the dichotomy Polanyi (1944) created between embedded (non-market) and disembedded (market) economies and societies, Granovetter (1985) argued the economy is always embedded. He criticised the way in which anthropologists over-socialised the economy while economists tended to under-socialise it. In reality all economies, he argued, operate somewhere between these two extremes; entirely embedded and disembedded economies emerge as a pure fiction. A romanticised moral economy which crowds out personal agency is no less misleading than the mainstream economic discourse.

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16 The way in which the economy was defined was central to the debate. Substantivists saw the economy as the way in which people make a living through production, exchange and consumption. Formalists on the other hand saw ‘the economic’ as a form of logic, the choice around the allocation of scarce resources to different means (Wilk and Cligett 2007:35-37).

17 Granovetter (1985) elaborates on the embeddedness of western markets. Similarly, Abolafia (1998) highlights the desire for Wall Street traders to embed and entangle themselves in social relations.
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There have been other attempts to grapple with the messiness of the relationship between the economy, society and culture. Gudeman (2001), for instance, sees the economy comprised of two realms: the market and the community. He argues that the former has been given prominence in economic theory in the West. The two realms are always present and exist in a dialectical relationship, each constituting and constituted by the other, the connections between the two creating ‘economy’s tension’ (Gudeman 2008).

Along similar lines Bloch and Parry (1989:26) have argued that all transactional systems contain two distinct spheres that they call ‘transactional orders’. These create ‘some ideological space within which individual acquisition is a legitimate and even laudable goal ... [and a separate sphere] concerned with the cycle of long-term [social] reproduction’ (also see Robbins and Akin 1999). Some resonance can be seen with Foster’s (1995) distinction between bisnis (business) and kastam (custom), in the way in which some societies deal with tensions through creating ideological separations (cf. Mosko 1999:60-1). Distinctions drawn between gift and commodity exchange (Gregory 1982), and between property and transaction (Kirsch 2001), present comparable framings.

The economic-social tension is indeed inherent in the very concept of the market, for the market in one sense refers to the mode by which exchange is organised in accordance with supply, demand and price, and is thus an argument for a universal principle of rationality. In the other sense the marketplace is a social institution, a geographically located site of exchange (see Bestor 2004:20). The two images of the market as a principle and the market as a place exist removed and isolated from each other; this is particularly visible outside the west (see Berthoud 1992; Gudeman 2001:94). The lack of resemblance, Callon (1998:1) suggests, is an outcome of economists’ desires to abstract, generalise and divide the theory and the object; a division necessitated by the quest for a perfect market that could be ordered, classified, defined, given laws and generalised across time and space. The social embeddedness approach towards markets goes some way to reconciling such disparate conceptions of markets.

The marketplace itself is often a site of contestation between different views of the market and its purpose. When the formal institution of a marketplace was introduced to PNG by the colonial administration, marketplace organisers were at pains to remove what they saw as non-market

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18 Interrelated to this is the way in which ‘economy’ (the way in which people make a living and how they allocate scarce resources) is conflated with ‘market’ (a particular mode of organising exchange) such that the market becomes seen as the only way in which an economy can be organised. Both terms are also conflated with ‘capitalism’ (see Wilk and Cliggett 2007 and Gibson-Graham 2006a).

19 That in some lowland locations throughout Melanesia trade gatherings similar to modern marketplaces existed in the pre-colonial period is discussed in Chapter 3 (also see Chapter 8).
activities from these spaces; fences were erected, gate keepers appointed, entrance fees introduced, and the attendance of loiterers whom had no intention to either buy or sell discouraged. It was envisaged that marketplaces were to be sites of trade and not social exchange (Jackson and Kolta 1974:3; Jackson 1976a:176) – the new town marketplaces being funded by AusAID, which resemble gaol exercise yards with high steel grill fences and limited entry and exit points, continue to reflect the desire to regulate these spaces. By contrast, the utterly informal marketplaces in which betel nut is exchanged carry no such separation. These marketplaces have either no fences, or particularly porous ones, and embrace the sociality of the space rather than resisting it. They exist alongside houses, gardens and tradestores and they contain spaces where people can play cards and bingo. The materiality of these marketplaces keenly reflects the absence of any ideological distinction about what a marketplace is and what it is not.

Attention to the sociality of markets highlights the need to look at how markets operate and the ‘local rationality’ (Abolafia 1998) that underpin transactions in these spaces. For, as Gudeman (2001:11) argues, ‘[n]o trade or market system exists without the support of communal agreements, such as shared languages, mutual ways of interacting, and implicit understandings’. This research is concerned with these ‘place-based practices’ (Curry 2003) and understandings, dynamic yet strongly rooted in local cultural ideas, that give shape and texture to the trade in betel nut.

This thesis draws on a diverse literature on ‘relational concepts of economy’ (Curry and Koczberski 2009, 2012) from within sociology, anthropology, geography and institutional economics (see for example Acheson 1985; Granovetter 1985, 2005; Healey 1990; Gudeman 2001, 2008; Bestor 2004; Swedberg 2005; Yeung 2005a). In particular the research closely follows those contributions by Curry (1999, 2003, 2005), Benediktsson (2002) and Banks (2006b) which explore the embeddedness of economic behaviour in PNG. All these approaches reinforce the need to observe the betel nut trade within its social milieu and to think about economy and markets not as autonomous and self regulating institutions but as inherently political and social constructs.

**ACTORS, GROUPS AND NETWORKS**

The relationship between the individual and the group is something that has long engaged anthropology and the social sciences more broadly. Ethnography from the PNG highlands challenged the inadequacy of rigid models of patrilineal descent (transplanted from Africa) and demonstrated the need for more flexible and less mechanistic concepts of ‘groupiness’ (see Wagner

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20 Also see Bestor (2004) in relation to Tokyo’s Tsukiji fish market.
1974). These studies emphasised the capacity and readiness of many Melanesian societies to incorporate ‘outsiders’ into group structures; although descent relates people it is co-residence, shared substance and cooperation, particularly in exchange, that defines the group (Healey 1979:117; see also Wagner 1967; A. Strathern 1979b).

The transformative processes of colonialism and the emergence of new economic forms have also reconfigured contemporary Melanesian social groups and intergroup relations. Colonial officers, plantation owners and missionaries among others, coerced people into villages, ‘pacified’ previously warring populations, recruited labourers, offered new economic opportunities, and altered exchange relations; in doing so they transformed group relations and identity. Peoples’ social worlds expanded and groups have emerged that transcend the more place-based associations of kin. Churches, education and employment, for instance, have created new identities and loyalties between people as *wanlotu, wanskal, wanwok*. Natural resource development projects, urbanisation, migration and politics have also reconfigured relatedness in different ways (M. Strathern 1975; Errington and Gewertz 2004; Bainton 2009; Curry and Koczberski 2009), as has the development of contemporary trade networks.

Within Melanesian anthropology, attention to group and individual relations and that of relationality and self-interest has led to debates around personhood, and to the emergence of a tension within the field (see, for a discussion, Foster 1995:1-21). M. Strathern (1988) posited a Melanesian ‘dividual’ – a view that sees persons as comprised of, and indebted to, their relations with other persons such that they cannot be considered autonomous individuals (‘proprietors of the self’) – in opposition to the Western individual form of personhood (see, for a discussion, Sykes 2007a, 2007b and Mosko 2010). This has been an important theoretical current within anthropology although it has been criticised for creating a contrast between ‘us’ and ‘them’ by over-emphasising the relationality of Melanesians and the individuality of those in the West (Carrier 1998; A. Strathern and Stewart 2000; Sillitoe 2010). Notions of personhood are also relevant in relation to changing processes of accumulation and the argued rise of possessive individualism in Melanesia (see Martin 2007; Sykes 2007a; also Finney 1973).

Relatedness can also be a source of tension surrounding access to the benefits of new economic forms, including cash cropping and extractive natural resource development. Kirsch (2001) and

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21 Meaning of the same church/religion, school and employment/profession, respectively.

22 In a panel on ‘Fifty years of kinship studies in PNG’ at the ‘60 years of anthropology at ANU: Contesting anthropology’s futures’ conference, 26-28 September 2011, panellists (John Burton, Nicole Haley, Linus Digim’rina, Jadrán Mimica and James Weiner) highlighted new questions on social groups in PNG surrounding the emergence of Incorporated Land Groups, politics and elections, and migration and urbanisation.
Bainton (2009), drawing on M. Strathern’s (1996) discussion of networks and property, have highlighted how the people of Lihir Island have expanded, contracted and severed their social networks in relation to the benefits and tensions associated with the Lihir gold mine. In the context of oil palm development in West New Britain and Oro provinces, Curry and Koczberski (2009) have similarly demonstrated the way in which migrants there have negotiated and maintained access to land, the conflicts that emerge, and the relationship between sociality and resource access. Kirsch (2001:152-3) states ‘social networks in Melanesia typically include all those persons who have contributed to another’s success, each of whom may later lay claim to their share of what that person attracts in the transactions in which he or she participates’. In the Lihir case, people only peripherally associated with the mine development seek to reinforce the connections that will enable them to gain some benefits. But Bainton (2009) highlights that while some are at pains to make connections visible others are intent on ‘keeping the network out of view’. Social networks are then manipulated to both include and exclude.

The management and negotiation of social networks, and the extent to which people engage intimate and distant relationships, is a prominent feature of exchange in Melanesia. In Mt. Hagen, today a central hub of the betel nut trade, A. Strathern (1969, 1971a, 1978) highlighted how big men (self-made leaders) skilfully manipulated their social networks. He emphasised that ‘well-defined social groups, in relations of opposition to, and alliance with each other … [were overlaid by] networks of exchange ties between individuals’ (1971:220). It was those ties that extended beyond the big man’s own group that enabled the size of exchanges to be expanded, although they also contributed to increasing unpredictability: ‘[extra-group] networks set the big-man free … [but] also tend to make political relations unstable’ (1971:221). I highlight this here because within the betel nut trade the expansion of social networks beyond close relations has emerged as a critical dynamic (Chapter 6).

The ‘network’ is a conceptual tool that has been used widely in the social sciences, but often without much agreement about how it should be applied. Attention to networks helps conceptualise the complexity of relatedness and connections between different types of actors whether individuals, clans, firms, states or things (Hughes and Reimer 2004:4), and to avoid apposing the individual and the group. Actors are always participants in multiple, sometimes competing, sometimes allied networks, each oriented towards a particular ‘project’ outcome. Actors are enrolled into the projects of others, while at the same time enlisting others in their own projects.

23 For instance the spatial networks of location theory are very different to the social networks of anthropology or sociology which are different again to the assemblages envisaged by actor-network theorists. There is also a considerable literature on network governance. This research does not exclusively subscribe to any of these usages.
But the projects of these actors are never completely identical so there exists a tension as each actor attempts to realign their networks based on their own goals and interests. Networks are then variably durable, some unified to the extent a single actor may be able to ‘represent’ and speak for the others, some fragile and ephemeral (Callon 1986; Murdoch 1995; Busch and Juska 1997). The geometries of power, the resources an actor is able to deploy, and their position within the networks shape the control they have over the networks in which they are involved.

Networks then emerge as a key concept for framing the research, and for exploring the operation of a contemporary Papua New Guinean trade. Networks offer a way to think about how those involved in the betel nut trade are connected, how they are influenced and attempt to exert influence over those to whom they are connected (see Allen 2003), and how this in turn shapes the process of market building.

**GIFTS AND COMMODITIES**

With trade and the marketplace the subject of the research, the logic of commodity transactions would presumably predominate, yet as many theoretical and empirical treatments of exchange in Melanesia have argued, transactions are ambiguous. It is therefore useful to recount some of the debates around gifts and commodities, for they loom large in the current research. The concept of the gift emerged as a useful antidote to both the application of neoclassical economics to the study of the economic activities of ‘non-capitalist’ societies and, equally, the way that ideas of economics, namely rational maximising, had been more broadly applied to societies at large (see Polanyi 1944; Mauss 1969). Within anthropology, gift exchange appeared as the neat inversion of commodity exchange (Thomas 1991:15).

Commodity and gift transactions present two seemingly contrasting modes of exchange (see Gregory 1980, 1982, 1997; Carrier 1991, 1995). Commodity exchanges are conceived as the temporary and impersonal relations of buying and selling. They are transactions between unobligated and autonomous individuals in a state of reciprocal independence. The transactions are considered alienable in that full property rights are transferred in the transaction so that no enduring relationship or obligation is created. In commodity exchanges the important relationship is that between objects, in the sense that x amount of one item is exchanged for y of another, something expressed as a price when money is involved (Thomas 1991:14). Commodity exchange

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24 Callon (1986) refers to the process of network building as ‘translation’ of which ‘enrolment’ is one aspect.
Introduction

then 'must be explained with reference to the social conditions of the reproduction of things' (Gregory 1980:641).

In contrast, gift exchange is the enduring and personal relations of giving and receiving. Gift exchanges occur between people known and obligated to each other and in a state of reciprocal dependence. The object transacted is considered inalienable in that it continues to be associated with the giver. Gift transactions evoke the memory of the transaction; the relationship between the giver and recipient and create obligation and debt. Something of the giver adheres itself to the gift so that the object is never fully alienated (Mauss 1969; Weiner 1992). In gift exchange the important relationship is between the parties to the transaction; something that 'must be explained with reference to the social conditions of the reproduction of people' (Gregory 1980:641). But although personal in nature, gift transactions need not be warm. They can just as easily be calculative, self-interested and the source of tension in social relations. Gift exchange is very often about creating debt and accruing social prestige (A. Strathern 1971a). Healey (1990:7) summarises the contrast: ‘Trade [commodity exchange] is thus overtly concerned with relations between material objects mediated by social relations, and prestations [gift exchanges], with relations between people mediated by material goods’.

The distinction between gift and commodity exchange has been the focus of considerable debate in anthropology, sociology and geography. Those characteristics presented here are ideal categorisations; the distinctions between the two practices are less clear in reality (A. Strathern 1971a; Hughes 1977). For Carrier (1995) these two modes of exchange occupy the poles of a continuum, whereas for Gregory (1997:52-3) they are broad categories that each contain a diversity of different forms, such that gift and commodity can be seen as 'species' from within the exchange 'genus'. Appadurai (1986), in his edited collection The Social Life of Things, also interrogated the distinction, arguing that commodities be treated not as a category of thing but rather as a particular phase or situation in the life of an object. In this view, things take on different forms depending on the context of the exchange. Though such an approach highlights the complexity of interactions between different transactional forms, the undifferentiated plane it leaves behind can be conceptually unhelpful. It is also pertinent that different parties to a transaction may perceive the same transaction in different ways (Carrier and Carrier 1989; Thomas 1991).

In regards to highland ethnography, Hughes (1977:209-10) and A. Strathern (1971a:101-4) note a range of other distinctions between gift (prestations) and commodity (trade) exchange (also see Healey 1990).

For Appadurai (1986:13), the commodity phase of a thing emerges as 'the situation in which its exchangeability (past, present, or future) for some other thing is its socially relevant feature'. This approach is a significant departure from Marx for whom things become commodities at the moment of production.
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Though Gregory (1982, 1997) reinforced the co-presence of both gifts and commodities in all societies, too often the distinctions have come to represent whole societies based upon over-essentialised views of each.28 ‘Commodity societies’ in the West are contrasted against ‘gift societies’ elsewhere, particularly Melanesia, and commodity exchange has become equated with capitalism, despite exchanges of this character predating the colonial period. Carrier (1998:102) argues that when Melanesian societies are represented as ‘gift societies’ it ‘comes to define what is authentically Melanesian, what is worthy of anthropological attention, and so indirectly what is inauthentic and not worth consideration’. It also contributes to value judgements being ascribed (Gell 1992:142), and trade neglected as an area of study (Healey 1990:3). An essentialised view also becomes problematic where particular ‘economic’ spaces (firms, marketplaces, villages, households) become solely understood through a single transactional form (whether that is the gift or the commodity). Although stark conceptual contrasts may prove unhelpful due to the connections and interdependencies they conceal, I am nevertheless inclined to agree with Gregory (1997:47) that ‘it is one thing to make a conceptual distinction but quite another to use this distinction to classify societies’ or, I might add, spaces.

The focus of this thesis is on a market in which the intention of transactions is primarily upon creating relations between objects. Betel nut traders and vendors do not go to the marketplace to exchange compliments, or insults for that matter, but to buy or sell; an exchange which is almost always one of betel nut for money (cf. Gell 1992:159). But even in this context the transactions are ambiguous: transactions are routinely not between strangers, obligations are created, and the transactions may be as much about creating relations between people mediated by things as they are about price making. These need not be mutually exclusive possibilities in exchange.

My intention is to engage with the betel nut trade in a way that the logic of commodity exchange does not crowd out space for alternative understandings. Transactions within the marketplace cannot be assumed to be exclusively of the commodity type. That said, the betel nut story also suggests that it is inappropriate to subsume all exchange in Melanesia to a Maussian model of gift exchange (Carrier 1998). I am interested in the way that trade transactions may also contribute to social reproduction, and in how gift transactions are pervasive parts of trade relations. The gift-commodity distinction yields an ‘analytical tool’ for thinking about the relations between people and things rather than an ‘empirical description’ of real life exchanges (Carrier 1995:192). What is

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28 Gibson-Graham (2006a) make a similar point when they argue that portrayals of the economy in the West has suffered from ‘capitalocentrism’ whereby the economy is conflated with capitalism to the extent that capitalism becomes the only form of economy, something that displaces the existence of diverse economic practices. Could Melanesian ethnography of exchange on the other hand be said to suffer from giftocentrism (cf. Carrier 1998)?
important is not the thing in transaction *per se* but the substance of the relationships that are created and mediated through the transaction of things (cf. Kirsch 2001). I am also compelled to think about trade transactions as encompassed within broader relations and relations of exchange, rather than as isolated and discrete actions. An examination of the contemporary betel nut trade raises the question: ‘When and under what circumstances do people in a given society transact objects in a web of social relations and think about objects in inclusive [/inalienable] terms, and when do they transact objects impersonally and think about objects in exclusive [/alienable] terms?’ (Carrier 1998:103 drawing on Bloch and Parry 1989). It is perhaps unsurprising that betel nut, as PNG’s quintessential commodity and quintessential gift, has the capacity to produce diverse relationships.

FIELDWORK

Papua New Guineans are passionate about betel nut. For many, it is a daily part of their lives, traditionally a part of many coastal and lowland cultures, and increasingly a part of a new emergent culture of consumption in the highlands and urban areas (Hirsch 2007). Given the enthusiasm for betel nut held by many Papua New Guineans, it was very easy to find people willing to talk with me about it. My topic was one that immediately resonated with the people I worked with and I had no difficulty in convincing people that it was an important thing to study, although many were surprised that it would be of interest to a *waitman* who at first didn’t even know how to *kaikai buai* (chew betel nut). Perhaps the most difficult aspect of my research was, given the all pervasiveness of betel nut in people’s daily lives, to ever disengage myself from the subject. For a year betel nut consumed me. I grew used to the smell of bags of betel nut, what they felt like to sleep on and to shoulder, the quality of nuts, the characteristics of nuts from different origins, the taste and aroma when chewed, and the husks and red spittle.

The methodological orientation

The research adopted the approach of ‘following’ (Marcus 1995; Cook et al. 2004). ‘Following’ both the betel nut itself from tree to marketplace and mouth and also ‘following’ the actors who shaped its movement. This was opportunistic and chance had a substantial hand in shaping what networks

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29 Another criticism of the gift-commodity exchange distinction is its focus on the nature of the object being exchanged, rather than the substance of the relationships which is mediated by the object being exchanged. As a result, Kirsch (2001:161) proposes an alternative distinction between ‘property and transaction regimes’ such that property regimes ‘emphasise relationships between persons and things’ and transaction regimes emphasise the ‘relationships created between persons through the circulation of things’.

30 Betel nut was/is an important gift item throughout the lowlands of PNG (Chapter 2 and 3), although this is not to deny the significance of items such as shell valuables and pigs in ceremonial gift exchanges. In contemporary PNG, both highlands and lowlands, betel nut is the most frequent and visible item involved in the more mundane everyday gift exchanges, and in this sense it is today PNG’s quintessential gift.
and stories I followed, and who was included and where the boundaries to betel nut’s contemporary story lay. As Cook et al. (2006:657) explain: ‘A good following story has a clear focus. Like a chicken. That never goes out of sight. But anything and everything that’s in and around it (throughout its conception, birth, life, death and travels) could become part of that story’. Both betel nut and the multitude of diverse actors associated with its trade were foci of the study. For Appadurai (1986:5) ‘from a theoretical point of view human actors encode things with significance, from a methodological point of view it is the things-in-motion that illuminate their human and social context’. Rather than simply observe the phenomena at distinct sites of production, exchange, distribution and consumption, I studied the flows between these sites and the way the different locales interacted, in what constituted a ‘multi-sited ethnography’ (Marcus 1995). I owe much to Benediktsson’s (2002) work on tracing sweet potato in the PNG context. Drawing on this I followed betel nut ‘through its twisted route in time and space, noting at every turn which persons, institutions, or other things influence its trajectory’ (Benediktsson 2002:270). A further grounding for the research was the desire to study the lived experiences of those who traded in betel nut. This involved participating in the daily lives of those who grow, trade, transport and chew betel nut, and who by doing so, create this trade.

Timing and the field site

Fieldwork was conducted in four main parts. The first was a brief three week scoping trip mid-2006. The second period was between January and July 2007. I then returned to Australia for a short time to gather my thoughts and recover from a bout of dengue fever. I returned to PNG for a third time between August and December 2007. Lastly, I made a shorter two week follow-up trip in August 2010. In addition in 2009-2010, regular trips to PNG for other purposes also provided the opportunity to make further observations and more informal enquiries. The research focuses on the betel nut trade at the time of fieldwork, although some attempt was made to piece together a history of the trade.

The mobile nature of betel nut and those involved in the trade necessitated that the research be nomadic in nature, rather than static and place based. When traded betel nut creates a network of diverse spaces where it is produced, exchanged, transported and consumed. These networks of spaces, and the people that move across the networks and interact at their nodes, constitute the field site. This included gardens, villages, urban areas, roadsides, wharves, airports, rivers, beaches,

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31 Between May 2009 and November 2010 I undertook seven trips, five months in total, to PNG while involved in resettlement activities associated with the Papua New Guinea Liquefied Natural Gas (PNG LNG) project in the Southern Highlands. My observations and discussions during this time focused on the trade in the areas surrounding the PNG LNG construction sites.
marketplaces of various sizes and functions, and resource enclaves. It also involved mobile spaces including boats, canoes, cars and trucks, as well as the space-time bridging offered by mobile phones. The highlands betel nut trade sources nuts, lime and pepper from different areas around the coast and lowlands, and it is sold in different highland locations. The multi-sited ethnographic approach meant that I worked to varying degrees in locations across eleven provinces on the PNG mainland. In the highlands I worked in the Eastern Highlands, Simbu, Western Highlands, Enga and Southern Highlands.\textsuperscript{32} Mt. Hagen (WHP) became the focus of the research although substantial amounts of time were also spent in Goroka and Kundiawa. Shorter visits were made to Kainantu, Kudjip, Banz, Tambul and Wabag amongst other smaller locations. In the lowlands regular trips were made to Lae and Madang, both important waypoints in the trade. Trips were also made to production areas including the lower and middle Ramu Valley and Karkar Island (Madang Province), around Wewak (East Sepik), the Markham Valley (Morobe), the areas surrounding Popondetta (Oro Province), Central Province and the National Capital District (Map 1). Insight into the trade in other provinces was gained from talking to informants who worked in those areas.

Map 1: Papua New Guinea – provinces and main towns

\textsuperscript{32}Throughout the thesis I have maintained the names of provinces as they existed during the fieldwork period from 2006-2010. In 2012 two new provinces, Jiwaka and Hela, were formed in the highlands region. Jiwaka Province was excised from Western Highlands Province, and Hela Province from the Southern Highlands Province.
Chapter One

The research process and practicalities of fieldwork

As a vagabond researcher, I spent much of my time travelling between the different trade nodes throughout the lowlands and the highlands, usually in the company of betel nut traders, seated upon betel nut bags and invariably chewing betel nut. I tried to always keep abreast of what was happening in the different production areas, the major trading hubs and along the transport routes. While travelling I would continually hear stories of events at other locales in the network, whether it was about a fight in the Hagen marketplace or a broken bridge on Madang’s North Coast Road.

With the introduction of Digicel into the telecommunications industry during my fieldwork in July 2007, the use of mobile phones flourished, and so changed the nature of the trade, as I watched. My mobile phone became a key research tool which allowed me to communicate with people throughout the betel nut trade networks and enabled me to, like the traders, learn of supply and demand, road conditions and law and order problems.

Because the focus of the research was an incessantly mobile thing and the people who shaped it were equally mobile, it was often not possible to plan far in advance. I learnt to adopt a flexible and opportunistic yet purposeful approach. This was effective as it emulated the behaviour of those in the trade. At times I tried to plan ahead and this invariably went wrong. I once waited in Madang for almost a week for a highland trader to come and meet me. He never showed up. It was from the spontaneous decisions that the most fruitful research emerged. On one occasion I had planned to travel to Wewak. I went down to the Lutheran shipping office only to find that the regular Wewak ship would not be running for almost two weeks. Frustrated that another plan had not worked out, I packed up my bag anyway and that night found myself waiting outside the Redscar nightclub in Madang hoping to take the ‘back road’ to the Sepik. There I bumped into some traders that I knew from Mt. Hagen and was soon on my way. The next night we arrived in Wewak after travelling by minivan, outboard dinghy and truck. I spent the next week accompanying these traders to the marketplaces and villages around Wewak and then returned with them and their betel nut to the highlands.

Whilst my fieldwork could be described as unstructured, it was always conducted with clear objectives. I wanted to follow betel nut. I wanted to experience the lives of the people who shaped betel nut’s journeys. My research thus went where those that I followed took me. It would be easy to critique what I did not do. For the most part I encountered people at those moments in which they themselves were engaged with betel nut. I worked with people from dozens of different cultural groups who spoke dozens of different languages. I could not hope to gain a detailed knowledge of language and custom amidst such diversity. Unlike traditional anthropological
accounts I cannot claim to have any more than a rudimentary understanding of particular cultures. In a sense I researched what people defined to me as being important in their participation in the trade. I gleaned what I could. Particular networks took me further than others. Nor did I discuss the same things with everybody I engaged with; I learnt different things from different people.

Communication was in the local *lingua franca*, *Tok Pisin*, or occasionally English. *Tok Pisin* was spoken extensively in all the marketplaces because they are sites of interaction between people of diverse languages. Where required interpreters assisted me, however my preference was to work directly with people in *Tok Pisin*. The betel people I worked with were, in a way, field assistants who helped me to navigate the research process. I did employ assistants to carry out particular tasks, such as quantitative surveys, when I was attempting to interview large numbers of buyers and sellers on a particular day. They were usually selected from people I knew who were literate rather than from the itinerant traders who I travelled with.

**Access, selection and ethical obligations**

The research required that I spend time with a variety of different actors. This was easier to achieve with some groups than with others. It became apparent early on that the best entry point into the trade was through the highland wholesale traders. I became familiar with many of the Hagen traders and accompanied them on their buying trips to the lowlands. This mobile group of mainly younger men became the window through which I observed the trade. I believe that being a single male of about the same age as these traders allowed me much greater access to their lives than I had for other actors. My ‘following’ approach meant that for the most part I was travelling along the same routes and to the same nodes as the traders, meaning I had greater opportunity to interact with them in their daily lives. The community of traders that exists also meant that on my travels I regularly came across people I had met previously, or *save fes* (known faces/acquaintances). Once I became better known to people and as my personal contacts expanded it became possible to travel with the traders rather than parallel to them.

While I engaged with people of many different groups, it is the wholesale traders for which I have the richest data. It was more difficult gaining a glimpse into the world of marketplace vendors. Vendors are typically middle aged women which posed gender based difficulties, but the greatest obstacle to working with them was their busy daily schedules, both at and away from the

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33 Throughout the thesis where *Tok Pisin* terms are used for the first time the English translation is given either in brackets, or as a footnote where some description is relevant. Alternately, where English is used in the text the corresponding *Tok Pisin* term, where relevant, is listed either in brackets or as a footnote.
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marketplace. I did spend time sitting with the women in marketplaces whilst they sold, however the sight of a waitman sitting in the mud alongside a seller proved to be a major attraction for spectators who blocked the pathways through the marketplace, disrupting business. I also had less interaction with growers than I had originally hoped for. Early on I visited production areas independently, but tracing the trading networks from the grower end proved difficult. As I became increasingly involved with the highland traders and began to travel with them to production areas I came to be considered as a highlander, albeit a white one. This made it even more challenging to engage with growers independent of my travel partners. My research has a particular slant, but I feel this enriches the research rather than compromises it.

In the research I sampled for diversity, trying to incorporate examples of actors who are positioned differently and operate in different ways. Sampling used a snowball approach. It was less a case of selecting who to work with than working with those who were enthusiastic to work with me. Starting with the highland traders I traced their networks as far as those actors in it would allow and what was feasible. For some networks I was able to build up a substantial picture of how the network as a whole operated, for other networks I was only permitted glimpses, normally from the view of a single actor. I attempted to build up a picture of the whole from the numerous incomplete networks I studied. This was necessary in part because building up a trusted relationship with one person in a network often made it difficult to also build a relationship with someone else in the same network, particularly where conflicting interests existed between the people I was working with. My data also reflects the varied extent to which people gave me access to their lives.

The research also demanded that I met a number of ethical obligations to my informants. Informants were all consenting participants and were made fully aware of the purpose of my research and how the information they gave me was to be used. Throughout the thesis I have used pseudonyms to help conceal their identities, nevertheless many of the people I discuss will be readily identifiable to those with detailed local knowledge. This is inevitable in a context, not unlike a village field setting, in which people's daily lives bring them into close proximity, and often into enduring relations, with each other. For the most part this is not problematic, people I worked with were in general happy to be identified in the research, and much of the information conveyed was not of a sensitive nature. Where an informant was concerned to not be linked to a particular piece of information, or where I have deemed it not in the informant's interests to be identified, I have taken additional steps to conceal their identity.
A more important consideration was to conceal information while in the field. Often information divulged by informants was only sensitive in nature for a short period of time. For instance, market information including price, supply and quality that were given to me in confidence, were highly guarded secrets on the day that the informant's betel nut was being sold, but were irrelevant and of no interest to anyone the following day. Other information however had to be strictly guarded. For example, one trader who worked as an agent for a larger trader confided to me that he had misplaced K1000 which belonged to the larger trader. Information of this kind had to be closely guarded due to the potential consequences for the informant, and doing so contributed to developing the trust of my informants.

Methods used

The methods used drew on both qualitative and quantitative methods. A key method was observation as both a participant and a non-participant. Some of the richest data I gathered was as a participant on the betel nut buying trips of highland traders to the lowlands. On these trips I travelled with traders, slept and ate with them. I helped grade the quality of betel nut, pack and sew up bags ready for transport, and load and unload betel nut from cars and boats. I was offered payment as a valued worker which for ethical reasons I had to decline. In other areas of the research participation was not an option. I was unable to climb to harvest betel nut from the palms. I did not have the finance required to buy and sell wholesale betel nut and, if I had attempted to, I would have come into conflict with the buyers I was working with. Throughout the work I did regularly buy small quantities of betel nut, exchanged them with friends and quite often chewed.

I collected data working between scribbled notes on a small pad to more thought-out notes in a field journal. In 2007 and 2010 I also undertook around sixty semi-structured in-depth interviews ranging from around twenty minutes to over an hour in length. Often interviews with individuals would become group discussions as onlookers became active participants. The interviews were digitally recorded for reference at a later date. In addition to formal interviews I also had countless informal conversations with people. These conversations were important in shaping the direction of my formal interviews and clarifying points raised in interviews.

In addition to these qualitative ethnographic techniques I also used a number of quantitative techniques. This was considered important as there is little data on the betel nut trade. The quantitative data helped inform the qualitative methods and vice versa. The quantitative data was collected during two large week-long surveys of Mt. Hagen’s Kaiwei marketplace, using numerous questionnaires and observation notes, and a comparable smaller week-long survey at Goroka’s
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Asarifa marketplace. During the year I also recorded the prices of different quantities sold at different key locations whenever possible. I also weighed samples to enable comparisons between the different volumes sold. Surveys of vendor numbers and bag numbers were also collected at the main marketplaces. In addition, I took thousands of photographs focusing on different aspects of the trade. Whilst in the field I also collected secondary data from various sources. This included data on sea shipping, air cargo uplifts and Consumer Price Index (CPI) held in various company and government offices.

Interacting as a researcher

Throughout the fieldwork process I paid particular attention to the way that I, as a researcher, modified the research setting – I had no misconceptions about being a ‘fly on the wall’. In the same way that different betel people became enrolled in my project, I too, often inadvertently, became enrolled in theirs. At times I no doubt altered the research setting. On one occasion I had travelled with a number of highland traders down to Popondetta. I accompanied the traders to the marketplace where they were buying and set about observing the interactions and exchanges between producer-sellers and the traders. One of the traders approached me and asked me to stand further away from where he was trying to buy; apparently my presence had been inflating the price due to some of the growers mistakenly believing me to be a betel nut trader, and a wealthy one at that. In other situations people would use me to their advantage. On one occasion I was travelling in a bus which was illegally overloaded with betel nut and had been pulled over at a police roadblock. The traders I was accompanying tried to use my status as a European to talk their way through the roadblock.

One of my most important research tools was a mobile phone, and traders at times used this to their advantage. Knowing that I was regularly on the road, traders would call me to ask me about road conditions and the supply situation in different marketplaces. A trader’s success is based on their ability to gain information, by withholding it from some or by giving misleading if not false information to others. They want to report lower highlands prices to growers and exaggerate lowlands prices to their buyers and thus maximise their profits. This often meant I was faced was an ethical dilemma as to whether to reinforce the stories of the traders and recreate the status quo or to tell people otherwise and effectively reshape the market. In many aspects the way I became enrolled in people’s trading activities and the way I shaped the market gave me important insights into how these actors manipulate their networks and shape the market in which they are involved. Rather than be frustrated by the fact that I was altering the purity of the subject of the research I
learned to value this as an important lens. In this way, I became another actor in the networks I was studying.

**ORGANISATION OF THE THESIS**

Chapter 2 outlines betel nut as a particular type of ‘thing’. It offers a description of the various substances involved in betel nut chewing, their properties and qualities, geographic distribution and seasonality, with a focus on the way in which these characteristics influence the trade. It then examines the history and social role of the substance, and the custom, in the lowland areas of PNG and the recent expansion of betel nut chewing into the highlands. It lastly explores the meanings attached to betel nut within contemporary PNG.

Chapter 3 traces betel nut’s ‘economic’ entanglements. Betel nut is positioned within the livelihoods of urban and rural people, and the connections between urban, rural and development enclave spaces are examined. The chapter then looks at pre-colonial exchange in PNG, and specifically the exchange in betel nut. It charts those changes brought with colonialism, notably increased mobility, money and marketplaces, as ‘contingent lineages’ in the contemporary trade in betel nut. Finally the chapter offers a history of the emergence of the contemporary betel nut trade, in the highlands and in the lowland production areas.

With this background the subsequent two chapters focus on the betel nut trade networks. Chapter 4 deals with the conduits of these networks; it traces betel nut on its journey from the lowland production areas to the highland locales where it is traded and consumed. It introduces some of the actors involved in the trade, the most important of whom are the highland wholesale traders who accompany betel nut for much of its journey. The chapter follows their search for betel nut and the substantial challenges and risks they face in moving betel nut. From this a detailed picture emerges of those in-between spaces that are often overlooked in place-based studies of commodity networks. It is these spaces that connect the nodes of the networks examined in the subsequent chapter.

Chapter 5 provides an in-depth description of the places where betel nut is produced, traded, circulated and consumed. It explores the production of betel nut in lowland villages, and its trade in the lowland wholesale marketplaces and transport hubs. Betel nut is then followed into the highlands, to the large wholesale marketplaces, smaller marketplaces, roadside stalls, urban streets
Chapter One

and rural villages. At each of these locales the different activities are described and the actors involved are introduced.

Chapter 6 frames the structure of the trade around the relationships between betel people. It outlines the social embeddedness of ‘economic’ behaviour, and the patterns of repeat patronage and trade practice. This highlights the informal social regulation that shapes where people are able to buy and sell, and who they can work and transact with. It charts the efflorescence of intermediaries, and the extension of social networks to encompass less intimate social relationships in the trade. The chapter challenges a purely utilitarian and transaction cost basis for trade, and instead highlights the sociality of trade and the social construction of marketplaces.

Chapter 7 builds on the previous chapter by exploring the substance of the relationships between different betel people. It is concerned with how interactions through trade contribute to the development of more enduring social relations of friendship and kinship. It examines the multiple meanings of commodity transactions, and the way in which these transactions may, rather than being socially destructive, contribute to fostering and reaffirming personal relationships.

Chapter 8 then focuses on the various relationships in which the wholesale traders are engaged: their interactions with other wholesale traders, those with the producers they purchase from, and with the marketplace vendors to whom they sell. The chapter attends to the conduct of trade interactions and the mixture of cooperation, collusion, competition, tension and conflict within each of these relations. To this end it draws upon literature on trade behaviour in PNG. This chapter is concerned with the power inequalities that underlie all trade relations, and the spatiality of power.

Finally, the conclusion distils the broad themes of betel nut’s contemporary story. It deals with some of the changes in Melanesian marketplaces, and explores what following betel nut might tell us about other markets and development in PNG. The chapter examines the success of the trade, its appeal to those involved, and the aspirations betel people hold for the future.
Chapter 2

Betel nut: A particular type of thing

INTRODUCTION

Betel nut is a particular type of ‘thing’. It is consumed, chewed and spat. It is a drug, psychoactive substance, stimulant, addictive and carcinogenic. At once traditional and a recent innovation. It is a gift, culturally embedded, an item of everyday consumption and ceremonial significance; a commodity in customary trade and contemporary marketplaces. A ‘money thing’. A necessity. Small, varied in character. Readily divisible and transportable. Production is seasonal and geographically restricted. It is licit, untaxed and only intermittently regulated. It has wide global distribution and yet is quintessentially Papua New Guinean. These are some of the features that define betel nut and shape its story.

Why the interest in ‘things’? ‘Things’ have ‘cultural biographies’ or ‘social lives’ which are created when they are produced, exchanged, moved and used (Appadurai 1986; Kopytoff 1986). These biographies become entangled with the stories of the people and other things with which they come into contact. While it is humans who ascribe meanings and values to objects, looking at ‘things’ tells us much about the social context (Appadurai 1986:5). This is because the ‘[v]alues ascribed to each substance, whether economic or symbolic, are based not on any intrinsic property, but instead depend on “judgements made about them by subjects”’ (Hunt and Barker 2001:179). An object’s properties do not define its use but they do indicate its most likely trajectory (Appadurai 1986).

1 Betel nut is a stimulant, meaning that it enhances nervous system activity. The term narcotic is often misused to refer to any drug. More correctly it refers to those drugs that have sedative properties.
Chapter Two

For lowland producers, betel nut tells the story of their creation and their relations with other people and groups. For the highland consumer, it may be little more than something to be shared, chewed then spat. As such, it is highly valued but does not carry with it the same cultural baggage as it does in the lowlands (but cf. Hirsch 1990, 1995, 2007). The issue of place is clearly relevant. As betel nut moves to different places the meanings attached to it change. Flusty (2001:136) states ‘[o]n the one hand, a given artefact exhibits a recognisable form regardless of place or mode of employ. On the other hand, the same artefact is attached to differing functions and meanings that depend upon the social context of its use.’ In the highlands, betel nut is first and foremost a commodity and a stimulant; it is not used to welcome, it does not bring peace and it does not carry magic, although it has in other ways been incorporated into the sociality of different highland groups. Though lowland groups have long exchanged betel nut with one another, it has only recently become a cash crop; for some remote lowland producers it was only when highland traders arrived that they realised ‘Hey, [betel nut] must also be for [getting] money!’

The contemporary story of betel nut in PNG is intimately connected to its life as a commodity. Betel nut has long been circulated in commodity exchange throughout lowland PNG prior to colonisation, however it is its life in the contemporary marketplace which is today of greatest importance. It is this phase of the social life of betel nut, a relatively recent chapter in its biography in PNG, which is the focus of this thesis. This chapter foregrounds this by providing an introduction to the thing and the custom. It first highlights many of its properties and characteristics. It then looks at its social life throughout PNG in the past, and the expansion of the custom in recent history. Finally the chapter examines the meanings and values attached to betel nut in contemporary PNG and the way this has shaped betel nut’s trajectory (Table 1). So what is betel nut?

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2 The purpose here is not to categorise the thing, rather to highlight the most relevant mode of exchange in betel nut’s contemporary story.
Table 1: A summary of betel nut, betel pepper and lime properties and usage

| Ecological distribution | Betel nut – widely throughout PNG from 0-1100 m.a.s.l.  
| Betel pepper – widely throughout PNG from 0-1000 m.a.s.l.  
| Lowland South and South-East Asia, Melanesia, Micronesia. |
| Plant description and characteristics | Betel nut (Areca catechu) is a tall slender single stemmed palm tree (up to 15-30 metres). The palm starts bearing in 7 years, but under good conditions as soon as 4 years. Palms produce on average 150-250 fruits per bunch and 4-6 bunches per year. The endosperm, which is consumed, is walnut-sized and egg-shaped (although variable) that is green when immature, yellow and orange when mature. Betel pepper (Piper betle) is a creeping vine. The inflorescence/ catkin, and less often leaf and stem, is consumed. The catkin resembles a slender green bean. Lime (Calcium hydroxide) is a fine white powder produced from burning shells and coral. |
| Tok Pisin names | Betel nut – buai  
| Betel pepper – daka  
| Lime – kambang |
| Substitutes | Betel nut – Areca macrocalyx, Areca sp., Hydrastele sp., Heterospathe sp., Calyptrocalyx sp., Brassiophoenix sp., Actinorhytis sp.  
| Betel pepper – Piper gibbilimbum.  
| Lime – limestone, commercial lime, ash. |
| Consumption distribution | PNG: Widely consumed in lowland locales. Rapid increase in consumption in highlands, particularly urban areas  
| Worldwide: Lowland South and South-East Asia, Melanesia, Micronesia, Eastern Africa, Middle East (Map 4). Migrant communities originating from the key consumption areas. |
| Preparation | Betel nut, betel pepper and lime are chewed together. In PNG betel nut is most often fresh rather than dried, and is not pre-made into a package for consumption (eg. pan), contrary to the practice throughout much of Asia. |
| Drug effects | Active ingredients: arecoline, arecaidine, guvacine, phenols.  
| Effects: Sense of wellbeing, euphoria, warming sensation, sweating, salivation, increased heart rate and palpitation, heightened alertness and concentration, hunger suppression, increased stamina, invigorates the body, mild intoxication. |
| Health impacts of consumption | Oral (attrition, lesions, cancers, reduced dental caries), cardiovascular (hypertension, cardiac arrhythmia), lungs (aggravated asthma), liver (abnormal function), gut (peptic ulcers, vermifuge), pancreas (positive and negative links to diabetes), neurological (reduced schizophrenic symptoms, addictive, habitual), pregnancy (potential link to low birth weights). |
| Customary uses in PNG | Everyday stimulant, to welcome visitors, precursor to social relations, relaxing tensions, resolving conflict and making peace, marker of social status, marks social rites (menstruation, intercourse, bridewealth, marriage, death), love magic, sorcery, mythology, promise of future exchange, gift exchange, trade. |
| Legality | Legal in PNG but consumption and sale regulated in some locations. |

Sources: see chapter text for sources.
Chapter Two

BETEL NUT, ITS ACCOMPANIMENTS AND SUBSTITUTES

Betel nut consumption typically involves three key ingredients, the betel nut itself and its accompaniments betel pepper and lime, all of which are chewed together to achieve the desired psychotropic affect. ‘Betel nut’ is often used as shorthand for the entire combination of ingredients, the presence of the betel pepper and lime being implied.3

The betel nut itself, also known as areca nut, is the fruit of the Areca catechu palm, a tall slender single stemmed palm reaching 15-30m (Baker and Dransfield 2006:50; Ross et al. 2008:391). The fruit is walnut-sized, ovoid in shape with a pointed tip, and has a husk, similar to a coconut, which surrounds the seed/endosperm. It is the endosperm that is consumed (Plate 1). In Tok Pisin betel nut is known as buai. Betel nut is chewed with betel pepper (Piper betle), known as daka in Tok Pisin, a climbing vine of which the bean-like inflorescence/catkin, and less often leaf and stem, is consumed (Plate 2). This is also commonly referred to as mustard. The last of the key ingredients is slaked lime (calcium hydroxide) known as kambang in Tok Pisin. Lime is a fine white powder produced from burnt shells and coral.5

Plate 1: Betel nut husk and endosperm.
Source: Engler (1895:15).

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3 In the same way, a cup of tea or coffee may also include milk and sugar.
4 Betel nut is somewhat of a misnomer as it is entirely unrelated to the betel pepper (Piper betle) with which it is chewed, and equally it is not a nut in the true sense. Nevertheless this is the popular name for it and the one used here.
5 In the production of kambang live shellfish may be used. At Labubutu near Lae, underwater shell middens in the mangroves near the village are 'mined' for their shells to produce kambang. Similarly, in the Lower Ramu villagers 'reported that they visited shell dumps in the bush and gathered shells there to burn for lime' (Swadling 1997). Live corals are also harvested, the sustainability of which has been questioned (Cinner et al. 2005).
In some locations and at particular times these three ingredients may be substituted with other substances (Table 2). The most common is the highland betel nut which is the fruit of a related highland species, Areca macrocalyx, referred to as kanivi in Tok Pisin. The leaf of the highland species of betel pepper (Piper gilbiliburnu) may also be substituted for the lowland variety of pepper. This is called lip daka (literally leaf pepper) in Tok Pisin. In addition there are a number of wild betel nut species which are less commonly used and which belong to at least six different genera (Baker and Dransfield 2006; Heatubun 2008). These are collectively referred to as wild betel nut or wel buai in Tok Pisin.

Lime also has its substitutes. Limestone is occasionally used, as is the ash of certain trees, notably Archidendron sp. (Blackwood 1939, 1978; Keil 1974:69), and even a type of earth in areas of the Sepik (Theodoratus 1953). Of concern are reports that commercial industrial/agricultural lime is also being used (Mahoney et al. c.1985; Watson 1987a:170; Marshall 2004), as well as crushed asbestos sheeting (Foster 1996:11), although I did not come across either whilst in the field.

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6 The leaf of the lowland species is also termed lip daka. There are several reports of the related Piper methysticum (kava) plant being used in certain areas (Chinnery 1922), although this is probably the outcome of a botanical misidentification (see Lepowsky 1982:337).
7 Other substitutes may also be used including ‘the bark of a mango-type tree ... and young coconut fruit’ (Iamo 1987:141).
8 The inflation of shell currency in the highlands, which followed European entry there, devalued these shells so much that many were ‘irreverently crushed into lime for betel chewing’ (Robbins and Akin 1999:20, see also Healey 1990:194 and O’Hanlon 1993:63).
Table 2: Betel nut, its accompaniments and substitutes.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Tok Pisin Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betel nut (also Areca nut)</td>
<td>Areca catechu</td>
<td>Buai</td>
</tr>
<tr>
<td>Betel pepper (also mustard)</td>
<td>Piper betle</td>
<td>Daka (also lip daka)</td>
</tr>
<tr>
<td>Lime (also slaked lime)</td>
<td>Calcium hydroxide</td>
<td>Kambang</td>
</tr>
<tr>
<td>Highland betel nut</td>
<td>Areca macrocalyx</td>
<td>Kavivi (also kapip)</td>
</tr>
<tr>
<td>Highland betel pepper</td>
<td>Piper gibbiliumhum</td>
<td>Lip daka</td>
</tr>
<tr>
<td>Wild betel nut</td>
<td>Areca sp., Hydriastele sp., Heterospathe sp., Calyptrocalyx sp., Brassiophoenix sp., Actinorhysis sp.</td>
<td>Wel buai</td>
</tr>
</tbody>
</table>

Source: Baker and Dransfield (2006); author

Throughout Asia other ingredients are incorporated into the chew including tobacco and various spices, though I have not seen or heard of this being done in PNG. The highland species of betel nut, wild betel nuts and highland betel pepper are regarded as inferior and are therefore predominantly chewed only when the lowland species are unavailable.9 The story of betel nut is thus the cultural biography of a number of intimately related things. The specificities of each are critical to the story as a whole.

*Kaikai buai* (chewing betel nut)

Chewing technique differs from place to place. The method described here is that which I most commonly observed. Importantly the method used to chew betel nut in PNG is substantially different to that most often used throughout Asia in which dried betel nut and lime is wrapped into a small parcel with the betel pepper leaf. In PNG fresh betel nut is used, something critically important to the trade.

The husk of the betel nut is removed by biting it lengthwise so that endosperm flesh remains intact. Anywhere from half a nut to up to five nuts may be chewed together at one time. Once the nuts are chewed to a paste, the betel pepper and lime are added. The pepper, most commonly the catkin, is dipped in the lime after the tip of the pepper is moistened with the chewers’ saliva to help the lime adhere. The pepper stick, now frosted with lime powder, is placed in the chewer’s mouth, usually on the masticated betel nut so that the lime does not burn the mouth. A small amount of the

9 The highland areas where these items were traditionally chewed are the exception. These items are often preferred by older chewers in these areas.
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pepper is bitten off and chewed together with the betel nut. These actions are repeated a number of times.\textsuperscript{10}

A chemical reaction between the three ingredients occurs which turns the mixture bright red in colour. There is an art to combining the ingredients in just the right ratio so as to achieve the desired level of redness. Not enough lime or too much pepper and the mixture turns an unsatisfying orange/pink. Chewing produces large amounts of saliva in the chewers’ mouth which is occasionally swallowed but is usually spat out.

The quantity of betel nut consumed varies between different locations, with notable distinctions between urban and rural areas, and between the highlands and lowlands. Weegels et al. (1984) found people consumed on average 7.4 betel nuts per day, and up to 35 nuts, in a survey within Sandaun Province. Watson (1987a:219) reported that consumption ranged between 8 and 30 nuts each day in a Biwat village in the East Sepik. Senn et al.’s (2009) survey of pregnant women on the Madang north coast found that 31\% of women surveyed chewed in excess of 10 nuts per day. Each of these authors believes that consumption was likely underreported and therefore the figures are likely to be underestimates.

By contrast, Gibson (2001b:41), based on 1996 PNG Household Survey data, reports much lower estimates of an average of 11 kg/person/year for rural PNG and 10 kg/person/year for urban PNG, equivalent to just over one nut per person per day. Survey data in Central and Eastern Highlands provinces indicates a higher prevalence of chewers and more regular consumption in the lowland communities, whereas fewer highland respondents chewed in total and those who did chewed more intermittently (Dowse 1994).\textsuperscript{11}

Geographic distribution and seasonality

The seasonality and geographic distribution are central to shaping the trade as they influence where traders go to purchase and when. It creates times of scarcity in which prices rise and times of surplus in which prices fall. High prices encourage traders to travel further afield, and to take greater risks along the way. Supply is variable but the demand is insatiable. Importantly the buying

\textsuperscript{10} Rarely a mortar and pestle may be used to combine the ingredients before it is placed in the mouth. This is usually done by older people who have lost their teeth.

\textsuperscript{11} Of the coastal villages surveyed by Dowse (1994), two were predominated by people of the Seventh Day Adventist faith for whom consumption of betel nut is discouraged. In these two villages there was a very low prevalence of chewers.
seasons, those times when traders venture into particular areas to make purchases (Chapter 4), only partially overlap with the seasons set out by the plants’ ecology.

Betel nut and betel pepper are both plants which have a specific geographic distribution and seasonality. These are discussed here in relation to ecological and environmental factors rather than in respect to the trade. Betel nut is entirely produced in coastal and lowland areas throughout PNG (Map 2). Its altitudinal limits range from 0-1100 m.a.s.l although the majority of production occurs at the lower end of this range (Bourke 2009).12 Most production is inland from the coast as the palm is affected by salty air. The betel nut palm does grow wild but the nuts chewed throughout PNG come overwhelmingly from planted palms. Its geographic distribution therefore is closely shaped by human settlement patterns. Betel nut is produced virtually everywhere but many areas produce only for local consumption and small-scale local trade and are not involved in the long-distance trade.


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12 Betel nut is on occasions planted in the highlands including around Kainantu and in Mt. Hagen although palms do not bear fruit at this altitude. In the late 1980s the Department of Primary Industry helped people from the Western Highland’s low lying Jimi valley to plant betel nut with the aim for selling in the highlands marketplaces. In the early 1990s newspapers reported the success of the project (Korugl 1993). Betel nut produced in the Jimi valley is reportedly being sold in local marketplaces in the Jimi, however growers claim that poor road conditions have prevented this betel nut reaching Mt. Hagen (The National 2005a:6).
Betel pepper is also a lowland species. Its mean altitudinal range is from 0-1000 m.a.s.l (Bourke 2009). Again most production occurs at the lower end of these limits. Like the betel nut, betel pepper grows widely throughout lowland and coastal PNG, sometimes wild but more often domesticated. Only a limited number of production locations are involved in the long-distance trade. The shells and coral from which lime is produced are also obviously a coastal and lowland resource. It is produced widely throughout PNG’s lowland and coastal areas, although involvement in the long-distance trade is concentrated in a few key locations. The highland betel nut is both propagated and grows wild in the highlands with a mean altitudinal range of 1100-1950 m.a.s.l (Bourke 2009) (Map 3). Likewise the highland betel pepper is both propagated and grows wild throughout the highlands of PNG. Its mean altitudinal range is 1150-2300 m.a.s.l (Bourke 2009). This species is not involved in the long-distance trade.


Betel nut and betel pepper are both perennial crops however they do produce seasonally. In some areas seasonality is particularly marked while in other areas only slight variations in production exist. Due to the significant regional ecological and climatic differences throughout the country, betel nut is in season in different areas at different times (Figure 1). For instance, the peak supply periods and

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13 Betel nut palms are susceptible to Rhinoceros beetles and number of other viruses and diseases. Betel pepper has fewer problems (Mosko 1999:54; 2005).
shortages for the highlands and Port Moresby markets are at opposite times of year (Bourke et al. 2004). Despite this occurrence the supply areas for the two major markets are quite separate, except during acute shortages. Seasonality also varies within provinces and within smaller geographic areas.14

Betel pepper is also a seasonal perennial crop. Similar to betel nut, the times in which betel pepper is abundant or scarce differs between different production areas (Figure 2). The level of seasonality also varies. Production on Karkar Island is year round with only minor variation whereas production in the Markham Valley is far more seasonal with significant drops in supply. Betel pepper production is linked to rainfall with highest production in the wet season and lowest production in the dry season.

Figure 1: Seasonality of betel nut (Areca catechu) across various locations in PNG. Source: author's data; Bourke et al. (2004). See Appendix 1 for details. Note: Seasonality data for the Markham Valley is based on Consumer Price Index data and on Aiyura/Kainantu/Okarumpa (Eastern Highlands) survey data 1979-1982 – at this time virtually all betel nut in the Kainantu area was from the Markham Valley (Bourke et al. 2004) – and the author's own data. For other locations data is that recalled and reported to R. M. Bourke (Bourke et al. 2004) and author by villagers from each location and should therefore be considered indicative only.

14 Lutkehaus (1981b:4) notes that on Manam Island ‘seasonal differences between two sides of the island cause a dearth of betelnuts on one side and an abundance of ripe nuts on the other’ at certain times of year.
Betel nut: A particular type of thing

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Figure 2: Seasonality of betel pepper (*Piper betle*) at various locations in PNG. Source: Bourke et al. (2004); Mosko (2005); Walsh 1982; and author’s data. See Appendix 1 for details. Note: Data is based on recall from a limited number of respondents from each location and should be considered indicative only. * No data available for period of poor supply.

The resources used in the production of slaked lime are always available. Shells, coral and wood (for making fires on which the shells and coral are cooked) may be harvested at any time of year. However specific weather conditions must exist for the manufacture of lime and so there is some seasonality in production. It is best to produce lime in those months with lower rainfall and at times of year when there are consistent onshore winds to ensure a strong fire. For the main production area around Lae, the lowest supply is likely to be around July-August and the highest supply December-January, although this is entirely subject to weather variations from year to year. The level of supply also reflects demand, with demand lowest when the betel nut supply is lowest.

The highland betel nut is also seasonal. It is likely that it fruits at different times in different locations although data is only available for the Kainantu area. According to informants the highland betel pepper is most abundant between July and December and least abundant between January and March. This is similar to Kainantu marketplace survey data from 1979 and 1982 (see Bourke et al. 2004:82). However the abundance of highlands betel nut in highland marketplaces is likely to be influenced more by the lack of availability of lowland betel nut. The supply of highland betel pepper is non-seasonal, which can be attributed to the leaves of the plant being consumed rather than the catkin, as is the case with the lowland species.

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15 Poor weather at certain times of year also inhibits the transport of *kambang* along the coast to the marketplace in Lae.
16 Informants in Labubutu, a village south-east of Lae, suggested that lime production was highest from September to December, a period which partially overlaps with Lae’s driest months from December to March. Lowest supply was reported to be between June and August which is coincident with the wettest months of July and August at Lae. This contrasts with the findings of a 2005-6 marketplace survey of the Lae main marketplace (NFA 2006) which found that *kambang* supply was highest in October 2005 and June 2006 and lowest in December 2005. The differences could be explained by year to year variations in rainfall and wind. Irrespective it is very likely that *kambang* supply is not consistent throughout the year.
18 Seasonal variations of supply of this species in the marketplace can be explained by two associations. The first is that it is most often consumed when the lowland variety is least abundant. A second factor is that often consumers of highland betel nut prefer to chew it with the highland pepper rather than the lowland pepper, as one Kainantu
Chapter Two

Aspects of quality

Betel nut is not a homogenous thing. In much the same way a wine connoisseur makes distinctions about different wines so do betel nut chewers. Chewers, and therefore also traders and vendors, make distinctions based on place of origin, different maturities, different cultivars and its chewing characteristics (taste and texture) amongst other things (see Jamo 1987:138). To a knowledgeable person the origins of a nut are readily identifiable from its size, skin colour, shape and appearance. Sepik betel nut looks different to Ramu betel nut, which looks different to Madang betel nut and so on, although there is also diversity within locales.

Origin is often a good indicator of the quality of a nut and thus the price. Some betel nuts are more sought after than others. For highlanders Markham betel nut is generally perceived as the highest quality, followed by that from Popondetta, Finschhafen and Ramu. Sepik betel nut is generally considered the poorest in quality with the exception of betel nut from Turubu which is well regarded. For example, a man selling a bag of betel nut from the Ramu for K250 commented: ‘if this was Sepik betel nut, the same bag would be K150-160.’ As a result, people often advertise the origin of the nuts they are selling. Locations are associated with certain characteristics, for instance, I was told that betel nut from Biwat was stubborn. Importantly a chewers’ origin influences betel nut preference, such that Sepik people believe their own betel nut is best. The lowlands betel nut is overwhelmingly preferred to the highlands betel nut, as a young man from Kainantu explained: ‘if we have enough coins we will buy buai, if not we will chew kavivi’ (cf. Hirsch 2001:93).

The texture of betel nut is most critical to the chewer’s choice, although there are regional differences as to which texture is preferred. In the highlands most chewers prefer betel nut that has a meaty or rubbery texture known as ‘mit’ and less often ‘raba’ betel nut. It is fully developed in size but usually retains a predominantly green husk. If the betel nut is left on the palm too long the husk will become yellow and sometimes reddish and the endosperm ‘strong’ or ‘drai’, a reference to its hard and dry texture. If the betel nut is harvested when immature it is called ‘ward’, ‘kulau’ or

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19 ‘Biwat buai em i bikhet liklik’.
20 ‘Bisau buai em i bikhet liklik’.
21 Kulau is the word for immature green coconut or immature betel nut in Tok Pisin; derived from the Tolai language.
‘drip’ betel nut, in reference to its soft and watery texture. Distinctions are also made about different cultivars of both betel nut and betel pepper, as well as the potency of betel nut (Table 3).22

Consumers are also concerned with deterioration in the quality of betel nut and betel pepper, and may refer to it as being ‘mau’ (ripe/over ripe) or ‘stink’ (rotten). Deterioration may be caused by age, rough handling, and exposure to sun and salt water during transport. Although dry betel nut is durable and has a low perishability, mit and wara betel nut is more perishable, thus the demand for mit betel nut in the highlands places pressure on the efficiency of the trade networks. Betel nut’s husk makes it reasonably durable, and mit betel nut if treated correctly can keep for over a week. By contrast, betel pepper is far less durable and is highly perishable, only lasting a few days in good condition. For both betel nut and betel pepper price is highest when the commodity is freshest.

Table 3: A glossary of terms referring to betel nut quality.

<table>
<thead>
<tr>
<th>Tok Pisin</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>'mit'</td>
<td>Firm and meaty in texture</td>
</tr>
<tr>
<td>'strong' or 'drai'</td>
<td>Hard or dry</td>
</tr>
<tr>
<td>'wara', 'kaai' or 'drip'</td>
<td>Under mature, watery, soft</td>
</tr>
<tr>
<td>'mau', 'stink'</td>
<td>Over ripe, Rotten</td>
</tr>
<tr>
<td>'spak'</td>
<td>High potency, intoxicating</td>
</tr>
</tbody>
</table>

Traders and chewers will also differentiate between the origin and types of lime. Lime made from shells, referred to as ‘kina’, is distinct to that made from coral, known as ‘rip’ (reef). Different producing locations are known for the type of lime they manufacture. Typically ‘kina’ lime is considered milder than that made from coral (Watson 1987a:221; Salisbury 1970:183-4).

All this suggests that these are diverse commodities. To talk of the price of betel nut on a particular day is misleading unless its quality, its place of origin, and other characteristics are also taken into

22 A betel nut’s potency is also a distinguishing factor. A potent betel nut which causes the chewer to feel an intoxicating effect is called ‘spak’ betel nut, ‘spak’ being the Tok Pisin word for intoxication. Biwat people distinguish between betel nut that intoxicates the chewer (buai bilong spak) and betel nut that helps them work (buai bilong wok) (Watson 1987a:217). This difference is likely a result of the substantial variations in arecoline, the active drug, content that can occur between different nuts (Raghavan and Baruah 1958).

There are also a range of different cultivars of betel nut that occasionally appear in the marketplace. Some palms produce betel nut with a flesh which is red in colour which is referred to as ‘meri’ (woman) betel nut. This type is less sought after as it makes the chewers’ mouths go black rather than red. Another variety is ‘mango’ betel nut which likely draws its name from its large size which resembles a small mango. This betel nut has its origin around Wontoat and Leron on the edge of the Finisterre Range in Morobe Province. The very large fruiting betel nut from Bougainville is also known as ‘mango’ betel nut. Another large fruiting variety ‘Mama’ betel nut comes from the northern coastline of the Huon Peninsula around Saidor. Meri, Mango and Mama are names given in particular locales. They are unlikely to have wide currency elsewhere in PNG.

Distinctions are also made about different varieties of betel pepper. One variety, ‘manub’, which grows around Madang is particularly sought after. Another variety gives off a pleasant odour when chewed and is consequently known as ‘mel’ pepper. There is a long and thick variety which originates from around Wewak but is now widely grown. Traders and chewers are able to clearly differentiate between those varieties grown around Madang and on Karkar Island with those native to the Markham Valley.
account. All this must also be discussed in relation to a specific marketplace as consumer preferences are not universal across PNG. Although weight was used to compare prices during this study, this is a poor measure due to its inability to account for differences in quality.\textsuperscript{23}

**A stimulant, and an addictive and harmful thing**

The stimulant properties of betel nut shape the trade more than any of its other features. They provide the reason for its consumption, which forms the basis of demand for the item and thus betel nut’s life as a commodity. The active ingredient is arecoline which is a similar compound to nicotine with similar short and long-term effects on the body. The initial effect of betel nut consumption is ‘a sense of well-being, euphoria, warm sensation of the body, sweating, salivation, palpitation, heightened alertness’, suppression of hunger and increased stamina (Chu 2002:111). These effects have only a short duration.\textsuperscript{24}

Many, but certainly not all, of the cultural reasons for chewing are associated with these physiological properties. For highlanders, the consumers of most interest to this research, betel nut consumption is a recent adoption and therefore there is little tradition surrounding its consumption. For both lowland and highland people, betel nut is an everyday drug chewed for its effect on the chewer and for its role as a social lubricant, often likened by chewers to other mild drugs such as tea, coffee, tobacco or alcohol. The reasons for chewing differ. Highlanders may explain: ‘Sometimes when we feel cold we chew betel nut to warm us’. It is also chewed to fight fatigue and to improve concentration. A Turubu elder described:

[When I chew] I feel nice, and awake ... If we are talking and I feel like I am sleepy. What you are saying won’t go in my ear and into my head. Instead it goes behind. I am just like a dead tree. But if I have daka, buai, I chew, you talk, my mind is focused.

Betel chewing is also said to invigorate the skin or stimulate the body (\textit{kinapim skin}) and ‘clear the mind’ (\textit{kliaim tingting}) and to ‘clear the eyes’ (\textit{kliaim ai}). For these reasons betel nut is used by long-haul drivers to keep them awake through the night (see Benediktsson 2002:209). Other reasons given for its consumption include making the breath smell good and to help with nausea during pregnancy (Senn et al. 2009).

\textsuperscript{23} For example, one betel nut buyer that I observed paid between K1.54 and K4.44 per kilogram for betel nut in the same lowland village on the same day.

\textsuperscript{24} Chu (2002) noted that an elevated heart rate and increased skin temperature lasted around seventeen minutes.
Betel nut is also both habitual and addictive which for many chewers is reason in itself (Winstock 2002). People say things like ‘when I don’t chew betel nut I nearly die!’ People discuss the difficulties of giving up saying they feel lethargic, and even that their teeth feel loose. Some people report to sleep with betel nut beside the bed so they can chew as soon as they wake (Garner et al. 1996:9). The feeling people get from chewing and the addictiveness of the stimulant certainly underlies betel nut’s life as a commodity.

While chewing is a popular practice, it is nevertheless clear that betel nut, betel pepper and lime are not harmless substances. A large body of medical research indicates that betel nut chewing has a number of long-term deleterious health effects. These include impacts on the mouth, upper digestive tract, cardiovascular system, lungs, liver, stomach, pancreas and brain. PNG Medical Society estimates as many as two thousand people die each year in PNG as a result of oral cancers linked to betel nut (Gerawa 2009). There are also a more limited number of health benefits associated with chewing. The negative consequences of betel nut consumption are often not well understood by grassroots Papua New Guineans (this is discussed, along with the medical literature, in Appendix 2). The substance is socially highly valued and any attempt to regulate consumption is likely to be met with both strong resistance and deaf ears.

AN EXPANDING CUSTOM, A CULTURAL INNOVATION

The rapidity with which this stimulant [(betel nut)] has been accepted by highlanders over a very short period is one of the more notable cultural innovations in the region, in many ways on a par with the adoption of steel or tinned fish’ (Jackson 1976a:179).

For many people from the lowlands of PNG betel nut is inextricably entangled in culture and social life. However, as previously noted, betel nut is a relatively new thing for the people of the highlands. This distinction is critical to the contemporary story of betel nut and must remain in sight as betel nut is followed from lowland producer to highland consumer.

Chapter Two

A global and a local thing

Betel nut is paradoxically both a global and a local thing. Its small size, durability (particularly when dried), and value made it one of the great pre-colonial travellers, and is essential to its contemporary story. The palm is believed to be native to island South-East Asia with the greatest diversity of *Areca* species in the Malaysian Archipelago (Theodoratus 1953). It is most likely to have been first domesticated here and then to have spread widely from this point along with the betel pepper which is likely to have similar origins (Theodoratus 1953; Lichtenberk 1998). Archaeological evidence suggests this movement likely predates 3200-5000 years before present. Betel stained teeth have been found in the southern Philippines, dating to about 5000 BP, and in the Bismarck Archipelago of PNG, dating to 3500-3200 BP (Kirch et al. 1989; Lichtenberk 1998:352).

Betel nut was also one of the earliest long-distance commodities, traded from Java to China in 1200 AD and perhaps into the Persian Gulf as early as 600 AD (Theodoratus 1953). It is now grown and consumed from parts of Africa and the Middle East, throughout the Indian subcontinent and much of Asia, and as far as Micronesia, Melanesia and its Polynesian outliers (Theodoratus 1953) (Map 4).

Betel nut is also exported in very small quantities throughout the world including to Europe, the United States and Australia. Betel nut is now consumed by at least ten percent of the world’s population making it the world’s fourth most consumed drug after nicotine, caffeine and ethanol (alcohol) (Boucher and Mannan 2002). Truly a global thing. Nevertheless, the story of betel nut in contemporary PNG is a local one; it is quintessentially Papua New Guinean.

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26 *Areca macrocalyx* is also considered to be native to New Guinea.

27 Zumbroich (2007) presents a synthesis of research on the origin and diffusion of the betel nut consumption throughout south and south-east Asia and the Pacific.

28 Theodoratus (1953) suggested as much as a quarter of the world’s population chew betel nut.
Betel nut plays a prominent role in many lowland cultures in PNG. It is both an everyday substance and one which is central in ceremonial and ritual aspects of life. In such a culturally diverse country it is difficult to generalise, however many ideas about betel nut are broadly shared across cultures although the specifics are often different. The cultural values attached to betel nut are often a direct result of its physiological properties.

Betel nut is the precursor to, as well as the catalyst for, many social relations (Schwimmer 1973). It is almost universally used to welcome. A villager from the Middle Ramu explained: ‘If a new visitor comes to your house the first thing you must do is give him betel nut.’ It is used to start meetings as well as more informal social relations. It is an item which should always be shared (Bergendorff 1996:136). For the Keakalo people (Central Province), and likewise for many Papua New Guineans:

People exchange betel [nut] generally within various interpersonal relationships. Offering betel [nut] when visiting with relatives, when traveling to or returning from gardens, at chance meetings on a garden trail or beach or during any social gathering is a common practice among kin and friends (Iamo 1987:146).
Chapter Two

Betel nut is also closely associated with relaxing tensions, resolving conflicts and making peace between groups. A Biwat villager described how in his community conflict is resolved by each party bringing a bunch of betel nut which is broken in half, each group taking half the bunch of the other group. Betel nut is used by orators to make their speeches more effective and is associated with ‘civilized forms of behaviour’ (Hirsch 1990:25). Betel nut is said to lubricate social relations, particularly between men and women (Schwimmer 1973:167; Lutkehaus 1981b).

It is a marker of social status, able to be used to attain prestige and ‘one of the things that brings good name’ (Iamo 1987:135). It is used in the rites which mark menstruation, first intercourse, bridewealth and marriage (Lutkehaus and Roscoe 1995; Watson 1987a) and is gifted at mortuary feasts (Schwimmer 1973). It can be used in both love magic and in sorcery, and for this reason chewing together shows trust due to the risk that some form of magic may have been cast on the nut (Lepowsky 1982). It is for fear of magic that many lowland people take great care, especially when travelling, where they spit and dispose of the betel nut husks (Lutkehaus 1981b; Hoenigman 2007).

The cosmology and myths of people throughout Melanesia are rich with references to betel nut (see Lutkehaus 1981; Hirsch 2007; Mosko 1985; Ivens in Lichtenberk 1998). In one village in the Middle Ramu there are four clans which are associated with different types of betel nut. A member of one of these clans who I interviewed stated ‘betel nut created me’. For the people around Turubu, one of their mythical creators was named Bu. This figure had the skin of a cassowary and his beard was stained red with betel nut. He created betel nut and betel pepper amongst other things. Lastly, betel nut is an important part of exchange both as an item of exchange and as a promise of future exchanges. This includes gift exchange, trade, barter, and in more modern contexts, market exchange, something discussed in greater detail in Chapter 3.

To this point the discussion has focused on lowland cultures and for good reason; for the most part betel nut was not a feature of highland societies, the one exception being the highland betel nut (kavivi) chewing areas. In these areas kavivi fulfils a similar role to that which bnai plays in the

29 Biwat is an area on the Yuat River, a remote and major tributary of the Sepik River. Watson (1987a), who conducted fieldwork here, suggested that this was not a traditional custom amongst the Biwat.
30 Many of the Proto Oceanic terms for betel nut are similar including bua, bu, and mbung (Riesenfeld 1947:187). In Gauss Bay near Turubu the word for betel nut is bu. Also see Lichtenberk (1998) and Ross (2008:393-4). The story I was told of the way in which Bu created betel nut and betel pepper bore similarities to Genesis.
31 Kavivi was customarily consumed in the highlands in an area centered upon modern day Kainantu, the Finisterre Range to the north and in the Menyamya area to the south south-east (R. M. Bourke pers. comm. September 2011; Blackwood 1939, 1978; Keil 1974). Keil (1974:69) notes that kavivi was customarily chewed by the Nekematigi people, a dialect group of the Benabena language group, but not by other Benbena people.
Betel nut: A particular type of thing

lowlands (see Hirsch 1990). It is given as a gift between friends and exchange partners; distributed at customary ceremonies including those celebrating a birth; and used to represent the promise of a pig in exchange (Keil 1974). It is also used in healing, and is a feature of cosmology and myths. For instance, among the Kapau of the Upper Watut (Morobe), kavivi features in stories which describe how things got their names from a cultural hero: ‘Manabwaiipo showed them how to chew areca nut with lime and betel pepper, he showed them many things, and told them their names’ (Blackwood 1978:160). Kavivi is even said to pulse through the veins of Gadsup warriors: ‘when other people fight they bleed blood; when we fight we bleed kavivi’ (R. M. Bourke pers. comm. September 2011). In the central highlands west of the Kainantu area buai and kavivi were not part of customary life.

Through all this it must be recognised that betel nut is no ordinary substance. Consumption in the lowlands and the kavivi areas of the highlands is closely tied to the myth, cosmology, rituals, social status, social relations, exchange practices and everyday life. Many of these traditional meanings and associations are very much present today and in different ways infiltrate the betel nut trade.

Expanding consumption in contemporary Papua New Guinea

The spatial distribution of betel nut consumption has altered significantly over the past fifty years. In the lowlands chewing is widespread both in terms of its spatial distribution and in terms of the proportion of the population who consume buai. For example, Lepowsky (1982:335) reports the Vanatinai people (Milne Bay) ‘chew betel many times a day. I met no one from the island who did not chew.’ Watson (1987a:215) who worked in an isolated part of East Sepik Province likewise noted ‘[a]ll Biwat villagers appeared to use betel nut, although age marked which part of the nut, or which species of nut, or what ingredients of the total betel chew, a particular individual could consume.’

These reports of widespread consumption are consistent with a number of medical studies (Table 4). One study of oral cancer in the late 1960s found that of those sampled from villages around Port Moresby 81% chewed betel nut, compared to 95% of villagers sampled from around Madang. In neither location was there any significant difference between the percentages of males and females who chewed (Pindborg et al. 1968:382). Similarly, Senn et al. (2009), in a recent study on

32 Hirsch (1990) refers to the highland variety of betel nut using the Fuyuge term inoa. Similarly he refers to the lowland betel nut as solon.
33 Riesenfeld’s (1947) paper Who are the betel-people? offers an exhaustive account of the distribution of the custom and the plant in Melanesia. While betel nut was absent in the highlands other stimulants were used including sugar, tobacco and ginger among others.

47
the impact of betel nut consumption on pregnancy outcomes, found 94% of pregnant women sampled from the Madang North Coast to chew betel nut. Another study in Kalo village (Central) recorded 93% of respondents chewed, with no gendered distinction (Owen et al. 2008:638, see also Dowse 1994).

<table>
<thead>
<tr>
<th>Location</th>
<th>Year</th>
<th>Male (%)</th>
<th>Female (%)</th>
<th>Total (%)</th>
<th>Source</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mt. Hagen (WHP)</td>
<td>1958-63</td>
<td>15.9</td>
<td>0</td>
<td>6.7</td>
<td>Atkinson et al. (1964)</td>
<td>Pre-Highlands Hwy</td>
</tr>
<tr>
<td>Menyamya (Morobe)</td>
<td>1958-63</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>Atkinson et al. (1964)</td>
<td>Kavi chewing area</td>
</tr>
<tr>
<td>Mendi (SHP)</td>
<td>1958-63</td>
<td>0.3</td>
<td>0</td>
<td>0.2</td>
<td>Atkinson et al. (1964)</td>
<td>Pre-Highlands Hwy</td>
</tr>
<tr>
<td>Mt. Hagen (WHP)</td>
<td>1967</td>
<td>46.0</td>
<td>1.9</td>
<td>26.8</td>
<td>Pindborg et al. (1968)</td>
<td></td>
</tr>
<tr>
<td>Gumine (Simbu)</td>
<td>1987-88</td>
<td>n.a.</td>
<td>16.0</td>
<td>n.a.</td>
<td>Groos and Hide (1989)</td>
<td></td>
</tr>
<tr>
<td>Masila (EHP)</td>
<td>1994</td>
<td>39.5</td>
<td>33.9</td>
<td>36.4</td>
<td>Dowse (1994, unpublished)</td>
<td></td>
</tr>
<tr>
<td>Gamusi (EHP)</td>
<td>1994</td>
<td>54.4</td>
<td>54.9</td>
<td>54.6</td>
<td>Dowse (1994, unpublished)</td>
<td></td>
</tr>
<tr>
<td>Gmisave (EHP)</td>
<td>1994</td>
<td>44.4</td>
<td>47.6</td>
<td>46.2</td>
<td>Dowse (1994, unpublished)</td>
<td></td>
</tr>
<tr>
<td>Mt. Hagen (WHP)</td>
<td>1997</td>
<td>n.a.</td>
<td>34.8</td>
<td>n.a.</td>
<td>Peters et al. (2001)</td>
<td>Pregnant women</td>
</tr>
<tr>
<td>Lowland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trobriand (MBP)</td>
<td>1958-63</td>
<td>99.3</td>
<td>99.2</td>
<td>99.3</td>
<td>Atkinson et al. (1964)</td>
<td></td>
</tr>
<tr>
<td>Wewak (ESP)</td>
<td>1958-63</td>
<td>97.1</td>
<td>91.5</td>
<td>94.0</td>
<td>Atkinson et al. (1964)</td>
<td></td>
</tr>
<tr>
<td>Madang (Madang)</td>
<td>1958-63</td>
<td>98.6</td>
<td>95.2</td>
<td>96.5</td>
<td>Atkinson et al. (1964)</td>
<td></td>
</tr>
<tr>
<td>Port Moresby (Central)</td>
<td>1967</td>
<td>79.3</td>
<td>83.8</td>
<td>81.4</td>
<td>Pindborg et al. (1968)</td>
<td>Rural</td>
</tr>
<tr>
<td>Madang (Madang)</td>
<td>1967</td>
<td>95.3</td>
<td>95.5</td>
<td>95.4</td>
<td>Pindborg et al. (1968)</td>
<td></td>
</tr>
<tr>
<td>Wosera (ESP)</td>
<td>1989</td>
<td>n.a.</td>
<td>68.0</td>
<td>n.a.</td>
<td>Garner et al. (1996)</td>
<td>Pregnant women</td>
</tr>
<tr>
<td>Madang (Madang)</td>
<td>2007-08</td>
<td>n.a.</td>
<td>94.0</td>
<td>n.a.</td>
<td>Senn et al. (2009)</td>
<td>Pregnant women</td>
</tr>
<tr>
<td>Koki (NCD)</td>
<td>2004</td>
<td>33.3</td>
<td>1.7</td>
<td>17.5</td>
<td>Owen et al. (2008)</td>
<td>SDA</td>
</tr>
<tr>
<td>Wanigela (Central)</td>
<td>2004</td>
<td>6.7</td>
<td>0</td>
<td>3.2</td>
<td>Owen et al. (2008)</td>
<td>SDA</td>
</tr>
<tr>
<td>Kalo (Central)</td>
<td>2004</td>
<td>93.3</td>
<td>93.4</td>
<td>93.4</td>
<td>Owen et al. (2008)</td>
<td></td>
</tr>
</tbody>
</table>

Note: This data indicates the percentage of people who reported to chew betel nut. It does not indicate the frequency with which people chew. Refer to original sources for further information, including on research methodologies.

It is a very different story in the central highlands. Two of the first Europeans to enter the highlands in the early 1930s – Michael Leahy, a gold prospector, and Father William Ross, a Catholic missionary – commented on the absence of both the plant and the custom there (Leahy 1936; Ross 1936). Another Catholic missionary, Nilles (1944:7), reported of the Bismarck Range, ‘areca palm tree does not grow in this area and thus betel-nut chewing is unknown. Consequently, the natives’ teeth are white and clean.’

Betel nut was first introduced to the highlanders by lowland people entering the highlands in the company of European prospectors, missionaries, and patrol officers (Theodoratus 1953; Straatmans.
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1968:10.4; Epstein 1982). Villagers just to the west of Kainantu (Eastern Highlands) confirm this. It is possible that early adoption in the highlands was to some extent associated with the power surrounding the lowland police who accompanied it into the highlands. 

Betel nut was brought by these lowland people on their own accord, and at times as part of issued rations (Burton-Bradley 1966:744). So by the early 1940s betel nut consumption was emerging in the highlands. Nilles (1944) observed ‘betel-nut has been introduced recently by the beach boys and I have occasionally seen a Chimbu native trying to get the best out of such a nut’. A betel nut trader recounted the introduction of betel nut to Mt. Hagen: ‘Coastal men came with Father William Ross. These men from Madang who came with him gave some [betel nut] to us. We chewed it. That is when we started with betel nut.’ Around Kainantu, villagers recalled that more betel nut started to enter the area during the construction of the Highlands Highway in the early 1950s, although by 1960 the amount of betel chewing in the highlands remained limited (Straatmans 1968:10.4).

While lowland people venturing into the highlands can be attributed with the introduction of betel nut to the highlands, and facilitating early experimentation amongst a limited number of highlanders, a far more important factor in its widespread adoption was the later movement of highlanders to the lowlands and back. An early catalyst for this was the Highlands Labour Scheme (1950-1974) which saw large numbers of highland men travel to and work on the coast and islands (Chapter 3). The scheme’s earlier recruits were mainly from the more easterly highland locations, and those enlisted towards the end of the scheme from the more remote westerly areas of the highlands (Ward 1990). This likely provides some insight into the movement of betel nut into different areas over time. The scheme also, and more significantly, spurred independent travel by highlanders to the lowlands.

The completion of the all-weather Highlands Highway in the late 1960s greatly contributed to the mobility of highlanders, and ultimately to the expansion of betel nut consumption and the betel nut trade in the highlands (see McKillop c. 2006) (Chapter 3). More recently Lutkehaus (1981a:2) has

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35 According to F.E. Williams (1940:157) (Government anthropologist - Territory of Papua) betel nut chewing was also an expanding custom in the Kutubu area in 1938-9, something he attributed to Fasu migrants. Kutubu is in the mid altitude zone c. 800 metres above sea level.

36 Father William Ross first arrived in Mt. Hagen in 1934 (and largely remained there until his death in 1973). The betel nut trader’s recollections are likely from the 1950 or 1960s, or recounted from stories he had heard of an earlier period. The mission at Rebiamul established by Ross is on the outskirts of Mt. Hagen not far from the Kaiwei betel nut marketplace.

37 For a handful of highlanders their first encounters with the substance were as carriers on Jim Taylor’s Hagen-Sepik patrol when it entered the lowlands in 1937 (see Gammage 1998). Around Kainantu, local people acted as carriers for soldiers during the Second World War, taking them down to the Markham and returning with betel nut. Men from around Kainantu also laboured on the construction of the Highlands Highway in the early 1950s.
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suggested ‘It has been the airplane, combined with the job mobility of the newly-educated elite in PNG, which has facilitated the current diffusion of the custom!’ I argue that roads and the increased mobility of the non-elite has been far more important. By the early 1980s betel nut adoption was widespread with Sexton (1988:126) able to state of the Daulo people (Eastern Highlands): ‘People constantly demand, offer, and receive from one another small amounts of food, tobacco, and betel nut’.

An indication of the uptake of chewing in the highlands can be drawn from a number of medical studies (Table 4). In the late 1950s to early 1960s Atkinson et al. (1964) recorded that in Mt. Hagen 15.9% of men chewed whereas no women reported to chew. By contrast, at the same time in Mendi (Southern Highlands) 0.3% of men chewed. Again no women reported to chew. By the late 1960s chewing was on the rise. Pindborg et al.’s (1968) study of highlanders from around Mt. Hagen township recorded that around 46% of men chewed betel nut whereas only 2% of women did so. This is indicative of a likely maximum to the proportion of highlanders chewing at the time, as uptake was greatest in urban areas, as remains the case today. A later 1985 oral health survey, conducted amongst the Huli people of the Southern Highlands, found that 22% of men chew but only 3% of women did so (Newell 2002). The lower consumption rates amongst the Huli, as compared to Mt. Hagen people, can likely be attributed to lower incomes, higher costs of betel nut, less mobility and the recency of its introduction there.

These three studies show a clear gendered distinction to consumption in the past. This no longer appears to be the case, particularly in urban areas. Dowse’s (1994) research in three rural highland villages in the Eastern Highlands found little gender difference with 45% of men and 42% of women reporting to be chewers.38 Although the number of highlanders chewing has increased dramatically, the frequency with which betel nut is chewed remains much lower in the highlands when compared to the lowlands. In those Eastern Highland villages surveyed by Dowse (1994) 20.1% of men and 17.6% of women consumed betel nut 6-7 days per week, whereas for the lowland village of Kalo (Central) 91% of all people consumed with the same frequency.

In remote highland areas consumption is lower and more intermittent. This was the case in 2009 in the Komo-Hides area, the end of the road network in the Southern Highlands. However, this has changed as a result of the PNG Liquefied Natural Gas project there. Urbanisation has also played an important role in the distribution of betel nut consumption in the highlands. Urban people have

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38 Gamusi and Gimisave in the Asaro Valley of the Eastern Highlands, and Masila (Masilakiaufa) near Goroka also in the Eastern Highlands. I am grateful to Gary Dowse and his colleagues who generously gave me access to unpublished data from this study. These figures include those who had chewed betel nut in the past 6 months.
greater access to marketplaces and greater access to money with which to purchase betel nut. Though even in relatively remote highland areas betel nut chewing may be practiced, it is in the urban areas, the urban periphery and those areas with the best road access and the highest incomes, where betel nut consumption levels are greatest. This trend is reflected in the 1982/3 National Nutrition Survey data on the percentage of households in each district reporting to earn income from the sale of betel nut (Appendix 3). This contemporary diffusion of betel nut consumption into the highlands is a remarkable cultural innovation (Jackson 1976a:179). Betel chewing is also a recent innovation in southern Western Province where it was not chewed at the time of European contact (Riesenfeld 1947:170-173).

It is clear that betel nut is consumed by a majority of the people throughout lowland PNG, and in the highlands it is a rapidly expanding practice. It is, however, important to point out a number of exceptions. Many of the surveys above focused on adults and therefore less is known about the number of children chewing. This is likely to differ considerably from place to place. Children, due to both social restrictions and access to cash for those in urban areas, are likely to chew less than the adults within a community although it should be noted that even very young children may chew. A second exception is amongst those members of certain evangelical and Pentecostal churches, including the Seventh Day Adventist (SDA) church. For example in Central Province around 92% of adults in Kalo village chew betel nut. By comparison in the nearby village of Wanigela, which is strongly SDA, only around 1% of the adults chew (Dowse 1994; P. Owen 2004:2-3). The Eastern Highland villages surveyed by Dowse (1994) are also likely to have a number of SDAs. Whilst the SDA church disapproves of betel nut consumption, many SDAs I met during fieldwork did chew although typically less often and less visibly. Education may also be a factor in consumption levels, particularly where the employment situation restricts consumption (for instance within resource sector enclaves and in the public service) although this cannot be substantiated.

Who are the betel people?

Intermittently betel nut finds itself featured at the centre of theories and debates around the peopling of the Pacific. In *The History of Melanesian Society*, Rivers (1914) theorised the populating of

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39 Hanson et al.’s (2001:92, 93, 110, 111, 124, 125, 140, 141, 156, 157) ‘access to services’ and ‘income’ maps give some indication of the likely prevalence and frequency of betel nut consumption in the highland provinces. This data is based on data from the early 1990s. The broad pattern remains the same today, the main exception being the recent rise in incomes in parts of the Southern Highlands associated with the PNG LNG project. Incomes in this area, and access to services is likely to increase in the near future, and as a result so will the prevalence and frequency of betel nut consumption. In 2010-2011 betel nut consumption has greatly increased when compared to the minor presence of betel nut in 2009 when the project was in its early stages.

40 Many SDAs find it more attractive to use toothpaste to disguise the odour and the appearance rather than give up their habit.
Melanesia and Oceania by two different peoples, the ‘kava-people’ and the ‘betel-people’. Rivers’ theory was based largely on the nearly non-complementary distribution of betel nut and kava consumption. Rivers suggested that there were two waves of migration into Melanesia – firstly the kava-people, followed by the betel-people. He argued that betel nut consumption replaced kava in those areas where the betel-people migrated. This version of events has since been dismissed (Riesenfeld 1947; Lichtenberk 1998; cf. Brunton 1989). In *Who are the Betel-People?* Riesenfeld (1947:204) states that ‘Rivers was in fact not lacking in imagination’ when he ascribed key cultural elements to the betel-people based on limited data. Riesenfeld (1947:205) argued that the custom was most likely introduced through a combination of migration, casual contact and trade rather than a distinct migration wave. Lichtenberk (1998:354-5) uses linguistic and some archaeological evidence to conclude:

> the people who spoke the immediate precursor of Proto Oceanic did chew betel, and that they did bring the custom with them. It is highly unlikely that the idea of chewing areca nuts, betel pepper and lime together in a quid originated more than once.41

The question of ‘who are the betel people?’ takes an interesting turn in light of recent diffusion of the custom (see Lutkehaus 1981a), one that is echoed by at least one betel pepper grower from Karkar:

> Highlanders really chew betel nut. For large men, five or six betel nut [at once] ... they really have the taste for betel nut, more than us from the coast. The [highland] women, when they sit down to sell [in the marketplace] their cheeks are filled with betel nut. They chew and chew until the afternoon. They are bigger betel nut chewers than us.

It is now those involved in the contemporary betel nut trade that consider themselves the ‘betel people’ (*buai na daka lain*).

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41 Lichtenberk (1998:354-5) further argues ‘speakers of Proto Oceanic chewed betel but did not drink kava. The custom of betel-chewing was carried by speakers of a descendant or descendants of Proto Oceanic as far east as the Torres Islands in northern Vanuatu … The spread of betel-chewing came to an end there, and only kava-drinking was carried into areas settled subsequently’. In reaching this conclusion Lichtenberk (1998) rejects Brunton’s (1989) claim of kava as ‘the abandoned narcotic’ suggesting that it is betel nut that has been the abandoned drug. Lichtenberk also refutes Kirch’s (1997) statement that Proto Oceanic speakers did not chew betel nut.
In the lowlands, betel nut has traditionally been an integral part of many Papua New Guineans’ lives and continues to be so today. Kastam (custom) surrounding betel nut remains strong, with its new life as a commodity existing alongside its pre-existing cultural roles. Betel nut remains the archetypal object of daily exchange in the lowlands where friends regularly share betel nut. Arguably the most common phrase heard in PNG would be ‘Buai i stap?’ or ‘Buai i stap!’ (‘Do you have betel nut?’ or ‘I have betel nut!’). Betel nut is widely consumed by young and old, male and female, rural and urban residents, lowland people and highlanders, rich and poor, grassroots, rabisman42, those in wage employment and politicians alike. Consequently it is an everyday part of the lives of a great number of Papua New Guineans.

Betel nut also carries with it contradictory ideas about being civilized. On one hand in many PNG cultures to chew betel nut is to be civilized. This is reaffirmed when it is contrasted with beer, a European import. Betel nut is a sign of sociality and peace, while beer symbolizes aggression and uncontrolled and uncivilized behaviour (Lepowsky 1982; Foster 1992b). On the other hand discourses around what it is to be modern (and Western) have led betel nut to be seen as a primitive practice to be dispensed with in pursuit of development (Foster 1992b). While traditionally it has been something that makes people work hard (Watson 1987a), for former Prime Minister Sir Julius Chan, it creates lazy workers (EMTV’ 2007).

Betel nut has also been associated with the emergence of a ‘national culture’ and identity (Hirsch 1990:18; Foster 1992b), perhaps one of the few things that unites a country of such diversity. Two prominent nationals, John Kasaiapwalova (1987) and Bernard Narokobi (1980) (see Burton-Bradley 1978), have recognised this, using it to construct a pan-Melanesian identity, ‘The Melanesian Way’, and as a symbol of resistance against their earlier colonial mastas (see Foster 1992b; 1996:11).43

Betel nut has also been drawn upon to differentiate indigenous Papua New Guineans from outsiders, with it acquiring labels such as ‘Papuan Beer’ or ‘New Guinea Whisky’ (Lepowsky 1982; Burton-Bradley 1980; see Schwimmer 1982). It has equally been used to create ethnic and regional identities, between those who customarily chew and those ‘people who are new to betel nut’; the highlanders (Foster 1996:12). Betel nut is used to unite and also to differentiate. Through the betel

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42 Literally ‘rubbish man’, meaning a man of low status.

43 Kava has similarly been used to foster national identity elsewhere in the Pacific, including Vanuatu, Samoa and Fiji (Lebot et al. 1992:208).
nut trade highland traders and lowland producers interact; those in the more advantaged (in terms of access to services, and higher incomes) Wahgi Valley come into contact with disadvantaged villagers from the Middle Ramu, and while buying their evening chew urban wage earners come into contact with migrants from the settlements.

Betel nut remains an integral part of lowland cultures. For instance, today in the Wewak main marketplace t-shirts are sold screen-printed with the slogan ‘Betel nut is what makes me Sepik.’ It is equally valued in the highlands. In Chris Owen’s (2004) documentary Betelnut Bisnis, one betel nut seller in Goroka’s Kakaruk betel nut marketplace states ‘without [betel nut] we’d die … the lifeblood of PNG’. Amongst the Daulo people (Eastern Highlands), Sexton (1988:126) observed the sharing of betel nut, among other introduced foods, as an expression of sociality in much the same way that traditional foods were manipulated. It is a substance which lowlanders and highlanders alike are compelled to share with kin and friends. Similarly Hirsch (1990, 1995, 2007) describes how betel nut has recently been incorporated into the cosmology and ritual practices of the Fuyuge people (highland Central Province). The extent to which betel nut has become a part of the cosmology and ritual life of those central highland groups, who are today key actors in the betel nut trade, would prove an interesting line of enquiry although not one pursued here.

Betel nut has also taken on new meanings, been used in new ways, and has had old meanings remade in the lowlands. For instance, Iamo (1987) described how political candidates distributed betel nut to potential voters in the lead up to the 1982 elections. During the 2007 national elections betel nut was again used as a political tool. In Manus Province, for example, some political candidates enrolled betel nut in ways which symbolically likened them to traditional leaders (Dalsgaard and Otto 2011:151-3). Likewise the role that betel nut has in diffusing tension between lowland communities has been transferred to lowland-highland relations. When a fight broke out at a betel nut marketplace between a highlander and a lowland man, the confrontation ended with the lowland man telling the highlander to return with betel nut so that they can sit down and chew together and be friends. Traditionally it has been used in relations between men and women; in the contemporary context it has been reported as being used to initiate the purchase of sex (NHASP 2006). It is not just here that betel nut’s tale interweaves with that of HIV/AIDS. Many betel nut

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44 ‘Buai tasol melkim na mi kamap as ples Sepik’.
45 In other ways it has been used symbolically as a measure of modernity and a mark of possessive individualism. Martin (2007) for example describes how betel nut has been used somewhat like a line in the sand by ‘big shots’ trying to distance themselves from the requests of kin. Martin (2007:288) quotes a local informant: ‘I don’t like it when I see someone just walk up to someone else’s basket and put their hand in’ and further ‘It’s all right for them to ask us for buai, but I don’t want us to be the sort of people who ask other people for buai’.
46 In relation to Melanesian elections, betel nut spit has also been used to defile candidate election posters (May 2012), and the husks to remove the indelible ink that is used to indicate that people have already voted (Ofotai 2006).
marketplaces have been labelled transmission hotspots, and traders; ‘mobile men with money’, are considered a particularly vulnerable group and the engine of the epidemic (see Lepani 2008; Beer 2008).

The story of betel nut is also shaped by its quasi-legal status. While betel nut itself is not an illicit drug, since at least the 1970s different authorities have sought to regulate it. The rationale for regulation include aesthetics, public health, public nuisance, taxation, law and order, and it being said to promote idleness. It is the aesthetic reasoning which is most commonly used as justification for regulation. Vending sites are conspicuous by the discarded husks of chewers that litter the ground and the red spittle which is visible across the urban landscape. Spitting is also a public health concern, as are the other health implications of chewing. In addition, roadside vendors are also seen as a public nuisance in the eyes of the town authorities. Roadside marketplaces, often referred to as ‘black markets’, impede the flow of pedestrians and traffic. Attempts have also been made to ‘tax’ the trade (Post Courier 1991:14) and to crack down on illegal liquor, marijuana sales, gambling and petty crime, which have become associated with many betel nut marketplaces. It is also criticised for creating laziness amongst both producers, who do not tend to their other crops, and consumers (see Kopi 2006; Bashir 2009). For others it is a waste of money and as a result leads to poorer nutrition. This has seen betel nut banned in different spaces, including workplaces – Narokobi (1980) jokingly remarked that this was due to a ‘betel nut stain on a white collar [being] impossible to remove. So it would be in order to keep the white collars clean [that] betel nut [be] kept out!’ The sale, consumption and spitting of betel nut has also been banned in the fresh food marketplaces and within some town boundaries, with spot fines issued for breaches (Plate 3).

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47 Fresh food sales have similarly been regulated although there has been greater attention paid to betel nut.
Plate 3: Goroka Urban Local Level Government sign publicising spot fines for the sale and consumption of betel nut, July 2006.

The sign reads: ‘Spot fines: litter and rubbish dumping – K20; Trading in public places – K20; Spitting or chewing betelnut in public places – K20; Selling of betelnut outside declared markets of public places – K20; Spitting or chewing of betelnut in a motor vehicle – K20.’

Foster (1992b) has argued that attempts by the state to regulate are a form of moral education to create a modern, Western and perhaps Christian citizenry. Several religious denominations certainly support such efforts. Town authority workers have often used heavy handed tactics to deal with vendors, something I witnessed, and have been reported to harass, assault and steal from vendors (see Poiya 2007). Despite concerted effort, most formal regulation has proved ineffective and short lived. The different authorities have been successful in removing betel nut from many of the government controlled urban fresh food marketplaces, and in shifting bulk sales to designated and dedicated betel nut marketplaces or private marketplaces on the outskirts of towns. However, the authorities face a protracted struggle to regulate roadside and street sales, and to curb the ‘litter’ problem associated with consumption. Largely, the repeated attempts to regulate have simply displaced the problem to different locations and different times. Informal regulations that exist within the betel nut marketplaces are a much greater influence than those imposed by a weak state.

Betel nut is today a pervasive feature of ‘economic’ life in PNG, and it has taken on strong associations with money (muni) and business (bisnii), and attained a lustre as ‘green gold’. Stories abound of people who have become rich from betel nut trading, and of the price of betel nut in the Porgera and Ok Tedi mine camps. It is also reflected by joking references to the Kakaruk betel nut
Betel nut: A particular type of thing

marketplace as being Goroka’s Wol Tred Senta (World Trade Centre). Despite the possible financial returns, many see selling betel nut as an occupation for the lower class and uneducated. A misbehaving child may be scolded with ‘do you also want to sell betel nut?’ – a suggestion that betel nut selling is something you do if you have no other opportunities. Though one discourse associates betel nut with entrepreneurship and innovation, for others it evokes laziness and the idea of ‘isi moni’ (easy money) and of earning a ‘one day fortnight’. For those grassroots people who sell it the sentiment is that ‘betel nut looks after us’, and for many it is their ‘sweet potato’, their staple.

The great earnings that some have derived from betel nut sales has also caused considerable social change. People are migrating into relatively more advantaged betel nut and pepper production areas, residence patterns following marriage have altered and gender relations are being transformed. Many people who produce and trade betel nut are also becoming more dependent on money and store bought goods for their subsistence and in some areas there has been a proliferation of material wealth and ‘money things’ (Mosko 1999:54-59).

The contemporary value of betel nut is clearly demonstrated by the attention it attracts in the PNG media. Articles on betel nut, especially on its price and attempts to regulate its sale or use, regularly appear in the nation’s newspapers, often as front page news. Multi-national companies have also recognised the appeal of betel nut. PK chewing gum has been promoted as an alternative to betel nut with the slogan ‘We don’t chew betel nut, we only chew PK’ (mipela no save kaikai buai, mipela save kaikai PK tasol). Likewise, in 2007 Coca-Cola launched its new ‘Bu’ energy drink with a betel nut pictured on the can and with enough sugar and guarana to ensure consumers ‘get [their] buzz’, and sufficient colouring to stain the mouth red after drinking it.

The multitude of signs that forbid chewing, spitting and selling in public places are a good indication of the importance of betel nut chewing throughout the country. The most pervasive indicator of its consumption and trade is also the ban of the urban authorities, the ubiquitous discarded husks and the red saliva stains which mark the ground, roads, walls, posts, bins and Public Motor Vehicles, as well as the teeth of consumers. It is an item imbued with considerable meaning for some, while for others it is an everyday substance: ‘It doesn’t help us with anything ... We chew, it goes red, we spit, that’s all’.

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48 Earning a ‘one day fortnight’ refers to their ability to earn the equivalent of a fortnight’s salary in a single day.
49 See also Foster (1996:10-11) for a discussion of PK and betel nut.
50 Many languages throughout PNG use the term bu, or some extension/variant of it, to refer to betel nut (see Riesenfeld 1947).
51 The ad slogan was ‘get your buzz, get your Bu’.
Chapter Two

CONCLUSION

Betel nut’s intrinsic properties and characteristics are crucial in shaping its ‘cultural biography’. I have paid particular attention to how these have shaped betel nut’s recent foray into the highlands and the country’s informal marketplaces. A lowland product consumed by highland people who cannot produce it gives rise to the trade. Its seasonality shapes the movements of traders around the country. Betel nut’s husk protects it during transport – yet its perishability means that time remains of the essence. Time is particularly important for the highly perishable betel pepper, something which shapes its production catchment. The fact that betel nut is consumed, regularly and by many, means that there is always demand. It is both luxury and staple. It makes people feel warm on a cold night, alert when they are tired, and more sociable. The addictive properties reinforce demand for the stimulant. The voluminous amounts of bright red saliva consumption produces compels people to spit, everywhere. The government seeks to morally educate its people in line with modern ideas on where and when to chew and spit. Town authorities in a struggle to maintain a tidy town ban chewing and selling in the urban areas and issue spot fines to those who transgress. They push sellers into marketplaces beyond the town boundaries, beyond regulation. Sellers in the urban areas operate from behind fences or in fear of mistreatment by police and town authorities. Betel nut chewing can cause mouth cancer, among other ill health effects. Again, authorities and NGOs call for its regulation, but betel nut is so engrained in people’s cultures and daily lives that any regulation seems doomed to fail.

It is critical to remember that the meanings and values ascribed to betel nut are not universal across its distribution. For the lowland producers betel nut is a thing imbued with cultural meaning. It is used to welcome visitors, make friends, placate enemies and coerce adoration from a member of the opposite sex. It takes its place in cosmology, drips through the beard of mythical creators, and takes part in numerous rituals and life events. It is an everyday substance and in its recent history increasingly a ‘money thing’. For the highland consumers, vendors and traders betel nut is a recent introduction, its consumption a significant cultural innovation. The commodity life of betel nut is the most relevant feature here, for it is the highlanders who made betel nut a money thing. It is a stimulant and they enjoy it for the same reasons as their lowland counterparts. But it has only made small inroads to attaining the same cultural significance that the substance has in the lowlands. For highlanders too it is an everyday substance, something to be shared amongst friends and used to promote sociality. Some of the values and meanings attached to it have proved sticky, others have evolved, and new meanings have adhered themselves. It is quintessentially Papua New Guinean yet provides common ground with a tenth of the world’s population. It also unites myriad cultures within PNG. It has overtones of money but defines the grassroots. It is consumed by most Papua
New Guineans. The cultural biography of betel nut has developed through its production, distribution, exchange and consumption. This thesis recounts its most recent chapter, one of its commoditisation.
Chapter Two
Chapter 3

Betel nut’s economic entanglements

INTRODUCTION

A chasm exists between official accounts of ‘the economy’ in PNG and the livelihoods which the majority of Papua New Guineans pursue. Typical accounts of the economy centre on resource extraction and exports, crudely measured by gross domestic product, while subsistence production, non-monetary and non-market exchange and informal economic activities are largely glossed over. The purpose of this chapter is to offer an account of that economy in which the ‘grassroots’ majority participate. Betel nut’s entanglements provide the basis to lay out this economic landscape. Betel nut – at once highly visible and valued by those whose lives are engaged with it, and neglected, hidden and muted by others – clearly illustrates the chasm.

The chapter tells of the substantial economic differences between rural and urban economic spaces, as well as those created by resource enclaves, but also of the considerable difference within, as well as continuity and connectivity between, these economic spaces. The chapter examines how the betel nut trade is positioned within these spaces and the traverses between them. Betel nut’s economic entanglements refers to the way in which betel nut selling connects, displaces, supplements, creates gaps for, and is co-dependent on, other economic activities and spaces. From the discussion, betel nut selling emerges as a significant livelihood activity for a large proportion of rural and urban Papua New Guineans.
Chapter Three

The trade in betel nut is of considerable scale, estimated to be worth around K115 million in the mid 1990s (Gibson 2001a).\(^1\) For some of those that sell betel nut, particularly traders, it can be a very lucrative activity, whereas for the majority it provides more modest daily incomes. The regularity of the income has substantial appeal compared to the larger, but more periodic, returns associated with most export cash crops and wage employment. It is an activity in which people can participate at virtually any scale, from a handful of nuts to several hundred bags. Importantly, betel nut should be seen as but one of the diverse livelihood activities in which Papua New Guineans engage. While at times and in particular locations it has displaced other livelihood activities including export cash cropping and subsistence production (see Mosko 1999, 2005), for the most part it is complementary. The trade of betel nut is also an important means by which wealth is redistributed throughout the country.

This chapter firmly locates betel nut within contemporary economic spaces and livelihoods in PNG. The trade is contextualised in relation to pre-colonial trade in general, and specifically the pre-colonial trade in betel nut, but argues that the contemporary trade in betel nut is qualitatively distinct from, rather than an adaptation or extension of, earlier movements of the substance. It lastly presents a history of the betel nut trade and examines those broader socio-economic changes that have occurred in (post)colonial PNG which have provided the impetus for the emergence of the trade. In doing so, betel nut is explicitly placed within a story of continuity, change and hybridity.

Economic difference in PNG

When betel nut is followed, like other commodities whether coffee, Coca Cola, pawpaw, sweet potato or lamb flaps\(^2\), it is revealing of the differences between its differently located actors. The contrast is not as stark as many South-North commodity chains, but it is nevertheless telling.

This contrast can be seen between Mt. Hagen, a key trading centre for betel nut, and the Middle Ramu, a remote production area at the trade’s periphery. Mt. Hagen is an urban centre and the economic hub of the highlands region; its environment, climate and colonial history favourable. The township connects people with global markets and the local economy breathes in unison with the international coffee market. While on a global scale Hagen is peripheral, in the national context Hageners are amongst the least disadvantaged (Hanson et al. 2001; Allen et al. 2005). At the other end lies the Middle Ramu; eight hours by boat brings you to the nearest road, itself out-of-the-way.

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\(^1\) Equivalent to K272 million in 2007. Gibson’s (2001a) estimate is based on consumption data from the 1996 PNG Household Survey conducted as part of a World Bank poverty assessment.

\(^2\) See respectively: West (2012); Foster (2008); Cook et al. (2004); Benediktsson (2002); Gewertz and Errington (2010).
Betel nut’s economic entanglements

Its environment is marginal and agricultural potential limited, access to markets and services poor (Hanson et al. 2001:200). The people say that ‘development’ has passed them by, and several studies have ranked it amongst the most disadvantaged districts in PNG (Hanson et al. 2001; Bourke and Allen 2008).

Throughout PNG economic difference is closely linked to the environment (Allen et al. 2005). In the past, good environments sustained higher populations, and both these factors attracted colonial ‘development’: patrol posts, aid posts, schools, airfields, roads, plantations, smallholder cash cropping and urban areas. As a result, colonial development has largely acted to reinforce and exacerbate pre-existing economic differences. Today the least disadvantaged rural people, and those with the highest incomes, are those with productive environments, with good access to services, and access to markets for their fresh food and export cash crops. The most disadvantaged rural people are those with more marginal environments, and poorer access to services and markets, and therefore lower incomes (Hanson et al. 2001:300; Allen et al. 2005).

Clearly substantial diversity in livelihood activities and consumption patterns occur in PNG. The most prominent distinction exists between the country's rural areas on the one hand, and urban areas on the other. Those spaces carved out by resource extraction are another distinct space. These are important cleavages within the PNG economy although there is undeniable diversity within these economic spaces, both between places and within a single location. There is also considerable connectivity and interdependence that exists between these spaces and the livelihoods that people pursue within them. This clearly emerges by following betel nut. The contemporary betel nut trade is an important means through which money is redistributed from those more advantaged areas – particularly the urban centres, the central highlands and the resource enclaves – to often remote rural areas.

**Rural economy and livelihoods**

Around eighty-seven per cent of Papua New Guineans live in rural areas (Allen and Bourke 2009a:29). Rural livelihoods in PNG are predominantly subsistence, with export cash crops and the domestic marketing of fresh food contributing small yet important cash incomes. It is difficult to overstate the importance of subsistence production in PNG. In 2006 an estimated eighty-three

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3 The Middle Ramu, was ranked amongst the most disadvantaged districts in PNG in both the World Bank’s Poverty Assessment and PNG National Economic and Fiscal Commission’s District Development Index (2004) (Bourke and Allen 2008).

4 See maps in Hanson et al. (2001:300) and Allen et al. (2005).

5 This combines the ‘rural’ (81%) and ‘rural non-village’ (6%) populations.
Chapter Three

per cent of food energy consumed was produced within PNG, and the majority of this by the consuming household (Bourke et al. 2009:130-2). In addition to subsistence livelihoods, non-market exchange such as gifting and barter between households and larger groups also comprises an important component of peoples’ livelihoods (see Koczberski et al. 2001, Carrier and Carrier 1989). Subsistence production and non-market exchange contribute to peoples’ economic resilience. With this base, people also require cash incomes which are typically used for items such as school fees, transport, imported food items, medical expenses, other basic needs as well as those lures of modernity.

Cash crops produced for export markets are collectively the most important source of income for rural households (Figure 3). In the lowlands the dominant export crops are cocoa, copra (coconut) and oil palm; in the highlands areas coffee is dominant. The majority of rural households are involved in the production of cash crops (Figure 4) although there is substantial variation in incomes earned from cash cropping throughout the country. Income from cash crops is periodic, seasonal in the case of coffee and fortnightly or monthly for oil palm. This periodicity has a significant bearing on spending patterns and the economy as a whole including the timing of sociocultural events (Koczberski et al. 2001:64; Curry 2003). This is particularly marked in the case of the coffee flush in the highlands (Bourke 1988:328-9; Allen et al. 2009:313; Grossman 1979). However, there are substantial differences between rural areas, even within provinces, as one Western Highlander explained:

Coffee. Rural people from Dei Council, Mul Baiyer, Tambul Nebilyer, North and South Wahgi, they are the ones who live off coffee. We from Hagen Central, we are not concerned with planting and looking after coffee. We work in the gardens, get produce like potato, sweet potato, sugar cane, bananas or greens and take them to the marketplace. We get money from this.

The sale of fresh food mostly through informal fresh food marketplaces is the other major source of income for rural villagers, particularly for those villagers who live close to an urban area. This trade provides an important link between rural production areas and the urban centres where much

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6 To offset only the staple crop production with imported rice would have cost an estimated K2850 million in 2004 (Bourke et al. 2009:142).
7 Some imported foods such as tinned fish, tinned meats and lamb flaps are particularly important in contributing to rural people’s protein and fat intake (Bourke and Allen 2009a:2; Gewertz and Errington 2010).
8 In addition a large number of different export cash crops are produced in PNG. These include tea, rubber, balsa, vanilla, pyrethrum and various spices. These are only significant at particular locations.
9 The plantation sector, while prominent in the first half of the twentieth century, has, particularly following independence, declined significantly in importance. Today smallholders represent 85% of coffee production, 82% of copra production and 90% of cocoa production. The exception is the oil palm industry where plantation production remains significant, and where smallholders represent only 33% of production (Allen et al. 2009).
of it is consumed. After Arabica coffee, fresh food sales are the second most important source of income for rural Papua New Guineans, in 1994 estimated at K44 million annually\(^\text{10}\) (Allen et al. 2009:286). Earnings from selling fresh food can be significant, for example in 2006 a survey of roadside sellers in Madang reported average weekly earnings of K138 per seller (Anderson 2008:68).

Figure 3: Estimated annual cash income of the rural population from different agricultural activities, PNG, 1990-1995.
Note: The PNG Mapping Agricultural Systems Project data is from the early 1990s, and therefore the absolute income figures are no longer accurate, however it remains the best comparative national estimate of smallholder incomes from a range of sources. This is because, although there is good current data on export earnings, there are not comparable estimates from non-export sources. Further, national cash crop export earnings are not the same as what smallholders earn at the farm gate (shown here). This is the result of plantation production, the level of which differs between crops (see Chapter 3 footnote 9), and value adding beyond the farm gate. For example, in 2006 coffee smallholders earned approximately K200,369,000 or 59% of coffee export earnings (Bourke and Harwood 2009:549; ICO 2013). In the same year cocoa smallholders earned approximately K136,926,000 or 70% of cocoa export earnings (ARDSF 2010; Bourke and Harwood 2009:553-4), and oil palm smallholders earned approximately K53,495,000 or 12% of oil palm export earnings (Bourke and Harwood 2009:412, 563-4).

\(^{10}\) Equivalent to K289 million in 2007.
Chapter Three

Figure 4: Estimated rural population who receive cash income from different agricultural activities, PNG, 1990-1995.
Note: The PNG Mapping Agricultural Systems Project estimates are based on 1990 census data in which the national population was 3,958,524. The PNG population has increased rapidly since with 5,190,786 people in 2000 and 7,059,653 in 2011 (Allen and Bourke 2009:29, 31; Kenneth 2012). Although the absolute numbers in the graph are out of date, these numbers remain a good indicator of the relative number of people who receive income from the different sources.

One of the most important features of rural livelihoods is the diverse range of income generating activities in which households are engaged. Curry’s and Koczberski’s research with oil palm and cocoa smallholders in New Britain clearly demonstrates this livelihood diversification, with individual households typically receiving income from a number of sources. If the returns from one cash crop are low, households may temporarily shift to another cash crop or another activity all together (see Allen et al. 2009:411-19). Whilst characterised as ‘smallholder’ households they also received income from various other activities including fresh food and betel nut marketing, poultry businesses, vehicle and tradestore operations, kerosene sales, petty trading, fishing, labouring and remittances from kin (Koczberski et al. 2001:44; Curry et al. 2007:45). Remittances provide an important link between rural and urban areas. This livelihood diversification strategy is central to the economic resilience of rural people. While subsistence production is undoubtedly the basis for most rural livelihoods, having access to cash is a crucial factor in ensuring peoples’ food security.

There are limited opportunities for wage employment in rural areas but a small number of families do receive income from labouring on plantations and in export cash crop processing, and from working at various public and private institutions such as schools, aid posts and agricultural stations.
Betel nut’s economic entanglements and economic resilience (Bourke 2001; Allen and Bourke 2009b). Over the past forty years betel nut has made an increasingly important contribution to the diverse livelihoods of rural people.

**Betel nut in rural livelihoods**

As previously noted, the production, distribution, exchange and trade in betel nut is central to the livelihoods of many rural people (Map 5). Selling betel nut and betel pepper is a particularly prominent livelihood activity in the lowlands where the crops are produced, but it is also becoming increasingly important for rural highlanders who are engaged in their resale. At the national level around a third of rural Papua New Guinean households earn some income from the sale of betel nut or betel pepper – in the early 1990s the Mapping Agricultural Systems Project estimated 35.2 per cent (Allen et al. 2009:286), and the 2000 Census reported 33.7 per cent (NSO 2003; cf. PNGIMR 1983) (Table 5 and Appendix 3).

Map 5: Rural locations in PNG where betel nut sales provide income, 1990-95.

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12 The PNG Mapping Agricultural Systems Project classified the significance of income from betel nut as either ‘Absent’, ‘Minor’, ‘Important’ or ‘Very Important’. This Map has combined the ‘Important’ and ‘Very Important’ categories. Note that three of the key production areas in 2007 (Mt. Lamington, Middle Ramu and near Wewak) are shown as minor or absent in terms of significance of income.
Table 5: Percentage of PNG rural households that reported to earn income from selling betel nut or betel pepper in the 1982/1983 National Nutrition Survey and the 2000 Census. 
Sources: PNGIMR 1983; NSO 2003.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highlands Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>0.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Enga</td>
<td>1.3</td>
<td>15.4</td>
</tr>
<tr>
<td>Western Highlands</td>
<td>4.1</td>
<td>17.6</td>
</tr>
<tr>
<td>Eastern Highlands</td>
<td>13.2</td>
<td>18.4</td>
</tr>
<tr>
<td>Simbu (Chimbu)</td>
<td>NA</td>
<td>21.6</td>
</tr>
<tr>
<td><strong>Non-highlands Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western</td>
<td>0.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Gulf</td>
<td>56.5</td>
<td>56.7</td>
</tr>
<tr>
<td>Central</td>
<td>37.3</td>
<td>50.8</td>
</tr>
<tr>
<td>Milne Bay</td>
<td>44.8</td>
<td>66.6</td>
</tr>
<tr>
<td>Oro (Northern)</td>
<td>49.2</td>
<td>54.5</td>
</tr>
<tr>
<td>Morobe</td>
<td>50.5</td>
<td>49.2</td>
</tr>
<tr>
<td>Madang</td>
<td>63.6</td>
<td>56.8</td>
</tr>
<tr>
<td>East Sepik</td>
<td>62.5</td>
<td>46.3</td>
</tr>
<tr>
<td>Sandaun (West Sepik)</td>
<td>49.2</td>
<td>39.6</td>
</tr>
<tr>
<td>Manus</td>
<td>58.4</td>
<td>59.6</td>
</tr>
<tr>
<td>New Ireland</td>
<td>65.2</td>
<td>48.9</td>
</tr>
<tr>
<td>East New Britain</td>
<td>58.0</td>
<td>53.8</td>
</tr>
<tr>
<td>West New Britain</td>
<td>72.6</td>
<td>45.7</td>
</tr>
<tr>
<td>Bougainville (North Solomons)</td>
<td>NA</td>
<td>27.6</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>NA</td>
<td>33.7</td>
</tr>
</tbody>
</table>

In the early 1990s betel nut and betel pepper were estimated to contribute around K20 million$^{13}$ annually to rural ‘farm gate’ incomes (Allen et al. 2009) (Figure 3).$^{14}$ This made it the fourth most important source of cash income for rural people behind coffee, fresh food and cocoa, on average amounting to an annual per capita income of K18.$^{15}$ The contribution of betel nut to rural incomes is likely to have grown since the early 1990s. These estimates are also based on production and do not include those rural people who generate income through reselling, an important activity throughout PNG but particularly in the highlands. Betel nut purchases in the mid 1990s comprised

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$^{13}$ Equivalent to K53.3 million in 2007.

$^{14}$ Allen et al.’s (2009) and Gibson’s (2001b) estimates for the value of betel nut in the PNG economy in the early and mid 1990s differ due to their focus. Allen et al.’s estimate of K20 million, based on production data from the Mapping Agricultural Systems Project, is for the contribution of betel nut to rural incomes. This is the ‘farm gate’ value of betel nut to producers and does not account for mark-ups that occur when betel nut is resold. By contrast, Gibson’s (2001a) estimate of K115 million, based on household consumption data from the 1996 PNG Household Survey, represents the end value of betel nut, that is, what PNG consumers spent on betel nut.

$^{15}$ Equivalent to K47 in 2007.
Betel nut’s economic entanglements

Betel nut selling is amongst the most lucrative economic activities in which rural people are engaged. In almost all areas where per capita incomes are highest, betel nut selling is an important activity (Bourke et al. 199817). Village producers in the Markham Valley have been reported as earning as much as K500 in a single day (Hriehwazi 2005). Certainly many Ramu villagers earn K200 to K300 each time a trader visits their village. Such earnings are not a daily occurrence but they may be reasonably regular, perhaps every few weeks. A single trader may contribute substantial amounts to producing communities. For example, in one visit to a village on the Ramu River a trader from Hagen, whom I accompanied, spent K8000 purchasing betel nut and K600 on canoe and motor hire. Amongst the Mekeo, Mosko (1999:54-6; 2005) has noted that during the 1990-94 El Nino drought in one particular village, average annual incomes were around K18,000 per household18 (also see Hide unpublished:17). At a smaller scale Anderson’s (2008) survey of roadside vendors in Madang shows that, amongst those vendors with the highest weekly incomes, betel nut is one of their main items for sale. Similarly, in Morobe Province, a survey of coastal villages found households to be earning on average K890 a year from the sale of betel nut and betel pepper. Within the Morobe and Salamaua local level government areas the sale of betel nut, betel pepper and lime represented twenty-one per cent of household incomes (NFA 2007; Kinch 2006:9, 36).

Rural highlanders also generate substantial incomes selling betel nut. A betel nut vendor at Suyan marketplace (Enga) may make K10-15 per day (Johnson 2010:35). In the Western Highlands Sowei et al. (2003) found betel nut to be amongst the most important informal sector activities. Average household fortnightly incomes from betel nut and cigarettes at Koglamp were K1064, Kumunga K448, Balg K160 and Koge K140.19 Koglamp villagers benefitted from the close proximity to the

---

16 Equivalent to K380 and K10,400 in 2007, respectively. This percentage aggregates lowland and highland rural people. Sexton’s (1988:133) sample of households from the Daulo area (Eastern Highlands) showed they on average spent 9.3% of their income on betel nut and tobacco. Surveys of coastal villages in New Ireland, Milne Bay and Morobe provinces indicated that households sampled from New Ireland spent K204/month or 18% of their household expenditure on betel nut, those from Milne Bay spent K31/month or 12% of their household expenditure, whereas those from Morobe (Morobe and Salamaua local level government areas only) spent 1.8% of their household expenditure on betel nut (NFA 2005:37, 2006b:38, 2007; Kinch 2006:37).

17 See the Agricultural Systems of PNG Working Papers produced by the Australian National University’s Land Management Group. This series includes working papers for each province in PNG in addition to a number of supporting texts.

18 Equivalent to K55,000 in 2007. Stephen (1974:340,391) estimated average household incomes in 1971 in one Mekeo village, Inawi, to be K308 (equivalent to K4458 in 2007 spending power). In 1982 Walsh (1982:38-40) estimates that Mekeo villagers selling betel nut in Port Moresby were earning K10-30 per day, equivalent to K57-190 per day in 2007 spending power.

19 Equivalent in 2007 to: Koglamp (K1310), Kumunga (K552), Balg (K197) and Koge (K172). Koglamp is close to Mt. Hagen and the Kalakai marketplace which was significant at the time of the informal sector survey. Kalakai has since diminished in importance. Income from betel nut appears to decrease with distance from town.
major urban marketplaces in Mt. Hagen town. It is little wonder that many people hold the belief that it is through betel nut that ‘money comes to the hands of the grassroots’.

For many, betel nut is seen as a profitable alternative to the traditional export cash crops of cocoa, copra and oil palm in the lowlands and coffee in the highlands. For instance, rather than replanting their cocoa plots some rural people in Oro Province have instead opted to replace them with betel nut (cf. Mosko 1999:54). This has also occurred on Bougainville where pests have affected cocoa harvests (Masiu 2007). For the Mekeo people, who are the main suppliers for the Port Moresby trade in betel nut and betel pepper, this trend has been present for some time. As Hau’o’fa (1981:18-19) noted:

Unlike other and more approved cash crops such as coconut or copra, cocoa and coffee, all of which are grown on a small scale in Mekeo, the production of betelnut requires little labour ... The enterprise is so easy and so lucrative that by and large Mekeo have turned a deaf ear to the exhortations of [agricultural] officers ... for them to participate in the cultivation of export cash crops.

This remains a concern for members of parliament today. Andrew Mald, the member for Port Moresby North East, is reported as saying:

It is easy money unlike the troubles they would normally go through to pick their coffee, transport, skin, wash and dry them for some time before selling and in the process, they forget all about their coffee or cocoa plots in the village (Bashir 2009).

Mald argues that this has caused people to migrate into the urban areas where incomes and demand for betel nut is higher. For the Mekeo people cash incomes from the betel nut trade are so high that for a period ‘many families abandoned their subsistence food gardens in favour of flour, rice and tinned food imported from town’, although this changed following a collapse in the betel pepper price in 1994 which left families food insecure (Mosko 2005:19; see Hoverman et al. 1981). One of the lures of betel nut is that, unlike the export cash crops, it is not tied into fluctuating international commodity markets, other than the general influences these have on the amount of cash flowing throughout the country. When the export commodity markets prove unappealing, producers look to the domestic commodities including betel nut for their livelihood (Connell 1997:311).

However, in most places betel nut selling is just one activity in a diverse livelihood strategy, and rarely totally displaces other economic activities as officials, politicians and non-government
organisations sometimes claim. For instance, in many lowland areas betel nut is commonly used as a shade crop for cocoa which enables both crops to be selectively utilised. Betel nut trading is also an activity which may be temporally integrated into their participation in export cash crop production. A Simbu betel nut trader in Goroka explained how he positions betel nut within his livelihood strategy.

If I see that betel nut is in short supply I come here [Goroka betel nut marketplace] and sell betel nut. If there is a glut of betel nut and I can’t make a profit I go back to my village and pick coffee, earning money in the village.

For most rural people, betel nut is not their sole source of income. People undertake different activities depending on season and current conditions in the marketplaces, amongst other considerations. One of Hagen’s most successful betel nut traders who lives in a rural hamlet in close proximity to Mt. Hagen, still maintains a large food garden and sells fresh food in the main marketplace in Mt. Hagen. Similarly, a betel pepper trader I accompanied carried bags of potatoes to sell in Madang’s town marketplace. After several days of selling he took his potato earnings, purchased betel pepper and returned to the highlands to sell this. This is a strategy occasionally employed by smaller volume traders.

Even in certain lowland areas where oil palm provides the major source of cash income betel nut remains important. For example, in Bialla in West New Britain, Koczberski and Curry (2005:333) note that in 2002 ‘17% of smallholders in Bialla reported betel nut sales as their second or third most important income after oil palm’. Curry et al. (2007:45) similarly note that of the cocoa smallholders they surveyed in East New Britain between 70 and 90% of households received some income from betel nut. A similar phenomenon can be seen at the Murua settlements (Gulf Province); originally set up to produce rubber, betel nut is now a more significant income source (Hide et al. 1993). Cash crops provide large and important injections of cash on a periodic basis. By contrast, for most, betel nut provides smaller but more regular earnings that are important for everyday subsistence.

Most households that are involved in the betel nut trade, including the largest traders, continue to maintain subsistence gardens for household consumption. The betel nut market can be volatile and therefore risky. A household subsistence base allows traders and vendors to accept these risks as ‘there will always be sweet potato and cold water’ (‘kaukau na kol wara bai i stap’).

21 Department of Agriculture and Livestock reports by Cook et al. (1989) and Ghodake et al. (1995) have suggested that betel nut and other trees be examined for use as a shade tree for cocoa.
Chapter Three

An important feature of the betel nut trade is the way in which it connects remote rural production areas with comparatively more advantaged urban consumption areas, and brings about flows of money to the remote areas. As such the trade is an important means by which money is redistributed within PNG. In some of the remote production areas such as the Yuat and Ramu Rivers, transporting export cash crops to urban areas to sell is extremely difficult. A producer and trader from the Ramu explains:

the difference with betel nut is that buyers come and pay at your house door, whereas with cocoa you have to pay for transport to Madang in order to sell it, and you can’t make lots of money from it.

The betel nut trade is shaped by and also influences the movement of other cash crops and fresh produce. Hagen betel nut traders report better sales during the coffee flush due to the increased availability of cash in the province. At least one large trader I spoke to only traded in the coffee season when there was plenty of money in peoples’ pockets and *bilum* (string bags). Conversely, the people of the Middle Ramu have hugely benefited from improved transport on the Ramu River, brought about with money from the sale of betel nut. This in turn has enabled them to more easily transport their cocoa to town. In this area people reported that spending in the area dramatically increased during the betel nut season in much the same way as coffee influences spending in the highlands. Betel nut trading has also contributed to the movement of fresh food to the lowlands. Often highlanders will travel down to the coastal towns of Madang and Lae to sell highlands fresh food in the marketplaces.

Betel nut is very important to the livelihoods of many rural people. It offers rural people both an alternative to dependence on fickle international markets but more so it supplements other sources of income, providing a more modest but regular income. It is intimately entangled with other rural livelihood practices. But its success for rural people relies on its connectivity with urban economic spaces.

Urban economy and livelihoods

Although only around thirteen per cent\(^{22}\) of Papua New Guineans are urban, urban areas play an important role in shaping the economy as a whole. Unlike in rural PNG, the capacity for agriculture within urban areas is limited, except on the periphery. Urban residents do not possess the same subsistence base which is so important for the rural population. For most urban Papua New

\(^{22}\) The population was 686,301 according to the 2000 Census (see Allen and Bourke 2009a:29).
Guineans, a cash income is necessary and often the basis for their survival.\textsuperscript{23} In a sense, the division between urban and rural livelihoods masks the important interactions between them. People from the surrounding rural areas flock into towns generally to sell their fresh produce, shop in the stores, access health and education services and to socialise. So whilst export cash cropping is largely rural in character, much of the income from it is spent in urban centres.

The majority of fresh food sales, whilst occurring in urban areas, are by rural people. Only in certain areas such as Port Moresby and Lae are urban resident resellers significant (see Vinning and Galgal 2008; Vinning et al. 2008; Benediktsson 2002). Migration to and from rural areas is also an important livelihood strategy for many. The towns are also the main sites of employment for both the public and private sectors. Most urban areas in PNG are provincial capitals, which are the location of government offices. They are also the location of the major schools, other educational institutions, police headquarters, hospitals, prisons and other sources of state-based employment.

Most private companies also operate out of towns. This includes the main export cash crop buyers and exporters, service providers associated with the mining industry, the offices of non-government organizations, the booming security industry and a large range of retail enterprises. Whilst a small proportion of the total population of PNG has what could be considered ‘formal’ employment\textsuperscript{24}, the effect on the urban sector is marked. This is most evident in the effect that the government payday or fotnait, and to a lesser extent the private payday, has on spending patterns (McCullough 1971; Bourke 1986a). Although this is less significant than it was in the past, every fotnait still sees an influx of people into town (cf. Jackson and Kolta 1974). The income of public servants is an important source of cash that is exchanged for rural produce including betel nut. The ‘market place and store go hand in hand’ (Jackson 1976a:181), because the demand by rural people for store bought goods is created by the cash they acquire in urban marketplaces. The retail stores provide the products the rural people demand and this provides the motivation for rural people to sell their produce.

Informal marketing and service delivery are increasingly seen as viable livelihood strategies. ‘People rely on the informal sector thirteen days a fortnight’ said one betel nut trader.\textsuperscript{25} The range of

\footnotesize{\textsuperscript{23}This is not to ignore those non-cash based transactions and labour relationships that occur including the gifting of fresh food by rural based relatives (see Umezaki and Ohtsuka 2003).

\textsuperscript{24}While the use of the term ‘formal’ is problematic, I take it to refer to ‘paid work registered with the state for tax, social security and labour law purposes’ (Williams and Round 2007:426).

\textsuperscript{25}‘Informal sector’ and ‘informal economy’ are contested and imperfect terms. The terms are most often defined by what they are not; ‘formal employment’ (see footnote 24). The ‘informal’ is then a ‘catch all’ for a heterogeneous array of activities that are broadly untaxed, hidden from the state, do not feature in government statistics or}
informal livelihood activities includes the marketplace and street selling of fresh food, newspapers, cigarettes, 'store' goods (salt, cooking oil, sugar, rice, instant noodles, stock cubes, soap), chewing gum, ice blocks, drinks, firewood, housing materials, handicrafts, second hand clothing, cooked food (most prominently lamb flaps and 'scones'), kerosene, empty plastic bottles (collected and washed), chickens, marijuana, home brewed alcohol, mobile phone credit recharge cards, and of course betel nut. There are also services including boot mending, labour, security, gambling, video screening, tradestores and public motor vehicle (PMV) operations.\(^{26}\) Crime and prostitution, problematically lumped under the banner of ‘informal economy’, are also an increasingly important part of urban livelihood strategies (Connell 1997:204-7). Raskol (criminal) activity in particular has a significant impact on the economy as a whole, influencing how, when and where people pursue their livelihood activities (Chapter 4 and 6).

A number of studies have shown that incomes from the informal sector are often higher than those wages paid to public servants and private sector employees. For instance, Umezaki and Ohtsuka’s (2003) study of the livelihoods of Huli (highland) migrants in Port Moresby settlements showed ‘the average income of households that exclusively depended on informal sector jobs was equivalent to, or higher than, that of households which included an employee in the formal sector’ (Umezaki and Ohtsuka 2003:3). These Huli migrants often actively redistributed food and cash to other urban households. Remittances, in the form of cash as well as other things including school fees, outboard engines and airfares, from urban residents to their home villages are important in maintaining relationships and access to land, retaining the possibility of an alternative rural livelihood (Umezaki and Ohtsuka 2003:20).

### Betel nut in urban livelihoods

Betel nut selling has become an important livelihood activity for many people in urban areas. In the PNG 2000 Census 25.4% of urban households reported to have earned income from the sale of betel nut or betel pepper (Table 6). Reselling of betel nut is particularly common in the larger urban centres and throughout the highlands. At Hagen’s Kaiwei marketplace and Goroka’s Asarifa marketplace the number of vendors selling betel nut, betel pepper and lime averaged 193 and 127 per day respectively. Other marketplaces also had substantial numbers (Table 7). But these figures, which exclude wholesalers, provide only part of the picture. While Kaiwei and Asarifa marketplaces were the largest betel nut marketplaces in their respective towns at the time, they certainly were not calculations of gross domestic product and are often quasi-legal. See Williams and Round (2007) and Latouche (1993) for a discussion of the nature of informality.\(^{26}\) PMVs do have some government regulation.
the only marketplaces. Hagen’s Kamininga marketplace\textsuperscript{27}, and to a lesser extent Kalakai marketplace, and Goroka’s Kakaruk marketplace were significant in their own right. In both towns there are numerous other smaller marketplaces where betel nut is sold as well as countless roadside vendors, people selling from their houses and street sellers. While no attempt was made to document the extent of roadside vending and street selling, Walsh’s (1982:11) survey of Port Moresby may give some indication. In 1982 he estimated there to be around 600 betel nut vendors in Port Moresby, of which two thirds were marketplace vendors and the remaining third illegal street vendors. Betel nut selling is certainly the most visible of urban livelihood activities. It does seem safe to say that ‘specialised betel nut markets and betel nut vendors constitute the bulk of the urban informal sector’ (Connell 1997:71; also see Umezaki and Ohtsuka 2003).

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
Province & 2000 Census (\%) \\
\hline
Highlands Region & \\
Southern Highlands & 11.55 \\
Enga & 10.11 \\
Western Highlands & 15.87 \\
Eastern Highlands & 17.01 \\
Simbu (Chimbu) & 13.04 \\
\hline
Non-Highlands Region & \\
Western & 15.01 \\
Gulf & 42.68 \\
Central & 25.32 \\
Milne Bay & 29.95 \\
Oro (Northern) & 22.09 \\
Morobe & 37.38 \\
Madang & 23.63 \\
East Sepik & 32.28 \\
Sandaun (West Sepik) & 30.89 \\
Manus & 34.61 \\
New Ireland & 27.49 \\
East New Britain & 19.22 \\
West New Britain & 28.09 \\
Bougainville (North Solomons) & 17.56 \\
National Capital District & 21.43 \\
Papua New Guinea & 25.43 \\
\hline
\end{tabular}
\caption{Percentage of urban households by province that reported to earn income from selling betel nut or betel pepper in the 2000 PNG Census. Source: NSO 2003.}
\end{table}

\textsuperscript{27} Also referred to as Kamanga marketplace.
Table 7: Daily average numbers of betel nut, betel pepper and lime vendors at selected major highland marketplaces, 2007.

<table>
<thead>
<tr>
<th>Marketplaces</th>
<th>Vendor Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiwei Marketplace (Hagen)</td>
<td>193</td>
</tr>
<tr>
<td>Wara Marketplace (Kundiawa)</td>
<td>92</td>
</tr>
<tr>
<td>Asarifa Marketplace (Goroka)</td>
<td>127</td>
</tr>
<tr>
<td>Kainantu Marketplace (Kainantu)</td>
<td>62</td>
</tr>
</tbody>
</table>

Note: Vendor numbers at Kaiwei are the average of two one-week surveys conducted in May and October/November 2007. Numbers at Asarifa are the average of a one-week survey conducted in October/November 2007 simultaneously with the Kaiwei survey. Those at Kainantu and Wara marketplaces are based off one-day surveys in March and April 2007. Kainantu marketplace was under attended on the survey date due to the threat of fighting in the area.

The range of incomes from selling betel nut is substantial. The largest and most successful traders make significant returns. For instance, Bettie, whose story I will return to throughout the thesis, was so successful in 2007 that she was able to purchase three brand new Toyota Hiace vehicles. Another of Hagen’s largest traders made K26,000 from a single buying trip to Popondetta (Table 8). But even for these traders returns are far from stable: ‘First trip he went on we made K60,000 profit, K63,000. The second trip he went on, the betel nut arrived ruined and we made a loss of K18,000’. This large trader suggested on average she makes around K10,000 each month. Not all traders are so successful. Numerous other traders have lost everything in search of ‘green gold’.

Table 8: Expenses and returns from a single betel nut buying trip from Mt. Hagen to Popondetta by one large wholesale trader, June 2007.

<table>
<thead>
<tr>
<th>Expenses</th>
<th>PNG Kina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>13 715</td>
</tr>
<tr>
<td>Labour</td>
<td>1 880</td>
</tr>
<tr>
<td>Other</td>
<td>545</td>
</tr>
<tr>
<td>Gate fees</td>
<td>591</td>
</tr>
<tr>
<td>Betel nut purchases</td>
<td>7 225</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>23 956</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Returns</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30 bags of betel nut (K330 each)</td>
<td>9 900</td>
</tr>
<tr>
<td>115 bags of betel nut (K280 each)</td>
<td>32 200</td>
</tr>
<tr>
<td>52 smaller bags of betel nut (K150 each)</td>
<td>7 800</td>
</tr>
<tr>
<td><strong>Total Returns</strong></td>
<td><strong>49 900</strong></td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td><strong>25 944</strong></td>
</tr>
</tbody>
</table>

The trader’s profit would have been marginally higher had a clumsy participant observer not thrown a bag of betel nut into the water at Oro Bay.
Betel nut’s economic entanglements

For the smaller wholesale traders the incomes are much more modest. Chris, a smaller Hagen trader, lost around K500 from a buying trip to Wewak. He then tried buying betel pepper at Kubugam making around K370 from the trip. A labourer for a large trader may make K300 in a week, although this income is occasional. A sample of marketplace vendors at Kaiwei marketplace indicates that they may earn on average around K45 for each day they sell amounting to perhaps K460 per fortnight. This was in keeping, albeit on the low side, of vendors’ own estimates of their average incomes. Importantly vendors, who are mostly female, are able to keep the money they earn from marketplace sales (see M. Strathern 1972a:5).

While the largest traders are able to make substantial profits, smaller street sellers are in a very different position, often one of precarity. David left his home area in Simbu Province due to fighting in the early 2000s and now lives in one of Goroka’s informal settlements. Here he and his wife eke out a living, largely by selling betel nut. He does not have enough money to pay the marketplace gate fees so instead he lives a precarious existence selling illegally on the roadside where he is regularly harassed by police. The government has ‘eaten’ lots of his money in bail charges, he says. His story is one of resilience not success.

We live on this … every day we must go to the marketplace, buy betel nut and come and sell. When finished we make a small K1 or K2 profit which we use to buy the night’s meal. Tomorrow with K10 or thereabouts we go and buy again, sell again. We make K1 or K2 profit and we eat again. With the same K10 we buy again, that is what we do … We don’t make lots of profit, if we buy with K10 we might make K5 profit … If we make K5 we will buy rice and tinned fish at night. We will eat and sleep. If not, we will just sleep. We won’t have food in the house. We will go to sleep hungry.

A 1995 survey of Huli migrants in Port Moresby reported comparably low incomes from betel nut selling; averaging K4.30 per day (Umezaki and Ohtsuka 2003:15) (Table 9). Similarly in 1982, Walsh (1982:40) estimated that betel nut street vendors in Port Moresby were earning K2.33 per day – ‘street vendors are not rich’.  

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29 Not all vendors sold every day. This is based on surveys conducted with sixteen vendors everyday over an eight day period. No claim is made as to how representative this is of all vendors or over longer periods.

30 Equivalent to K11.33 per day in 2007.

31 Equivalent to K13.40 per day in 2007.
Table 9: Average expenses and returns from betel nut sales by eight Huli migrant households in Port Moresby, 1995.
Source: Umezaki and Ohtsuka 2003:15.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Betel nut purchases</td>
<td>12.50</td>
<td>33.00</td>
</tr>
<tr>
<td>Other costs (incl. transport)</td>
<td>0.70</td>
<td>1.80</td>
</tr>
<tr>
<td>Returns from sales</td>
<td>18.70</td>
<td>49.30</td>
</tr>
<tr>
<td>Net earnings</td>
<td>5.50</td>
<td>14.50</td>
</tr>
<tr>
<td>Net earnings per day(^{32})</td>
<td>4.30</td>
<td>11.30</td>
</tr>
</tbody>
</table>

For many, betel nut contributes to a broader family livelihood strategy. Often those families with a member in wage employment will also sell betel nut to supplement the wages. This may be done by another family member or the wage earner themselves. One young roadside betel nut seller that I met in Mt. Hagen worked each day as the caretaker for a local church. In the early mornings and afternoons he sold betel nut to those passers by heading off to work for the day. The money he received from this regularly exceeded what he was paid by the church although he valued both incomes, as his wage gave him security and his association with the church provided a fence to sell behind in the urban area. Many wage earners also often trade betel nut during their annual leave, or even when they are meant to be on duty, as one police officer confessed. Earnings from betel nut sales are an important supplement to waged incomes, or even the main source of income, for many in the paid workforce.

For some, betel nut selling becomes more than an income supplement. Many betel nut traders I talked to had previously received a wage (*jimatil*) as teachers, policemen and agricultural officers. One of Hagen’s larger traders, Lewis, had previously been employed in the coffee industry. He explained:

> When I was employed ... because I was a casual or something ... they were paying me about K150 per fortnight. That’s not much. Then I compared [it] to betel nut ... my annual salary could be taken in a week or two.

There is not only potential for higher incomes but also the ability to have a more regular supply of money. A common sentiment expressed by betel nut sellers is that while those in wage employment

\(^{32}\) Households took 1-2 days to sell the betel nut they had purchased, therefore the overall net profits differ from the net earnings per day.
Betel nut’s economic entanglements

have to *wetim fotnait* (wait for the fortnightly payday), betel nut sellers always have money. Another successful betel nut trader, Margret, explained why her husband, Nelson, left wage employment:

[Nelson] left teaching. We saw that with teaching we would wait for the payday for money ... each fortnight we would get K300 or K400-500. With betel nut and betel pepper we have money every day... some thousands. We carry cash around. We go to sleep and wake up with money. We see this work is much better than other businesses.

While those in wage employment often look down upon betel nut sellers, an article in the *National* reports: ‘workers usually go around with empty pockets while the despised betel nut sellers are the ones who [are] making hundreds of kina each day’ (Kapi 2002), earning what betel people call a ‘one day fortnight’. As a result it is common practice for wage earners to borrow money from betel nut sellers. One seller from Hagen recounts: ‘Those employed; public servants and workers. They work but they don’t have money. When their money is finished they come to us. They say “let’s find the betel nut and betel pepper sellers and get some of their money.”’

Betel nut selling also has important spin offs. For example, Kaiwei is renowned as a betel nut marketplace, although betel nut vendors only constitute around 46% of the vendors in the marketplace. The other 54% sell mainly fresh produce, cooked food, imported goods and cigarettes. The profits from betel nut recirculate within the marketplace and benefit non-betel nut sellers.

As with broader spending patterns, the injection of money from wage employment bolsters the betel nut trade. This can clearly be seen in the effect of the *fotnait*. Bourke and Nema’s (1985) survey of the Kainantu marketplace (Eastern Highlands) in 1982 showed the value of betel nut sales was higher on both the public and private sector paydays (McGregor and Bourke 2009:282). This indicates that money earned in wage employment has an important role in shaping betel nut sales. This is both a result of direct spending by the wage earner or wage earner’s household, and wage earner’s money indirectly entering the marketplace.

Consumption is of course the basis of any market. The 1996 PNG Household Survey on income and expenditure found that betel nut accounted for 2.09% of the average annual urban household

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33 A lucrative informal money lending industry also exists. Money lenders charge very high ‘interest’ rates. One lender in Mt. Hagen in 2007 charged ‘thirty percent’ on top of the loan amount so that, for example, a loan of K100 would be repaid with K130, even though the loan period was very short.
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expenditure of K11,900, or K249 per household per year (Gibson 2001b). This amounts to about one betel nut per person per day. For some households spending on betel nut is much higher. In the documentary Betelnut Bisnis (C. Owen 2004), one young highland man reported to chew over twenty betel nuts each day, which could cost between K4 and K10 per day, a considerable amount considering average household expenditures and incomes. This is certainly above average although not extreme.

Consumption does vary throughout the year according to available income. One informant explained:

In the coffee season, when it is fully ripe, the middle of the season, you will see that people chew betel nut just like flying foxes. They get fresh betel nut regularly, smoke and chew. You will see they won’t rest, because they have money. You will see their mouths always working. When they don’t have money they will stay at home and chew less often

Betel nut traders typically do much better during the coffee season. The boost in available money as a result of the coffee flush is as important to the urban spaces as it is to the rural spaces of production. Informants also reported that people chew less betel nut in February when school fees are due.

The impact of betel nut is felt through the whole economy due to betel nut’s inclusion in Consumer Price Index (CPI) calculations. Although betel nut is sold through informal marketplaces, and its sale is untaxed, it is nevertheless viewed as an important item of consumption by national accounts statisticians and is one of the 124 goods and services which are used to calculate the national CPI. Betel nut has a high weighting in the CPI, given an index of 7.6%. This suggests that in 1976 betel nut comprised 7.6% of spending by the average urban household, considerably higher than the 2.09% estimated by the 1996 household expenditure survey. Given this heavy weighting ‘betelnut dramatically inflates the overall CPI with its periodic upward fluctuations in price’ (Foster 1992b:40) and, conversely, falls in the betel nut price disguise price increases amongst other goods and therefore mask changing cost of living pressures (Pamba 1999).

34 In 2007, equivalent to K28,100 and K588 respectively.
35 Based on 10 kg per person per year and an average nut weighing 30 g (see Gibson 2001a, 2001b)
36 The CPI weightings were based on a 1975/76 survey of urban wage earning households (this was largely public servant households). As of 2012, the weightings have not been updated.
37 This is regularly reported in the PNG press with headlines like ‘Price hike of betel nut and veggies push inflation up’ (PNG Business Monthly c.2007) and ‘Betelnut fall masks price increases in urban areas’ (Pamba 1999).
Resource extraction and betel nut

Resource extraction is at once both central and marginal to the economic lives of Papua New Guineans. Few Papua New Guineans benefit directly from extractive resource development, although many do benefit indirectly. Mineral resources represented around three quarters of the country’s export earnings between 2004 and 2006, and are the major source of revenue for the Papua New Guinean government (see Allen et al. 2009:293). In 2012 the PNG Liquefied Natural Gas (PNG LNG) project stands poised to more than double the country’s gross domestic product (ACIL Tasman 2009). These revenues enable the state to pay its public servants, deliver services and invest in infrastructure improvement and maintenance. The continued maintenance of the national road system, particularly the Highlands Highway, is of particular importance to the betel nut trade.

The resources sector also shapes the betel nut trade directly; through purchases by company employees, employees of supporting industries, those in receipt of business contracts with the resource company, and by those local landowners receiving various forms of payments including compensation, royalties, and dividends (see Banks 1997). In many of the resource extraction sites and their nearby enclaves, betel nut is officially banned (Figure 5), although large amounts of betel nut is still traded and consumed at these locations – workers refer to purchasing betel nut as ‘buying peanuts’.

Figure 5: A resource company view on betel nut

<table>
<thead>
<tr>
<th>Betelnut free workplace guideline</th>
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<tbody>
<tr>
<td>The use of betelnut is prohibited on Company Property [camps and vehicles], as well as when representing the Company on business, and when attending Company sponsored functions. Failure to comply with this requirement may result in disciplinary action. (Esso Highlands Limited 2010)</td>
</tr>
</tbody>
</table>

While demand in the resource enclaves is limited by the relatively small number of employees (and therefore potential consumers), the huge wealth in the enclaves means the trade is particularly lucrative. The enclaves are widely discussed as ‘money places’ (ples bilong moni), and the betel nut price reflects this. The cost of betel nut is much higher than in the main highland towns. Stories

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38 In some areas mining companies act as a de facto state being involved in the repair of roads and bridges. This is based on a tax credit scheme.
abound as to the high prices charged in the enclave areas: ‘Here [in Mt. Hagen] we sell one betel nut for 50 toea or 60 toea. You will see that at Porgera or Kutubu one betel nut will sell for K1 or K1.50’, and even higher. I am told that betel nut purchased for K1 outside the fence at Oil Search’s Moro and Ridge camps near Lake Kutubu is routinely smuggled into the camps where it is resold for K1.50. There is also considerable demand for betel nut from local people who live in the areas surrounding extractive resource operations. This is the result of the additional money flowing through the local economies from employment, royalties, and other payments associated with the operation. The development of the PNG LNG project in Southern Highlands Province has seen a rapid expansion of betel nut sales in the area, predominantly for consumption by local people there.

Wealth generated from the resources sector also enters urban areas. For example, Mt. Hagen is home to numerous businesses that have contracts with different resource companies. The ability for betel nut to draw wealth from the resources sector and redistribute it throughout the broader economy is something that is well understood by rural and urban people. As one Hagen trader buying in Wewak commented: ‘betel nut goes [to Porgera and Kutubu] and gets money and gives it to the coastal people’.

The importance of betel nut in the livelihood strategies of rural and urban people today, and to the national economy more broadly, is a result of numerous changes in the economic landscape brought about under colonial rule and in the post-colonial period. The following section provides an overview of pre-colonial trade and exchange, both in general and specifically focused on betel nut, followed by a discussion of the economic changes brought about during the colonial and post-colonial period. With this context, the emergence of the contemporary betel nut trade is explored.

**BETEL NUT IN PRE-COLONIAL EXCHANGE AND A TRANSFORMING ECONOMY**

The contemporary trade in betel nut presents a significant departure from the structure of its exchange prior to European colonisation. Those changes that have led to the emergence of the highlands betel nut trade reflect changes to the economic landscape more broadly. The purpose here is to outline the general structure and dynamics of pre-colonial exchange and look at how this transformed in the colonial and post-colonial period. This topic has received significant ethnographic attention, so the aim then is not to repeat this but rather to highlight how this articulates with the contemporary betel nut trade.
Pre-colonial and early colonial exchange in PNG

An interconnected web of trade and exchange networks operated across PNG pre-contact and in the early colonial period. The modes of exchange ranged from ceremonial prestations and informal gifting to barter and commodity transactions. My focus here is on trade, but importantly these modes often shared similar characteristics, were interconnected and interdependent (Gregory 1982; Healey 1990:5-7, 227, 304). Exchange and trade systems differed widely throughout Melanesia with some quite clear regional differences.

In coastal, coastal hinterland and riverine areas trade was often based on ecological diversity. Trade included both the traffic of valuables as well as staple foods, indeed some communities were to various degrees dependent on inter-group trade for their subsistence (Harding 1967:118-53; Gewertz 1983; Barlow 1985). In some areas trade networks involved large-scale, cooperative and long-distance seafaring trading voyages (Harding 1967; Kirch 1991). Both men and women were involved in trade, however men tended to be more involved in the exchange of prestige goods, and women with subsistence items (Salisbury 1970:177; Gewertz 1983; Barlow 1985). In a limited number of locations a regular trade in staples took place in marketplace-like arrangements (Harding 1967:150-1; Epstein 1968; Salisbury 1970; Keil 1977; Gewertz 1978, 1983). Trade partnerships were also an important feature (Sahlins 1972).

By contrast, trade in the highlands tended to be small in volume and concentrated on valuables. Staple foods were not items of trade (Hughes 1977:208-9; Healey 1990:3; Keil 1974:195).

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[39] There is a considerable ethnographic literature focussing on pre-colonial trade throughout Melanesia. For instance see Malinowski 1920, 1921, 1932; Mead 1930; Hogbin 1935; Schwartz 1963; Harding 1967, 1994; Epstein 1968; Salisbury 1970; Godelier 1971; Salhins 1972; Keil 1974, 1977; Allen 1977; Godelier 1977; Hughes 1977; Sillitoe 1978; Leach and Leach 1983; Barlow 1985; Lipset 1985; Healey 1985, 1990; Kirch 1991; Gell 1992. This list is far from exhaustive. It is important to recognise that these accounts describe the exchange systems as they were at the time of contact or soon after, the systems themselves changing over time (see Kirch 1991).

[40] Melanesian ethnography’s emphasis on gift exchange has often obscured the presence and role of trade (Healey 1990; Gell 1992; Carrier 1998). For instance, far more is known of the Trobriand *kula* prestations than the more mundane *ginwali* barter exchanges that accompany the *kula* (Keesing and Strathern 1998; cf. Malinowski 1920, 1921, 1932). See Chapter 1 for a discussion of the distinctions between, and debates surrounding, gift and commodity exchange. Also see Chapter 7.

[41] For instance, the Tolai people (East New Britain) had a system of marketplaces and a local shell currency, *tabu*, at the time of European colonisation (Salisbury 1970). The Motuan and Mekeo people also traditionally ‘traded at specific locations at regular time intervals’ (Forbes 1973:3), as did groups in the middle Sepik (Gewertz 1977) and in the Vitiaz Strait (Harding 1967:150-1). Keil (1977) argued that these were quite different in nature to contemporary marketplaces. He instead characterised them as ‘impersonal reciprocal transactions’ between two groups (dyadic) rather than between members of numerous groups.

[42] Valuables traded included stone axes, shells, salt, plumes and pigs. See Hughes (1977), Healey (1990), Godelier (1971), and Keil (1974) for a more complete list of items traded. Some trade of staple crops did occur in particular highland areas. For example in the Benabena area (Eastern Highlands), people in the seasonally dry grassland valleys obtained sweet potato from groups in the nearby forested areas, that are at slightly higher altitude. These transactions were however irregular and distinct in structure to the trade in other items (Keil 1974:62-3, 196-7; Holmes 1956-7, 1957-8). I am grateful for Mike Bourke’s efforts in tracking down these references in Holmes’ patrol reports.
Marketplaces were absent, traders travelled short distances while trade goods travelled in chain-like steps over longer distances.\textsuperscript{43} Hughes (1977:203) notes that it was rare for traders to travel more than 24 km from their kin’s land although certain groups, such as the Huli, traded up to 70 km from their territory (however, this was exceptional in the highlands) (Ballard 1994:139; also see Healey 1990).\textsuperscript{44} Highland people often feared the sorcery of lowlands people and so did not travel to lower altitudes. This fear, reinforced by the presence of malaria in the lowlands, meant there was a tendency for traders to move uphill (Hughes 1977:204). That highlanders travelled limited distances, and uphill, in the pre-colonial period is significant given that the majority of long-distance betel nut traders today are highlanders.

There were ‘no professional traders, no merchants’ (Hughes 1977:203). Trade was episodic and a largely individual affair that occurred in private meetings between trade partners, and there was ‘a general lack of communal or cooperative activities beyond expeditions of men travelling for companionship and protection’ (Healey 1990:2). In the highlands, trade was a male preserve (Hughes 1977:203). Throughout PNG exchange rates were commonly arrived at through convention, often taking a one-for-one form (eg. one fish for one piece of sago, or one shell for one pig\textsuperscript{45}) (Salisbury 1970:177; Gewertz 1983:19-21; Healey 1990:2; see discussions in Modjeska 1985 and M. Strathern 1992:173-6). The conduct of pre-colonial and early colonial trade is revisited in Chapter 8.

**Betel nut in pre-colonial exchange**

Betel nut, its accompaniments and associated artefacts (such as lime gourds, mortars and lime spoons) were traded and exchanged widely throughout lowland PNG long before Europeans entered the area in the late 1800s.\textsuperscript{46} It was an important feature of economic life for many of the different cultural groups. Significantly, betel nut was not consumed or exchanged by the people of the central highlands at this time (Riesenfeld 1947) (Chapter 2).\textsuperscript{47}

Ecological difference was a key driver of exchange in betel nut, betel pepper and lime, as it was in exchange more broadly. Betel nut and its accompaniments were exchanged for each other and for

\textsuperscript{41} Nilles (1944:12-13) noted that the Kuman people (Simbu) did not have regular market days although they may intermittently call barter days to trade surplus pigs.

\textsuperscript{42} The Huli speaking area centres around Tari in Southern Highlands Province. The Huli were not included in the study area of Hughes (1977) which centred on the trade routes out of the central highland valleys, broadly speaking Western Highlands, Simbu and Eastern Highlands provinces.

\textsuperscript{44} This need not entail a single object but may in fact be a single bundle.

\textsuperscript{45} Prior to 1870 there had been isolated, but no sustained, contact with Europeans in certain locations. Different areas have different contact histories.

\textsuperscript{46} The exception is the kavivi chewing highlands groups (Chapter 2).
other trade goods. In the case of the Orokaiva people (Oro Province), Schwimmer (1973) noted ‘betelnut grows only on the foothills; lime is made of shells collected on the seashore. It was, and is, therefore common to exchange one for the other.’ Similar exchanges occurred on Manus Island (Mead 1930:130) and in the Port Moresby area (Turner 1876 cited in Riesenfeld 1947:176).

Betel nut, betel pepper and lime were also exchanged for a wide range of other items (see Harding 1994:118-22).48 Harding’s (1994) synthesis of the trade systems engaged in by such geographically dispersed groups as the Mountain Arapesh (Sandaun/East Sepik), Wegeo, Murik (East Sepik), Manam (Madang), Sio, Mandok (Morobe), Manus (Manus), Mailu and Western Motu (Central) begins to highlight the great spatial expanse of the trade of betel nut. What is clear is that throughout lowland PNG, betel nut and its accompaniments were an important feature of inter-group gift exchange and trade, and also often acted as lubricants to other exchanges.

While betel nut has long been a pervasive commodity in PNG, the contemporary trade cannot be seen as an extension or development of pre-colonial trading practices surrounding betel nut. Betel nut now travels even greater distances, connecting distant communities and incorporating new areas. Trade routes have been significantly realigned and the links in the chains have stretched. The central actors are no longer just the lowland people but also highlanders who now travel vast distances. Betel nut remains an important item of more customary inter-group exchanges throughout PNG. This exchange overlaps with, and is often overshadowed by, the contemporary betel nut trade in PNG.

THE HISTORY OF THE CONTEMPORARY BETEL NUT TRADE

Mobility, money and marketplaces: ‘contingent lineages’ in the contemporary betel nut trade

The emergence of the contemporary trade in betel nut came about alongside broader changes to the economic lives of Papua New Guineans. The betel nut trade of today is not a spatial extension of pre-colonial trade networks but a recent innovation resulting from the considerable changes brought about in the colonial period, in sum mobility, money and marketplaces. I here trace those ‘contingent lineages’ (Tsing 2005) that gave rise to the contemporary trade into the highlands.

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European entry into the highlands brought about substantial change. Initially, exchange with Europeans acted to reinforce pre-existing trade and exchange networks, however it soon destabilised these socio-economic structures (see A. Strathern 1971b, 1979a; Finney 1973; Hughes 1977). The conduits of trade were refocused on the new sources of wealth and the value of existing commodities was renegotiated.

In the pre-colonial highlands, things travelled over long distances, people did not. The colonial suppression of tribal warfare had an immediate impact on trade in the highlands. Hughes (1977:204) noted:

the remarkable expansion of trading, and in particular travel for trade, which developed in the highlands immediately some safety was assured. It began with carriers accompanying the very first patrols and has extended ever since. Expeditions to the lowlands did not begin until the 1950s but within 10 years Chimbu [Simbu] traders, especially plume buyers, had been reported as visiting the far western highlands, the far eastern highlands, the interior of the Finisterre Ranges and the Rai Coast (cf. Healey 1990:234-70).

Initially greater freedom of movement saw an elaboration of customary trade networks in intensity, volume and scale. Traders travelled further afield, and fewer links in the chain connected centre and periphery (Healey 1990:241). It later allowed people to take advantage of the new economic opportunities presented by wage labour, and to forge new relations with previously unconnected others.

The change of the colonial migration and labour policy with the introduction of the Highlands Labour Scheme was also important in enabling the emergence of the contemporary betel nut trade into the highlands. Prior to that time, the administration had prohibited movement of highlanders to the lowlands without government approval. Between its commencement in 1950 and its abandonment in 1974, some 100,000 highland men had temporarily worked in lowland locations. It was the first time large numbers of highlanders had been in any sustained contact with people from elsewhere in PNG (Ward 1990:291-2).

Men returned to their homes with stories of life in the lowlands. As highlanders, labourers and otherwise, became more knowledgeable of the world beyond the highlands they became more

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49 Recruits initially came from those highland areas where colonial development was most intense, but the greater cash earning opportunities available in these locations, saw recruitment soon decline there and shift to more peripheral highland areas (Ward 1990).
confident to travel outside the boundaries of their own tribes and provinces. With this confidence and experience, increasing numbers began to travel independently, and to seek work in the lowlands beyond the scheme. The significance of the scheme to the emergence of the betel nut trade was as a point of indirect exposure for non-contract labourers to life outside the highlands which was a catalyst for greater mobility and independent travel. Having learned *Tok Pisin* while travelling and labouring, diverse peoples now had a means by which they could communicate and therefore trade (Healey 1990:240).

Highlanders also often returned home with a taste for betel nut, and this became an important point of exposure and diffusion of the habit. As Lucas, in *Betelnut Bisnis* 50, explained:

> Before, we didn’t know about Markham *bmai*. My father was contracted to work on the coast as a plantation labourer. After his two years finished, he came home. He bought a whole bag of betel nut ... and said 'This is betel nut from the coast.'

Mobility was also greatly facilitated by the construction of the Highlands Highway in the 1950s and 1960s, and most significantly by the completion of its upgrade to an all-weather road in 1967 — itself an attempt to open up the highlands to global commodity chains. Movement became focused along this conduit rather than the pre-existing connections to neighbours of different ecological zones. This amounted to a complete reordering of economic space. By the end of the 1970s large numbers of men were travelling to the lowlands for work, among other reasons. For instance, one of the early wholesale betel nut traders in Mt. Hagen got his first experience of the lowlands in the early 1980s, working for Public Works in the construction of the Madang Road. Lowland Papua New Guineans working as public servants in the highland towns provided an earlier but less significant impetus for the emergence of the highlands betel nut trade. This was particularly the case as increasing numbers of Papua New Guineans became employed in government positions, previously held by Australians, in the lead up to independence in 1975 (C. Walsh pers. comm. July 2010).

At the same time that highlanders were becoming more mobile they were increasingly becoming a part of a ‘cash economy’. While trade goods such as shells, steel tools and salt were initially used in payment for labour, land and garden produce, the administration soon favoured payments in cash. Unpopular among highlanders at first, the establishment of tradestores helped shift perceptions

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50 A film by Chris Owen (2004). This is the translation/subtitling used in the film and not my own.
51 The road connecting Lae to the highlands was completed in 1953, however at this time the road conditions were rough, the journey onerous and traffic on the road was infrequent. In 1963 work began to upgrade it to an all-weather road. See McKillop (c. 2006) for a brief history of the Highlands Highway.
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(Finney 1973:31-42). Money was and is by no means encapsulated by its use as currency (Parry and Bloch 1989). Money, particularly larger denominations, took on symbolic value quite independent of its utility as currency. In Mt. Hagen cash came to supplant shells in moka exchange (Strathern 1979a; see Nihill 1989; Akin and Robbins 1999). Money was appropriated to cultural ends but it is the extent that it has become a measure of account and means of exchange that is most pertinent to the betel nut story.

It was with the development of the coffee industry, and particularly the increase of coffee smallholdings, that money became a part of the lived experience of large numbers of highlanders. Money soon became important to people’s livelihoods for expenses including school fees, and for items such as cooking oil, kerosene, salt, soap, pots and steel axes (among an expanding list of consumer items\(^{52}\)), which could only be obtained with cash and had become considered necessities. For many betel nut now fits into this category.

The emergence of the betel nut trade is also associated with the fluctuations of the export cash crop markets. During the early 1980s and the early 1990s prices for major export cash crops were considerably depressed. This led Papua New Guineans to explore alternative sources of income (Connell 1997:311). Many lowlanders neglected their cocoa and copra plantings and expanded their betel nut groves. In places like Mt. Hagen fresh food marketing presented an alternative source of income to coffee. The subsequent booms in the coffee price in the mid 1980s and mid 1990s led to increased incomes in the highlands and a corresponding increase in the amount of betel nut consumed and traded.

Interlinked with the story of money is the emergence of the institution of the marketplace and the commoditisation of food.\(^{53}\) This is relevant to betel nut as it is within the informal marketplaces that betel nut is traded. The marketplace is ubiquitous in PNG, however for the most part it is of twentieth century origin, a feature of the colonial era (Brookfield 1969b) associated with the post-World War II growth of urban areas (see Connell and Lea 2002). The growth of marketplaces in the highlands also correlates with the growth of the coffee industry (S. MacWilliam pers. comm. August 2012). On the Gazelle Peninsula and in Port Moresby, marketplaces had informally evolved, only later being brought under the regulation of the authorities. Elsewhere the marketplace emerged through more direct encouragement and action taken by the colonial administrators. So initially ‘it was administrative initiative, rather than local spontaneity, that was responsible for the

\(^{52}\) Other items such as Coca Cola became a mark of modernity (see Foster 1996, 2008; Hilton and Flauder 1996).

\(^{53}\) For a discussion of the emergence of the marketplace in PNG see Brookfield (1969a, 1969b); Jackson (1976a); Maclean (1989); and Benediktsson (2002).
setting up of regular markets in the highlands’ (Epstein 1982:19), a response aimed to ‘regularise and formalise an emerging reality’, one created by increasing urban demand for fresh food (Jackson 1976a:175). Marketplaces also provided a means for the administration to pursue broader political and development agendas; to communicate with rural people, introduce new crops, agricultural technologies and know-how, and carry out political education (Jackson 1976a; Maclean 1989; Benediktsson 2002:138-40).54

The establishment of these marketplaces occurred throughout the 1950s and early 1960s.55 Initially periodic in nature they quickly became permanent features of the urban landscape. From the more formalised settings of the government controlled marketplaces since the 1960s many smaller marketplaces emerged without government encouragement. Jackson (1976a:176) noted of the early 1970s, ‘markets have sprung up alongside almost all non-rural settlements in the region: beside council chambers, near schools, by missions, by plantations, next to airports, along road sides, and by small wayside shops (or trade stores)’.56 Although initially the emergence of the marketplace was slow (Brookfield 1969b:12), it has now been wholeheartedly embraced and is a largely indigenous entity (in which women are prominently positioned), although one which interacts strongly with exogenous forces. Marketplaces are now spaces created by locals rather than outsiders (Benediktsson 2002:140), and it is in these locally-owned spaces which betel nut finds its home.

Changes in the economy created new types of actors. Although travelling traders and middlemen are not new, they have taken on novel forms. In the 1950s the expanding road network and the development of plantations saw fresh food buyers, Australians and later Papua New Guineans, travelling the highland roads in search of produce (Benediktsson 2002:125). In the same period, and with the growth of smallholder coffee production, travelling coffee buyers began to act as intermediaries between the rural people and the plantation factories. These coffee buyers were both company employees and independent (A. Strathern 1972a, 1972b, 1982c:144). Wage labourers and ‘big peasants’ came into being (see Howlett 1973; Donaldson and Good 1981). What demonstrative...

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54 In the 1970s one strategy to decentralise service provision envisaged using the market as the basis for the periodic and mobile delivery of a range of services to rural areas including: health, agricultural extension, adult education, postal, banking and vehicle maintenance (Ward et al. 1974). The market rau (mobile market), as it was known, suffered in implementation and for various reasons never gained hold (Benediktsson 2002:140).

55 In the highlands, the marketplace at Goroka was established in 1955 and the Mt. Hagen marketplace in 1959. Prior to this fresh food had been hawked from door to door rather than occurring in set locations. This was also the case in Lae which gained its first marketplace in 1957. During this period marketplaces were also established in many of the smaller urban centres and administrative headquarters such as Popondetta (in 1956) and Kerema (in 1961) (Jackson and Kolta 1974; Epstein 1982; Brookfield 1969a, 1969b; Dalekyne 1969:25-7).

56 In the early 1970s there were at least 31 marketplaces in operation in the Western Highlands (Jackson and Kolta 1974) and 23 marketplaces in the Eastern Highlands (Ward et al. 1974: Fig 4.17). The rapid expansion can be observed by the fact that by the early 1980s in the Eastern Highlands there were ‘some 57 rural and rural non-village markets ... as well as nine markets located in the urban areas’ (Bourke 1986a:73).
role have these new economic subjects played in the development of the contemporary betel nut trade?

What is clear is that those same changes that shaped the economy more generally also provided the stimulus and the support for the emergence of the contemporary betel nut trade. It is in this context of changing economic relations, the emergence of marketplaces and increasing human mobility that the betel nut trade emerged. Highlanders now had a taste for betel nut, the money to buy it, the people prepared to go in search of it, the means to get there, and the places to sell it.

I now briefly document the expansion of the trade in the highlands, and trace the changes that have occurred in the lowland production areas due to their integration within the highlands trade. The history of the betel nut trade into Port Moresby, which for the most part emerged and continues to function independently of the highland trade, is discussed in Appendix 4.

The highland trade

Before the completion of the all-weather Highlands Highway in 1967, betel nut was already a significant commodity in the highlands. In 1966 Burton-Bradley (1966:744) noted that he observed ‘the three items [betel nut, betel pepper and lime] on sale in the main streets of some Highlands towns’, which he attributed to indigenous traders. A police officer responsible for the Highlands Highway recalled that by 1967-68 betel nut was being sold in every local marketplace he visited in the highlands including Mt. Hagen, Kundiawa, Chuave, Asaro, Goroka, Henganofi, Lufa, Bena Bena and Kainantu (J. Jansen pers. comm. August 2007). Straatmans (1968:10.5) similarly observed that by the late 1960s betel nut was sold in ‘fairly great quantities’ in highland marketplaces and on the roadsides coming into Mt. Hagen. At this time Epstein (1982:108) saw the highland betel nut trade as an ‘embryonic stage in the development of wholesale trading’, with an estimated 63 kg of betel nut sold daily, and 5.8 tonnes annually, in Hagen’s main marketplace (Williams 1969:50). This betel nut, as well as coconuts, was brought up the highway by truck drivers from Lae. Villagers near Kainantu recalled that by around 1970, people from around Watarais in the Markham Valley were bringing betel nut up to Kainantu to sell.

By the early 1970s the trade appeared to be growing rapidly in the Western Highlands. The amount of betel nut transported into the highlands accelerated in the lead up to independence as Papua

57 Not all betel nut was traded into the highlands along the Highlands Highway. Benediktsson (2002:117), for instance, notes that in the late 1960s ‘buai’ was traded up to Asaro and Goroka by villagers in Wesan (or Waitsan) on the northern highland fringe, with whom the Asaro villages proper had traditional trade links’ (Benediktsson 2002:117).
New Guinean truck drivers began to replace the Australian drivers (C. Walsh pers. comm. July 2010). In June and December 1973, Jackson and Kolta (1974:8) observed, betel nut was present in the main Mt. Hagen marketplace but was only a minor item in the smaller marketplaces surrounding Mt. Hagen. However in June 1974 they noted the ‘extremely rapid diffusion … almost every market had its buai sellers and in many cases buai, both in terms of numbers of sellers and of value of sales, was the predominant good for sale’ This betel nut was commonly brought up to the highlands from Lae by young highland men.

In 1974 betel nut had become such a significant item that the Mt. Hagen marketplace had a fenced off section especially for the more than eighty betel nut vendors who sold there, most of whom were male (Jackson and Kolta 1974:3, 12, 21). They also note that at one compensation ceremony in the Nebilyer Valley in 1974, there were thirty-four local Ulga women present reselling betel nut. At this time much of the trade could be characterised as unspecialised and opportunistic. Those selling betel nut ‘relied more on chance visits to Lae than on regularly organised buying and resale … [and] deliberate trading as a full time wage occupation or as a self-employed activity is virtually nil’ (Jackson and Kolta 1974:20-1).

By 1979 Biwat traders from the East Sepik were flying betel nut, lime and pepper up to Mt. Hagen (Watson 1987a, 1987b). This was for highlanders and not East Sepik or other lowland people residing there. The returns from this venture of around K1400 in three days indicate that by this time it was in significant demand in Mt. Hagen, due in part to the coffee price boom and the associated increase in spending, in the late 1970s. This trading venture involved considerable coordination of transport within the Sepik, chartering Cessna light aircraft and renting safe houses in Mt. Hagen. These selling expeditions by Biwat people were apparently occurring several times a year.

At around the same time Lutkehaus (1981a) noted betel nut being shipped from Manam Island to the mainland then by truck to Madang where it was then airlifted to Mt. Hagen. The betel nut was then sold in the marketplaces by Manam Islanders residing in Mt. Hagen who sold both to lowland people and to the local highland people. Villagers on the Ramu River also reported a trader buying betel nut and live crocodiles on the river at the time, although it is not clear where he was reselling. A few Karkar Islanders were also taking betel pepper into the highlands including to Mt. Hagen at this time. Importantly, the Biwat, Manam and Karkar cases show that lowland people where central to the trading activities, and not just as producers.

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58 Equivalent to K10,300 in 2007.
Chapter Three

When Bourke conducted surveys of the marketplaces in the Kainantu area in 1981-82 he noted that ‘wholesaling of betel nut has grown into a large industry’ (1986:69). The betel nut section of the marketplace had on average 37 vendors and 783 buyers each day. He estimated that the annual sales of betel nut in Kainantu marketplace were around K108,000 in 1981-82. Surveys indicated approximately 60% of betel nut being sold was of lowland origin, the remainder being the highland species.

By this time betel nut had apparently become such an issue in the Western Highlands that in 1981 the Provincial Government attempted to ban the substance, albeit unsuccessfully (Marshall 1987:19). Betel nut trading in the early 1980s remained small-scale. Walsh (1986:169) noted that in 1982-83:

few [betel nut traders] bought more than two bags ... Most sellers undertook about three buying trips a year and two out of three had other incomes. Epstein’s ‘embryonic wholesaling’ appears to have experienced a very long gestation period.

Walsh (1986:169) muses that given the entrepreneurial reputation of the highlanders and the substantial price mark-ups which lead to handsome profits, ‘One could imagine an enterprising big man transporting a hundred or so bags a week for resale ... One wonders why this has not happened’. It was not long before this was indeed the case.

It appears that during the 1980s a substantial expansion of the betel nut trade was taking place and with this an ‘efflorescence of betel production’ was also occurring (Watson 1987a:248) (discussed below). Amongst the first traders from the Western Highlands to start regularly buying betel nut in the lowlands was Francis. He first went to the lowlands working for the Public Works Department building roads and bridges. He used his leave time to trade small volumes of betel nut up to Mt. Hagen. He began trading full time in 1983, when according to him only a few others were doing so, and when the trip to Lae took two days. Initially he bought in the Markham Valley but around 1984-85 he started to go to Madang and later the Middle Ramu. In his first years of trading traders

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90 By ‘wholesaling’ Bourke more accurately meant ‘middlemen’ who bought in bulk and then sold in a more retail like fashion (see Bourke 1986b).
91 Equivalent to K621,000 in 2007.
92 Bourke et al. (2004:45) suggest that the proportion of highland betel nut in the market has significantly declined since the 1980s. Seasonality however is a key factor influencing the amount of highland betel nut available in the Kainantu marketplace. The highland species at certain times of year was perhaps even dominant in the marketplace. It is difficult to speak conclusively without more substantial data.
sold ‘loose’ betel nut, four or five nuts for 10 toea. He would buy four to six bags which were then sold in a retail fashion. The wholesale resale of full bags in the highlands was yet to emerge.

Another Mt. Hagen trader recounted accompanying his father to buy betel nut in the Markham in the 1980s. He remembered the Markham people being afraid of the highlanders; they would put their betel nut out on the roadside but would run away when the highlanders arrived. Slowly they would return but keep their distance, they would accept whatever they were given. In these early days, he recalled, highlanders told the Markham people it was for personal consumption. It took some time before they realised that it was being resold up in the highlands. The price increased as the lowland people realised this was *bisnis*. At this time trade took place in the village but as more and more traders came a roadside marketplace was set up around 40-Mile in the Markham Valley.

By the mid to late 1980s highland buyers were going further afield in their adventures to buy betel nut. Several times during fieldwork I was told the story of a man from the Middle Ramu called Mabure, the first person on the Ramu River to take highlanders with him up the river. The story goes that he was in Madang selling betel nut when he met up with a number of traders including Nelson (above). He agreed to take the highlanders with him back to his village of Misingki but when Mabure did so there was substantial resistance from the other villagers who were afraid of the highlanders. They took Mabure to the local magistrate and the story goes that he was even imprisoned for a short period. At this time on the Ramu, and other remote areas, traders bartered trade goods including salt, soap and kerosene for betel nut rather than using money – notably all these goods are purchased by the traders and no highland produce was exchanged. This practice declined after the 1980s although it still occurs occasionally, particularly in more remote production areas.

Around 1986-87 more highlanders were coming into the Ramu River area. By the start of the 1990s betel nut was being sourced widely throughout PNG for the highland market. Traders were regularly going as far as Wewak, Umboi Island, Kimbe, Rabaul and Popondetta in search of betel nut (see Metta 1994). Traders had become true wholesalers, selling bags rather than loose nuts, something Nelson says started at Kamininga marketplace on the Baiyer Road. Selling of K2 groups also started at this time. The trade had apparently become so lucrative by the mid 1990s that newspaper advertisements appeared offering to sell and ship betel nut throughout the country (*The Times PNG* 1994:33).

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63 Brown (1988:134) reports that in the late 1980s some Simbu women were buying betel nut in coastal towns.
64 Today some remote areas still prefer to barter, and there is some bartering around the margins, usually for larger items such as generators, radios and shoes, as well as a more concealed exchange for marijuana, but for the most part the trade now is thoroughly monetised.
By this time the betel nut trade had taken on its present form. Since then there have been only minor changes to the trade. The appearance and spread of a disease affecting betel nut in Morobe Province (discussed below) has seen the Markham Valley lose its prominence in the trade. Traders are now forced to regularly travel greater distances. Traders have also shifted to using minivans rather than open back trucks to transport their loads, a response to declining security as well as the protection from the elements it affords. The use of aeroplanes has also declined as the cost of air travel has escalated in recent years. Aircraft are still used on occasions but not on a regular basis for most routes. The soaring oil prices in the 2000s have had less of an impact, other than traders trying to squeeze in an extra couple of bags.

The trade continues to evolve and the traders continue to innovate. Since the 1990s a considerable proportion of the country has been incorporated into the highlands trade (Chapter 4; see Map 6). The trade has become consolidated in the hands of highlanders, who go to extraordinary lengths and take great risks to find ‘green gold’ and bring it to market. It has taken on considerable scale and touches countless lives. This story is elaborated in the following chapters.

Changes in the lowlands

Important changes in the lowlands can also be traced to the emergence of the contemporary trade. Prior to the trade’s expansion, betel nut production was primarily for community consumption and that of neighbouring communities. Betel nut plantings were therefore small. With the widespread adoption of chewing in the highlands, and the growth in urban centres, demand for betel nut has grown dramatically. Supply has undoubtedly grown with the demand. Villagers in production areas of Oro Province, the Ramu River and near Madang town (Madang Province), and the Sepik Coast (East Sepik Province), reported that production had expanded due to the growth of the highland trade. One Ramu villager stated:

We were surprised that highland buyers came… Before we knew that betel nut was for creating peaceful relations, or if a visitor comes and you want to be friendly, or with kastom ... then we saw that highlanders came to buy. ‘Hey, it must also be for money!’ OK then we all started growing ... Highlanders brought something new, money. Now the community’s fathers, mothers, brothers, sisters, they started to plant betel nut. I must have lots of betel nut. Money will come, highlanders will bring it. I became interested in this. A new change came at this time.
Betel nut’s economic entanglements

Counts (1981:56) made a similar observation of the Kaliai people before a market emerged for betel nut in Kimbe (West New Britain). ‘[t]he social value of [betel nut, betel pepper and lime] ... as an expression of generosity, sharing, and hospitality was so great that ... they simply had no commercial value’.

Joel, a Karkar Islander, told how he had expanded his betel pepper production. After finishing Grade 6 in 1963 he commenced work with the Department of Post and Telegraph, at first in Madang and later in Goroka. He returned to complete Grade 7 and 8 in Madang. Between 1971 and 1974 he found employment in a ‘frock shop’ in Mt. Hagen. At this time he saw the opportunity to supply the Hagen market with betel pepper. With Independence looming Joel, fearing the security situation in the highlands, returned home. With cuttings of Manub pepper, a favoured variety, brought from Rabaul by friends who had been working on the plantations there, he started planting. His vines started fruiting in 1979, and soon afterwards the first highlanders came and bought betel pepper from him. In the early 1980s the trade began to boom. Joel recalls that a local political candidate saw his plantings and encouraged others to do likewise but only a few people heeded this. Gradually people realised the benefits and by 1990 there was lots of pepper on Karkar.

A man from the Madang North Coast had a similar story. He tells of the early 1980s:

At a time when no one in Madang Province and Karkar Island were marketing, I carried betel nut and betel pepper up to Hagen. I sold in Hagen and I saw that money from betel nut and betel pepper was good in the highlands; in Hagen. I came back and planted lots of betel nut and betel pepper. I also tried to convince others that they must plant lots ... I told them that betel nut and betel pepper can help us village people improve our livelihoods.

Watson (1987a:242-8) reported a recent efflorescence of betel nut plantings amongst the Biwat people in the early 1980s. Of the plantings of the three households she surveyed only 12.5% of palms were bearing, the remainder were all recent plantings between one and five years old. Watson (1987b:126) notes that these plantings where for trade and far outstripped local demand. For example, she estimated that one of the households she surveyed required only 275 of its over 4000 palms for household consumption. In 1991 Mike Bourke observed large-scale plantings of young betel nut palms in the Finschhafen area, on Umboi Island and the Markham Valley; a response to increasing demand in Lae and the highlands. Around Finschhafen betel nut had become the most

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65 The betel pepper varieties planted on Karkar Island were reported to be originally from the Sepik, Manam Island and Rabaul. The local Karkar variety is considered of poorer quality.

significant cash earning activity by the mid 1990s (Bourke et al. 2002:57, 80, 99-100). Bryant Allen (pers. comm. May 2006) observed similar plantings in Sepik River villages. Similar expansion of both betel nut and betel pepper has also taken place amongst the Mekeo (Mosko 1999:54). The expansion of betel nut and pepper plantings is also associated with depressed cocoa and copra prices during the early 1990s. In 2007 areas under cultivation were continuing to expand, both within those communities already producing and into new areas previously not involved in the large-scale trade.

The role of lowland people in the trade has also changed. In the 1980s many lowland producers travelled to the highlands to sell betel nut and betel pepper (see Levett 1992:79-80). They tell of doing this alone, without the assistance of highland partners. Into the 1990s, with the deterioration of law and order, passage on the Highlands Highway became increasingly unsafe. Many lowland traders feared the highlands and instead decided it far safer to let the highlanders travel. The lowlanders shifted to selling at lowland wholesale points such as Boroi, Base Camp and Kubugam. Today far fewer lowlanders trade into the highlands and those that do tend to be in the company of trading friends from the highlands.

A recent development has been the spread of an unidentified disease afflicting betel nut in Morobe Province (Maino and Komolong 2006; Davis 2006). The disease devastates plantings causing the trunks to constrict and to eventually break leaving, as villagers described, ‘the trunks standing up like telegraph posts’. The severity of the problem had become evident by 2003. The disease has devastated livelihoods in the Markham Valley, where previously the trade had been so lucrative that many growers turned away from their other cash crops and even subsistence crops. In 2007 I witnessed the death of the 40-Mile marketplace which had been until then the centre of the trade in the Markham.

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67 In areas experiencing land pressure, there is a risk that the expansion of betel nut plantings will take land out of the fallow system (see Watson 1987a; Bourke et al. 2002:100). Watson (1987a:240) also argues that because betel palms present permanent records of the use of the land, they meant that ‘effective control over the land passed from the land-owning group to the planters or the betel palms, and their descendants’.

68 Martin from the Lower Ramu belongs to a Seventh Day Adventist area. When the missionaries arrived they made the villagers cut down all their betel nut palms so that today few palms exist. Martin's village is not far from the road junction with the Ramu River. After highlanders started coming to the area, he became involved in transporting them up river. He saw the other Ramu people getting money but not him and was resolved to plant his own betel nut. Between 2005 and 2007, with dry betel nut obtained by bartering woven mats with upstream villagers, he had planted over a thousand palms.

69 Levett (1992:79-80) reports that in 1988 villagers from the Gazelle Peninsula (East New Britain) reported transporting betel nut to Lae, Hoskins, Kimbe, Kavieng, Buka, Kicta, Manus, Mt. Hagen and Port Moresby.

70 The disease was first observed on the Huon Peninsula in the Sialum area in the 1990s and in the Markham Valley around Mutzing in 2000. From Sialum it spread around the Huon coast towards Lae, and from Mutzing it moved east towards Lae and west towards Ramu Sugar. The common practice of moving planting material may be a factor in the spread. Producers obtain high quality dry nuts in marketplaces and from friends and relatives and plant them on their own land.
The expansion of the betel nut trade has also led to other changes within production communities. The role that betel nut has customarily played in creating and maintaining social relations meant that, as Bergendorff (1996:145) noted of the Mekeo in 1991, in many communities ‘betel cannot be bought; it can only be given. A refusal to give betel is tantamount to ignoring the other as a person’. The trade’s expansion has resulted in it now being common for villagers to buy and sell both small and large volumes of betel nut amongst themselves (see Smith 2002:89; Mosko 2013). Also while most betel nut producers continue to grow subsistence gardens, some of those most involved in the long-distance trade have chosen to meet a considerable portion of their material needs through cash purchases.

CONCLUSION

Betel nut has become entangled – connecting, displacing, supplementing and creating spaces – in both rural and urban livelihoods, and in the broader economy. Betel nut selling is a hugely important economic activity, one which has for the most part remained obscured, at least to non-Papua New Guineans. This is a significant oversight given that, as one Hagener put it, ‘people rely on the informal sector thirteen days a fortnight’. This chapter has consequently sought to reframe the discussion of the economy away from commodity exports and back towards a dynamic and important aspect of the domestic economy, and one that is more meaningful to the majority of Papua New Guineans.

The contemporary betel nut trade presents a significant departure from pre-colonial exchange. Today’s long-distance trade into the highlands is not simply an extension or elaboration of pre-existing trade networks but should instead be seen as contemporary indigenous innovation. Papua New Guineans have been central to sculpting the betel nut trade, nevertheless, those same exogenous forces that reshaped the country more broadly laid the groundwork for the trade’s emergence. It is with this context that the following chapters lay out the broad features of the contemporary betel nut trade and the lived experiences of those involved.

Chapter Three
Chapter 4

Betel nut on the move

INTRODUCTION

Once betel nut leaves the palm it is rarely still. It is carried down the slender slippery palm and then by foot to the village where it is packed into bags. It is loaded onto boats; dinghies, dugout canoes, rafts, fishing boats and ships; travels down rivers, and along the coast to the road-head. The load is shifted to small buses, minivans and open back trucks. Occasionally it is taken by air. It makes its way along the lowland roads, muddy and slow at first, later sealed and faster, then up the Highlands Highway. Under its weight the vehicles in which it travels groan as they breach the mountain passes, their tyres squeal on descent. It pauses momentarily in the highland wholesale marketplaces where it passes through numerous hands before continuing its risky journey westward. It travels to roadside marketplaces in colourful *biluma* (string bags), and onto the streets in the pockets of street sellers. It is traded, and it passes between friends who chew together. The arecoline pulses through the body and finally the masticated nut and bright red saliva is projected from the mouth, splot on the dust. This all takes place in little more than a week.

Betel nut does not move alone. Along this route from palm tree to mouth it encounters myriad others. Producers, traders, canoe skippers, ship captains, drivers, *raskols*, policemen, marketplace workers, wholesale resellers, ‘axis’, marketplace vendors, street sellers, customers and chewers; each shaping the direction it roves, when, how. It comes into friction with non-human others; flying foxes, produce bags, leaky boats, minivans, potholed roads, needles and ‘no spitting’ signs; all exerting their own influence. Thus, the purpose of this and the next chapter is to follow betel nut in

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1 My primary focus is on betel nut. Betel pepper and lime share much the same journey although they originate in different locales. Those responsible for the trade in these commodities tend to specialise in a single commodity.
motion; observe where it goes, how it moves, who and what touches it along the way, to ‘get inside [their] networks, go with the flows and look to connect’ (Crang 2005:49; see Cook et al. 2006:657). The chapters are structured around particular spaces and places but in doing so those themes pertinent to the space are teased out. The story is split to focus first on the conduits of the network and secondly on the nodes they connect.

The current chapter tells the story of the movement of betel nut along the edges or conduits of the networks. These are spaces in-between and contested. They are also hazardous spaces. The traders navigate these routes with great skill. Through practice they develop an intimate knowledge of where to buy and in what season, how to transport bags, how many bags fit in a boat, a canoe or a Toyota Hiace. When to fly? They learn to keep track of shipping timetables and cargo policies. They create novel ways of moving money. Traders have embraced mobile phones, and know which spaces this technology can bridge and which it cannot, but they also recognise that phones are only as useful as the person at the other end. Good social networks are critical. They must be flexible, innovative and charismatic. They must be strong and brave. On leaky boats and speeding vehicles they risk life and limb. Raskols, police roadblocks and angry landowners are all part and parcel of travelling the highway. Passage is always uncertain.

The subsequent chapter examines people’s daily lives in the different places in which betel nut comes to rest: villages, transport hubs, marketplaces and urban streets; the nodes or points of the networks. They are spaces over which different actors exert control, places in which some people belong and others do not. In each chapter attention is cast on the diverse subjects who populate these spaces, and how they shape betel nut’s story. The chapters together offer a ‘thick description’ (Geertz 1973) of the betel nut trade, building on the general discussions of the preceding chapters and setting the context for those that follow.

THE LANDSCAPE OF BETEL PEOPLE

The betel nut trade comprises a heterogeneous array of actors who are involved in producing, transacting, packing, transporting and consuming. Betel nut passes through many hands on its journey from palm tree to mouth. It is regularly sold up to five times before it is consumed. There are also many other people who never own the betel nut but assist others buying and selling and with transportation. Table 10 presents a selection of the actors involved, their function, and the locations where they participate.
Betel nut on the move

Actors often assume multiple roles simultaneously as well as in different locales and at different times. For instance, some producers are also wholesale traders, and some traders are also responsible for transport. Traders and marketplaces vendors may sell their own betel nut on one day and sell on behalf of someone else the next. Small marketplace vendors may become large wholesalers, betel pepper traders may move over to betel nut trading, and nearly all of these actors are also avid consumers. Table 10 and Figure 6, along with Table 15 and Figure 9 (Chapter 5), thus simplify what is a complex arrangement. Together they provide a reference tool and a conceptual map to which the reader may turn to make sense of the minutiae.


**Chapter Four**

**Table 10: The landscape of actors in the highland betel nut trade**

<table>
<thead>
<tr>
<th>Participants</th>
<th>Function/Activities</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actors involved in transactions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producer and family</td>
<td>Produce and harvest betel nut. Sell to traders at the <em>hanu dua</em> (farm gate) or at town marketplaces in the lowlands. Rarely sell in the highlands. Also assist to process, grade and pack.</td>
<td>Lowland villages and town marketplaces.</td>
</tr>
<tr>
<td>Producer/traders (lowland traders)</td>
<td>Purchase from their own communities and on-sell to other traders at town marketplaces and occasionally in the highlands. They are also producers.</td>
<td>Lowland villages and town marketplaces, and occasionally the highlands.</td>
</tr>
<tr>
<td>Buying assistant (dependant)</td>
<td>Assist itinerant highland traders to process, grade, pack and transport bags. May help with sales. Work for large traders (<em>hevi baias</em>) through dependent wholesale traders.</td>
<td>Lowland villages and town marketplaces, and highland marketplaces.</td>
</tr>
<tr>
<td>Wholesale trader (independent)</td>
<td>Purchase betel nut in the lowlands from producers and lowland traders. Process, grade and pack produce and coordinate its transport back to the highlands marketplaces. May also sell in highlands marketplace.</td>
<td>Lowland villages and town marketplaces, and highland marketplaces.</td>
</tr>
<tr>
<td>Wholesale trader (dependant)</td>
<td>Purchase betel nut in the lowlands from producers and lowland traders. Process, grade and pack produce and coordinate its transport back to the highlands marketplaces. Work as agents for large traders (<em>hevi baias</em>). May help with sales.</td>
<td>Lowland villages and town marketplaces, and highland marketplaces.</td>
</tr>
<tr>
<td><em>Hevi baias</em> (large wholesale traders)</td>
<td>Organise and coordinate transport and sale of produce in highlands marketplaces. Employ wholesale traders and buying assistants to purchase on their behalf. Use salesmen to sell produce. Finance buying trips.</td>
<td>Highland marketplaces and lowland marketplaces.</td>
</tr>
<tr>
<td>Wholesale salesmen</td>
<td>Wholesale sales on behalf of wholesale traders and <em>hevi baias</em>. Sell to wholesale resellers and vendors.</td>
<td>Highland marketplaces.</td>
</tr>
<tr>
<td>Wholesale resellers</td>
<td>Purchase wholesale betel nut from itinerant traders and <em>hevi baias</em>. Resell wholesale to vendors</td>
<td>Highland marketplaces.</td>
</tr>
<tr>
<td>'Half bag' or 'bag-bag' marketplace vendors</td>
<td>Purchase wholesale from wholesale traders, <em>hevi baias</em>, salesmen and resellers. On-sell in medium wholesale volumes (small bags) to roadside vendors and street sellers.</td>
<td>Highland marketplaces.</td>
</tr>
<tr>
<td>'Group' marketplace vendors</td>
<td>Purchase wholesale from wholesale traders, <em>hevi baias</em>, salesmen and resellers. On-sell in small wholesale volumes (small heaps) to roadside vendors and street sellers.</td>
<td>Highland marketplaces.</td>
</tr>
<tr>
<td>Urban roadside vendors</td>
<td>Purchase small quantities from 'half bag' and 'group' vendors and retail as smaller heaps and individual nuts to consumers.</td>
<td>Highland urban roadside marketplaces.</td>
</tr>
<tr>
<td>Street sellers</td>
<td>Purchase small quantities from 'half bag' and 'group' vendors and retail as individual nuts to consumers. Sell in undesignated public spaces. Often mobile.</td>
<td>Highland towns.</td>
</tr>
<tr>
<td>Rural sellers</td>
<td>Purchase small quantities from 'half bag' and 'group' vendors and retail them as smaller heaps and individual nuts to consumers. Sell in small rural roadside marketplaces and from their houses.</td>
<td>Highland rural areas.</td>
</tr>
<tr>
<td>Highland retail customers</td>
<td>Purchase from group vendors, roadside vendors and street sellers for personal consumption or that of friends and relatives.</td>
<td>Highlands.</td>
</tr>
<tr>
<td><strong>Other actors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketplace workers and security</td>
<td>Work for the marketplace owner to clean the marketplace, provide security and collect gate fees.</td>
<td>Highland and lowland marketplaces.</td>
</tr>
<tr>
<td>Other marketplace vendors</td>
<td>Sell goods and services to marketplace goers</td>
<td>Highland and lowland marketplaces.</td>
</tr>
<tr>
<td>PMV/truck driver and <em>bakken</em></td>
<td>Load and transport betel nut from the end of the lowlands road network to the highlands. Also provide transport in lowland areas separated from the main road system.</td>
<td>Highlands highway and lowland road network.</td>
</tr>
<tr>
<td>Boat and canoe skippers and ship captains and crews</td>
<td>Load and transport betel nut in areas without roads to the road head.</td>
<td>Lowland rivers and coastline.</td>
</tr>
<tr>
<td>Shipping companies (Luship, Rahaul Shipping)</td>
<td>Provide shipping services between coastal towns. Transport betel nut.</td>
<td>Coastal towns and coastline.</td>
</tr>
<tr>
<td>Airlines (Air Niugini, Airlink)</td>
<td>Provide air services and charters. Transport betel nut.</td>
<td>Towns throughout PNG.</td>
</tr>
<tr>
<td>'Taxis'</td>
<td>Unload vehicles and carry betel nut bags by foot throughout the highland marketplaces.</td>
<td>Highland marketplaces.</td>
</tr>
</tbody>
</table>
Figure 6: Trade network showing the movement of betel nut between main actors involved in the transaction (as owners/non-owners) of betel nut in the highland trade.
Chapter Four

The traders

It is the traders, *baias* (literally buyers) in *Tok Pisin*, who are primarily responsible for the movement of betel nut into the highlands. They are betel nut’s constant travelling companion, helping to overcome any troubles encountered on the road, and ensuring it reaches its destination. It is an activity highlanders have made their own. After two weeks of marketplace surveys at Mt. Hagen’s Kaiwei marketplace where 316 betel nut and betel pepper traders were surveyed, only four traders were of lowland origin. Lowlanders for the most part are happy to leave the perceived and real dangers of the highlands to the highlanders. Traders spend much of their time in search of ‘green gold’, usually spending around a week for each trip. They revel in the excitement, adventure and risk of life as a trader, the potential to escape the constraints and boredom of village life, and a chance to *lukim plas* (see the country).\(^2\) They are spurred on by the lure of money and, for some, to attain a ‘name’. The risks are real, and many traders abandon the enterprise after scary encounters with *raskols*, car crashes or boat capsizes; but the life of a trader is as addictive as the stimulant itself: ‘it gets in your blood and it makes it hard to give up’ (*i stap long blut na bat long giv-up*).

Traders are predominantly men – seventy six per cent of them according to the Mt. Hagen surveys – most in their twenties, thirties and forties. Some hardened men trade into their later years but most find the constant travel and living rough difficult to maintain. Most female traders tend not to travel, and instead have male relatives or workers who travel for them, although a handful of, usually older, women do travel. Men typically do not like the idea of their female kin travelling, and the risks for women are more acute. One male trader explained ‘men are so powerful to go around to other places ... whatever happens on the road, we can fight, we can talk ... Women can go but they must be in-between men, they have to be accompanied by men’ (cf. M. Strathern 1972). It is more common to see female traders in the less distant marketplaces such as Madang, Kubugam and 40-Mile. Despite being the minority of travelling traders, some of Hagen’s largest traders are women.

Traders as a group are not homogenous. The *hevi baias* (literally, heavy buyers) are the key movers and shakers in the trade. They deal in large volumes and invest large amounts of money. The largest load by a single trader recorded during the marketplace surveys was 12.5 tonnes, which required an investment of over K60,000. *Hevi baias* cannot coordinate such large purchases alone. They instead have workers who buy on their behalf. The largest traders are mainly financiers (*papa bilong moni*) and coordinators, who remain in Hagen to keep an eye on the market and who occasionally may

\(^2\) Hughes (1977) and Gell (1992) highlight the excitement and adventure of pre-colonial trade.

\(^3\) Literally, ‘father of the money’. 

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Betel nut on the move

meet a load of their betel nut in Madang or Lae. In Hagen there are perhaps ten traders who operate on such a scale. It is those who work for them that do the foot-work of buying and moving the betel nut. The bulk of traders are those ‘on the sidelines’, as one trader described it. They buy on behalf of the largest traders or invest small amounts of their own money. But even small traders deal in quite large amounts, with average loads of around 830 kg (Figure 7).4

Figure 7: Number of traders arriving at a Kaiwei marketplace (Mt. Hagen) carrying different weights of betel nut (n=167) during two one-week surveys (14/5/2007-20/5/2007 and 29/10/2007-4/1/2007). Note: Individual traders may have been recorded on more than one occasion if they undertook multiple buying trips during the two survey periods.

Traders at any particular point in time usually specialise in trading betel nut or betel pepper, and for a very limited group, lime. It is difficult for traders to simultaneously follow different commodity markets, although many will switch between commodities during their careers. Betel pepper trading is often a stepping stone to involvement in the more lucrative and less volatile betel nut market. This is because betel pepper requires less start up money: ‘To buy betel nut requires more money like K3000 to K6000 and over … but to buy betel pepper requires K3000, K2000, K1000 or less’.

**PRODUCTION AREAS AND TRADE ROUTES**

Betel nut is produced widely throughout lowland PNG (Chapter 2), however only a few locations are important to the highland trade. The main source areas for the highlands are East Sepik Province, particularly the coastline immediately east and west of Wewak, the Yuat River (a tributary of the Sepik) and, to a lesser extent, the Sepik Highway; Madang Province, especially the middle

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4 This figure excludes the largest traders, taken as those dealing in over 2000 kg or around a full minivan load. With the largest traders included the average was 1170 kg.
Chapter Four

Ramu River and its tributaries, the area surrounding Madang town, and the North Coast Road; Oro Province, along the road to Kokoda and the north-western flank of Mt. Lamington; Morobe Province, particularly around Finschhafen and the Markham Valley; and West New Britain, both the north coast, and the south coast around Kandrian. Less important sources during 2007 included Manus, Bougainville, Gulf and Central provinces. On occasion betel nut from Sandaun, including Aitape and Vanimo, and Milne Bay provinces enters the highland marketplaces. Map 6 shows the key long-distance trade routes, and their relative size, throughout PNG. The most important feature is that the highland trade is for the most part separate from the Port Moresby trade (Appendix 5). Minor and mostly irregular flows do connect the two markets, but only in acute shortages does any significant crossover occur.

The trade in betel pepper is quite distinct. Betel pepper has three key source areas. The main one is the south of Karkar Island, Madang Province. The other two are the upper Markham Valley around Umi, and 9-Mile (Lae) both in Morobe Province. Occasionally betel pepper from Wewak also enters the highland marketplaces. Lime traded into the highlands is almost exclusively produced along the Morobe coast, in particular south of Lae between Labubutu and Salamaua, and on Umboi Island. Most of this lime is traded through the Lae Main Market. The highland betel nut (kavivi) is only a minor part of the long-distance trade. It is produced near Kainantu, around the bush fringe including the northern slopes of the Bismarck Range, Okapa and the Huon Peninsula around Wantoat and Erap.

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5 The Markham Valley was a major production area for the highlands until the mid 2000s when the disease devastated plantings there (Chapter 3).
6 East New Britain was previously a major source area although during fieldwork in 2007 the presence of cocoa pod borer in that province put a stop to the transport of agricultural material out of the province. It is likely to again become a part of the trade once this problem is resolved. The cocoa pod borer was subsequently found near Bogia (Madang Province), a major stop off point for betel nut traders, which led to unheeded calls to restrict the transport of betel nut along that route.
7 Small quantities also used to come from Rabaul prior to the arrival of the cocoa pod borer in the province.
8 The numerous other betel nut and betel pepper substitutes which are sometimes grown and sometimes collected from the bush both in the lowlands and in the highlands are not part of the long-distance trade although they occasionally appear in the marketplaces.
Source: adapted from Allen et al. (2009:391). Data compiled by R. M. Bourke and author
The transport network

The national road network is an important structural factor which shapes the betel nut trade. However, it is limited in size, fragmented and of variable quality. The country’s most important and extensive road network is the Highlands Highway and its interconnecting roads which link the central highlands, their urban centres and resource enclaves, with the northern coast of PNG, the towns of Lae and Madang, and along the coastline north-west of Madang town (Map 7; see Allen and Lowe 2006). The next most important road network is the Hiritano and Magi Highways which extend west and east of Port Moresby. There are smaller road networks mostly extending a short distance from each of the provincial capitals including Wewak and Popondetta. None of these networks are connected to one another and importantly no road joins the northern and southern parts of PNG. These major roads are connected to a system of rural feeder roads.

Map 7: Main road networks in PNG.

The quality of roads is hugely variable (see Allen 2009:477-81). For the most part the major highways are in relatively good condition with bitumen, albeit heavily potholed, for most of their length. The once extensive network of rural feeder roads established under the colonial
administration has fallen into disrepair since the mid 1980s. Many of the feeders could now only loosely be described as roads, no longer passable to even the most hardened Toyota Landcruiser.

While the road network is limited, the majority of the population have access to a road (Allen and Lowe 2006). This has resulted from both the colonial administration constructing roads to connect the most densely populated areas, and due to people migrating to areas with better road access. For those without, a road has become an important symbol of ‘development’ (Hirsch 1994). The road network, however fragmented and poorly maintained, remains the basis for transporting betel nut.

Beyond the reach of the roads, water transport by river and sea plays a crucial role. Two of the major production areas, those communities along the Ramu and Yuat rivers, are only accessible by river. These huge river systems act as highways taking betel nut down river and trade goods up river. Elsewhere the fragmented national road network is connected by sea. Large commercial ships, medium sized fishing boats, and dinghies, are all enlisted. The most important links are from Wewak to Boroi and Madang town, Karkar Island to Kubugum (north of Madang town), and into Lae from Gona and Oro Bay (near Popondetta), Finschhafen (Morobe), Kandrian and Kimbe (West New Britain).

Some production areas do not have direct access to either a river or road. In these areas transporting betel nut by foot is the only possibility. In the Middle Ramu, and the hinterland behind Finschhafen, some producers carry bags of betel nut several hours to the nearest road or tributary. Even in relatively well serviced areas betel nut often starts its journey by foot. It is also walked into many rural highland areas.

IN SEARCH OF GREEN GOLD

Travelling to the lowlands

‘Lae, Lae, L-L-Lae’, ‘Madang, Madang, Madang’. In the early morning outside Hagen’s main fresh food marketplace dozens of public motor vehicles (PMVs) jostle for space and passengers (Plate 4). Horns sound, engines are revved. Standing in the doorways of these minibuses and small buses bosken, the drivers’ right hand men responsible for attracting passengers and taking payment, call out their destinations – ‘Madang, Madang, Madang’. Their eyes are peeled for travellers heading to the lowlands, someone with a bag, a known betel nut trader. Once all the seats are filled the PMV heads eastwards. On the outskirts of town a short stop allows the PMV crew to fill up with fuel and for their passengers to buy the necessities for a trip to the lowlands, a bunch of peanuts, buai,
maybe a pair of sunglasses from a street seller. The trip takes the best part of the day and costs K50, or K30 if the *bokkeru* is a friend. With no delays you can be in Madang within eight hours, Lae a little sooner.¹

![Plate 4: PMV stop outside Mt. Hagen’s main fresh food marketplace, August 2010.](image)

The PMV traces the Highlands Highway to Kundiawa up over the Daulo Pass, with maybe a short stop for passengers to relieve themselves and buy a fried sweet potato or sausage, then descends towards Goroka. The vehicle speeds its way through the highlands, using its mass to intimidate those rural people walking along the road, often women burdened under unwieldy *bilums*, from the bitumen. As the PMV approaches Goroka everyone spits out their betel nut lest they receive a K20 fine from the town authorities here. After restocking with betel nut on the other side of Goroka, the PMV continues along the valley, through Kainantu, over the Yonki Dam which supplies electricity to Lae, Madang and much of the highlands, over the Kassam Pass before descending steeply for around 1000 m into the open grass valleys which mark the watershed of the Ramu and Markham valleys. At Watarais a right turn leads down the Markham Valley to Lae, where a boat can be taken to Finischhafen, New Britain or Oro. A left takes the PMV past the Ramu Sugar refinery,² and their recent oil palm plantings, over the western edge of the Finisterre Range and on to Madang town. This is the end of the line for most passengers, and betel nut traders must change vehicles here. Madang offers the opportunity for traders to buy agricultural produce bags, to be eventually filled with betel nut, and a needle and thread to sew up the bags. Late in the evening outside the

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¹ See Stewart and Strathern (1999) for an account of a trip on the Highlands Highway.
Betel nut on the move

Redscar nightclub\(^3\) the traders board another K20 PMV to take them to Ramu Base Camp, en route to the betel nut palm lined banks of the middle Ramu River, or Boroi, on the ‘back road’ to Wewak. Around a week later they will retrace this route, but first they must find some betel nut.

**Finding betel nut and learning the ropes**

“If they had not taught me I would not know how to buy betel nut, come and sell … how to find a boat … I would not have been able to do this alone. They taught me. One man took me to one place, and another man took me to another place, another man to another place. After that I knew. Now I travel alone” – Mek, a trader from Hagen.

Traders learn their skills from other traders; where to buy betel nut and the specificities of how to buy and to find transport in different locations. Buying betel nut in Popondetta is very different to buying on the Ramu River. In the 1980s pioneering betel nut traders ‘opened roads’ (*opim rok*) into these areas and have subsequently showed (*soim rok*) these to new generations of traders. Mek, quoted above, learnt the trade from a number of relatives, a man from the group to which his aunt is married, his brother and others. As he grew in confidence he started travelling on his own. When I met Mek he was in his mid thirties and was on his way to Popondetta to buy for a Hagen *hevi baia*. He was accompanied by three young men who were helping him and at the same time learning the trade. These apprenticeships allow them to gain knowledge that they would otherwise not have access to.

Many aspects of trading are closely guarded secrets, particularly new, unknown buying locations. When asked in public, traders are typically ambiguous as to their exact buying location, preferring to instead give broad regional descriptions such as Ramu, Sepik or Madang rather than the village names or tributaries where they buy. One trader selling his betel nut ‘labelled’ as Sepik later confessed that its true origin was Manus. Another trader reported his betel nut was from Kimbe, West New Britain, when in reality it was from Kandrian on the opposite side of the island. Hiding information about production areas is done so that particularly small locations do not have their supplies depleted by too many traders visiting. This is partly because traders regularly return to the same village, or even the same part of a village, for the whole season and often year after year.

\(^3\) Also known as Hagen Park to Madang locals. The site has a thriving sex industry and is considered a high risk HIV/AIDS transmission location (NHASP 2006).
Although some traders arrive in production villages without any prior contacts, most are either escorted into production areas, and hosted there, by producers they meet in the marketplace, or alternatively, they accompany traders who already have established contacts. Sometimes traders give prior notice of their arrival but most often they arrive unannounced.

**Following the seasons**

Betel nut and betel pepper produce year round although they do show seasonality, more so in some areas than others (Chapter 2). Traders must learn to follow the seasons, moving from place to place. Lewis, a buyer from Hagen explains:

> From March to July we stay around 40-Mile Lae. And then from May to July we sometimes go to Finschhafen ... When all the highlanders get down there and the betel nuts are finished, then we switch over to Popondetta ... when Popondetta finishes then we look around, we go to Sepik, even further up to Vanimo, Aitape ... and then Ramu starts in November ... and it finishes around February, March we get down to Lae again.

These seasons are not strictly based on the plant’s ecology but also on the movement of other traders, travel costs, the quality of betel nut in each location and the trader’s personal contacts. To reduce travel costs traders buy from closer locations first. Why spend days and thousands of kina getting to Popondetta when a day-trip to the Markham can be made instead? Traders are forced further afield in response to seasonally declining yields, and due to heavy competition with other traders. In peak season a location might be able to support dozens of traders but when the palms are at their least productive there is but enough room for one or two. Some traders are location specialists who buy year round in a single location. The bulk of traders though must follow the seasons on to different locations.

Highland marketplaces are always supplied from multiple source areas, but the proportion coming from each place varies throughout the year. Figure 8 illustrates the shift based on two one-week snapshots of the Kaiwei marketplace, one in May 2007 and one in October/November 2007. While the proportion coming from East Sepik remained fairly stable, Oro featured more prominently in May while that from Madang, most of which was from the Ramu River, comprised a greater proportion in October/November. Both surveys coincided with the start of the buying season in those locations; had the two surveys instead been conducted in July and December it is expected that, respectively, Oro and Madang betel nut would have been far more prominent. Betel pepper is
Betel nut on the move

year round dominated by Karkar Island (Madang) with a small amount seasonally coming from the Markham Valley (Morobe).

Figure 8: Origin of betel nut and betel pepper supplying Kaiwei marketplace (Mt. Hagen) based on two one-week surveys (14/5/2007-20/5/2007 and 29/10/2007-4/1/2007).
Chapter Four

Working for a hevi baia

Mark is a young trader from Hagen. After failing Year 10 in 1997 he dropped out of school and started buying betel nut, at first independently. On one buying trip Mark met a hevi baia, James, they became friends, and Mark started to buy on James’ behalf. He also started to live with James and his wife Bettie and was later adopted by the couple. Buying on behalf of a hevi baia is common. The largest traders in Hagen all have several young men, like Mark, travelling and buying for them. Often they work for a hevi baia for a period before buying for themselves again.

Mark spends much of his time on the road travelling between the highlands and his regular buying location on the Ramu River. These trips take around a week. It takes two or three days to reach the village where he buys, involving a PMV to Madang, another PMV to Base Camp on the Ramu River, and finally a canoe to take him up river. Several days are then spent buying in the village before the betel nut is quickly moved down river and up the highway to Hagen which usually takes one to one and a half days. Mark spends more time in the village where he buys than he does at home in Hagen, and is considered something of a local there. He has bought regularly in the same village since 2002 and has close relationships with many of the villagers, some of whom work with him (Chapter 7). Once back in Hagen, Mark waits and rests for the few days it takes to sell the betel nut. With the principal recovered he again returns to the lowlands.

Mark recalls when his reputation, and the ‘212’ name under which Bettie and James mark their betel nut bags, took off. On one trip the betel nut that Mark bought made a profit of K11,000. Mark recounts: ‘James and Bettie both held me and cried. They did not think you could earn that much money [from one trip]’. The partnership was so successful that in 2007 the family bought three brand new Toyota Hiace minivans (Chapter 7; Vignette 8). Mark remembers that when they bought the first car Bettie and James waited for him to return from a buying trip on the Ramu, then the whole family had gone to Ela Motors together and paid for the car in full, handing over K58,900 in cash (cf. Finney 1973:81-2).

Mark is paid a share of James and Bettie’s profits. After buying for them for a few years he considered buying on his own again but when he told James and Bettie of his plans ‘they cried for me because I earn their money’. Mark remained buying for his adopted parents but it is common for traders to buy independently once they have raised enough capital to do so. It is also common for traders to return to a hevi baia following failed trading ventures in which they have lost all their money. Smaller traders regularly fail.
Moving moni

The movement of money (moni) stands alongside the flows of people and betel nut. People have devised quite innovative ways of transferring money. While many hevi baias have bank accounts, few of those who buy on their behalf or the smaller independent traders do. This means that for the most part cash must physically move. Chris, a small trader from Hagen explains: ‘when we are on the road, we carry cash around, K5000 or K6000, big money ... some traders even carry K10,000 or K20,000’. This is something that other people are all too aware of, and is one of the risks of being a trader. The money is carried in large wads, and the demand for smaller denominational notes in the rural villages where they buy adds to size. The money is concealed in deep pockets, inside their pants, their back packs and in small ‘bum’ bags.

For many traders it is too risky to travel alone with such large amounts of cash, so they usually travel in small groups and many carry knives concealed in their trousers. Probably the greatest risk is the Highlands Highway. The traders place considerable faith in the skill and courage of their PMV drivers. The lowlands are somewhat safer, with fewer hold ups and the aggressive reputation of Hageners offers some protection. Wherever they go there are always other Hagen traders or at least other highlanders to offer some security. However, traders still take precautions.

Martin lives on the lower Ramu River not far from Base Camp. He earns money through skippering the long dugout canoes which are used to travel up river and later carry betel nut back down to the road-head. He explains: ‘when I load to come up river, [the highlanders] are afraid. They bring their money and give it to me. I hold onto their money while we travel.’ This is because highlanders may be targeted on the river, whereas locals are less likely to be held up. When Martin saw such large amounts of money going to the producers, compared to how much he earned, he resolved to plant his own betel nut grove.

To avoid the risks of travelling with money on the Highlands Highway some traders instead withdraw money in the lowland urban centres. This is easier said than done. Some traders use the Post Office’s money transfer service, Salim Moni Kwik (Send Money Quickly), although they say that proving their identity in order to collect the money can be difficult. The other option is to use banks however many traders find it difficult to open their own accounts. Traders instead often use other people’s accounts to transfer money, although this requires a high level of trust. One trader explained:

If I am short of money I ring Hagen. My family will send some money here [to Wewak] ... If there is someone I know with a job, who lives here, I will ask him for his
account number and give this to my family. They will transfer the money and that person will withdraw it and give it to me.

Even with a bank account obstacles remain. A trader from the Southern Highlands complained that a daily withdrawal limit of K1000 meant he had to wait for two days in Wewak before he had enough money to pay his transport back to Mendi.

Traders also reduce the amount of cash they travel with by paying for the road transport of their betel nut in Hagen. Traders, returning from a buying trip, commonly arrive at the road-head having spent every last kina buying betel nut. The PMV drivers accept the loads on credit, and may even lend the traders a small amount for the trip. The PMV crew are paid once the betel nut has been sold, with the money never leaving Hagen. What is evident is that the movement of money is heavily reliant on people's social networks (Vignette 1).

Vignette 1: Down the Morobe coast.

Fifteen of us crowded onto the small 8.2 m skiff for the one and a half day journey between Lae and Gona. Our skipper Scott, his daughter, two young kids, two crewmen, a passenger, seven betel nut traders, none of whom could swim, and one slightly concerned PhD student. Scott had purchased the boat on a loan repayment basis through the EU-funded Rural Coastal Fisheries Development Programme but at K4000 a return trip he could make more money skippering for betel nut traders than he could catching snapper. He had hired his boat out for the season exclusively to one of Hagen's bevi baias. When the traders stopped coming he would return to fishing. After a full day on the water we pulled into a small village not far from Morobe Station to eat and to fill up with diesel. The traders rested at Scott’s sister’s place while Scott went in search of someone who might sell him some diesel. His choice to fill up here was strategic: an Asian logging company sells locals discounted diesel. With 200 litres in the skiff, enough to complete the return trip, we continued our trip along the coast to Gona. The next day one of the traders returned on the skiff along with thirty bags of betel nut destined for Hagen.

FROM PRODUCTION AREAS TO THE HIGHLANDS ROAD NETWORK

The betel nut has been harvested, the bags are packed, and the betel nut is beginning to deteriorate. Time is of the essence. The next day or two will tell whether this has been a successful buying trip for the trader or whether he will lose everything.
**Highlanders cannot swim**

Hughes (1977:205) notes that in pre-colonial trade in the highlands ‘risk to life and limb was the one meaningful transport cost’. This remains an important concern to betel nut traders today. It is common to hear stories of traders lost at sea or drowned. The story of three Western Highland traders who, during the shortages associated with the 1997 drought, drowned in Milne Bay waters after their boat capsized is often repeated (see Bariasi 1999).

Few highlanders can swim, much to the amusement of many lowland people. One Ramu River man told of a canoe loaded with betel nut capsizing. When he dived down to try and save the highland trader, he found the man sitting on the bottom of the river ‘like a stone’. In 2007 a group of traders were travelling along the Morobe coast in a small dinghy loaded with Popondetta betel nut destined for Lae and the highlands. The dinghy ran out of fuel and began to drift. It washed over a reef and capsized, drowning one of the traders on board while the other two made it to shore by holding onto the empty fuel container. The week following this incident I heard this story from one of the survivors while we sat in a boat off the Morobe coast. The electrics were down and around us the crew and passengers bailed water to keep the overloaded and severely leaking boat afloat. Not a life jacket in sight (Vignette 2).

There are also the obvious financial risks of an overturned boat. Lewis, a large trader, explained:

> Betel nut is a little bit risky. It is a hundred per cent risk ... if we hire a ship to Popondetta and if we get the betel nuts for another K10,000 something, then it is K20,000 to K30,000 [at risk] … if that ship is capsized or something, that K30,000 is definitely lost, and there is no insurance for it.

That producers did not recognise the risks involved in trading and therefore perceived the highlanders as greedy was something that often frustrated traders. A trader who buys on behalf of Lewis complained of producers of Oro Province:

> They think that we get lots of money but they do not think of our expenses. Hiring vehicles, hiring boats, buying food, paying labourers, paying gate fees ... We risk our lives, carrying cash around, boats sinking, car accidents. These costs they do not know about ... we get angry because they do not sell us good quality betel nut.

There is no shortage of stories about traders who have lost it all.
Chapter Four

Vignette 2: Popondetta to Lae.

The traders had spent the last three days buying betel nut and packing them into bags for transport back to Hagen. The bags, around 18 tonnes in all, were loaded onto open back trucks for the run down to the wharf at Oro Bay. The bags were loaded into Lucy II, an old and poorly maintained fishing boat. By the time we had fully loaded, the boat sat worryingly low in the water. The whole boat was completely filled, including the cabin floor. In the rear of the boat betel nut was loaded so high that there was little more than crawling room between the bags and the upper deck. Early in the morning we were ready to leave. As we pulled away from the port, water flushed in the back of the boat washing over the bottom layer of betel nut. A short time into our journey to Lae we noticed that the boat was taking on water at a rapid rate through leaks in the hull. This, combined with the fact that the bilge pumps were not functioning, meant the traders were required to take it in turn hand bailing the engine room of the vessel. This was to go on continuously for the next thirty-six hours. Soon after night fell the wind and waves began to pick up. The boat rolled from side to side, rocked up and down, and with each movement water flooded into the back. Those bailing, sea sick and suffocated by fumes, emerged now and then to vomit over the side of the boat. Our predicament became worse when all electrics on the boat failed. Now in darkness and rough weather the skipper navigated along the coastline with only a compass. Only a week earlier a trader had drowned on this stretch of coast. At dawn the sea calmed and, remarkably, we were on track with Lae in sight (Plate 5).

Plate 5: Unloading Popondetta betel nut from Lucy II into a dinghy at Voco Point (Lae), June 2007.
Dealing with shipping companies

On the large commercial ships there is no risk of capsizing, but using ships has its own problems. At the time of fieldwork in 2007 there was an uneasy relationship between betel nut traders, shipping companies and the port authorities. This tension was reported in the *National* newspaper in 2005 when a Lutheran Shipping company ship refused to carry betel nut from Oro Bay to Lae (*The National* 2005b:5). The bags were reportedly left on the wharf, the traders with no other way to transport their cargo to the highland road network. Apparently this was due to troubles the company had in controlling the traders on the wharf, and the security and safety concerns this created. In 2007 the situation remained uncertain. In July Rabaul Shipping was allowing betel nut to be carried on its ships but by August they were again refusing it. There was also some disagreement between the shipping companies, who make substantial profits from their involvement in the trade, and the PNG Port Services. Port Services were frustrated by the wharf area being turned into an informal marketplace each time a ship docked, and by the regular breaches of security both by traders and those coming to the wharf to buy.

For the traders, commercial shipping was both inflexible and equally unreliable. It was a lottery as to whether they would be allowed to load their betel nut, obviously an unsatisfactory situation for the traders. As traders tried to avoid these risks an increasing volume of betel nut was transported on smaller privately-owned boats. To date, the majority of the shipping troubles have centred around Lae and Oro Bay, while services between Madang and Wewak have not suffered from the same conflicts, mainly due to Lutheran Shipping owning their own wharf (Plate 6). Lutheran Shipping has also recognised the financial benefits of being involved in the trade; in the first four months of 2007 they earned over K260,000 carrying betel nut (Table 11).

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4 In February 2012 the MV Rabaul Queen, a ship regularly used in the transportation of betel nut, sank off the Morobe coast. Around 100 people are thought to have lost their lives.
Source: data provided by Lutheran Shipping, 2007.

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Weight transported (kg)</th>
<th>Earnings (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2005</td>
<td>715</td>
<td>828</td>
</tr>
<tr>
<td>June 2005</td>
<td>1 155</td>
<td>1 460</td>
</tr>
<tr>
<td>July 2005</td>
<td>1 708</td>
<td>2 163</td>
</tr>
<tr>
<td>August 2005</td>
<td>15 478</td>
<td>19 470</td>
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<td>September 2005</td>
<td>21 418</td>
<td>28 405</td>
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<td>October 2005</td>
<td>38 528</td>
<td>49 090</td>
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<tr>
<td>November 2005</td>
<td>36 783</td>
<td>46 115</td>
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<tr>
<td>January 2007</td>
<td>47 203</td>
<td>59 280</td>
</tr>
<tr>
<td>February 2007</td>
<td>13 087</td>
<td>16 436</td>
</tr>
<tr>
<td>March 2007</td>
<td>73 980</td>
<td>92 390</td>
</tr>
<tr>
<td>April 2007</td>
<td>75 560</td>
<td>94 243</td>
</tr>
</tbody>
</table>

Plate 6: Betel nut bags transported from Wewak being offloaded at the Madang Wharf, April 2007.
Timing of transport

One of the most important skills possessed by a trader is the ability to time the transport of betel nut, both to fit with the rigid schedules of commercial shipping companies and to avoid flooding the highlands marketplaces with betel nut. The shipping schedule between Wewak and Madang has a marked effect on the arrangement of the highlands trade, as does the movement of larger boats on the Morobe coast, particularly the *Lucy II*. Stanley, a producer and trader from the Middle Ramu, explained how he used to time the transport of betel nut out of the Ramu so as to avoid clashing with the transport of Sepik betel nut:

> Before the ships had a schedule. So we would look for a gap. We knew that on a certain day the ship would travel. So we must avoid that day when Sepik betel nut will go.

Predicting the movement of Sepik betel nut is now more difficult. Highland traders are increasingly prepared to risk a smaller boat at sea. The smaller boats do not have schedules, which makes it difficult to predict the flow of betel nut into the highlands. While there is now greater uncertainty, the movements of larger boats and ships are still well known and traders do their best not to overlap.

Traders will also try not to overlap with their partners to spread the risk and to prevent competing with each other. Stanley, works closely with Mark (above):

> If betel nut is oversupplied we go on separate days. [Mark] will go tomorrow and my betel nut will travel on Friday. We give each other space. It is not good if we both get lots of betel nut and Ramu betel nut is oversupplied [in Hagen], we will ruin our price.

In the lowlands traders are often coy about their exact travel plans. Traders can only observe what others are doing and make their best guess – it is always a gamble. Often the best information is garnered by phoning Hagen.

Travelling blind and mobile phones

> ‘We tried to come in a gap but we came in a glut’ – A Hagen trader.

Having good information is vital. In remote areas, outside of the towns, traders ‘travel blind’. They rely on information from those they encounter en route. A trader who has been on the Ramu for
Chapter Four

several days will seek information from those who have recently arrived on the river, fresh from Hagen. From the river bank they call out to other traders in passing canoes. Traders often say that traders should cooperate with one another and be truthful, but not everyone subscribes to this maxim (Chapter 8). Traders cannot always choose who they get their information from. Information received is often unreliable and sometimes deliberately misleading. In town traders use public telephones to ring Hagen, but in PNG public telephones are few, far between and invariably broken.

During fieldwork a mobile phone revolution was set to change all this. Mobile phones were not new to PNG but they were to the majority of Papua New Guineans. Digicel, a new telecommunications company, launched in mid 2007 with a flashy campaign promising to deliver mobiles to the grassroots.6 Cheap handsets and calling rates challenged the monopoly previously held by Telecom/B-mobile, and made mobiles no longer an elite item. B-mobile, in a scramble to maintain its share of the market, followed suit by dramatically reducing their costs and rebadging to improve their image. Betel nut traders were quick to seize on the benefits this new technology offered. Before Digicel’s arrival only beti baias could afford to have a mobile, while the remainder relied on public phones or personal contact. Virtually no one had a private landline. Traders enlisted relatives or friends in formal employment and with access to a phone to pass information back and forth, and groups of smaller traders often pooled together to purchase a shared mobile phone. Mobile phones could also be rented informally at exorbitant rates.

With the advent of affordable mobiles, virtually every trader owned at least one phone. Throughout 2007 the two competing companies did not share their networks, which meant a Digicel customer could not call a B-mobile customer and vice versa. Their networks had overlapping but not congruent coverage areas, with some parts of PNG only serviced by one or the other company. As the Digicel network was unrolled across the country, traders were always abreast of which areas had coverage (gat be6), and at which hill or corner of the road coverage commenced.

Mobiles revolutionised and democratised the betel nut trade. Traders could now ‘speak their own language with Digicel’,7 an important development. Traders no longer had to rely on unreliable and misleading information gleaned from chance meetings. With mobile communications a trader in the

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5 Digicel is an Irish owned company with a successful record in mobile telecommunications services in the Caribbean.
6 Literally ‘got bar’, ‘bar’ referring to the bars on the mobile which indicate the strength of the signal.
7 Digicel was promoted with the slogan ‘tok pled wantaim Digicel’
lowlands could ring a friend or relative who they trust and in real-time get an assessment of the state of the market. Chris, a Hagen trader, explained:

I left home over a week ago and have come to another province… I must ring and find out if everyone is alright or if there is some trouble, what the betel nut price is, whether there is lots of betel nut in the marketplace or not. If I do not have a mobile or I do not ring, I would not know. I will just go and whatever trouble there is back home I would not know about.

In an age of mobile phones, tribal conflicts have increasing reach and pay-back is able to be sought on an unsuspecting enemy who is away from home; something that places traders at risk. Following a murder in Hagen in 2007, traders belonging to the accused man’s tribe remained in the lowlands until compensation had been paid and it was again safe to travel. These traders had received warning calls on their mobiles. Traders also use mobiles to organise transport. In remote areas things have changed little but certainly traders are forced to ‘travel blind’ for shorter periods and in fewer places.

Producers transporting betel nut

Before betel nut and betel pepper reach the road network which connects to the highlands, they are as often in the hands of lowlanders as in those of highland traders. In areas close to towns such as Wewak, Madang and Popondetta, lowlanders are regularly responsible for moving produce from their villages to the town marketplaces. In remoter areas, they may transport the produce to lowland transport hubs. Middle Ramu villagers travel to Base Camp, people along the Watut ride bamboo rafts down to the highway in the Markham Valley (Bourke et al. 2002:100), Biwat villagers voyage to Boroi, and Karkar Islanders to Kubugam. It is easier for producers to wait for the highlanders to come, but when they tire of waiting and need some money they make the trip. Some producers double as traders, earning a profit off other’s betel nut in return for the risks and hassle of transporting it to the road-head. The following presents the journeys undertaken by two different groups of lowlanders.

The Green Bus: Karkar to Kubugam

Early each morning the ‘green bus’ leaves the village on the foothills of Karkar Island, heavily laden with baskets of betel pepper, and groans as it descends the rough and slippery dirt road down to the coastal village of Mangar. The ‘green bus’ is a local joke. It is not a vehicle but refers to the line of women who carry betel pepper to the coast; each with several green leaf baskets of betel pepper,
Chapter Four

each weighing around seven kilograms, slung from their foreheads and their shoulders. Each day the ‘green bus’ transports hundreds of baskets down the road for which the women, usually relatives of each household, are paid K2 per basket. At the beach the baskets are offloaded into the waiting seven-metre fibreglass dinghies which transport betel pepper for K5 a basket and K20 for an accompanying passenger, the twenty kilometres to the mainland. The dinghies are loaded high so that the water laps precariously close to the gunwales. The dinghies arrive on the mainland at Kubugam marketplace (Chapter 8), the main wholesale point for betel pepper in the highlands trade. When betel pepper is in low supply the baskets are greeted at Kubugam by dozens of highland traders wading into the water to secure the load. This trip is only short, other groups make far longer journeys.

Keeping the highlanders out: Biwat to Boroi

Biwat people accompany the betel nut they produce further than any other producers in the highlands trade. Where most betel nut falls into the hands of highlanders close to the point of production, Biwat people have forcefully exerted control over the movement of their betel nut for around half its journey to the highlands. Only at Boroi in Madang Province is it sold to waiting highland traders. In her study of betel nut in a Biwat community Watson (1987a:267) noted that, ‘Outside entrepreneurs have not played a role in the growth of Biwat’s inter-regional betel trade.’ Some traders do go up river but are usually escorted there by a local. Bill, a young Biwat man, explained:

At first Hageners used to go inside and buy in the village… but in the Sepik Province, Biwat are strong people. They are stubborn as well. White men they cut [with machetes], black men they cut – those carrying money. They cut, cut… the young men cut and cut. Now no Hageners go to the village, no Hageners go, absolutely none.

Traders who did go often had their money stolen and ran into trouble. Bill said that because his father is an important man in the village he is able to take traders with him; they stay with him and he looks after them. Bill has a close relationship with a family from Hagen who accompany him to Biwat and he travels with them to Hagen. But, for the most part Biwat people themselves are responsible for the movement of betel nut to the road-head.

8 People of the Middle Ramu travel only slightly shorter distances, however highland traders play a much bigger role there than compared to the Biwat area.
Betel nut on the move

From Biwat betel nut is transported in fibreglass dinghies, rather than the long dugout outboard powered canoes which are dominant on the nearby Ramu River. The dinghies are heavily loaded carrying 60-80 bags, each around 28 kg in weight, in addition to up to half a dozen passengers. Transporting betel nut is, according to one of Darja Hoenigman’s respondents, like carrying a dead body – you must not speed lest the boat is capsized but you must also not stop in case it becomes damaged in the sun. The bags are brought down the Yuat River to its confluence with the Sepik River, then downstream to Angoram. From here some of the betel nut makes its way to Wewak by road but most of it continues further downstream on the Sepik. At Angoram the flows out of Biwat meet that coming along the ‘back road’ from Wewak to Madang (Vignette 3; Map 8).

![Map 8: Movement of betel nut out of Madang and East Sepik provinces.](image)

Darja Hoenigman conducted her anthropological research amongst the Awiakay people, a group who neighbour the Biwat people. The Awiakay are only very peripherally involved in the highlands betel nut trade. I am grateful to Darja for allowing me to use her data.
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Vignette 3: The back road from Wewak to Madang.

In Wewak we loaded the betel nut bags onto the back of an open-back truck. As dusk fell we jumped on top of the bags and travelled the four hours along a mostly unsealed road to Angoram, located on the mighty Sepik River. Angoram is the administrative centre for the middle and lower Sepik and despite being small, run-down and quiet, is a major transport hub for the Sepik. The bags were offloaded from the truck and straight into a dinghy on a prearranged charter. Bill, our skipper—boat owner and a producer-trader from Biwat, had brought twenty of his own bags. With the weight of sixty bags and four people, the boat sat low in the water as we floated down the Sepik. The engines were cut to save petrol and to time our trip so we arrived at dawn. No one wanted to join the mosquitoes on the banks in the pre-dawn. A couple of hours before sunrise, now nearing the coast, we left the main river and followed some smaller mangrove channels of the Sepik estuary. We arrived on the coast at Watam at first light and offloaded half the load before going out into the open ocean.

With the boat sitting slightly higher in the water we ran out through the waves and alongside the coast, crossing through the turbulent, swirling waters of the Ramu River pouring out into the sea. After a couple of hours we again came in through the waves, just preventing the boat from capsizing when waves hit us on the side causing the weight of the betel nut to shift inside the hull. After bailing the water the skipper steered the boat in through a small estuary then a short way up river to the road-head at Boroi. Here betel nut from the Sepik and around Wewak is unloaded from the boats and reloaded into waiting vehicles.

This day was different. Heavy rains along the Madang north coast had cut the road so that no vehicles could get through to Boroi. Throughout the day betel nut continued to arrive, the bags piled up, and the traders became increasingly frustrated. Late in the day the first vehicle arrived. It was loaded with as many bags and people as it possibly could and with the suspension completely compressed crawled its way to Madang. At first light on the second day, after two flat tyres, and with us sitting between the bags and the roof, the betel nut arrived in Madang.

Once the betel nut arrives at the peripheral reaches of the road network, it is firmly in the hands of highlanders. A few lowland people make the journey but most are happy to let the highlanders accept the risks from here on: ‘No need for me to go to the highlands ... Let the highlanders come and give me some small coins.’

In the early 1990s betel nut producers from the Kandrian area (West New Britain) had similar sentiments. They claimed that when they took their betel nut to Lae they were either robbed of their betel nut or, if they managed to sell it, their money. They thought it better to let the traders come to them (Mike Bourke pers. comm. June 2012).
THE LOWLAND ROADS: MUD AND BROKEN BRIDGES

Once betel nut reaches the lowland stretches of the Highlands Highway road network it is loaded into minivans and begins its road journey (Plate 7). In fine weather and when road conditions are good this section of the journey is relatively straightforward. However, in PNG the combination of torrential rains, unstable geology, low quality road construction, and poorly maintained vehicles can make this section particularly challenging. Along the coast there is often a choice between the type of boat and the route to be taken but once on land there is only one option. This can create significant bottlenecks.

![Plate 7: A boskru loading betel nut into a Toyota Hiace minivan at Madang Wharf, April 2007. Note: The bags are labelled with the trader's initials, TK.](image)

In September 2007 some large storms over Madang Province damaged a bridge on the North Coast Road, closing it to traffic for several days (Vignette 3). News of the broken bridge reached traders in Wewak via friends and relatives in Hagen but the full extent of trouble was not understood. Many traders had already bought betel nut and had no choice but to move it before it deteriorated. The effect of the bridge was exacerbated by the fact that the regular ship between Wewak and Madang was not running that week so all betel nut coming out of the Sepik had to go through Boroi. Traders continued to arrive at Boroi, and by dusk on the second day there were over 800 bags awaiting transport (Table 12). The traders had no way to move them, and no mobile coverage with which to gain information. At the time the bridge was damaged only one vehicle used for transporting betel nut was stranded on the Boroi side of the river. Even overloaded it could only carry around eighty bags. It was a six hour round trip to the bridge where the betel nut could be...
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offloaded, walked across the damaged bridge to be reloaded into another vehicle waiting on the opposite side.

Table 12: Betel nut transported through Boroi (Madang Province) on 27/9/2007.

<table>
<thead>
<tr>
<th>Trader Origin</th>
<th>Betel Nut Origin</th>
<th>Destination</th>
<th>No. of bags</th>
<th>Weight (est.)</th>
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<td>Turubu</td>
<td>Mt. Hagen</td>
<td>112</td>
<td>3 136</td>
</tr>
<tr>
<td>Hagen trader 2</td>
<td>Turubu</td>
<td>Mt. Hagen</td>
<td>75</td>
<td>2 100</td>
</tr>
<tr>
<td>Hagen trader 3</td>
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<td>Mt. Hagen</td>
<td>23</td>
<td>644</td>
</tr>
<tr>
<td>Hagen trader 4</td>
<td>Coast west of Wewak</td>
<td>Mt. Hagen</td>
<td>20</td>
<td>560</td>
</tr>
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<td>Wewak</td>
<td>Mt. Hagen</td>
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<td>980</td>
</tr>
<tr>
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<td>Mt. Hagen</td>
<td>102</td>
<td>2 856</td>
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<tr>
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<td>1 288</td>
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<tr>
<td>Hagen trader 8 *</td>
<td>n.a.</td>
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<td>120</td>
<td>3 360</td>
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<td>Biwat trader</td>
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<td>Mt. Hagen</td>
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<td>476</td>
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<td>Biwat group 1</td>
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<td>Mt. Hagen</td>
<td>74</td>
<td>2 072</td>
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<tr>
<td>Biwat group 2</td>
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<tr>
<td>Biwat group 3</td>
<td>Biwat</td>
<td>n.a.</td>
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<tr>
<td>Biwat group 4</td>
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<td>68</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>812</strong></td>
<td><strong>22 736</strong></td>
</tr>
</tbody>
</table>

Note: * The 120 bags belonging to 'Hagen trader 8' arrived at Boroi on 26/9/2007.

Similar events are common. A trader’s success hinges on their ability to overcome such obstacles. When the bridge was damaged Margret, a hevi baia from Hagen, had several traders in the Sepik buying for her. Of the bags backing up at Boroi, 187 were hers. When she got news of the bridge she sent one of her sons to organise transport on both sides of the bridge. Her son was able to reserve and pay for the use of the sole betel nut vehicle on the Boroi side. As a result, Margret’s betel nut was the first to clear the bridge and make it to Hagen. Her ability to move the betel nut quicker than the other traders meant that her betel nut was sold before the marketplace became flooded with the stranded betel nut and the price plummeted. Margret had been successful but the trader I was travelling with was not, losing K500 on his venture.

The road from Madang town over the western flank of the Finisterre Range to Watarais Junction and the start of the Highlands Highway presents its own challenges. The unssealed road becomes muddy and very slippery following rain, a frequent occurrence in that part of the country. Traders often have to push their vehicles through particularly slippery sections. But even when the sealed road is reached PNG can still live up to its label of, ‘the land of the unexpected’. This is a commonly heard expression, often followed by the half exclamation, half sigh of ‘eebbh Papua Ningin’. On one such occasion I arrived at Gusap Bridge near the Ramu Sugar refinery to find the bridge bent in two under the weight of a large truck carrying a crane. Apparently the driver had
Betel nut on the move

ignored warnings that his load was too heavy and decided he would give it a go (traim tasol). The bridge buckled, the truck and crane stuck, and the road was cut for several days (Plate 8). Travellers were forced to leave their PMVs, walk down the bridge onto the crane tracks, now touching the water, and back up the other side and find a PMV willing to take them. Betel nut bags took the same route. Once the broken bridge was removed betel nut traders continued to move their cargo on inflated rubber tubes. Someone would sit in the tube cradling a bag and be pulled across the river by rope. This was no more than an inconvenience for the innovative and persistent traders, but these events can significantly impact supply and price.¹¹

![Plate 8: Gusap Bridge (Ramu Highway) buckled under the weight of a crane, March 2007.](image)

Most of the time, reaching the road network is a chance to celebrate. Especially for those buying on behalf of others, the hard work and major risks of trading are over and they sit back and enjoy the ride with a six-pack of SP lager. The road between Lae and Watarais Junction is well sealed and it is not long before they reach Young Creek (also known as Singsing Creek). By day Young Creek is an arc of empty huts, but by late afternoon and early evening it is a thriving entertainment hub on the

¹¹ A vehicle carrying betel pepper crashed on this section of road during the marketplace survey in October/November 2007. This impacted betel pepper supply on that day.
Highlands Highway where highway travellers can fill their stomachs with chips and lamb flaps, buy beer, or win it in a game of darts\(^\text{12}\), and satisfy their sexual urges with one of the many prostitutes who work here. Young Creek is well known as a HIV/AIDS hot spot (NHASP 2006; cf. Beer 2008). From here the betel nut moves up the Highlands Highway.

**UP THE HIGHLANDS HIGHWAY**

Each day dozens of minibuses carrying hundreds of betel nut bags make their way up the Highlands Highway to the main highland centres of Kainantu, Henganofi, Goroka (Eastern Highlands), Chuave, Kunduwa (Simbu), Minj, Banz, Kudjip, Mt. Hagen (Western Highlands), Wapenamanda, Wabag, Laiajam (Enga), Mendi and Tari (Southern Highlands), and beyond to the resource enclaves at Porgera (Enga), Moro and Hides (Southern Highlands). The vehicles are stacked high with betel nut, the accompanying passengers fitting in whatever space remains, sometimes a spare seat but regularly lying on top of the bags or standing in the door well. The trip from Boroi to Mt. Hagen costs K20 a bag, traders travel free (see Map 9 to compare transport costs).

Vehicles are often decorated with betel nut bunches hung from the side view mirrors and coconuts wedged behind the bumper bar, showing that they are returning from the lowlands. As the vehicles ascend steeply to Kassam Pass there is a sense of merriment with all aboard singing songs; some contemporary and some customary chants from their home areas. One trader explained: ‘we travel in good spirit, not with anger, anger is bad, it will hold us on the road. But if we come with happiness, nothing will trouble us; if we come with an easy heart’ (Chapter 8). The betel nut is now in the hands of the driver and boskru. Traders keep the driver awake throughout the long night, they tell stories and jokes, sing songs and ply him with cigarettes, Coke and betel nut.

As the vehicle tops Kassam Pass and continues towards Kainantu the mood in the vehicle changes. People’s minds turn to the impending risks of highway travel, particularly that of raskols. Raskols are a major concern for traders who carry large amounts of money on their way down to the lowlands and valuable cargo of betel nut on their return. Betel nut vehicles typically convoy through the most dangerous road sections instead of risking the drive alone. Each evening highway vehicles gather at Young Creek to form these ‘line-ups’ (*lain-ap*). Those vehicles that arrive late and cannot join a

\(^{12}\) I can strongly recommend against indulging in a game of highlands darts. Late one night at Young Creek I had decided to try my hand. A dart board stood some six or seven metres away and over two metres high. I took aim and released my *spia* (spear/dart). It sailed over the top of the dart board, past a couple of men drinking, and a few metres further on lodged itself into the foot of a hapless and very understanding highway traveler. Whilst he rubbed his foot I resolved never to try my hand again.
Betel nut on the move

convoy may wait until daylight affords them greater safety. The effect is that most betel nut vehicles arrive in the Hagen marketplace at much the same time each day.

Map 9: Transport costs (kina) for transporting a standard (28 kg) bag of betel nut along different segments of the trade routes into the highlands, 2007. Note: These costs are indicative only. The actual cost paid by individual traders varies based on the particular mode of transport, the amount being carried, their relationship with the transport operator, and the trader's ability to negotiate.

Traders place faith in their drivers. Highway driving is a high risk, skillful and well respected profession. They must travel at high speeds on heavily potholed and winding roads at night and for long hours without rest, and they must be both fearless and skilful at breaking through *raskol* hold-ups.

Those young drivers have killed lots of *raskols,* lots of *raskols* have died ... drivers are not afraid of dying or being killed by *raskols.* They do not worry. Drivers do not stop
... they are good drivers, they drive fast, steer well, look after their passengers’ safety. They are really concerned for our welfare ... especially those cars from Hagen (Mek, a Hagen trader).

Even with the best of drivers highway travel is always a gamble. The Kombri Valley, just west of Kainantu, is a particularly notorious stretch of road of which stories abound of near misses and terrifying hold-ups in which indiscriminate violence and the rape of female travellers are somewhat commonplace (cf. Stewart and Strathern 1999:26-7). Such experiences lead some traders to give up trading, but for most the lure of ‘green gold’ is too strong. One driver I met had his hands heavily bandaged; sliced by a bush knife that had been swung at him through the PMV window. With such events occurring regularly, vigilantism by traders and drivers is commonplace. I was told a disturbing story of a failed hold-up in which a *raskol* was captured. His left leg was tied to one vehicle, his right leg to another vehicle and the unfortunate soul ripped limb from limb. Due to security concerns, traders prefer to travel in enclosed vehicles – Toyota Hiaces, Toyota Coasters and Nissan Urvans – rather than in the open-back trucks commonly used to transport fresh food to market.

But *raskols* are not the only risk on the roads. The pressure to drive for long hours, at night and at high speeds makes highway travel particularly dangerous. A few beers in the driver does not improve the situation. Many traders have lost their lives in horrific car accidents. Since 2007 at least two of my informants have lost their lives in crashes on the Highlands Highway.

Another concern is that the Highlands Highway is regularly used by landowners as leverage to resolve certain conflicts. In one incident a PMV from Hagen was involved in a hit and run accident where a man from the Asaro area, near Goroka, was killed. Angry relatives of the deceased blocked the highway and threw rocks at passing vehicles. They also confiscated a number of vehicles and pigs to place pressure on the owner of the offending vehicle to come forward. In another incident in the following month a group of landowners from the Eastern Highlands felled trees across the highway effectively closing it to vehicles for a couple of days. The reasoning behind this was to pressure the national government to pay K3.8 million compensation for impacts to people’s livelihoods resulting from highway rehabilitation work carried out some years earlier (*The National* 2007). In such situations betel nut traders are amongst those most affected. When permitted to walk across such blockages local landowners often charge the traders to do so. Travel up the highway is always uncertain.
Police roadblocks are also a regular part of travelling on the Highlands Highway, particularly in the Eastern Highlands, and are something of a nuisance for drivers and traders. Police search for arms, alcohol and marijuana, and also check for defective vehicles. As a result, most vehicles carrying betel nut are in surprisingly good condition considering the hard life they lead. Betel nut vehicles are most often targeted for overloading, a practice which is part and parcel of highway driving; a PMV overloaded with betel nut can make almost twice what it can carrying passengers. If the PMV crew are unlucky they receive a K20 fine and a mark on their license but most of the time they can pass through for a few kina and some betel nut for the policemen to chew. It is easiest for betel nut vehicles to travel at night when police are at home in bed.

Traders usually pass through the unstable geology of Simbu (see Allen and Lowe 2006:73) in the early hours of the morning. Landslides can cut the road and present delays but it is usually possible for traders to transfer their load to a vehicle on the other side of the slip and continue on their way. If all goes well the vehicles enter the Western Highlands and make their way along the Wahgi Valley as the sky begins to lighten as dawn approaches. The traders are home. Each morning at first light around a dozen vehicles arrive at Kaiwei marketplace in Mt. Hagen, all heavily loaded with betel nut and betel pepper (Table 13).


<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>No. of betel vehicle arrivals</th>
<th>Weight (kg) of betel nut arriving</th>
<th>Weight (kg) of betel pepper arriving</th>
<th>Average weight (kg) per vehicle (excl. passengers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13/05/2007</td>
<td>Sunday</td>
<td>14</td>
<td>17 086</td>
<td>381</td>
<td>1 248</td>
</tr>
<tr>
<td>14/05/2007</td>
<td>Monday</td>
<td>13</td>
<td>13 883</td>
<td>1 222</td>
<td>1 162</td>
</tr>
<tr>
<td>15/05/2007</td>
<td>Tuesday</td>
<td>11</td>
<td>22 140</td>
<td>1 366</td>
<td>2 137</td>
</tr>
<tr>
<td>16/05/2007</td>
<td>Wednesday</td>
<td>14</td>
<td>12 335</td>
<td>873</td>
<td>943</td>
</tr>
<tr>
<td>17/05/2007</td>
<td>Thursday</td>
<td>12</td>
<td>10 300</td>
<td>1 200</td>
<td>958</td>
</tr>
<tr>
<td>18/05/2007</td>
<td>Friday</td>
<td>16</td>
<td>21 980</td>
<td>1 038</td>
<td>1 439</td>
</tr>
<tr>
<td>19/05/2007</td>
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<td>13</td>
<td>12 899</td>
<td>897</td>
<td>1 061</td>
</tr>
<tr>
<td>20/05/2007</td>
<td>Sunday</td>
<td>10</td>
<td>11 774</td>
<td>2 445</td>
<td>1 422</td>
</tr>
<tr>
<td>28/10/2007</td>
<td>Sunday</td>
<td>11</td>
<td>11 380</td>
<td>1 552</td>
<td>1 176</td>
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<td>29/10/2007</td>
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<td>7</td>
<td>9 538</td>
<td>740</td>
<td>1 468</td>
</tr>
<tr>
<td>30/10/2007</td>
<td>Tuesday</td>
<td>13</td>
<td>18 791</td>
<td>895</td>
<td>1 514</td>
</tr>
<tr>
<td>31/10/2007</td>
<td>Wednesday</td>
<td>13</td>
<td>16 591</td>
<td>1 009</td>
<td>1 354</td>
</tr>
<tr>
<td>1/11/2007</td>
<td>Thursday</td>
<td>7</td>
<td>11 747</td>
<td>1 038</td>
<td>1 827</td>
</tr>
<tr>
<td>2/11/2007</td>
<td>Friday</td>
<td>9</td>
<td>13 192</td>
<td>803</td>
<td>1 555</td>
</tr>
<tr>
<td>3/11/2007</td>
<td>Saturday</td>
<td>8</td>
<td>4 677</td>
<td>718</td>
<td>674</td>
</tr>
<tr>
<td>4/11/2007</td>
<td>Sunday</td>
<td>13</td>
<td>8 363</td>
<td>1 646</td>
<td>770</td>
</tr>
<tr>
<td>Total Average</td>
<td></td>
<td>11.5</td>
<td>13 542</td>
<td>1 114</td>
<td>1 294</td>
</tr>
</tbody>
</table>
Chapter Four

The roadblock marketplace
At Kaiwei people keep track of the movements of large traders. Traders phone Hagen to tell relatives and workers when to expect their arrival – vendors glean such information and use it to their advantage. When there is a shortage of betel nut at the marketplace, vendors try to intercept traders, and buy their betel nut, before they arrive at Kaiwei. Groups of vendors hire PMVs to take them a short way out of town. When they see a vehicle loaded with betel nut coming they park the PMV across the road and stand in a line to stop the vehicle.

Traders like this. They know that supply must be low so they are able to increase the asking price. Mobile phones mean traders can call people in the marketplace to get an indication as to what they might be able to charge. The roadblock means that those vendors at the roadblock get the first opportunity to buy. Had they remained at Kaiwei they may have missed out, and would be left with nothing to sell. Some hevi baias and large resellers may purchase an entire load to resell wholesale at Kaiwei or even further west.

West of Hagen
To the west of Mt. Hagen the Highlands Highway splits. The northern branch leads to Enga, the southern branch to the Southern Highlands. Large amounts of betel nut flow into both provinces, to the urban centres of Mendi, Tari and Wabag, and to smaller settlements, rural areas and into the resource extraction sites. Some of the betel nut is traded by Southern Highlanders and Engans, who travel to the lowlands in search of betel nut, although most only travel as far as Hagen’s Kaiwei marketplace where they buy in bulk then resell in smaller quantities in their home marketplaces. Western Highlanders, many from Tambul, have a strong hand in these marketplaces.

Some of the key players at Kaiwei are also involved in the marketplaces to the west. Bettie, the hevi bai for whom Mark buys, is one such trader. Bettie keeps a close eye on the conditions in Hagen, as well as the marketplaces to the west through a number of informants. Bettie has specialised sellers who sell in these marketplaces on her behalf. Some of her contacts are Engans and Southern Highlanders while others are Western Highlanders residing there and with established social networks. A couple of these people are from her natal clan, but most she met through trading. At first she ‘tested’ them, giving them a few bags to sell and seeing whether her money came back. Over time she began to trust them more and more.

Her contacts communicate with her using mobiles, relaying information on the state of the different marketplaces. When the time is right they travel to Hagen, and meet Bettie at Kaiwei.
They then return to their home marketplaces, sometimes in one of Bettie’s minivans, with the bags Bettie has given them. Bettie describes how it works: ‘I place my money in their hands. I buy betel nut and give it to them and they take it and sell it, and return [with the money]. I take the principal (bun moni), the profits (win moni) I divide.’ She explains, ‘They have used their time, so it would be bad to be greedy. They worked hard to sell my betel nut so I divide [the profits] evenly’. While Bettie’s betel nut is being sold in Wabag and Mendi, her money is tied up. She waits for the money to be returned before reinvesting in another buying trip.

Although the markets in the Southern Highlands and Enga are lucrative, they are much smaller than Kaiwei, so the volume she sends is generally below thirty bags. Not all Hagen traders can sell in the markets to the west. The social networks which Bettie has invested in allow her to do so. Importantly these networks are not solely based around kin. She places substantial trust in wanwoks, individual business partners that have developed out of the trade (Chapter 6). Away from the towns the amount of betel nut traded peters out. In early 2009 very little betel nut was being traded to the ends of the road in the Hides area, however by late 2010 the trade in betel nut in that area had increased dramatically as money associated with the PNG LNG project flowed in.

**UPLIFTING BETEL NUT**

Air freighting betel nut, both on chartered and commercial flights, used to be relatively common in the past when freight was cheaper and when there was a direct Air Niugini flight between Wewak and Mt. Hagen. By 2007 air freighting of betel nut had declined, and was focused on a few specific routes and times. Today the expense of airlifting (Map 9) means it is only used when prices are very high. This is the case when betel nut is transported from Lae or Popondetta to Port Moresby or from Port Moresby to the highlands and Daru. The exception is Kiunga, to where betel nut is flown year round to supply the mining enclave at Tabubil (Ok Tedi). Today most airlifted betel nut is freight on passenger flights although rarely traders charter smaller aircraft.

In August 2007, the month in which the largest amount of betel nut was uplifted by Air Niugini from Port Moresby’s Jacksons Airport, only 707 bags of betel nut (17.3 tonnes) were transported.

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13 Initial investment capital is commonly referred to as bun moni (literally, bone money) or mama moni (literally, mother money). Bun in Tok Pisin also used to refer to strength. Mama moni may be suggestive of the mother’s role in reproduction and nurturing growth. Profits are referred to as win moni (literally, won money).

14 Air Niugini does not collate data on the amount of betel nut uplifted and flight manifests are held at the point of uplift rather than centrally. I was able to access only a limited amount of data.

15 On one occasion I have heard of a helicopter being used to get betel nut out of the hinterland at the back of Finschhafen although I suspect this was perhaps unwittingly subsidised by a helicopter operator.
(Table 14; Plate 9).\(^{16}\) Around two thirds of this betel nut was destined for Hagen, the remainder mainly to Tari and Lae. This amounts to twenty-two bags a day, a tiny fraction of the highlands trade.\(^{17}\) By contrast in the whole of December only four bags were uplifted from Port Moresby, all destined for Lihir (Air Niugini 2007).

<table>
<thead>
<tr>
<th>Destination Airport</th>
<th>JUN 2007</th>
<th>JUL 2007</th>
<th>AUG 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goroka (GKA)</td>
<td>473</td>
<td>8</td>
<td>563</td>
</tr>
<tr>
<td>Mt. Hagen (HGU)</td>
<td>309</td>
<td>4 123</td>
<td>11 613</td>
</tr>
<tr>
<td>Lae (LAE)</td>
<td>0</td>
<td>295</td>
<td>3 470</td>
</tr>
<tr>
<td>Tari (TIZ)</td>
<td>121</td>
<td>509</td>
<td>1 312</td>
</tr>
<tr>
<td>Wapenamana (WBM)</td>
<td>63</td>
<td>223</td>
<td>116</td>
</tr>
<tr>
<td>Mendi (MDU)</td>
<td>0</td>
<td>239</td>
<td>171</td>
</tr>
<tr>
<td>Tabubil (TBG)</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>966</strong></td>
<td><strong>5 397</strong></td>
<td><strong>17 259</strong></td>
</tr>
</tbody>
</table>

Source: Air Niugini 2007.\(^{18}\)

\(^{16}\) Air Niugini earned just over K78,000 for their role in this.

\(^{17}\) Airfreight at its peak accounts for only around three per cent of betel nut reaching Mt. Hagen.

\(^{18}\) I am grateful to Air Niugini for providing this data. Thank you to the staff who compiled it.
Despite becoming increasingly uncommon, air freighting is important at particular moments. Robert’s story is particularly telling:

Betel pepper was in low supply in Port Moresby. A brother rang and said to bring some betel pepper ... I went down to Umi to buy the betel pepper. I bought K270 worth ... K300 I used to buy my plane ticket [from Nadzab airport (Lae)] ... I landed in Port Moresby on Saturday night. When I went down, Port Moresby had no betel pepper, all of Friday and Saturday people had not chewed. We made K720 from a small plastic bag of betel pepper that we had bought for K50 ... In the morning we sold at ... Erima. I made how much? K1600 ... on top of the other K720 ... That Monday my wife sent some betel pepper down again and we sold again. [After this] the word had got out in the highlands ... and betel pepper was oversupplied.

Like Robert, traders use air transport to help them exploit short term gaps in supply, where prices are substantially higher. It is most common between Popondetta and Port Moresby during the low season in the capital. One Hagen trader produced receipts of three charters he had organised in early 2006. He chartered a small aircraft from Airlink for K4169 per trip to fly from Port Moresby to Popondetta and return. On the outgoing flight he covered costs by selling seats to passengers, which he found by putting a public notice on the television broadcaster EMTV’s Tok Sare program. On the return flight he filled the plane with betel nut.

The other major use of air transport in the betel nut trade is to supply the mining enclaves, particularly the township of Tabubil associated with the Ok Tedi mine. Tabubil’s isolation from both the Port Moresby and highlands road networks, and its residents’ wealth, means that betel nut prices there are substantially higher than elsewhere. In 2007, flying betel nut into Tabubil airport had recently been banned (in combination with a ban on betel nut in the camp), so traders were instead flying bags from both Port Moresby and Mt. Hagen to Kiunga. They then took the betel nut by road to Tabubil, smuggling it around a checkpoint en route.

One of the major difficulties with airlifting is that there is no guarantee cargo will be uplifted. This is where Alex fits in. Alex works for one of the major airlines, but makes money on the side by facilitating the movement of betel nut. He is part of a complex network of actors centred on a trader in Tabubil whose spouse works for Ok Tedi Mining Ltd. The trader orders betel nut from a relative in Wewak who takes it by ship to Madang and then road to Mt. Hagen. Alex then arranges for the betel nut to be uplifted. The trader pays K5.15 per kilogram plus a handling fee and tax to

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19 An Embraer EMB110 Bandeirante.
the airline. A commission is also paid to Alex who ensures that the trader’s betel nut is prioritised over other cargo. Alex also acts as a gatekeeper to accessing Tabubil, effectively controlling who can and cannot load betel nut on that route.

FROM MARKETPLACE TO THE HOUSE AND THE STREET

From the wholesale marketplaces betel nut continues its journey into the urban areas, the roadsides and the streets. It moves by foot in *bilums* slung from the foreheads of female sellers, and by town bus; those older vehicles with shattered windscreens, battered panelling and broken seats which can no longer make the trip down to the coast. The town bus costs 30 toea (50 toea in one of the newer vehicles) for the passenger, but a bag of betel nut attracts a K1 fare. While this trip is the shortest of betel nut’s travels, it is a journey which is well trodden. Some sellers from town make the trip to and from the marketplace up to five times a day. Even when sellers return to their selling spots they very often remain mobile so as to avoid the gaze of the town authorities (Chapter 5).

Betel nut’s final movement is with its end consumers. Finding betel nut to chew (*raun painim buai*) is a national pastime. It is purchased, carried around in peoples’ pockets and *bilums*, shared with friends and new acquaintances, chewed and finally unceremoniously splattered on the dusty roadway. For another fifteen minutes or so the stimulant pulses through the bodies of its chewers (Chu 2002).

CONCLUSION

As a commodity betel nut is nearly always on the move. This chapter has highlighted that it does not do this alone, nor without friction. A multitude of actors are involved in the movement of betel nut from the betel nut groves of lowland villages to the streets of the highland towns and beyond. Producers, lowland traders, minivan crews and roadside vendors all play a role although none as pivotal as the highland traders, large and small, who accompany betel nut for most of its risky journey. Passage is far from assured. Many loads of betel nut have been left to rot on the wharves or have found watery graves. The most successful traders are innovative and able to lubricate the often sticky conduits. They know who to talk to, how to move money, the best supply areas, how to organise a canoe, boat, truck, charter aeroplane or airfreight to Tabubil, and when and when not to travel. They know which drivers can break a *raskol* roadblock and when to travel to avoid police inspection points. They are always abreast of what is happening throughout the network, which bridges are down and which groups are in conflict, something greatly facilitated by the recent
democratisation of mobile phones. But even the best traders get caught out. The spaces which they traverse are contested ones.

This chapter has provided a rich description of the spaces ‘in-between’; the lines of the networks along which betel nut travels. It has introduced some of the key actors who shape the twisted course of betel nut, both those who facilitate its movement and those that offer resistance to it. Social networks, not restricted to kin, are crucial in facilitating the distribution of betel nut and its story more broadly, a theme that is elaborated in subsequent chapters. I now continue to ‘follow’ betel nut into the nodes of the networks, those places where betel nut comes to rest, and in doing so examine people’s daily practices in the betel nut marketplaces and those other locations central to the trade.
Chapter Four
Chapter 5: Daily practices in betel nut marketplaces

INTRODUCTION

Betel nut is traded in diverse places. In the lowlands it is transacted in rural villages, in urban marketplaces and at transport hubs on beaches and river banks. In the highlands it is traded through different sections of large urban wholesale marketplaces, in smaller urban and rural marketplaces, at roadside stalls and in busy urban centres, in resource camps, and from the houses of rural people. But these are not simply locales in which betel nut is transacted; they are also sites in which betel nut is produced, sorted and packed, information is exchanged and gleaned, trading contacts forged, phone calls made, friends are met, transport organised, entertainment sought and fights erupt.

They are places in which diverse groups of betel people interact, places in which some people are at home and others strangers. Each place has its own characteristics shaped by its geography, its position and relationship to other places, its function within the trade, and by the social relationships amongst the diverse actors who frequent it. They are discrete locations but they are all intimately connected through the movement of people, things and ideas. Some of these locations, such as Kaiwei marketplace in Mt. Hagen, are central axes of the trade, whereas others are at the peripheries of the network.

While the previous chapter charted betel nut on the move and examined the in-between spaces, this chapter focuses on the centres and nodes within the trading network, where betel nut momentarily pauses and changes hands before it continues on its way. I examine the daily practices of the betel
people who inhabit and create these different places and the broad dimensions of the exchanges conducted. A topology of the different spaces within the trade, and how they are connected, is presented in Figure 9. This reflects the structure of the chapter, in which betel nut is followed from the sites of its production to its final sale to the consumer. A typology of the different marketplaces and spaces, and the main trading activities that occur in each, is presented in Table 15.

Figure 9: A topology of locations within the highland betel nut trade.
Table 15: A typology of locations in the highland betel nut trade.

<table>
<thead>
<tr>
<th>Marketplace Type</th>
<th>Description of main functions</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lowlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production areas/ lowland villages</td>
<td>Production; bulking; sorting and packing; sales between producers and wholesale traders.</td>
<td>A large number of lowland locations. Notably the Middle Ramu River and Yuat River.</td>
</tr>
<tr>
<td>Lowland wholesale marketplaces</td>
<td>Sales from producers to wholesale traders; sales between wholesale traders.</td>
<td>4-Mile, Balasigo, Kubugam (Madang); 40-Mile, Umi, 9-Mile, Lae main market (Morobe); Popondetta main market (Oro); Wewak main market, Dagua market (East Sepik).</td>
</tr>
<tr>
<td>Transport hubs</td>
<td>Change mode of transport; sales from producers to wholesale traders; sales between wholesale traders.</td>
<td>Base Camp, Boroi, Kubugum, Madang Wharf (Madang); Voco Point (Morobe).</td>
</tr>
<tr>
<td><strong>Highlands</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highland wholesale marketplaces</td>
<td>Breaking (reducing size of sale lots); sales between wholesale traders; sales between wholesale traders and wholesale marketplace ‘group’ and ‘half bag’ vendors; sales between wholesale ‘group’ and ‘half-bag’ vendors and retail vendors; sales to consumers.</td>
<td>Kaiwei, Kamininga, Minj, Banz, Kudjip (Western Highlands); Wara, Uai (Simbu); Asarifa, Kakaruk, Kainantu (Eastern Highlands); Wabag (Enga); Mendi (Southern Highlands).</td>
</tr>
<tr>
<td>Highland roadside marketplaces, and street selling</td>
<td>Breaking (reducing size of sale lots); repackaging; sales to consumers.</td>
<td>Smaller urban and rural marketplaces throughout the highlands.</td>
</tr>
</tbody>
</table>

**THE BETEL NUT GARDEN: GROWING AND HARVESTING BETEL NUT**

‘Betel nut was created with the earth’¹ – a producer from Turubu (East Sepik).

Mary explained that the best time to plant betel nut is late in the afternoon. If planted in the morning, she explained, the palm follows the sun and will grow tall before it starts to bear fruit. If you plant it properly, give it your attention rather than rushing, say the right words, and keep the ground around the base clean then it will bear at a young age and with large fruit.² Mary is from

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¹ ‘Buai i kamaŋ wantaim gram’.
² In the Middle Ramu I was told that betel nut should be planted by digging a hole with the branch of a large fruiting tree such as coconut. This was said to make the betel nut imitate the fruit of the other tree. It is also said that a woman crouching down with a bilom strung from her forehead has the same effect.
Turubu, an area to the east of Wewak renowned for its high quality betel nut. She is married with five children. Mary likened looking after betel nut to looking after her husband. If you look after your husband, he will give in return and look after you. In the same way, if you care for your betel nut it will give you money and nurture good social relations. Kastam (custom) dictates how betel nut should be planted and cared for, and the right magic cast on a palm, signaled by a palm frond tied around the trunk, protects the palm from theft, and will inflict various ailments on those who breach it.\textsuperscript{3} Everyone may own betel nut.\textsuperscript{4}

At one Middle Ramu village, I was told, four of the clans were associated with betel nut, each with a different type. Joseph, a member of one of these clans, explained: ‘I’m a child of betel nut, I descend from betel nut, so I must look after the things of my father.’ His clan would ensure that the village’s betel nut palms would bear prolifically. Anyone who damaged a betel nut palm would have to compensate his clan to ensure the health of the rest of their trees.\textsuperscript{5}

Betel nut palms are the dominant vegetation cover in the major production areas. Along the wide stretches of the middle Ramu River, betel nut groves signal that the canoe is approaching a village. Dense stands line both banks of the river and extend a considerable way inland, some in close proximity to producers’ houses although others may be some distance. A household’s plantings can be extensive with palms numbering in the thousands. In Biwat, the number of trees in four surveyed holdings ranged between 3848 and 6321 (Watson 1987a:243; cf. Stephen 1974:391). At the time of Watson’s survey there was an efflorescence of planting so that between 80-95\% of the palms were not yet bearing. One Orokiwa man I stayed with estimated his betel nut plantings to be around six hectares.\textsuperscript{6} A man from the Ramu River had recently planted a small plot in which I estimated there to be 1200 to 1500 trees. The groves are often monocultures of betel nut with some understory growth. In parts betel nut is mix cropped with cocoa and occasionally coconuts. Food gardens may be interplanted with betel nut until the palms have matured and have closed the canopy.

\textsuperscript{3} In the Mekco area, one producer suggested that stealing was such a problem that he would sleep in his garden house each night to ward off potential thieves.
\textsuperscript{4} Watson (1987) noted that in the Biwat area betel nut may be planted on both matrilineal and patrilineal land.
\textsuperscript{5} Joseph is from the Breri (Kwanga) language group. Stanhope (1970) described the clan and totem affiliations of the neighbouring Rao people. Rao society is matrilineal, with named clans and totems: “clan membership and totem allegiance are strongly linked, but not identical” (Stanhope 1970:127). Clans are associated with a totem category, comprised of a number of animals, plants, and other items, one of which represents their major totem. Betel nut is the major totem of one of these totem categories. Three of the clans have totems from more than one totem category. Stanhope names five clans which have betel nut amongst their totems.
\textsuperscript{6} This land had previously been planted with cocoa. His estimates were based off those given by the agricultural officers who advised on his cocoa planting. In the nearby village of Sivepe a survey in 1964 found households had an average of eighteen trees, with a range of between six and forty (Waddell and Krinks 1968:44).
Betel nut, particularly around the house, is selectively planted. Producers identify palms which fruit prolifically and with large nuts at a young age. The betel nuts are allowed to dry on the palm and fall to the ground to sprout before being transplanted to the garden, often via a nursery. But given the size of the plantings it is inevitable that some betel nut are self-sown, carried by flying foxes (also referred to as tumbuna). Once planted, betel nut takes around four to five years before it begins bearing (Watson 1987a:190) although those planted in the best soils, rather than sandy ones, and cared for properly, may fruit in their third year. The palms may produce between four and six bunches (rop) annually (Watson 1987a:237), and at any one time a palm will have a number of bunches at different stages of maturity, of which only one bunch at a time is harvested. Bunches vary in size from 40 to over 300 nuts. Betel nut is harvested continually throughout the year, although more frequently when in full season.

If the harvest is small, then it may be done by members of the producer’s household although for larger harvests owners often enlist a team of young boys. This is also done when harvesting betel pepper. They get ‘hot feet’ but they are getting paid so they keep going, one trader joked. Households may also work cooperatively with other households (Watson 1987a:203-5).

It is mainly children who clamber up the palms, assisted by vines which bind their feet; the tall and slender trunks are unable to support heavier climbers. The quality of each bunch is checked before it is harvested. A single nut is taken from the bunch and tested while the climber remains just below the crown. A nut may be thrown down to the palm owner, or a trader, for their assessment. If the bunch is of the desired quality the whole bunch is pulled from the palm and delivered to the ground. The climber can move from palm to palm, using their weight, and sometimes a rope, to bend the palm until it comes into contact with an adjacent palm. In this fashion they will harvest several palms before returning to the ground. It has its risks; palms do break and the odd child does descend to earth faster than planned. It is also particularly risky and often impossible to harvest following rain when the palm trunks become very slippery. The bunches are then brought back to the house to prepare for sale.

Betel nut for kastam and bisnis

Given the centrality of betel nut in the lives of many lowland people (Chapter 2) it is not surprising that the use of betel nut in customary exchange remains strong and has been resilient to the

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7 Tumbuna means ancestors although on numerous occasions it was used to refer to flying foxes (blak buki).
8 Raghavan and Baruah (1958:328) in contrast reported 2-3 bunches per year, and 150-250 nuts per bunch, based on production data from India.
changing forms of value now associated with betel nut. In general producers I spoke with did not see the two value realms of betel nut as lying in conflict, at least an irreconcilable one, although this does not mean its role has been unchanged or is without contestation (see Mosko 1999, 2013). Although betel nut is now closely associated with money it still occupies an important part of *kastam*, and *kastam* has a role to play in business (*bisnis*). The vast quantities of betel nut in most of the key producing areas means that demands for both can be satisfied, although where supply is more limited there remains potential for conflict. Mary, from Turubu, explained:

> When there is customary work to do we must use [betel nut] for *kastam* first, when the customary work is over we must think of money. If there is customary work to do and we do not think of *kastam* but instead we think of using betel nut for money, then the betel nut will not fruit well. They have spat at the source of betel nut ... if you give small betel nut [to your customary exchange partners] they will say 'big betel nut you think about money and small you use for *kastam*.'

For Mary, and many other producers, *kastam* is inextricably tied with production. For producers to ignore customary obligations in favour of immediate financial return would, in Gudeman’s (2008) terms, be a form of ‘debasement’ which undermines further production. While distinctions are evidently drawn between customary indigenous exchanges and that of monetary trade, the two are seen as entangled (cf. Foster 1995). Continued success in the betel nut trade necessitates that *kastam* be prioritised and the ‘base’, their source of wealth, maintained. This is not simply a financial calculation; meeting their customary obligations and participating in indigenous exchange with neighbouring communities is central to their wellbeing, quality of life and personhood (Curry 2003:417; Koczberski 2002) (see Vignette 4 for a discussion of lime production).

Vignette 4: Lime production

Labubutu, a major production site of lime for the highland market, is a small village a short canoe ride along the coast south of Lae. It lies nestled in between the mouth of the Markham River and the outlet of a large lagoon. This lagoon is where the shells used in lime production are harvested. Those in Labubutu are proud that they produce their lime from shells whereas most other areas nearby use coral. Shells, they say, produce a superior lime. A variety of different shells are used, some live, some not.

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9 What I have translated here as ‘big betel nut’, is what Mary referred to in *Tok Pisin* as ‘*maus buai*’, literally ‘mouth betel nut’. Here ‘mouth’ is used in reference to the mouth or opening of a bag, a result of it being common practice for producers and traders to position the biggest and best quality betel nut at the top of the bag as a marketing strategy. Thus when Mary describes that *maus buai* should be used in customary exchange she is drawing on a lexicon derived from the market. See Barlow (1985) for a discussion of exchange relations in which the Turubu people are incorporated.
One practice is to dive in the murky lagoon to collect deposits of shells under the muddy lagoon floor. Women, who predominantly do this work, paddle into the lagoon in dugout outrigger canoes. They identify the shell deposits by probing the bottom with a long wooden pole – the pole stops when it hits shells. The women then dive several metres to the bottom with the pole guiding them as they descend. The mud at the bottom is deep, so the women must slide their arms through the soft silty mud until they feel the shells, which they harvest with a scoop. They return to the surface after each dive, and place the shells in the canoe. This is done many times before enough shells have been collected.

In one part of the lagoon lies a small island where their ancestors once feasted on moluscs. The midden produced from this has been heavily ‘mined’ for its shells by the villagers. This has significantly eroded the island and caused many of its trees to fall down. Local leaders have recently put a stop to this practice. Both mining middens and collecting live shells for lime production is unlikely to be sustainable in the long-term. Cinner et al. (2005) have likewise raised questions as to the sustainability of coral harvesting for lime production in Manus Province.

Once enough shells have been collected the women return to the village. The shells are washed, swished around in a bilum in the saltwater until all the mud is removed. A neat bed of firewood is laid on the beach above the hightide mark, and perpendicular to the prevailing onshore wind. The clean shells are placed on top of this and the fire lit. A light constant breeze is needed to fuel the fires, to make them burn hot so as to produce the best lime. The breeze also blows away the ash so that it does not contaminate the lime. Once the fire has burnt out the shells are carefully shovelled from the coals (Plate 10). At this stage the shells are white and have retained their shape although they will crumble to a powder if placed under any pressure. The shells are then sorted by hand – those that have not been fully cooked are removed and either discarded or returned to the fire. Shells that pass the assessment are placed in a sack then beaten with something that resembles an oversized cricket bat, crushing the shells and forcing a cloud of lime powder to billow from the bag with each hit. The resulting coarse greyish powder, calcium carbonate, is then mixed with water (slaked), creating an exothermic reaction, to produce the fine and brilliant white lime powder, calcium hydroxide, much sought after by betel nut chewers. As a final stage the powder is sifted through a fly mesh to remove any remaining shell fragments before being packed into bags ready for sale in Lae’s main marketplace.
TRADING IN LOWLAND VILLAGES

Traders from the highlands travel in large numbers to the lowlands in search of betel nut. Many chose to buy at the producers’ haus dua (house door), the PNG equivalent of the farm gate, rather than buy at the large urban marketplaces and other wholesale points. For many producers, Mary explains: ‘we feel that going to town is too expensive, so we stay here and the highlanders come to our house door. That is easier.’ For producers it is isi moni (easy money) and even fri moni (free money). ‘Money will come, highlanders will bring it’, remarked one Ramu man.

Traders usually travel to production areas with other traders. On arrival they typically split up to ensure they do not interfere with each other’s buying, and so each can buy a sufficient quantity. Each trader works in a particular village, or part thereof. When traders arrive in production areas they send word out that they wish to buy betel nut, although for most producers the mere sight of a highlander in the village is enough to make everyone run off to their gardens. The next day buying begins and the house in which the traders stay becomes the de facto marketplace.

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Plate 10: Cooked shells used to produce lime being shovelled from a fire, Labubutu village (Morobe), March 2007.

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10 This is one of the most important features of the betel nut trade and one which differentiates it from the trade in export cash crops and fresh food where the onus is often on the producer to transport the produce to market. With that said there are numerous itinerant coffee buyers, and local cocoa fermentaries, although buyers do not always arrive and fermentaries do not always operate. The arrival of betel nut buyers is a much surer thing.
Betel nut is either purchased pre-packed in bags or as bunches. Most often both methods are employed. When purchased as bags, producers may have their own empty bags which they fill with betel nut to sell to the traders. More commonly traders arrive in the village with empty bags which they distribute out to producers. The empty bags are labeled with the trader’s name, or some other identifying mark, so that they can only be sold to that trader and not other traders. The bag constitutes an order, and records of who gets how many bags are kept. Producers are told in advance what they will be paid for a full bag, and it is up to the producers to decide how many bags they take. This method can be more expensive than buying bunches, and there is a risk that some producers may conceal poor quality betel nut within the bag. It is widely used however because it is less labour intensive for the trader and allows purchasing to proceed more quickly. The faster a trader can buy, the fresher the nuts will be when they arrive in the highland marketplace. Traders also often work through local buyers who help ensure supply and quality. The bags are inspected and paid for on return. Producers normally have a couple of days to pack the bags, in the meantime the trader sets about buying bunches.

Early in the morning the producers, mainly women and children, start to congregate, bunches of betel nut held in hand or slung in bilums from their foreheads. Producers from neighbouring villages may also attend. One by one they approach the trader handing over their betel nut for inspection. The trader takes a couple of samples from the bunch, bites them open and tests the firmness of the flesh with pressure from his thumb. Occasionally a bunch is rejected for being too watery but for the most part producers are familiar with the quality demanded. In exchange they are paid a sum, usually between K2 and K20, based on the number of nuts on the bunch, their size and quality. The traders hold large wads of K2 and K5 notes, rolled up and bound with a rubber band. Larger denominations have little use a day’s travel from the nearest town. The conduct of these transactions is discussed in Chapter 8. Accepted bunches are placed on an ever growing pile and the next producer approaches (Plate 11). Traders may buy in this way for a couple of days before they have purchased sufficient quantities and the bags are ready to be packed.

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11 Some traders label their bags with their own personal initials or their name in full. Other traders are quite creative. Several traders label their bags with ‘PX’ followed by a number, a tongue-in-cheek mimicking of the Air Niugini airline code. In addition to personal labels some traders also use labels that identify them with a particular group. For example ‘BRB’ is used as an acronym for Blue Rock Band, a reference to Mt. Kuta; ‘FBO’ stands for Flying Boys of Okupka, a reference to those young men from the Mokei Okupka clan who were flown to the coast in the early days of ‘contact’ in Mt. Hagen; ‘Kum Kops’ is used by some members of the Kum-Kopi tribe whose origin place is Kum mountain (see Burton 1988:9.1); ‘P9B’ is used by members of the Penambi tribe, P-9-B being an imperfect homophone of the tribe name; and ‘KND’ which stands for Kiminingka Never Die is used by some members of the Mokei Kiminingka clan.

12 Larger denominations do have symbolic use value (see Robbins and Akin 1999).
Plate II: A trader buying betel nut on the Ramu River (Madang), November 2007.
Note: The trader (seated) is holding a wad of money in his left hand. The producers (standing) are waiting to sell their betel nut.

One by one the bunches are stripped. This is very much a social activity with up to a dozen people, producers and traders, sitting around a small tarpaulin telling stories and jokes while they work. There is a technique; if the nut is pulled the wrong way it is damaged and becomes susceptible to rot. The nut should be held close to where it is attached to the bunch and twisted so it is removed clean and the operculum (end cap) remains attached to the nut. The nuts are then thrown into a pile on the tarpaulin and the stripped branches discarded. It is hard work and hurts the hands but the pace is relaxed and enjoyable.

So that bags are of comparable quality, and every bag gets its fair share of high and low quality, the pile of betel nuts is mixed before packing.\textsuperscript{13} The loose nuts are packed into large woven plastic farm produce bags until just shy of the lip. Traders reserve their largest, highest quality betel nut, known as \textit{maus buai} (literally, mouth betel nuts), for the mouth of the bag. The idea is that the end buyer’s initial inspection will be of the highest quality nuts. Hopefully they will be so happy that they will buy without thinking (\textit{kisim nating}). The \textit{maus buai} is packed well above the lip of the bag so that when the lid is sewn on the bag bulges. There is an art to sewing up the bags; slackly packed bags have little appeal in the marketplace, so bags are sewn up taut, or \textit{kundu tait} in reference to the way

\textsuperscript{13} This was the common practice for traders from Mt. Hagen. Traders from Goroka prefer to pack their bags in layers, each layer comprised of the betel nut from a single bunch. This is done so that when the bags are unpacked the vendors are able to identify which betel nuts came from which bunches and are consequently able to price them differently. The way in which betel nut is sold in Goroka is then quite different to the way it is sold in Mt. Hagen.
Daily practices in betel nut marketplaces

it should resemble the skin on a drum. The bags producers have filled themselves are also topped up with *maus buai* and re-sewn to improve their appearance. The packed bags are then stacked on their sides in the shade to await transport. While some traders seek out enduring social relations with producers, other traders revel in the anonymity provided by the marketplace (Chapter 8). But even for those traders who buy in the village, lowland marketplaces are important ports of call.

**LOWLAND MARKETPLACES**

Lowland urban marketplaces are very different spaces to the villages. They are spaces where producers and traders from different locations gather and interact, and are central sites within the betel nut trade. They function as much more than the locations for economic transactions. They are locations where highland traders know they will be able to meet up with friends and other traders. Certainly much of the exchange that goes on is social in nature, chatting about events back home, telling stories and exchanging betel nut to chew.

Part of this interaction is the exchange of trading information; the road conditions, the prevailing prices in different marketplaces, villages, and in the highlands, and the state of conflicts between different groups. Some information is derived from observation; how much other traders are buying, their destination markets (derived from the traders ethnicity), and the price. Many of those traders attending the marketplace have no intention of buying but are simply gleaning information to help their trading elsewhere or at a later time.

Traders routinely check town marketplaces for supply, and if sufficient they may buy there. Buying in the towns can simplify things for the trader and speed up the buying process. Traders do not require the same social networks that assist trading in the production villages, and transport is easier to organise. They stay in cheap guest houses, and cram many traders into a single room to keep costs down.

The town marketplaces are also where producers and traders meet. Some producers attend the marketplace in the hope of attracting a buyer: ‘I give them betel nut then [the traders] chew and we sit down and talk and I ask them to come and buy betel nut in the village.’ This is how many traders discover new production areas and begin their relationships with these communities.

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14 *Kandu* is a type of drum that has a taut animal skin at one end.
Different marketplaces have their own *modus operandi*. Here I describe the operation of two marketplaces, Wewak and Popondetta. Producers around Wewak intending to sell in town start the day early, often before dawn. Having harvested the previous day, producers board a PMV truck for the ride into town. The PMVs normally arrive at the marketplace early to mid morning. The producers-cum-vendors sit cross-legged on the ground on a piece of cardboard or an old produce bag with their betel nut, in bunches or packed in small 10 kg Roots Rice bags, laid out in front of them. At Wewak betel nut vendors sit alongside fresh food vendors, and it is common for betel nut producer-vendors to also sell fresh food items. The exchanges are dyadic, occurring between individuals, rather than through competitive bidding from multiple buyers, and often involve intense price negotiations (Chapter 8). Traders move through the marketplace buying up as much betel nut as they can. Once they have amassed enough betel nut the bunches are stripped and packed into bags ready to be transported.

The Popondetta town marketplace takes a different shape. Producers, most of whom come from villages adjacent the Kokoda-Popondetta road near the base of Mt. Lamington, wake early and board the trucks heading for town. The trucks pull up outside the front gate of the marketplace. Rather than enter the marketplace proper, producers sell from outside the fence. Here bags are more commonly sold, although bunches may still be transacted. The bags are clear plastic bales, which in a previous life bundled packets of Trukai rice. Each producer has a small number of bags which they stand up vertically beside them. The traders walk from producer to producer offering a price (Chapter 8). If, after negotiation, the producer agrees on the offered price the trader will then lay the bag down horizontally to indicate his intention to purchase it. The trader then moves on to the next producer and does likewise. A producer who changes her mind will stand her bag up again, to which the trader normally responds by again lying the bag down. The trader then does a second round of the producers and pays them for their bags (Plate 12). Once purchased, the bags are placed in a separate stack belonging to the trader. Because the quality of bags differs, traders will often grade and repack the betel nut.
Grading betel nut in Popondetta

In June 2007 I accompanied a large group of traders from Mt. Hagen to Popondetta. The group was comprised of three sub-groups, each responsible for buying on behalf of one of three hevi baias who had banded together to charter a large fishing boat (Lucy II) for the trip. One of the hevi baias, a Hagener living in Popondetta, made his own purchases whereas the other two (Lewis and Simon) had sent agents to buy on their behalf. Each of these two sub-groups were led by one trader who had primary responsibility for managing the money, coordinating purchases, sorting, packing and transport. In addition, each sub-group had several assistants who laboured for the main trader.

On this trip the traders and their assistants spent three days buying, sorting and packing. In the mornings they attended the marketplace and made their purchases of clear plastic bales filled with betel nut, each around 26 kg in weight. In the afternoon and evenings they cut open the bales, graded the betel nut, discarded the poor quality nuts and packed the good ones into new bags that ended up weighing around 35 kg.

There is quite a skill in grading betel nut. Each bale typically contained betel nuts from around ten different bunches. Betel nuts that come from a single bunch have similar characteristics in terms of size, shape and colouring. Most importantly, the quality of the betel nut is consistent within a bunch. The task then is to identify the different bunches which make up the bale, and their
respective quality. Samples are tested, sometimes by opening the husk but more often by inserting a needle, pin or sharpened prong and feeling the resistance given by the betel nut flesh. If the needle enters too easily the nut is too watery; if the needle is difficult to probe into the nut, it is too dry. Once a poor quality nut is identified, its visual characteristics are used to identify all other nuts belonging to the same bunch. These are then discarded (Plate 13).

The bales that the producers sold to the traders contained a considerable proportion of nuts which the traders deemed unsellable in Mt. Hagen. On the second day of buying, for instance, the combined purchases of two of the sub-groups totalled just over 7 tonnes of betel nut, of this around 2.5 tonnes (35%) was discarded. Traders cited this as the key reason they needed to negotiate hard to suppress prices. Once the grading was completed the good quality betel nuts were packed into bags, topped with the highest quality maus buai, and sewn up taut ready for shipment to Mt. Hagen.

TRANSPORT HUBS

Transport hubs are those locations where betel nut is transferred from one form of transport to another. This commonly occurs at points where the main water trading routes meet with the roadheads of the Highlands Highway road network. These points become bottlenecks through which all betel nut moving out of a particular area must pass. For example, all betel nut coming out of the Ramu River must pass through Base Camp (Vignette 5); nuts coming out of East Sepik Province must pass through either Boroi or Madang wharf; betel pepper from Karkar Island passes through

Plate 13: Grading betel nut in Popondetta (Oro), June 2007.
Kubugam; and betel nut and lime from coastal Morobe, Oro and the islands region passes through Lae.

These locations are also important marketing points in their own right. Some transactions at these locations are opportunist sales made by traders en route to the highlands, but a large number of traders also attend these locations with the intention to buy or sell. Producers also come to these locations to trade; the sale of betel nut pays for a trip to town to *lukim ples* (see the sights), visit friends and relatives, or go to the hospital. Producers also attend when traders have not visited their village for some time. Some production communities, such as the Biwat, have actively sought to control the transport to these points (Chapter 4). Transport hubs are sites where highland traders, if offered the right sum, may opt to on-sell there rather than risk the trip up to the highlands, or the chance of a *bam* market. These locations are wholesale marketplaces, where only whole bags of betel nut and woven palm leaf baskets of betel pepper are transacted.

Like all marketplaces, transport hubs are important sites of information exchange. They are places in which friends and fellow traders may meet and exchange relevant information. They also offer an insight into the prevailing conditions in both highland markets and production areas. Producers and traders alike talk of how the village price is based on the transport hub price which in turn is based on the highland price. They are also places from where things can be organised, vehicles booked, boats hired, fuel purchased and meeting times arranged.

Transport hubs belong to neither traders nor producers, and are often sites of conflict. Boroi, is a place in which producers and traders from throughout East Sepik come into contact with traders from the highlands (Plate 14). A Biwat man said of Boroi:

> People of different provinces meet here to buy and sell ... This place does not belong to the Hageners and it does not belong to the Sepik people. It is not a good place that has been designated as a site to build a marketplace, but somehow Sepik people have come, Biwat people have come. They found this place and then the government built a road.

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*Bam* refers to an over-supplied market. The word itself is a *Tok Pisin* alliteration of the English word ‘bump’. The term may come from the idea of a large number of bags and traders bumping up against one another. Alternatively the term *bam* is also used to mean crash, as in a car crash. It may then be used here to mean a market crash or a price crash.
Chapter Five

At Boroi fights between groups are common. Such violence may be suppressed in marketplaces where one group has a clear home advantage. The local residents here are at a loss to maintain order in their community. A notice board has been erected in one of the huts used by traders and producers. One of the many notes from the village ‘law and order representatives’ reads: ‘Don’t bring problems into the village. Highland problems, sort them out in the highlands. Sepik problems, sort them out in the Sepik. Not here. Please respect the village. Deal with betel nut then go.’ Another sign requests everyone to work together to maintain peace and harmony in the village (‘kamapim wanbel or bel isi pasin’). Villagers from Kubugam have also, with little success, attempted to regulate relations between the Karkar Island betel pepper producers and the highland traders (Chapter 8).

Plate 14: Betel nut from the East Sepik being unloaded at Boroi (Madang), September 2007.
Several hours earlier our long dugout canoe had been loaded with bags of betel nut and we had commenced our journey down the wide Ramu River. Now dark, we rounded the final meander before our destination – Base Camp. Headlights of several vehicles lit the banks of the river. Base Camp on the lower Ramu River, is the lifeline for communities of the lower and middle Ramu. At this point a small dirt road connects the river to the North Coast Road and eventually the Highlands Highway. All cargo going up river and all betel nut and cocoa coming down river passes through this point.

We pull into the edge of the river parking the canoe amongst over a dozen similar canoes. The powerful waters of the Ramu have steeply cut the banks so that it is necessary to climb four or five metres to the top of the bank. Sitting in the canoe the trucks and minivans rev their engines above us. On this night, as most nights, Base Camp is a hive of activity. People are offloading their cargoes of rice, flour, tinned fish and South Pacific Lager from trucks and piling it at the top of the bank. Skippers of the different canoes fill up their petrol (known as 'zoom'\(^{16}\)) containers in preparation for the trip back up river. Others are telling stories, exchanging information and drinking beer while the less energetic take refuge from the mosquitoes in cars or in the raised K2 per night guesthouse and attempt to get a few hours sleep before heading off at first light.

The trader I am with has organised to share a minibus with three other smaller traders also from the Western Highlands. The bus is parked near the top of the bank and one by one the bags are carried up the steps cut into the dirt bank and placed directly into the bus where the boskeru expertly packs the bags to make best use of the space. Around us other groups also load their own vehicles with betel nut bags, all destined for the highlands. As we finish unloading the canoe two traders prepare the canoe for their own trip up river.

Betel nut’s journey into the highlands was traced in the previous chapter. We now pick up the story as it enters the highland marketplaces.

THE HIGHLANDS MARKETPLACES

Marketplaces are important features of the townscape. They are no longer the periodic marketplaces of an earlier era, which opened for only a couple of days each week. Instead they

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\(^{16}\) Zoom is petrol mixed with oil suitable for use in two-stroke outboard engines.
operate seven days, although Sunday is always a bit sleepy.\textsuperscript{17} The day starts at dawn and ends just before dusk to enable the market-goers to get home before the ‘six o’clock \textit{manki}’ come out.\textsuperscript{18} While each town always has its betel nut marketplace, the locations are often fickle and transient. Marketplaces come and go with the whim of local politics. They rise in prominence then fall from view. Some never recover; others regain their previous status after being left fallow for some years. Some marketplaces are on land belonging to the town authorities but many are on non-government land. The physical structures of the marketplaces are far from durable. Most marketplaces are simply bare earth, open air venues, sometimes surrounded by a cyclone wire fence. They have virtually nothing in terms of facilities, no concrete floor, the occasional corrugated iron roof, no running water, no toilets, perhaps a makeshift storage hut but little else. But as such they are places in which local people have ownership (Benediktsson 2002:148). They are spaces over which particular groups exert control, where some are secure in place – ‘\textit{em ples yat}’ – and where others are outsiders and whose position is tenuous.

The major highland marketplaces are distinguishable from those in the lowlands by the segregation of betel nut from fresh food. Whereas in most lowland marketplaces betel nut and fresh food may be sold side by side, in the highlands betel nut is sold in separate marketplaces or at least in a different section of the same marketplace. The large marketplaces are primarily wholesale venues; even the women selling small heaps of betel nut fulfil a wholesale role. In these marketplaces virtually any quantity, big or small, can be purchased. The marketplaces all have gate fees for sellers with small vendors paying for a spot to sit, while wholesale traders pay by the bag. They are informal spaces but they are not without regulation.

Each marketplace has its own character, size, spatial layout, geometries of power, and informal rules and norms, so that trading at Goroka’s Asarifa marketplace is very different to trading at Mt. Hagen’s Kaiwei marketplace. Each place has its own logic. Place matters. No attempt is made to document such diversity here; instead in this section I highlight the specificities of one particular place, Kaiwei, and some of those other places to which it is connected. Betel nut is followed as it passes through the various spaces of Kaiwei, and then as it travels throughout Mt. Hagen town and beyond. But first a quick look at the town itself.

\textsuperscript{17} Note the significantly lower vendor numbers on Sunday in Figure 10.

\textsuperscript{18} A reference to the young men (\textit{manki}) who emerge on the street at 6 pm where they stay until 6 am and often get up to no good in between.
Mt. Hagen town

Mt. Hagen – ‘Hagen’ to most – is the capital of Western Highlands Province and the economic hub of the highlands region. With a population in 2000 of 29,900 and a considerable semi-urban periphery, Hagen is PNG’s third largest city behind Port Moresby and Lae, and is the most populous of the highland urban areas. The city has benefited considerably from its geography. An arguably unattractive urban centre and often unruly place, Hagen has become the economic locus for a substantial periphery including the rural districts of the Western Highlands as well as Enga, Southern Highlands and Simbu provinces. Hagen, like other urban areas throughout PNG, is no longer dominated by expatriates but by Papua New Guineans, and local ones at that. Hagen owes much to its history as a patrol post and the establishment of the coffee industry. It is the centre of provincial government administration and as such the concentration of the province’s public service. It is a service centre for the extractive resource developments to its west, and a business centre for the private sector. In Hagen people can access services: hospitals, schools, banks. Hopeful migrants seek work on plantations, as security guards or perhaps as groundsmen. Hagen also connects people to other places: one can board a PMV for Madang, catch a flight to Port Moresby, telephone a relative in Lae, and check the international coffee price. It is a place to buy: a new set of clothes, a pot, a carton of lamb flaps for resale, fresh food from the marketplace, a mobile phone or a Toyota Hiace; and a place to sell: kaukau, mandarins, and broccoli in the new AusAID-funded marketplace, and Arabica coffee onto international commodity chains (cf. M. Strathern 1999:93-4). It is also a site of entertainment and somewhere to spin and catch up with friends. The story of Hagen as an urban and economic centre is telling in its emergence as the centre of the contemporary betel nut trade.

Hagen’s Kaiwei marketplace

‘Kaiwei is one of the main places that controls betel nut ... for betel nut from Popondetta, Ramu, Biwat, or the Sepik, the main marketplace for deciding the price is Kaiwei in Hagen ... When [Kaiwei’s vendors] do not pay a decent price, let’s say they are buying for K100, okay at Boroi [the highland traders] must pay around K70 or K60. Okay then for us [Biwat traders], we must buy for K30 or K40. You see the price follows [Kaiwei]’ – A producer-trader from Biwat.

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19 See Southern (1976), Jackson (1976b) and Jackson et al. (1980) for an account of the urban geography up to the 1970s. Also see M. Strathern (1999:93-4).
‘The price follows the market there [Hagen], the supply in the market there. When there is an oversupply there, the price drops here [Ramu]’ – A producer-trader from the Middle Ramu.

‘When betel nut is oversupplied [at Kaiwei], it is the same further up [the road]. Tari and Porgera will also be oversupplied. When betel nut in short supply in Hagen, it is in short supply everywhere. Because [Kaiwei] is the main marketplace for the highlands, everyone comes here to buy betel nut’ – A wholesale reseller at Kaiwei.

Hagen’s Kaiwei marketplace lies at the centre of the highlands betel nut trade. The effects of supply and price at Kaiwei reverberate throughout the rest of the network to the extent that a producer on the distant middle stretches of the Ramu River knows the name of this place and its importance even though they may never have ventured into the highlands. For a place where such power resides it is unassuming. It has none of the impressive concrete and corrugated iron structures of the kind seen at Hagen’s AusAID-funded fresh food marketplace. Instead, like many PNG marketplaces, Kaiwei is a large dirt patch with a few huts on the outskirts of town, nestled amongst coffee and sweet potato gardens and peri-urban hamlets. Following rain, channels cut by the daily passage of thousands of customers become filled with mud and red betel nut spit. The steps of market-goers are cushioned by the build up of betel nut husks from years of use. The smoke from burning piles of refuse fills the air and the nostrils.

*Kaiwei* in the local Melpa language means ‘very good’. The marketplace takes its name from the automotive service business, Kaiwei Motors, which used to be on the eastern boundary of the site. The name stuck. People have sold betel nut here since the late 1980s although it was only around 2000 that it became the largest betel nut marketplace in town. The main betel nut marketplace in Hagen has shifted location a number of times. Initially at Kaiwei, it shifted to Kamininga marketplace on the Baiyer road, back to Kaiwei, then to Kalakai on the Highlands Highway on the eastern side of town, before returning to Kaiwei. This movement has been the result of various conflicts between different groups and with the authorities. In 2007 tension during the elections saw some traders and vendors shift back to Kamininga. However in 2012 Kaiwei remains the primary wholesale betel nut marketplace.

The marketplace is busiest in the early morning when on average a dozen vehicles arrive each loaded to the roof with betel nut and pepper.20 These bags are offloaded onto the ground or into the small unlit huts to be stored out of the sun. Traders stand behind stacks of bags trying to attract

20 During the market surveys there was a daily average of 11.5 vehicles although the arrivals ranged between 7 and 16 (see Table 13).
customers. In another part of the marketplace, shaded by a low canopy of colourful umbrellas, the small wholesalers sit cross-legged on slightly raised mounds, their betel nut and betel pepper displayed on the mat in front of them. The marketplace is filled with people talking and chewing. Elsewhere people play darts, cards, bingo and snooker which are all part of the attraction of Kaiwei. The Highlands Highway, connecting Hagen to Wabag, Mendi and beyond, runs along one edge of the marketplace. The minivans that act as town buses constantly arrive and depart the marketplace during the day ferrying sellers, shoppers and spectators to and from the town centre.

At first glance Kaiwei appears like any other betel nut marketplace, but to believe this would be a mistake. Kaiwei is not just a retail marketplace which links sellers and consumers. More significantly, it is a wholesale marketplace with an important ‘breaking’ function. Traders on-sell to smaller wholesalers (marketplace vendors). A buyer at Kaiwei can buy a bus-load of bags or a single nut and anything in between. On a normal day there are around two dozen wholesale betel nut and pepper traders and around 420 marketplace vendors, just under half of whom are selling betel nut, betel pepper or lime (Figure 10).

Figure 10: Number of betel marketplace vendors (includes betel nut, betel pepper and lime) compared to non-betel vendors over two one-week periods (14/5/2007-20/5/2007 and 29/10/2007-4/11/2007) at Kaiwei marketplace, Mt. Hagen.21

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21 In Figure 10 vendor numbers may have been higher on average in May due to the coffee season but it is not possible to rule out the market conditions surrounding betel nut on that week. Lower numbers in October/November may also have been the result of the emergence of a rival market, Kamininga, following the national elections in July.
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The marketplace cycle

Kaiwei is divided into sections each catering for different types of sellers. The wholesaling of bags, vending of half or part bags, the vending of small piles of nuts, and the sale of nuts to passing travellers, all occur in particular spaces. There are also particular spaces for those selling things other than betel nut. The type of selling distinguishes the different sections but so too does the ownership of the marketplace. Kaiwei is privately owned by four different owners. These four men do not own the marketplace in common; rather each owns a particular space within it. The boundaries between their respective areas are not obvious to the casual observer, however they are evident on the ground when pointed out, and they do have a visible impact on the operation of the marketplace.

Rather than managing the marketplace and collecting gate fees together and dividing the work and profits amongst themselves – something that would involve a high level of trust – or even taking it in turn to collect gate fees, each owner is responsible for managing and charging gate fees only within their own area. To avoid the different owners competing to attract traders and vendors to sell from their area, they have organised an irregular spatial rotation of particular functions within the marketplace. This primarily impacts the wholesaling of bags and ‘half’ bags of betel nut. For two weeks these activities occur on the eastern side of the marketplace which belongs to one of the owners. During the third week, however, this wholesaling shifts to the western side of the marketplace, of which each of the other three owners owns part. After the third week these activities return to the eastern side and the cycle starts again. The irregular rotation is due to the first owner owning a greater proportion of the space. If a trader accidentally arrives on the western side of the marketplace when it is the turn of the eastern side’s owner, the workers of the eastern owner will force the trader to move to the eastern side, confiscating a bag if he refuses. It is a perplexing spatial shift but it works for the owners and, apart from a little confusion amongst vendors and traders on the day of the shift, the trade carries on as usual.

Wholesaling at Kaiwei

Large volume wholesaling is what differentiates Kaiwei from other betel nut marketplaces throughout PNG. Wholesaling occurs at other marketplaces, but it occurs here on a much larger

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22 At Kaiwei (2007), wholesale betel nut traders are charged K5 per bag, although this is negotiable and depends on your relationship with the collector. The market owners have workers who collect the gate fees from the traders. When a trader arrives at the marketplace the worker will confiscate one of the trader’s bags which is returned once the gate fee is paid. If the fee is not paid the worker recoups the money by selling the bag. Marketplace vendors of betel nut are charged K2 per day, betel pepper K1-2, and lime K1.

23 Wholesaling is often referred to as boliel (derived from wholesale) or as salim bek wantain (literally, selling the bag with [the betel nut]).
scale. Kaiwei’s catchment area is substantial; it draws buyers from throughout the Western Highlands as well as the Southern Highlands, Enga and Simbu, and attracts betel nut from almost every corner of PNG.

The day commences at daybreak when traders who have travelled up the Highlands Highway throughout the night begin to arrive. The arriving minivans are driven into the marketplace. What happens next is very much shaped by the supply the previous day and the prevailing prices. If prices are high, there is a scramble among those intent on buying. Arriving vehicles are surrounded by crowds several people deep, the buyers holding their money high in the air to attract the attention of the salesmen. Money may even be thrown through an open window in an effort to secure a purchase. On days like this the wholesale section may be cleared by mid morning.

On the other hand, if prices in the marketplace have been low because of a surplus of betel nut, potential buyers feign indifference. There is no rush on the vehicles, and the buyers mill around casually chatting with one another. When this happens the betel nut is offloaded from the vehicle and piled on the ground (Plate 15). Customers can then inspect the bags, testing the quality before offering a price well below the asking price. If these conditions prevail a trader’s betel nut may remain unsold for days. Most of the time the trade lies somewhere between these extremes, often with a short lived rush on the best betel nut early in the morning followed by slower buying of the remainder. Kaiwei has no central seller and no auctioning of commodities; rather, each trader is responsible for organising the sale of their own betel nut.

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A number of different types of bags are sold, the most common being the Farmset produce bags which weigh around 28 kg.\(^{24}\) Prices vary substantially, for instance a Farmset bag may sell for as little as K50 or for over K300. In the wholesale section of the market hundreds of bags of betel nut and baskets of pepper are sold each day. On average, around thirteen tonnes (equivalent to 468 bags) of betel nut and one tonne (equivalent to 150 baskets) of betel pepper were turned over in the wholesale section at Kaiwei each day of the two one-week surveys (Figure 11 and 12). This turnover is worth around K680,000 per week or over K35 million a year, and does not account for the increased value when on-sold by marketplace vendors.

![Figure 11: Wholesale betel nut arriving, unsold and sold at Kaiwei marketplace, Mt. Hagen, over two one-week periods (14/5/2007-20/5/2007 and 29/10/2007-4/11/2007).](image)

\(^{24}\) Other bags used include ‘Agmark’ and ‘Chemica’ bags, which are the same size as the ‘Farmset’ (these are all agricultural produce companies). Traders also use plastic rice bales which weigh around 26 kg, ‘3 Roses 25 kg Flour’, ‘Wheat’ and ‘Bundaberg Sugar’ bags which all weigh around 35 kg, and large white ‘Slak’ bags which weigh just under 40 kg. Other types are used occasionally.
Daily practices in betel nut marketplaces


A number of important actors are involved in the wholesale trade: wholesale traders, salesmen, independent wholesale resellers and smaller wholesale marketplace vendors. Traders who make the trip to the lowlands are often involved in transactions at Kaiwei, particularly in the case of smaller scale traders, however often the selling rests in the hands of others (Chapter 6). For those traders who purchased betel nut on behalf of larger traders, it is these hevi baias who normally take responsibility for selling. Traders having spent the last week or so on the road are often unaware of the current market conditions, whereas, hevi baias have kept a close eye on supply and price by remaining in Hagen and are therefore in a much better position to do the selling. After spending the whole night on the road with little sleep and often much alcohol, the bleary-eyed traders are also not as sharp and may miscount money or lose a bag. Hevi baias are also regular faces in the marketplace, with established clienteles and reputations, whereas their agents are generally less well known and respected.

The necessity for sellers to have up-to-date information and to be known has also given rise to another group of actors, the salesmen (sels-manki). Some salesmen are in the employ of hevi baias with whom they are often related or have a close relationship. Other salesmen operate on a ‘freelance’ basis working for different traders each day. Salesmen create a niche for themselves through building a customer base (Chapter 6), enabling them to have a faster turnover than traders who do not have regular customers. They also may sell alongside traders as two people can sell at a faster rate than an individual. Many of the traders however, do not trust salesmen due to their
reputation for skimming profits. My discussions with salesmen suggest this mistrust is well founded. One trader told me:

Sometimes salesmen trick you and embezzle money. Like if they receive K160 they will tell us they received K150, and K10 or K20 they will hide ... I do not give my betel nut to salesmen, I sell myself ... I do not trust them.

In the trade this ‘K10 or K20’ is referred to as their komison, although the term does not exactly correspond with the English word, commission, from which it is derived. For salesmen who are paid a daily rate for their labour, one based on the trader’s profits, money skimmed in this fashion is an important part of their income. The numerous and creative ways in which they extract a komison are key to a salesman’s success.

A further group involved in wholesaling is the independent resellers. For the most part they are traders or salesmen looking for an opportunity to make a profit. Resellers buy multiple bags in bulk from a trader at below the going price, then sell the same unchanged bag at or above the going price, pocketing the difference. Resellers may buy only five or six bags or as many as fifty bags. For the traders their presence reduces the profits but also the risks. Resellers rely on having an established clientele (Chapter 6).

The traders, salesmen and resellers constitute the sellers within the wholesale section. They are predominantly men, although interestingly those few women who do participate are amongst the largest and most successful of the traders. By contrast, the marketplace vendors, who are the buyers in this section of the marketplace, are overwhelmingly female.

Around half of the traders’ customers on-sell as either ‘groups’ in the inner marketplace or as ‘half bags’ in the outer marketplace sections at Kaiwei. The great majority of these vendors are from Hagen District, and most live within close proximity of the marketplace. The other half of trader’ customers do not resell at Kaiwei but rather transport it elsewhere for resale in other major markets, notably Mendi, Tari, Wabag and Porgera.25

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25 Due to the rapid and chaotic nature of wholesale trading and the small size of the research team it was not possible to collect data on the identity of customers. It is however possible to make some estimates from the data available. During the surveys an average of 466 bags of betel nut were sold at Kaiwei each day, while an average of 119 vendors sell betel nut at Kaiwei (which they purchased wholesale at Kaiwei). The average vendor sells 1-2 bags each day which even at the upper limit only accounts for 238 bags, about half of the transacted volume. The other half of the traders’ bags are on-sold elsewhere.
Marketplace vendors arrive at Kaiwei each morning and eagerly await the arrival of the betel nut. Quality is a central concern for them. The ‘Kaiwei mama’, as they are often called, inspect the texture of the betel nut by using a specially designed tool – a sharpened piece of wire with a wooden handle – to pierce through the bag and into the betel nut within. They say without this needle they would not be successful. This probing has given rise to these women being jokingly referred to as the ‘Kaiwei doctors’. The sellers, traders or salesmen, are regularly surrounded by maybe half a dozen or so ‘doctors’ sitting down, bag in lap, closely examining it; poking the bag and making holes from which to extract specimens (Plate 16). The seller’s job is to ensure the ‘doctors’ do not probe too deeply lest they discover something they were not meant to. Once decided to purchase a bag the customers make an offer (Chapters 8), and after the transaction is complete the bag is moved to another section of the marketplace where it is broken down and resold in smaller volumes (Vignette 6).

Note: Two salesmen (standing, centre) keep an eye on the women (seated).
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Vignette 6: Taxi!

A small wholesaler has purchased her bags for the day and looks around for someone to help her carry them back to her selling spot in the marketplace. ‘Taxi! ... Taxi!’ she sings out. From behind the crowd of people in the marketplace a short young man comes running. As he moves through the people he makes engine and horn sounds from his mouth, imitating the sound of a car. Rex, from the Southern Highlands but now residing in Mt. Hagen, makes a living transporting betel nut by foot through the marketplace. Rex loads two bags onto his shoulder, each weighing around 28 kg, their combined weight almost exceeding his own (Plate 17). He takes off, darting barefoot through the marketplace, around muddy puddles and under the umbrellas which shade the sellers. As he moves he continues to make engine noises, sounding his horn if anyone gets in his way. All this time the owner of the bags is in hot pursuit to ensure she does not lose him and potentially her betel nut in the crowds of people and coloured umbrellas. Her bags are placed in her usual location and a small taxi fare of K1 is paid.

Selling ‘half bags’ in the outer marketplace

The ‘outer’ marketplace is physically located in between the bulk wholesale area and the vending area of the inner marketplace. This location is representative of the outer marketplace’s position in the overall life of Kaiwei, in between the larger wholesalers and the smaller ‘group’ vendors. In the outer marketplace sellers vend betel nut and betel pepper in small bags referred to as selling *hap-hap* (half and half, part). A seller will normally buy a full bag which will then be divided into between four and six smaller bags (Plate 18). The same breaking occurs with betel pepper. The vendors arrange the bags open in front of them, displayed for potential customers to inspect. Each bag is arranged in such a way so as to exaggerate the amount and quality of betel nut that appears to be in the bag. One seller claimed on some days he sold as many as fifteen full bags in this style. *Hap-hap* vendors are still primarily wholesalers who mostly sell to those who on-sell away from Kaiwei; maybe in Hagen, in their village or in Enga or the Southern Highlands. *Hap-hap* vendors are distinct from those vendors who sell in the ‘inner’ marketplace. *Hap-hap* vendors, who are predominantly female (eighty-three per cent\(^\text{26}\)), are a much smaller group of around forty vendors; the inner marketplace has around three times this number. This area is most active in the mornings and is regularly empty by mid afternoon.


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\(^{26}\) Based on Kaiwei marketplace surveys.
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‘Group’ selling in the inner marketplace

The ‘inner’ marketplace as the name suggests lies at the physical centre of Kaiwei. This section is laid out in numerous rows of vendors making a haphazard grid. Throughout the inner marketplace betel nut, betel pepper and lime vendors are interspersed. Like the rest of Kaiwei there is no market building, rather vendors sit on slightly raised earth mounds on cut-open produce bags or pieces of cardboard which keep them marginally out of the mud.27 The vendors, who are overwhelmingly female (ninety-five per cent)28, sit cheek by jowl, each occupying only the space of the cut-open bag, perhaps one and a half metres squared. Each vendor has her own regular location, often seated between relatives and friends, where she sits crossed-legged, her betel nut displayed in front of her (Plate 19). Vendors typically arrive early in the morning to buy betel nut, and then spend the rest of the day, until late afternoon, reselling her morning’s purchases.

Note: Both vendors are displaying K2 ‘groups’. The betel nut vendor’s mouth is bulging with betel nut.

Betel nut and pepper in this section is sold in small piles or heaps (grup, literally group). As is common practice throughout PNG for a wide range of produce, weights are not calculated, instead the prices of ‘groups’ remain fixed while the size of the group is adjusted, effectively changing the unit price. For example, the standard selling price at Kaiwei is K2 and for this a customer may receive as few as four individual nuts or in excess of twelve depending on the market conditions.

27 These mounds are made from small river stones. Young boys collect these and sell them to the vendors.
28 Based on Kaiwei marketplace surveys. See Hide (1993) on gendered distinctions around selling in marketplaces.
and the customer’s identity. Vendors display multiple groups on their mat so that potential customers have a selection to choose from. These are replaced as they are purchased. Vendors specialise in the sale of betel nut, betel pepper or lime; very few deal in multiple commodities, particularly in a single day.

The customers of these vendors are: those who on-sell in smaller roadside marketplaces in both urban and rural areas; the mobile sellers of the busy city centre of Hagen; those who have small stalls in the town’s residential areas; as well as some end consumers. These customers come to the marketplace throughout the day although the marketplace is busiest in the early to mid morning. Throughout the middle of the day the marketplace is quieter; the vendors seek shade under their umbrellas, exchange stories and chew betel nut, in between making the occasional sale. In the afternoon business picks up again due to the demand of people finishing work. As the afternoon wears on the size of the K2 piles gets larger as vendors attempt to clear their remaining betel nut, although it is always possible to sell it tomorrow. The ‘inner’ and ‘outer’ sections are also where traders come to change large denomination notes into the smaller denominations demanded by rural producers.

**The roadside at Kaiwei**

The main lifeline of the highlands region, the Highlands Highway, runs along Kaiwei’s southern edge. A distinct section of the marketplace lies on the southern side of the road, cut off from the rest of the site. The traffic slows to a crawl along this section as the masses of visitors to Kaiwei spill onto the road. The roadside vendors who sell here draw their main customers from the westbound traffic leaving Hagen, destined for Enga and the Southern Highlands. Departing vehicles stop at Kaiwei so their passengers may stock up for the drive. Betel nut is the essential companion to most road trips in PNG. Kaiwei’s roadside consists of a long line of makeshift stalls and seated vendors, who sit only a couple of metres back from the road itself, and mobile hawkers. The vendors sell betel nut, cigarettes, soft drinks, pineapple segments, peanuts and hot dogs, among other things. Of these items betel nut, betel pepper and lime are predominant. The betel nut and its accompaniments sold along the roadside were previously purchased from the ‘inner’ and ‘outer’ sections, carried across the road and ‘repackaged’ as smaller heaps of often three or four nuts with a stick of betel pepper included. Importantly the roadside differs from the rest of Kaiwei in that sales

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29 Betel nut is also less often sold for K1, K3 and K5.
30 In Goroka vendors normally grade their betel nut according to the bunch each nut has come from. Rather than prearranging K2 groups the vendors call out the number of betel nut that can be purchased for K2. This number will differ depending on the individual bunch’s quality (see Chapter 5 footnote 13). In 2010 a similar practice of calling out a number had emerged at Kaiwei, although at Kaiwei no grading took place.
are targeted at consumers rather than other middlemen. While a distinct space, the roadside is very much a part of the life of Kaiwei, another space where grassroots people have forged livelihoods for themselves.

Fresh and cooked food, gambling and services: other spaces within and around the marketplace

Kaiwei is first and foremost a betel nut marketplace, although a range of other types of vending occur there. In economic terms betel nut and its accoutrements are dominant, however in terms of vendor numbers there are marginally more vendors selling other goods (Figure 10). At Kaiwei you can buy a fried portion of lamb flap (20-50 toea) and a cob of corn for lunch, an icy pole, a single cigarette (40-60 toea), a joint of marijuana (50 toea), firewood, a pair of Australian second hand trousers, a pig for a bridewealth payment, and extra credit for your mobile phone. For a fee you can have your mobile phone battery recharged, your shoes repaired, or hire an umbrella to shade you whilst you sell. A mobile hawker can sell you a pair of sunglasses, a ‘Rambo’ knife and a steel wool pot scourer. In the afternoon a sizeable fresh food section gets underway, with sweet potato, potato, corn, Asian greens, cucumbers, mandarins and pineapples, among other items.

There is also a range of entertainment on offer, many involving some level of gambling, including cards, highland darts, snooker, bingo, and lucky numbers. You can pay to watch a pirated copy of a B-grade Hollywood film, get your face painted in Maroon’s or Blue’s designs on State of Origin night, and buy some Maggi noodles and a can of soft drink from one of the three tradestores within the marketplace. There is also a mostly after hours trade in beer, home distilled spirits known as ‘steam’ and prostitution. Kaiwei caters for just about all the shopping and entertainment needs of your average grassroots Western Highlander. This hive of activity all draws on the substantial amounts of money generated by betel nut. The spectacle that is Kaiwei attracts people from near and far. While many come to make their purchases, a substantial number simply come to spectate, catch up with friends and soak up the atmosphere. When you have finished, a continuous rotation of ‘town buses’, for 30 toea, will take you into town.

Selling in town

Away from the large betel nut marketplaces, betel nut selling occupies a number of distinct spaces. In the towns, one does not have to walk far to come across someone selling betel nut. It is sold in

31 Before the democratisation of mobile phones in PNG, at Kaiwei mobile phones could be hired for K10 per day or K20 overnight, in addition to paying for phone credit.
32 Highland darts: if you can think of a game of darts, the board mounted a metre higher, or lower, than usual and double the throwing distance, then you are on the right track. Lucky numbers: a form of gambling.
residential areas, at small roadside marketplaces, on the pavement outside shop fronts, and covertly in the town centres. Importantly, they are selling to consumers rather than to other intermediaries. Betel nuts are sold individually, referred to as selling wanwan (singly) or lus (loose), and when purchased a piece of betel pepper and the use of a lime jar is included. If a customer selects a poor quality nut they are entitled to throw it to the ground and take another. Unlike the specialists in the marketplaces, these sellers also routinely sell individual cigarettes and pieces of chewing gum. Their activities are considered legitimate and illegitimate to varying degrees, and as a result the spaces these sellers occupy are closely shaped by the way the authorities look upon them.

In the residential areas betel nut is sold in front of peoples’ houses. The security concerns of urban residents means most houses (outside of the settlements) have high cyclone wire fences surrounding the perimeter. Some households sell from outside the front gate in an attempt to attract passing customers although this also attracts the unwanted attention of police and town authorities. Others sell from behind the protection of their fence, with money and betel nut passed between the diamond-shaped holes in the wire. Their produce is usually displayed on small purpose-built tables, sectioned into different compartments. Each compartment contains betel nut of a different size, quality and price, while another section contains small pieces of betel pepper, and a small jar of lime. In Hagen, when prices in the marketplaces are low, the price may be 30, 40 or 50 toea for each nut. When prices are high individual betel nut are more likely to cost 50, 60 or 70 toea (Plate 20). These are social spaces where people congregate to socialise whilst they chew. This can especially be seen in the mornings and afternoons as people head off to, and return from, work.
Throughout the urban areas there are also numerous smaller roadside selling locations, often referred to as ‘black markets’, made up of anywhere between a few vendors and a couple dozen, some of whom sell betel nut. They are typically in areas in which people congregate; at PMV stops, near clusters of stores and kai bars\(^3\) or in urban parklands. Because they vend in public spaces few use purpose-built tables and instead sell from produce bag mats or a small upturned cardboard box. Some black markets are well established, and here the vendors tend to display all their produce, whereas some smaller ones have a precarious existence. These vendors, rather than displaying all their betel nut, display only a few at a time to minimise their losses if they are harassed by the authorities. Those in the larger roadside marketplaces are largely female while those selling in riskier locations are predominantly men, often from the settlements surrounding the towns.

\(^3\) Food outlets typically selling deep fried foods.
The last group of sellers in town are far less visible due to the regulation attempts by the town authorities and police. These sellers often signal that they are selling by discretely holding a small plastic bag of lime and by quietly calling out to passers by that they have betel nut: ‘Buai i stap! Buai i stap!’ (Plate 21). The identity of these sellers is well known to consumers. To avoid trouble with the authorities they are mobile and conceal their betel nut in deep coat pockets. When approached by a customer they display a number of betel nut in their hand for the customer to choose from. These mobile sellers trade in the busy town centres and are a common sight at PMV stops where they sell to travellers through the PMV windows. They tend to be young men often from the settlements, although the hidden nature of this style of selling makes it difficult to trace.

All of these sellers source their betel nut, pepper and lime from the large wholesale marketplaces; at Kaiwei in the inner and outer sections. They may go to the marketplace several times each day, buying a small amount (typically between K3 and K30) each time and returning once they have finished selling their first purchases. This helps them to see the demand from their customers – ‘Mi lukim mak bilong ol kastoma’ – and therefore to minimise the risk of being left with unsold betel nut.
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Buying in small amounts also means authorities have less to confiscate. The variety of ways betel nut is sold allows people to participate in the trade at whatever scale they wish. Even buying in a few kina at a time can be economically viable.

Selling in the rural highlands

Betel nut moves into the rural areas of the highlands usually through a chain of marketplaces. Betel nut sellers at Hides, the end of the road in the Southern Highlands, most commonly purchase their betel nut in Tari or less often in Mendi. The seller in Tari, most likely bought their betel nut in Mendi or Hagen. While some rural sellers venture to the lowlands themselves, most buy in the highland town marketplaces. Kaiwei has considerable pull. Supply is generally higher closer to Hagen and in the urban areas, smaller government stations and surrounding resource development enclaves. Supply dwindles with distance from Hagen and rapidly peters out away from the highlands road network. This distribution is a reflection of both income and access to services in these areas (see Hanson et al. 2001). For most rural people selling fresh food and export cash crops are the only potential sources of income. Where access to markets is poor due to long distances and poor road conditions, it is often not profitable for rural people to make a trip to the town marketplaces to sell fresh food or to Hagen to sell their coffee. Lower incomes mean that there is less money available to be spent on betel nut, and therefore lower demand. Rural people are more occasional chewers than the daily devotees of urban and peri-urban areas. There are then fewer sellers and smaller markets.

Throughout rural areas marketplaces remain periodic, usually held a couple of times a week. Smaller roadside marketplaces are held throughout the week, and are usually busiest in the afternoons. Betel nut appears to be the exception. While betel nut sellers number higher on market days and in the mornings and afternoons, a seller can always be found at any time of day. At night it may be sold on request from the seller’s house. They grumble that all night long people knock on their door: ‘if you are a village betel nut seller you do not get any sleep’.

Remote areas often get very poor quality betel nut. Higher quality betel nut would be prohibitively expensive by the time it reached the more remote highland areas due to transport costs and the mark-ups of intermediaries, and thus it is the older shriveled betel nut that is sold. So while the price of a betel nut may be the same at, say, Hagen and Hides, what you get for your 50 toea is considerably different. Low incomes in rural areas also mean that karivi, the highland betel nut

[34] The greater wealth in the area, associated with the PNG LNG project, has improved the quality of betel nut on sale since 2010.
variety, is often sold. At Hides, 50 toea might buy a single yellow and shriveled betel nut, while 20 toea might buy three or four larger kavivi or six smaller ones.

**Selling in the resource enclaves**

The sale and consumption of betel nut is officially banned in most of the resource enclaves, nevertheless it is both sold and consumed in all. Companies differ to the extent that they enforce the bans. Some sites have secure boundaries with thorough searches of those coming and going, while other sites are fairly porous with security guards giving no more than a cursory glance in bags or turning a blind-eye. Irrespective, betel nut always makes it in whether in the bags of fly-in employees, in the pockets of the drivers, in the bilums of locals working on-site, or passed through the perimeter fence. Local sellers also use company swipe cards of employed relatives and friends to bring in supplies. Most of the betel nut is sold by employees themselves trying to make a few kina on the side. Papua New Guinean employees know who the sellers are and transactions are conducted behind the secrecy of closed doors. Many of the enclaves are open camps, meaning employees can go off-site. This provides an opportunity to partake. A significant proportion of the trade around the enclaves occurs outside the fence and is entirely legitimate, even if consumption by employees is not. Betel nut marketplaces are set up in nearby townships, such as Suyan near the Porgera mine, to benefit from the extra wealth in the community spinning off from the resource development.

**OPPORTUNISTIC SELLING**

Betel nut is never hard to find; where there are people there is betel nut. When the Gusap Bridge broke (Chapter 4) it did not take long for dozens of people to set up shop selling betel nut to stranded and transferring passengers. On the Highlands Highway each set of road-works, of which there are many, has its seller, so that you can pass the time chewing betel nut while you wait for the bulldozer to leave the road. At public gatherings like *singsings* (customary dancing events), election campaigns, cultural festivals and sporting events a betel nut seller can always be found on the margins.

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35 Kavivi was not traditionally consumed in these highland communities although the plant itself is native there.

36 An article in the *Post Courier* (Engee 2012) detailed some of the other ways people have attempted to smuggle betel nut into Tabubil: ‘The security guards in Tabubil seem to be very good at their job of catching illegal *buai* smugglers. They have caught them smuggling the green nuts in various means – in a coffin, in a TV, in coconut shells, in the belly of a catfish and lately in hollowed out pineapples and pumpkins. At K5 a nut, one *buai* is worth its weight in gold!’
FOLLOWING THE PRICE

As betel nut is moved from lowland production areas to the highland wholesale marketplaces the price, unsurprisingly, increases. In general, more distant production areas tend to have lower prices so that betel nut purchased on the Ramu or Yuat rivers, elsewhere in East Sepik and in Oro Province is cheaper than that produced in the Markham Valley and near Madang town. This is partially accounted for by the significant transport costs (Map 9). To move a bag from Wewak or Popondetta to Hagen it costs about K50-60, from the Middle Ramu around K40, and from Madang or the Markham K15-20.

Likewise betel nut of a single origin typically increases in price with distance from the production area. For instance survey data from 13-14 May 2007 records Ramu betel nut being sold for K50-60 per bag in the production village and K90 at the road-head at Base Camp. Similarly, betel nut is more expensive at Boroi than in the Sepik production areas. Prices also increase as it is resold from producer to trader, trader to marketplace vendor, and from vendor to roadside seller (Figure 13 and 14).

The price of betel nut also changes seasonally. The price in the highland marketplaces is lowest between February and June, a period when betel nut is plentiful in most of the major production areas, and highest in September-October when the nearest supply areas are in low supply, forcing traders further afield (Chapter 2). At this time households still have reasonable incomes from coffee, something that has a marked effect on spending patterns in the highlands (Bourke 1988:328-9). That said, prices can remain fairly constant from month to month. For instance the average ‘group’ price of betel nut in the May 2007 Kaiwei survey was K 10.95/kg compared to K 11.01/kg in the October-November survey period.

Prices are nevertheless subject to short term shocks. The betel pepper market can be particularly volatile due to the perishability of the pepper. For instance in the October-November 2007 Kaiwei survey the ‘group’ price of betel pepper fluctuated between K19.50/kg and K39.20/kg within the space of a week (Figure 13). Similarly, over the Easter period in 2007, the price for a betel pepper basket at Kubugam ranged between K10 and K70 in under a week. The price of betel nut can experience large and rapid fluctuations, however it usually remains more stable. In the October-November survey the ‘group’ vendor price only varied between K10.35/kg and K12.04/kg (Figure 14).
Figure 13: Average daily prices of betel pepper at various locations over a seven day period (29/10/2007-4/11/2007).
Note: All data collected at Kaiwei marketplace, Mt. Hagen.

Figure 14: Average daily prices of betel nut at various locations over an eight day period (28/10/2007-4/11/2007).
Note: All data collected at Kaiwei marketplace, Mt. Hagen.
Chapter Five

Betel nut and betel pepper prices are also interlinked, since both are required to chew. A shortage of betel pepper during the October-November survey caused a slight decline in the betel nut price, and meant that a large volume of betel nut was left unsold (cf. Figures 11-14).

Although I have used weight to compare prices between different places and across time, undoubtedly the most important influence on price is quality. A good quality bag of betel nut may fetch over K300 whereas a bag of poor quality nuts may be unsellable and have to be thrown out. The best way to follow the price of betel nut is to examine the purchase and sale of one trader’s betel nut, from one buying trip, as it passes through different locations.

Mark’s betel nut

In November 2007 I followed Mark on a buying trip from Hagen to the Middle Ramu. I returned to Hagen with him, where some of his betel nut was sold, then followed his betel nut onto Wabag where the remainder was sold. Mark’s betel nut was sold in different ways and at different locations; the price of each transaction was recorded (Table 16).

In the Middle Ramu Mark bought betel nut by the bunch and by the bag. Bunches are highly variable in size and quality and the price Mark paid varied accordingly ranging from K2 to K20 (K1.50 - K4.40/kg). Buying in this way cost Mark around K70 to fill a bag (an average of K2.49/kg). Purchased as bags from the producer he paid K100 for each bag (K3.57/kg).

These fifty bags were then transported to Hagen. When the costs of purchasing the betel nut, transport, labour and sundries were accounted for the total expense for each bag was K152 (K5.42/kg). Part of Mark’s load was sold at Kaiwei, but twenty-seven bags were sent to Wabag. At Kaiwei his bags were advertised as ‘K250, K240, K230’, this means that the full price is K250 but they will sell it for K230. Most bags on the first day sold for K230 (K8.21/kg). Bettie, for whom Mark buys, scolded one of her salesmen who sold a bag for K240 and pocketed the extra K10 himself. The remaining bags sold the following day for K200 and K190 (K6.80/kg). At this time a single betel nut was fetching 50-70 toea (K26.87-37.62/kg) on the streets of Hagen.37

While this was occurring in Hagen, a relative of Bettie’s, Jerry, had taken part of the load to Wabag where it was sold in two ways: by the bag and vended as ‘groups’ by people selling on Jerry’s behalf. When sold as bags he received K250-K270 (K8.90 - 9.60/kg). When Jerry had others sell ‘group’

37 Caution needs to be exercised when calculating profits. Not every betel nut purchased by a street seller will yield a profit. Customers do not pay for poor quality nuts. A customer who buys a bad nut can simply throw it to the ground and take another one. The street price of betel nut also includes a piece of betel pepper.
betel nut on his behalf and return him the money he grossed K250-K310 (K8.90 – 11.10kg) for each bag. From these sales minus the cost incurred he was able to return K237 per bag to Bettie, meaning a profit of K85 per bag for Bettie. While in Wabag a local big man died, and as a mark of respect the marketplace was closed for the day. The flood of people into town, and the scarcity of betel nut due to the closed marketplace, created an opportunity to make a good profit. A lady with one of Jerry’s bags was able to make a return of K500 (K17.90/kg). Due to the substantial risk that people may have perceived her selling as disrespectful, she did so covertly behind closed doors.

Table 16: Following the price changes of one trader’s (Mark) betel nut from a single buying trip at different locations, 11-19 November 2007.

<table>
<thead>
<tr>
<th>Location</th>
<th>Method of sale</th>
<th>Price per bag (kina)</th>
<th>Total expenses per bag (kina)</th>
<th>Price by weight (kina per kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramu Village</td>
<td>Bunches</td>
<td>70</td>
<td>-</td>
<td>2.49 (1.50-4.40)</td>
</tr>
<tr>
<td>Ramu Village</td>
<td>Bag</td>
<td>100</td>
<td>-</td>
<td>3.57</td>
</tr>
<tr>
<td>Mt. Hagen (day 1)</td>
<td>Bag</td>
<td>220-230</td>
<td>152</td>
<td>7.86-8.21</td>
</tr>
<tr>
<td>Mt. Hagen (day 2)</td>
<td>Bag</td>
<td>190-200</td>
<td>152</td>
<td>6.80-7.15</td>
</tr>
<tr>
<td>Mt. Hagen group price *</td>
<td>Group</td>
<td>-</td>
<td>-</td>
<td>10.00-12.00</td>
</tr>
<tr>
<td>Mt. Hagen Streets</td>
<td>Single nut (50 -70 toea)</td>
<td>-</td>
<td>-</td>
<td>26.87-37.62</td>
</tr>
<tr>
<td>Wabag</td>
<td>Bag</td>
<td>250-270</td>
<td>165</td>
<td>8.93-9.64</td>
</tr>
<tr>
<td>Wabag</td>
<td>Group</td>
<td>250-310</td>
<td>180-185</td>
<td>8.93-11.07</td>
</tr>
<tr>
<td>Wabag (following death of big man)</td>
<td>Group</td>
<td>500</td>
<td>165</td>
<td>17.90</td>
</tr>
</tbody>
</table>


Following Mark’s betel nut highlights the increase in price along betel nut’s journey and the different influences on price, including the way it is transacted, the location, and particular local events. The following chapters will further highlight that betel nut always has multiple prices.

**CONCLUSION**

This chapter has followed betel nut through the different spaces where it is traded; from the lowland villages, marketplaces and transport hubs where producers sell to wholesale traders, through the large wholesale marketplaces in the highlands in which traders sell bags to marketplace vendors who in turn on-sell betel nut in small piles, and to the urban areas and rural communities where it is finally on-sold to the consumers.
Chapter Five

These are distinct spaces, with their own specificities, but they are also intimately connected with other spaces within the betel nut trade. It is through connecting spatially distant sites of production, trade and consumption that betel people make a living.

Betel people are also tied into places and processes beyond the trade. It is the connections that Hagen has with other places, domestic and international, that make it the economic hub it is, and this is why Kaiwei marketplace has such gravity. Kaiwei pulls customers from a wide catchment within the Western Highlands and the surrounding provinces. These customers produce the demand for betel nut which drives traders to distant marketplaces and production areas throughout the lowlands.

Following betel nut highlights the complexity of the trade and the diversity of actors. In each location, different groups of betel people negotiate betel nut’s trajectory. These are places with their own contested power geometries, places where some people belong and others do not. The way in which these different social relationships shape the structure and conduct of trade is the focus of the remaining chapters. The influences of space and place remain central to thinking about these relationships.
Chapter 6:

Networks and markets: Middlemen, save fēs, and the regulation of trade

INTRODUCTION

This chapter examines the social embeddedness of the betel nut trade. I outline the patterns of clientelisation, which see betel people repeatedly interact with the same people.¹ Traders return to buy from the same producers, and marketplace vendors have even more enduring relationships with the street sellers to whom they sell. Enduring relationships in the trade are both vertical (between supplier and customer) and horizontal (between those at a similar level in the market). Dealing with the same people again and again reduces the transaction costs in a market that is highly volatile, inherently risky and rife with opportunism. Many betel people form such relationships freely, however uneven power arrangements mean that others are compelled to do so. These social relationships are manifested spatially in the marketplace. I argue that the betel nut market is not a free market, where anyone may participate. Rather I sketch a view of the market in which some people belong and others do not. Following this I argue that the social networks are built of both personal and close ties including kinship, as well as on more distant and impersonal

¹ Clientelisation is the tendency for market actors to transact within enduring trade relationships. I also describe this as ‘repeat patronage’ in the sense of a regular customer. Clientelisation can be highly variable; some relationships are close long term partnerships whereas others may be ‘nothing more than the tendency to buy or sell with one trader rather than another’ (Alexander and Alexander 1991:495-6). I do not use clientelisation and patronage to suggest a power hierarchy in the ‘patron-client relationship’ sense. Within economics this is often discussed in relation to the extent of vertical integration of a supply chain and in particular in relation to the organisational structures of firms. Clientelisation and the emergence of firms is often explained in economics as a means to reduce transaction costs; those expenses incurred (monetary and non-monetary) in excess of the purchase price when conducting a transaction. See Geertz (1978), Acheson (1985) and Alexander and Alexander (1991) in regards to the anthropology of markets; Williamson (1975, 2005) from the new institutional economics perspective; and Granovetter (1985) from within sociology. My use of the term should also not be confused with ‘clientelism’, used in political science and political economy to explain political behaviour and outcomes.
connections or *save fis* (known faces) in *Tok Pisin*. All betel people use a mixture of both these types of bonds. People’s enduring ties provide support and security, but in a market network which is necessarily sparsely distributed it is the ‘weak ties’ (Granovetter 1973) people are able to cultivate that prove most useful in the betel nut trade. As Bestor (2004:308) highlights: ‘To be sure, buy low and sell high is always good formalist advice. But buy from whom? Sell to whom? When? Where? In a marketplace, these questions are often answered in a substantivist mode’.

Lastly, I argue that the pattern of social networks and the way they act to exclude people from particular places provides niches for people to mediate in these spaces. This has led to a diversity of middlemen who act as brokers between otherwise spatially concentrated social networks.

**REGULAR CUSTOMERS AND ‘GROOVED CHANNELS’**

The betel nut trade is to varying degrees based upon repeated interactions between particular buyers and particular sellers. Some transactions approximate the impersonal and discrete transactions of economic theory, whereas other transactions are more personal and enduring. The nature of transactions is distinct for different segments of the trade. Interactions between wholesale traders and marketplace vendors are considerably different to those interactions between marketplace vendors and street sellers. Individuals also adopt their own trading strategies comprised to varying degrees of both personal and impersonal connections. The betel nut trade thus operates somewhere between a spot market, in which transactions are impersonal, discrete and unencumbered, and a heavily socialised market in which exchange relations are personal, ongoing and obliged.

Wholesale traders pursue two distinct strategies in their relations with producers. Some traders purposefully seek out enduring trading interactions in particular communities, some trading almost exclusively with a particular group of producers. Other traders are more transient and buy in many different locations or buy from the diverse group of producers found in the urban marketplaces (Chapter 8). The relationship between producers and traders in the lowland marketplaces are the least enduring of all trade interactions.

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2 *Save* in *Tok Pisin* is not pronounced the same as its English homograph, but as ‘sa-vay’.

3 See Chapter 1 regarding the formalist-substantivist debate. Also see Wilk and Cligett (2007) for a more detailed summary.

4 Highly vertically integrated firms have not emerged in the betel nut trade. Certainly some *hevi baias* have enduring relations with agents who buy and sell on their behalf but these agents are rarely so closely aligned with the *hevi baias* that they may be considered employees.
The interactions in the highland marketplaces between traders and their customers, the marketplace vendors, are diverse. Traders at Kaiwei sell to two sets of customers: marketplace vendors who on-sell at Kaiwei; and others vendors who on-sell in marketplaces other than Kaiwei. Customers within this first set often have personal relationships with particular traders, and may prefer to trade with these traders. Trading reputations also guide customers back to particular traders. However, alignment between traders and their customers is limited by the irregularity with which traders sell. Traders spend long periods buying in the lowlands and therefore normally sell at Kaiwei no more than once a week. By contrast, the vendors at Kaiwei are perennial attendees, who sell there five or more days each week. As a result, marketplace vendors, if they want to trade, must buy from numerous traders throughout the week. The customers who on-sell in other marketplaces tend to purchase at Kaiwei less frequently, and must buy from the selection of traders present on the day they attend. So while customers may seek out individual traders – who they know and who have a good reputation – when these traders are present, they also regularly have to trade with other traders with whom they have no enduring relationship.

The greatest clientelisation is undoubtedly between marketplace vendors and the roadside sellers and street sellers to whom they sell. Vendors speak with pride of the regular customer base they have established: ‘we have our own customers ... my customers will always come and find me.’ Roadside and street sellers equally value their enduring relationships with particular vendors, affectionately referring to their suppliers as their betel nut ‘mama’ (mothers). Repeated interactions with vendors have emerged due to the permanent presence of most vendors within the marketplace and the regularity with which roadside and street sellers frequent the marketplace – some return to the marketplace several times each day (Plate 22). Relationships are not exclusive; vendors have many customers and the roadside and street sellers frequent a small selection of suppliers. The clientelisation is not a product of indebtedness created through the extension of credit from supplier to customer; rather, these relationships are founded on trust, quality, quantity and price of betel nut, as well as stemming from relations of kinship and friendship.
Plate 22: A marketplace vendor sells betel nut to one of her customers, Kaiwei Marketplace, August 2010. Note: The betel nut vendor has not prearranged 'groups'. Instead she is advertising a certain number of betel nuts for K2 (see Chapter 5 footnote 30).

For roadside and street sellers, ensuring the quality of produce is the most pertinent reason for forging ongoing relations with marketplace vendors. They trust their regular suppliers to be honest with them regarding the quality of betel nut on sale. David, a migrant from Simbu who sells betel nut on the roadside in Goroka, buys betel nut daily at the Asarifa/Chuave marketplace on the outskirts of Goroka where he has his regular suppliers:

We have our own [suppliers] ... When I go there I deal with them. I ask them, ‘Is your betel nut good or not?’ They are my wantoks so they tell me honestly. “It is good betel nut, you can buy it”. If they say that, I buy from them. I do not just buy randomly (nabaut nabaut).

\(^5\) Wantok, literally ‘one talk’, originally referred to people with a common language. In contemporary PNG referring to someone as a wantok suggests a shared identity however this may be very broadly conceived, particularly when outside of one’s home area. It is also used to refer to relatives and friends.
The importance of being truthful about quality with regular customers was reinforced by many people whom I interviewed. Janet, a vendor from Sabama marketplace in Port Moresby, explained:

My customers know me. They come and ask if I have good betel nut or not. [If I do not I will say] ‘No, I have bought hard betel nut so I will not sell it. I will not ruin you. You can go find some in the marketplace.’ [Alternatively] ‘I have bought good quality betel nut, I will display K1 and K2 betel nut and you can buy it.’

Though vendors may misrepresent the quality of their betel nut to strangers, there is no advantage to doing this to regular customers as they would come back requesting a partial refund or some additional compensatory betel nut. Denying such a request would likely entail the loss of future transactions with that customer. Some regular customers and friends will support their supplier and purchase irrespective of quality. Betel people remember those who have stuck with them in the good times and the bad.

Vendors may also give a better price to those with whom they have an ongoing relationship. It is standard practice to give a customer betel nut additional to the purchased amount (Chapter 7). One Kaiwei vendor explained:

If they are people from Mendi or Enga or those who sleep in the settlements throughout town; those who come every day to the marketplace. Who know us. Our customers. We will give discounts and small and poor quality betel nut we will give them free ... It is pleasing our customers. That is good as they will finish our betel nut quickly. We do this for our real friends and customers. For others, whose faces we do not know, when they come to buy we will not give [extra].

Likewise those vendors selling small bags of betel nut may reduce the price of the bag: ‘When a regular customer of mine comes, I say, ‘okay you’re a regular customer, all the time you come and buy from me, take off K10’ ... I will help her’. A vendor’s regular customers benefit from cheaper prices, the assurance of quality and the ability to negotiate with their suppliers if they are unhappy.

The vendors in turn are assured of sales. Roadside and street sellers normally have several, perhaps up to five, regular suppliers. They often spread their purchases across these vendors, either buying a

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6 Salisbury (1970:183) similarly described how producer-sellers at Rabaul marketplace pointed out flaws in their own produce.

7 When vendors or traders are asked by their customers to compensate them for selling them poor quality betel nut, they most often provide compensation in such a way that it maintains the relationship. Rather than offering cash refunds most traders and vendors will instead offer to reduce the price of the customer’s next purchase. For the customer to retrieve their losses they must buy from the trader or vendor again. In this way indebtedness (on the part of the seller) contributes to the continuation of that relationship.
small amount from all on each trip or by rotating their purchases between the vendors, so that they maintain these relationships and the benefits they entail. Most vendors, in contrast, sell to over twenty different customers each day. They are intent on maintaining this clientele base and their reputation as it is this which enables them to sell. Matthew, a regular seller at Kaiwei explained:

If you do not usually sell, you will not make a good [profit], no one will buy yours ... If a new man wants to try ... [people] will not buy it, he will become tired and hot ... no one knows you, so your betel nut will remain, the same bag will last until afternoon and half you will carry back to your house.

Even when vendors have sold out, or are not selling that day, they continue to help their regular customers by directing them to other vendors whom may be trusted; ‘If my betel nut is finished and [my friend] has some left ... [if] a customer of mine comes I will take her to my friend.’ Passing customers cultivates both the relationships amongst vendors, but also the relationship between a vendor and her customers.8

Many transactions by vendors are with people they recognise as save fes (known faces) or maybe even friends.9 That said, there are always new customers entering the market; the lure of riches made from ‘green gold’ ensure this. There are also those looking around for a new supplier, and casual market-goers who have no particular allegiances. These people represent potential customers who may become repeat buyers in the future. There is thus considerable competition between vendors to attract such people, although it is not considered good practice to ‘pull’ another vendor’s customer. Agnes, a daily face in Kaiwei’s ‘inner’ section, explained:

If I have displayed my betel nut and a customer comes wanting to buy. If some women sitting nearby see this is a wantok of theirs ... and they call out, call the customer’s name and say “come, come.” Then I will say “I am selling betel nut and they came to me to buy, why should you call out!” I will berate them. There is conflict over this. They cannot lure away my customers ... I will berate them, they will berate me, if the exchange is bad and I get really angry then I will go hit her, and she will hit me too.

Unattached customers conversely offer the opportunity to exploit a stranger (Vignette 7).

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8 Elyachar (2005:152-6) has argued that similar practices in mechanical workshops in Cairo are productive of ‘relational value’.
9 A close friend may be referred to as a besti (derived from ‘best’).
Vignette 7: Selling to strangers

There is a small shed on the eastern edge of Kaiwei which is used to store betel nut bags awaiting sale. A corrugated iron roof shades the bags from the sun whilst woven bamboo walls conceal the activities within. It is dark inside, and on entering from the blazing midday sun it takes some time for the eyes to adjust. In one corner of the shed two men work around an empty bag. On the floor beside them are two large piles of betel nut, one fresh green mit betel nut, the other dry and yellow. The two men work together to line the bottom and sides of the bag with the good quality mit betel nut. As they place the mit betel nut around the edges they progressively fill the core of the bag with the poor quality yellow betel nut. Once the bag is filled, the top is covered with the mit betel nut entirely concealing the unsellable dry betel nut within. None but the most detailed inspection will reveal the bag’s true contents. The bag will eventually be bought by some unsuspecting buyer from perhaps Wabag or Mendi, targeted by the salesman simply because she is a stranger. The work of the two men in the shed will only be discovered the following day when the buyer sits down in another distant marketplace and cuts the bag open ready to sell.

I became particularly aware of the relationships between marketplace vendors and their customers during the marketplace surveys I conducted at Kaiwei. Each day my research assistants purchased numerous K2 groups of betel nut and betel pepper in order to gain price information. In carrying out this exercise the assistants said it was difficult to purchase randomly, as instructed, because relatives and friends would question why they were buying from strangers. One assistant, not quite having grasped the idea of a random sample, explained very honestly that if I wanted to buy betel nut then we should go buy from his mother. From these comments I realised that a random sample did not necessarily result in an accurate reflection of price. Few customers transact randomly, outside of an established network, as doing so is bound to leave you with less in terms of both quantity and quality. There was also a sense of obligation to buy from those who had endured my repetitive questioning, many of whom had become friends, and who were often relatives and friends of my assistants.

Numerous studies of trade in both developing and developed countries have similarly described the enduring trade relationships between particular buyers and sellers. Some of these relationships are

10 Mit betel nut is firm and rubbery (Chapter 2). It is the type most preferred by highlanders.

11 For example: Mintz (2011 [1961]) (Haiti); Davis (1973) (Philippines); Geertz (1963, 1978) (Indonesia and Morocco); Alexander and Alexander (1991) (Indonesia); Akerlof (1970); Acheson (1985) (United States); Bestor (2004) (Japan). Trade partnerships also occurred in precolonial PNG (Sahlins 1972).
simply the tendency for buyers to frequent the same sellers again and again whereas others are characterised as trade partnerships, for instance *pratik* (Mintz 2011 [1961]) and *suki* relations (Davis 1973). Geertz (1978:30) evokes the image of ‘grooved channels’ within social networks which repeatedly guide buyers back to the same suppliers (cf. Bestor 2005). ‘Grooved channels’ are said to form in markets where there is a high level of uncertainty and risk, typically regarding the availability of information on the quality of commodities being exchanged, their price and the reliability of transactors. Trust is important in markets where there is potential for actors to behave opportunistically (Lyon 2000). The development of enduring relations reduces search and transaction costs for participants, something that is also argued to explain the emergence of firms (Alexander and Alexander 1991). Repeat patronage is seen as a strategy by which short-term profits are forfeited in return for long-term gain. While transaction costs, the monetary and non-monetary expenses incurred in undertaking a transaction (Williamson 2005), may be reduced through cultivating ongoing relationships, this cannot be assumed to be the sole basis for such connections, an assumption that is a significant failing of new institutional economics (Chapman and Buckley 1997; Gudeman 2008).

Issues of uncertainty, risk and trust are critical to the emergence of repetitive transactions. Betel nut is highly variable in quality, and it is not always easy for buyers to make accurate assessments of it. There are certain features that buyers do look for. The appearance of betel nut tells a prospective buyer much about its likely quality, however the identity of the seller is likely to tell more. Relationships develop between a customer and supplier through repeated transactions; each builds on earlier transactions and is suggestive of future transactions. New relationships may become enduring over time but this entails an initial risk. Most betel people maintain numerous trading relationships, something that gives them greater agency. Today the absence or ineffectiveness of the state in many parts of PNG, the resulting uncertainty regarding personal security, and the lack of legal recourse in the face of dishonest trading, also contributes to the consolidation of trade along known channels.

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12 Betel nut quality is discussed in Chapter 2. A practiced buyer can identify the origin of a nut, and knowing this tells them much about its likely chewing qualities. It tells them how it was transported, and therefore the likelihood that it has deteriorated in transit. The type of bag that contains it can also signify its quality. For instance a rice bale of betel nut from Popondetta was most likely packed by a producer and it therefore is likely to be of variable quality. Popondetta betel nut repacked in another bag is more likely to have been graded by a trader and is therefore more likely to be of higher quality (Chapter 5). What tells a potential buyer more is markings on the bag that indicate the trader who purchased the betel nut. For example ‘212’ marked with red permanent marker indicates that Mark purchased it.

13 Healey (1990:333-334) similarly describes that in the lead up to PNG independence in 1975 there was a sense of disquiet due to the uncertainty of the times amongst the Maring people (Western Highlands). This led Maring traders to trade closer to home within more established trade partnerships.
Importantly, the enduring ties between people in the betel nut trade, do not necessarily entail intimacy or even amity (cf. Carrier 1995:72). The ‘strong ties’ that people possess with their family and clansmen enable people to explore those ‘weak ties’, with people who are no more than *save fes*, in the knowledge that they can draw on the support of their close social relations to deal with any troubles that arise (cf. Granovetter 2005). ‘Strong ties’ are important for trade, but it is the cultivation of ‘weak ties’ that really underpins the trade and which leads to the greatest innovation and success.

Attributing the development of repeated trade interactions to reducing transaction costs assumes individuals have a high level of agency and therefore voluntarily choose to enter enduring relationships. Alexander and Alexander (1991) highlight the need to consider power differentials between different actors, inequalities that may create relations of obligation and debt and compel actors to utilise particular networks. In situations where actors do not have equal access to markets, often associated with high costs of production, transport costs and other barriers to entry, certain market participants may be considerably constrained. More advantaged actors may respond by providing credit or assisting with various inputs, such as fertilizer, in return for beneficial purchase arrangements. Often they will purchase produce below market rates. In this situation less powerful market participants are compelled into ongoing relationships which are disadvantageous.

In the betel nut trade it is important to emphasise that the actors are not ‘locked in’ to particular networks. Their relationships are less durable and more fluid, flexible and informal than the relationships discussed in many other accounts of markets such as Alexander and Alexander (1991), Acheson (1985) and Bestor (2004). Financial barriers to entry are limited, and the means of production and control over capital are not dominated by an elite. As a result, credit relationships are a very minor part of the market. The dominant use of credit is for transport, something that obviates the need to travel with large sums of money which, due to the risk of hold-ups, suits both traders and vehicle owners. Credit may also be extended to relatives, for example between a trader and his wife. In this situation offering credit does not advantage the trader or disadvantage the recipient. Otherwise credit plays little role in forging patterns of clientelisation.

Nevertheless, the betel nut trade is not without relationships characterised by obligation or inequality that incise ‘grooved channels’ upon the market. For instance, though producers are not compelled to transact with any particular trader, often in practice they have little choice. Producers in the remotest communities do not have the finances to transport betel nut or achieve the necessary economies of scale to make a trip viable to locations where they have a choice of traders.
to sell to. They are in reality restricted to selling to whichever trader arrives in their village. Given trader territoriality, and how they conceal information regarding their source areas, producers may only have a choice of one trader. For the producer the problem is not a lack of information but the power to act on it (cf. Alexander and Alexander 1991:502) (Chapter 8). Further, while relations of credit and debt may not be a source of obligation towards repeat patronage, kinship and amity are.14 Although a wife who buys a bag of betel nut from her husband is not compelled to do so due to a credit relationship, as kin she is nevertheless expected to.15 In a country in which social networks are often highly geographically concentrated, these grooved channels have a clear spatial dimension.

**‘WE MUST SELL IN OUR OWN PLACE’: SOCIAL NETWORKS AND THE SPATIAL REGULATION OF TRADE**

Betel nut marketplaces are places in which some people belong and others do not.16 One of the first things that impressed me about the betel nut marketplaces was the ability for people to hold large amounts of money openly in these spaces. Rather than vendors concealing their money in *bilums* or pockets, they typically display it openly. Often up to a couple of hundred kina is nonchalantly kept under a vendor’s leg (Plate 23). Likewise traders hold large wads of cash, sometimes as much as K15,000, openly in their hands for all to see (Plate 24). I asked both vendors and traders why they were not concerned about holding such large sums so visibly; after all I had seen one poor woman from Mendi relieved of K1500 at knife point in broad daylight. The response was always along the lines of ‘this is our place, why should we be afraid?’ Marketplaces are thus spaces of fear and unease for outsiders less established in place, and spaces of protection and comfortable familiarity for others. The trade is subject to considerable informal regulation as to who can do what and in which spaces. Some traders and vendors are highly territorial, and will forcefully defend incursions on their space and their ‘market’, but for the most part restrictions are affected by opportunist *raskols* who target strangers because they lack local support.

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14 Grossman (1986) highlights how social relations and space interact together to influence patterns of patronage at tradestores in the Eastern Highlands.
15 This is not to reject clear gendered inequalities between husband and wife (see M. Strathern 1972a; A. Strathern 1979a; Overfield 1998). Males are also expected to support the businesses of their close kin.
16 Spatial restrictions on selling were also a feature of pre-colonial trade (see Harding 1967:216; Salisbury 1970; and Gewertz 1983). Pacification led to freer movement of people and as a result altered inter-group dynamics. Some groups who operated as intermediaries had their positions undermined.
Note: The vendor to the right is selling bundles of highland betel pepper leaves which indicates that betel pepper was undersupplied on this day. Small bags of lime can be seen over the betel nut vendor's right shoulder.

Plate 24: A trader displays his returns: ‘this is our place, why should we be afraid?’ Kaiwei marketplace, February 2007.
Note: The trader is holding several thousand Kina.
Traders tend to concentrate their buying to a few key locations which they know and in which they are known. This may be a particular area, village or part of a village. A producer from the Ramu explained:

Each trader has their own spot where they buy ... For example, Mark buys betel nut from here, if he wants to leave here and buy elsewhere, then he will not get good betel nut, because he will be new to that area. When he gives out bags [to fill with betel nut], he will not give to other areas within the village because they would ruin him. He would not be able to be certain about the betel nut’s quality.

They also tend to focus their selling in one marketplace, usually close to home, but may on occasions sell at other nearby marketplaces. At Kaiwei, for instance, 87% of traders were Western Highlanders and of these 73% were from Hagen Central District. While people often insist that the marketplaces are public spaces and open to anyone, the reality is that selling in places where there is no support from kin or friends is risky. Traders feel uneasy about selling in places where they are outsiders. Ben, a trader from Kaiwei, explained the spatial extent of his trading:

We cannot sell in Kainantu, and we do not sell in Goroka, they have their own traders. Sometimes we sell in Banz. Banz is close to Hagen ... sometimes we sell in Kundiawa. At Goroka and Kainantu we do not.

Distance, both spatial and social, is critical in shaping traders’ access to marketplaces. Traders often find it difficult to even sell in multiple marketplaces in the same town. Traders in Mt. Hagen for instance cannot easily switch between Kaiwei, Kamininga and Kalakai marketplaces without attracting scorn from traders at those marketplaces.

Thomas, another trader from Hagen, explained the link between traders and place and the reasons others are unable to trade in Hagen:

They do not come here [to Hagen] and sell betel nut because they are afraid of raskols. Because they are new to the area they are concerned they will be robbed. We must get our strength from our own land. In our area we must sell our own things or those things we bring here. We must sell in our own place. It’s not good for us to go to someone else’s place and get robbed. We do not have the power to get it back, because it is someone else’s place, not ours. If someone from Simbu comes here, he

17 Kaiwei marketplace is within Hagen Central District. For 10% of traders no place of origin was recorded. Of the Western Highlanders 10% were from Tambul Nebilyer District and 9% from Angalimp-South Wahgi District.
18 Ben went on to explain that Banz is Hagen. The people in the Banz area belong to a different, yet related, language group. ‘Hagen’ is often used as a gloss for Western Highlands (cf. M. Strathern 1975:15-18).
will be afraid when he sells. He knows it is not his land, his land is in Simbu ... so he will not come to sell ... We do not chase them away. They can come but they are afraid to ... If someone from Simbu, Mendi, Wahag or Goroka comes and stays here for a number of years. Sleeps in the settlements and stays with us; they get used to how we act, they know about our society, how we behave, how we eat. Because we know them and they are not new here they can sell. They can sell because it becomes like their land and they gain strength from that.19

That traders gain strength from the land, and have the power to act in particular places but not others, means that the betel nut trade has a clear spatial organisation; a feature inseparable from people’s social networks. Certain groups have thus come to dominate particular aspects of the trade, and the trade at particular locales. The wholesale betel nut trade into the highlands is the preserve of highlanders. This is at least partly due to the perception of producers that it is easier to stay in their villages and wait for money to come to them, but it is also due to the fear lowland people have of the highlands, a response to both real and perceived risk. It is certainly a perception that highlanders are happy to perpetuate. One Karkar Island betel pepper producer explained:

A few [Karkar Islanders] go up [to the highlands], most do not. This is because of how the Hageners act. If we were to hire a vehicle to transport [betel pepper] they would be cross. They do not want us to see their market ... They would be cross if we started going to Hagen. They would say “if you go up there we will steal your betel pepper and hit you”. We are afraid, so we are just involved in small-time trading at Kubugam.

Outsiders are thus excluded from access to the marketplace due to duress. Where lowland people do trade into the highlands they mostly do so with the assistance of highland friends rather than independently.

It is therefore common for marketplaces to be dominated by particular cultural groups.20 Often these groups would be considered the local group. Kaiwei, for example, is dominated by members of the Mokei tribe, on whose land the marketplace is located, and to lesser extent members of Jika, another significant group whose territory lies nearby. In other locales ‘outsiders’ have gained control over marketplaces beyond their traditional home areas. For instance, migrants from Simbu

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19 New vendors may pay young men to protect them. The protector soon becomes the raskol if not paid.
20 This is often as much a provincial grouping, for example Western Highlanders from numerous language groups share some solidarity. People will often use province names or more often the names of major towns as shorthand for cultural groupings. The Huli people of the Southern Highlands for instance are more likely to be referred to as Tari.
who have settled in the Eastern Highlands dominate the betel nut trade in Goroka at both the Kakaruk and Asarifa marketplaces (Benediktsson 2002:222). Indeed, Asarifa marketplace is also known as ‘Chuave’ marketplace due to the large number of sellers there who have migrated from the Chuave area of Simbu Province. Simbu migrants have also gained a foothold at Kainantu’s betel nut marketplace as well as in the Kamkumu and Nine-Mile marketplaces in Lae. Similarly, in Port Moresby the betel nut trade was previously controlled by producers from Central and Gulf provinces but since the late 1980s highland migrants have taken over most of the capital’s marketplaces (Mosko 1999:54). This territoriality means that when authorities ban selling in particular locales, vendors may be unable to readily move to new locations (see *Post Courier* 2003:4).

Particular events or incidents also affect where people can trade. During the lead up to the 2007 national elections, considerable tension existed between rival groups in Hagen, restricting the movement of both sellers and customers. The tendency for people to block vote for their local candidate created tension between Mokei tribe members who supported one candidate and neighbouring Jika tribe members who supported a rival. For a period it was considered unsafe for Jika people to attend Kaiwei. In another event that year, a Mokei man was killed by a *raskol* from the Yamka tribe after a robbery went wrong. Following this it was considered unsafe for Yamka people to leave their home area, until compensation had been paid.

Marketplace vendors are also very territorial over access to different spaces within the marketplace. At Kaiwei, vendors differentiate between different segments of the marketplace and resist the free movement of vendors between segments. One vendor, Anna, who regularly traded in the ‘outer’ section pointed out the restrictions on the movement of vendors:

    On the inside, where all those women sit, this woman [from the ‘outer’ section] cannot go inside, I cannot go inside, those men cannot go inside. And the inside women cannot come and take our places. Because they always sit in their place and we always sit in our place.

Anna, also recounted an occasion when she had tried her hand at wholesale trading and had travelled to Madang. When she returned to Hagen with her bags of betel nut she tried to sit down and sell the betel nut as a marketplace vendor, but she was chastised by the other vendors who told her ‘you brought it [as a trader], we will sit down and market it.’

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21 Also see Benediktsson (2002:198, 145, 265).
22 My own research was affected by this when one of my field researchers was unable to work at Kaiwei during this period.
Vendors also have their own particular places within the marketplace where they sell. Janet, a Hagen woman who was amongst the first vendors at Sabama marketplace in Port Moresby, explained: ‘I have my own place to market. I will put down my bag and display my betel nut and sit down there. The next day I will sit down in the same place. That’s where I remain because my customers know that is where I will be sitting.’ Vendors may occupy the same place over long periods of time. When I returned to Kaiwei marketplace in 2010, I found many vendors seated in the same locations that they had occupied three years earlier. Conflicts ensue if others encroach upon these spaces.

Although enduring relations have emerged amongst participants in the trade, and these have acted to exclude outsiders, these social networks do not constitute a cartel which regulates access to the market. Rather in a trade that is highly volatile and in which there is much opportunism, it is simply that outsiders do not have the protection of highly emplaced social relations. Outsiders are more likely to be held up by local raskols, who know their victim has little means for recourse, than to be chased out of the marketplace by potential competitors.

**KIN, WANWOKS AND SAVE FES**

Betel people draw upon strong, enduring and personal social connections as well as weaker, irregular and less personal social bonds. Different betel people enlist these different types of ties to greater or lesser extent, and often deploy them in different directions. Many betel people draw closely on their familial and kinship relationships in the trade. Healey (1990:331) notes: ‘Kinsmen are more worthy of trust because they are also subject to moral ties’, which compel them to act in consideration for their kin and make social sanctions more effective. Most labour that goes into production, harvesting and initial sorting of betel nut in production communities is provided by kin. Hevi baiat may also draw on family members to act as their agents to travel and buy betel nut on their behalf. This was the case for Margret and her husband Nelson who had their sons and Margret’s brothers working for them.23 Margret reasoned:

> They will look after our money. Other men we give money to, they will trick us, spend the money and play up, because our money is not their concern ... Our children know it is the family’s money and they will think about generating money [for the family].

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23 They also had some men from the same men’s house working for them but at times this resulted in money being misused.
Many traders gave reasons of trust for using close kin. Margret also suggested:

There are good and bad times. The reason we send our sons is, if they are in a car accident, we will not hear any complaints because they are our sons. All the pain we will feel, the burden we will carry. Only the two of us will feel this and carry this.\(^{24}\)

Margret and Nelson repeatedly talked about looking after their sons, setting them up for life and eventually handing the business to them so they would look after them, their parents, in old age. Many vendors also expressed a preference to buy betel nut from traders who were also their kin. Kin are also likely to receive a better price. One vendor explained: ‘When others are buying for K250 ... If a family member or relative of yours comes, okay you can secretly give them a wantok system price like K200 or K220.’\(^{25}\) There are always multiple prices (Alexander and Alexander 1991).

Beyond the family level, group affiliations and descent often influence who people work and transact with, although they far from determine alliances (cf. A. Strathern 1971a). Shared group affiliation, particularly for larger socio-political groups, does not automatically translate to trust. Trust still needs to be cultivated. Lewis, for instance, regularly works with Simon who is from the same tribe section, Mokei Kuipi, but from a separate aligned clan group.\(^{26}\) Lewis explained: ‘One thing we look at is our group ... If my father made friends with his father, I will always know that they are my friends.’ Lewis admits that he prefers to work with other Mokei Kuipi and that he feels as though he can rely upon them for support (Chapter 7).\(^{27}\) He equally admitted feeling uneasy about working with members of Mokei Depi, the other Mokei tribe section, although he somewhat dismissed his feelings as being an irrational remnant of the past. Nevertheless such considerations play in people’s minds.

Affinal relationships are also important relationships in trade. Traders often work in partnership or on behalf of their in-laws. Chris, for instance, traded in his own right but he also worked as an individual trader for a time. Many vendors also expressed a preference to buy betel nut from traders who were also their kin. Kin are also likely to receive a better price. One vendor explained: ‘When others are buying for K250 ... If a family member or relative of yours comes, okay you can secretly give them a wantok system price like K200 or K220.’\(^{25}\) There are always multiple prices (Alexander and Alexander 1991).

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\(^{24}\) Implicit here is the concern surrounding compensation. The year following this interview Margret and Nelson sadly lost one of their sons when his boat capsized while transporting betel nut along the north coast (Chapter 8).

\(^{25}\) The ‘wantok system’ refers to the system by which people show preference and support to friends and kin. It may be cast as either nepotism or alternatively as a social safety net.

\(^{26}\) The Mokei tribe is divided into two groups, Kuipi (also spelled Kwipi, meaning grassland dwellers) and Depi (also spelled Ndepi, meaning bush dwellers) (Burton 1988). Kuipi and Depi are each comprised of numerous clan groups. The origin myth of these two groups is recounted by A. Strathern (1971a:29-30). The conflict between two brothers in the myth reflects the extent of separation and enmity which actually exists between the two sections of the Mokei tribe.

\(^{27}\) Lewis described: ‘When there is compensation to pay or there are troubles, we say “we are Kuipi, they are Depi”... I will take pigs and money... I am happy to give money because our ancestors were allies, they joined together and fought these people, killed these people. That is how the story goes. We believe in this, so the wantok system is strong.’
agent for his father-in-law, particularly whilst he was establishing himself. He also routinely travelled on buying trips in the company of his younger brother-in-law, whom he assisted in learning the ropes. In Hagen women continue to create exchange relations, cooperation and a ‘road for valuables’ (cf. M. Strathern 1972a:138-9) (Vignette 8).

Vignette 8: Bettie’s minivans

Bettie is a *hevi baia* from Kaiwei. She started off selling vegetables in the main marketplace and then later shifted into small volume wholesaling of betel nut. Her success enabled her to move into larger volume wholesaling and she is now one of the major actors in the marketplace. By 2007 Bettie had earned enough to buy three brand new Toyota Hiace minivans. On the front side panel of each vehicle the letters ‘JMN’ were painted: ‘J’ for James her husband, ‘M’ for Mark her adopted son and ‘N’ for James’ father, Noki. Though Bettie’s labour was central to raising the money, for vehicles, as with gardens and pigs, ‘it is the man’s name on them’ (M. Strathern 1972a:133). Bettie exemplifies the ‘woman in between’, the ideal role of a women in Hagen society as a ‘road for valuables’ (M. Strathern 1972a). As M. Strathern illustrated, big women exist although it is through promoting the name of their husbands and male kin that they promote their own name. With Bettie’s hard work, James was able to take a second wife and was on his way to becoming a big man.

Kinship may point to who may be trusted and which trading relations are likely to be fruitfully developed, but trust is not ascribed automatically. Kin, like strangers, must earn trust. These relationships are nurtured through exchange both in and out of the marketplace.

Group alliances may equally point to who should not be trusted to transact with. For instance, some Yamka tribe members refused to buy betel nut from traditional enemies in the Jika tribe. Jika people had killed their people and it was felt that they might seek to poison betel nut sold to a Yamka person. As a result, they would not buy at Kalakai marketplace because it was controlled by Jika vendors.

Rather than centre their trade relations on kin, some betel people deliberately eschewed the use of these connections. Kirsch (2001:152-3) highlights that ‘social networks in Melanesia typically

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28 These vehicles, each named Matak, are discussed further in Chapter 7.
29 James died on a trading trip in 2008 (Chapter 8). Following his death his brothers claimed that the vehicles, as James’ possessions, rightfully belonged to his clansmen. Under considerable pressure to relinquish control over the vehicles, Bettie covertly sold them. She was able to keep half of the proceeds but was forced to redistribute the other half to James’ brothers.
30 Kalakai used to be the main betel nut marketplace in Hagen before it shifted to Kaiwei.
include all those persons who have contributed to another’s success, each of whom may later lay claim to their share of what that person attracts in the transactions in which he or she participates.

For this reason some traders felt, as Lewis did, that:

To work with real brothers is not good ... They say ‘I helped you to become a big man’, this kind of talk. ‘I helped you and now you’ve got a car and house ... I helped you. Give me some money’ ... It’s better if you get some distant cousins, brothers or sisters, your in-laws or something. Then it works, it works alright, because after hard work you give them some money or something.

It is difficult to decline requests from close kin particularly when they feel they have some stake in the business through either contributing labour or capital. It is much easier to avoid or deny the requests of more distant relatives or non-kin. Managing the requests of kin is a considerable challenge faced by business owners in PNG (Curry 2005). In the betel nut trade while some kin struggle to make visible connections that may entitle them to some claim, others attempt to limit such claims by keeping these same connections from view (Bainton 2009).

The spatiality of the betel nut trade, particularly for wholesale traders who buy from remote production areas and distant marketplaces, necessitates the expansion of less intimate social relations. In PNG the majority of people’s most intimate ties are highly spatially concentrated. At least initially betel nut producers share no kinship relationship with the traders to whom they sell. Relationships between traders and producers are primarily the result of serendipitous encounters, shared stories and shared consumption of betel nut in lowland marketplaces. Betel nut traders, as can be said of many Papua New Guineans, are compulsive network expansionists who constantly kindle new relationships, often in very calculative ways. Strangers in a marketplace soon become save fes and friends with whom they regularly transact, socialise, stay and eat with. Weak ties are also advantageous because they can be developed with less risk that indebtedness will be created. The concern is that indebtedness may provide the basis for claims upon the proceeds of the enterprise (cf. Kirsch 2001; Bainton 2009). Weak ties also amount to weak claims.

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31 Papua New Guineans commonly refer to their male cousins, and male kin more broadly, as ‘brothers’, and similarly female kin as ‘sisters’.
32 Here labour is in some sense perceived as a commodity. Lewis uses payment for labour to sever the legitimacy of any further claims. See also Martin (2007:293).
33 Lewis told me that he was often burdened with requests for beer by his relatives. Finding it difficult to refuse such requests, Lewis devised a way to avoid these. He gave up drinking altogether.
34 Strong ties may also stifle innovation (Granovetter 1973, 2005). The reliance on strong ties may explain the ‘copycat’ businesses that people establish in Mt. Hagen.
35 Bainton (2009) writes of social relations around a large extractive resource project on Lihir Island. Also see Martin (2007) on the emergence of possessive individualism and the manoeuvring around social interactions.
To be successful in the betel nut trade, one must draw on their strong ties but more importantly they must foster social relationships beyond kinship. This may include more or less enduring connections based on wanskul (school mates) and wanwok (work colleagues, or people in the same line of work). Many traders work with people who they have met through the betel nut trade. This was the case for Simon and Lewis who met in Lae when they were both independently trading betel nut. Although they are both members of the same Mokei tribe section (see above), prior to meeting in Lae the two only vaguely knew each other. After this meeting they became friends and started to travel and trade together. Their shared identity as Mokei Kuipi assisted the cultivation of their friendship, however it was through the trade that they met and it was the trade that provided the context in which they strengthened their friendship.36

On one occasion traders working on behalf of Simon and Lewis went to Popondetta to buy betel nut. There they stayed with two Western Highlanders, known to Lewis and Simon, who live in Popondetta. Lewis’ ‘boys’ stayed with John, a wanskul of Lewis’ from when they were studying at the Popondetta Agricultural Training Institute. Simon’s buyers stayed with Kenny, a friend of Simon and Lewis, whom they met through the trade. John, like Kenny, is a long term resident of Popondetta. Most weeks during the Popondetta buying season they play host to one trader or another.37 Kenny and John also regularly trade in conjunction with Simon and Lewis. They look after things at the Popondetta end while Lewis and Simon take care of the Hagen end. Although all are Western Highlanders, none of these men are related through close kinship, rather they are relations based on other connections.

In the documentary Betelnut Bisnis, Owen (2004) also highlights the way in which kin, friends and wanwoks become entangled in the betel nut trade. The film follows Lucas, a Simbu migrant resident in Goroka, and his early attempts in the small-scale betel nut trade.38 On one trip Lucas meets the film’s researcher, Jane, in Madang and he is invited to accompany her to her aunt’s village to buy betel nut. Jane and Lucas’ wife later hatch a plan to sell betel nut together. It is these kinds of relationships upon which the betel nut trade is so often based; chance meetings with save fis and the use of one’s social networks whether based on kinship or some other association.

36 Healey (1984:55) similarly discusses the search for kinship relations between strangers as a means to frame their relationship.
37 John is married to a Mokei woman from the Kaiwei area, and he regularly hosts his father-in-law and other inlaws who are involved in the trade.
38 Lucas used to work as a security guard on the estate where Chris Owen lived. He later worked for Chris as a security guard at the National Film Institute.
Chapter Six

In PNG, where kinship and group affiliation are central to peoples’ identities, it is not surprising that such relationships feature prominently in trade. Deep social connections provide support for trading activities but the nature of betel nut trading compels betel people to look beyond their more personal relations. A. Strathern (1969, 1978) has argued that Melanesian big men draw on a combination of ‘production’ and ‘finance’ strategies. ‘Production’ entails focussing on the resources provided by one’s more immediate social networks of family and close clansmen, whereas adopting a ‘finance’ strategy involves cultivating more extensive relationships with more distant others. Big men all adopt a mixture of the two strategies but those who adopt more of a finance approach are able to exchange at a grander scale and have become larger big men. In the same vein I argue that it is those betel nut traders who have, at some risk, developed their weaker and more distant ties that have become the largest and most successful traders. For betel nut traders, as with big men of past, extra-group ties set them free but are also inherently unstable (A. Strathern 1971a:220-1).

THE EFFLORESCENCE OF MIDDLEMEN

The ‘grooved channels’ that connect different betel people into enduring trading relations with one another, and the spatial regulation within the trade that both excludes and protects, contribute to understanding the development of middlemen within the betel nut trade. Middlemen help mediate interactions, and present some continuity, between diverse betel people who otherwise have little basis for a relationship. Obviously other reasons contribute to the emergence of middlemen, such as distance, the scale of business operations, and the ability to accommodate substantial mark-ups. However the mediation role is central to the variety in types of intermediaries.

The tendency, desire, and at times necessity, for betel people to transact with known others has provided space within the market for intermediaries to operate. For example, Matthew, who operates as both a marketplace vendor and as a wholesale reseller at Kaiwei, owes his existence to the desire of vendors, and street sellers to seek out known faces who they trust and with whom they have some means of recourse. Matthew highlights how the mobility of traders prevents them from gaining an established bank of customers:

[Traders] do not have established customers, I have customers ... from Enga, Southern Highlands, Mendi, Wabag, I hold these customers. The customers do not know him [the trader]. Because he buys on the coast they do not know him. So I buy from him and bring it here, then the customers come to buy from me. If he comes here they will not buy from him because he has no established customers.
 Those salesmen who act as agents and sell on behalf of wholesale traders work on the same premise. Salesmen, with their superior knowledge of current trends in the market, also often determine the selling price. Individual traders attend the marketplace only irregularly whereas wholesale resellers and salesmen are in the marketplace every day. They develop enduring connections with the vendors who prefer to buy from such intermediaries because they are more easily held accountable. Thomas, a wholesale reseller, explained: ‘if the betel nut is bad, vendors must come back with the remainder ... Because she is a regular customer I cannot ruin her. If the betel nut is bad I must refund her a few kina. If she bought for K250, I can give her K100 back’. These intermediaries provide a known face for customers within a marketplace where traders come and go.

Intermediaries are also important in mediating transactions between producers and traders. This is true of both transactions occurring in production villages and those in lowland marketplaces. Mark, who recall, buys for a hevi baia and has an ongoing relationship with producers from one particular village on the Ramu River (Chapter 7 and 8), takes pride in the mutual trust that exists between him and the producers with whom he regularly trades, and in this regard he differentiates himself from many other traders.

But traders are not naive. They are aware that they remain outsiders, although not strangers, and some producers may try to trick them. Mark trades directly with producers but he also purchases through a number of local middlemen; family and clansmen of his Ramu friend Stanley. These middlemen are trusted to scrutinise the betel nut they are purchasing. While a producer may try and deceive a highland trader like Mark, they are less likely to do so with a local intermediary who is a person from their own community and is potentially kin or of the same clan. Trading through an intermediary embeds Mark in established social networks and enables him to maintain power at a distance (Allen 2003).

Intermediary specialist buyers are also involved in the lowland marketplaces where they act as agents for travelling traders. They are usually young men, often highlanders who are long-term lowland residents, who have intimate knowledge of the marketplace, the going prices, the producers and traders, and how to operate. This makes them proficient buyers. Because of this they are able to negotiate a better price for the trader while still making a cut for themselves.

As described, there is considerable spatial regulation of the trade. Betel people are restricted in where they can sell. It is only in marketplaces where they are known that they can sell without fear
of being either robbed or in some other way intimidated. Territoriality, and the social networks that
define it, presents another opportunity for middlemen to mediate transactions. This is the case for
traders who want to sell in a marketplace other than where they usually sell. Stanley is one of the
few lowland traders who transports betel nut to Hagen. He is a producer on the Ramu River who
moved into trading with the assistance of traders from Hagen – Bettie, James and Mark. He assists
Mark to trade on the Ramu, and he is in turn assisted by James and Bettie in Hagen. Stanley, whose
relationship with Mark is discussed in Chapter 7, describes:

> When I go to Hagen I must first go and see James’ wife [Bettie]. So she can sell my
> betel nut. I cannot sell myself ... When you are new and you want to sell for the first
time there it is a bit dangerous, because those in the marketplace do not know you.
> They will try to steal your money and things.

This is the same for traders from the highlands wanting to sell in other marketplaces. Chris, another
Hagen trader, specifically framed his ability to trade in new locations in reference to his social
networks:

> I do not usually come to Lae, so I must find a man who knows Lae and who I know. I
> will give [my betel nut] to him and he will sell it. It would not be good if some street
> boys stole my betel nut or snatched my money. So first I must find a man from Lae
> who regularly sells betel nut and who the marketplace vendors recognise, who they
> know well. If I was to go for the first time they would cut my bags and break them.

Intermediaries of this kind are often not immediately obvious. A trader might be able to transact
himself, while the marketplace regular stands nearby to look out for him and intervene if any
troubles arise.

Some *hevi baias* also enlist others to gain access to new marketplaces. Bettie, the Hagen *hevi baias*,
uses agents to sell on her behalf in marketplaces in Mendi, Wabag and near Porgera. These people
are different to the salesmen Bettie uses at Kaiwei, rather, they are regular faces in these other
marketplaces. Two agents sell for her in Wabag, one at Suyan (Porgera) and two sell at Mendi. A
couple of her agents are Hageners who now live in these other towns, the other three are locals to
their respective markets, but all are well known, and have established customer bases that enable
them to sell. Bettie would not have the same access were she to trade independently. The scale at
which Bettie trades alone necessitates she employ agents to work on her behalf but it is the range of
locations that Bettie buys and sells that requires her to have agents specialised in each location.
Thus the spatial concentration of social networks has presented niches where intermediaries can broker between different groups and in different spaces, creating bridges between otherwise unconnected social networks (Granovetter 2005:35). The diversity of locations within the trade has led to increased opportunities for intermediaries and contributes to understanding the efflorescence of middlemen who have emerged to support the trade. Some intermediaries have close relationships with those whom they work with, for instance those bevi baías who use their trusted immediate family members to buy on their behalf. But more important is the expansion of intermediaries who possess weak connections to those with whom they work. Middlemen of this type not only bridge ‘structural holes’ in the network (Granovetter 2005), but they also present relationships that may be used without creating significant indebtedness. This in turn minimises the strength and legitimacy of claims by others upon the financial returns from trading.

CONCLUSION

The betel nut trade is socially embedded. Without seeking to conceal the great number of impersonal and discrete transactions of which the betel nut trade is comprised, I have argued that the trade is shaped by enduring relationships or ‘grooved channels’ between different betel people. These relationships are both vertical, between supplier and customer, and horizontal, between actors whom occupy a similar market position. These enduring trading relationships assist in dealing with uncertainty and risk, however they are not unencumbered by power inequalities. The enduring relationships amongst betel people manifest spatially. This creates those grooves which, for instance, lead traders again and again to the same production areas.

In a country where social networks are highly spatially concentrated, the grooved channels are as much about exclusion as they are the reification of certain relationships. In the different spaces that the trade connects some people belong and others do not. Betel people are not free to trade where they please, but are compelled to do so in a limited number of spaces.

Enduring trade relationships are based upon those intimate and personal associations with kin that constitute one’s strong ties but also, and more importantly, are developed through the cultivation of weak ties. More intimate social connections provide greater security but more distant connections contribute to innovation and the connection of otherwise unconnected networks (Granovetter 2005). Weak ties may also be used to minimise indebtedness and to remove subsequent claims upon the proceeds of betel nut businesses (cf. Bainton 2009). Focusing on one’s weak ties certainly
Chapter Six

offers freedom to the trader but it also leads to instability (cf. A. Strathern 1971a). Social relationships, as Robbins and Akin (1999:36) argue, are:

often imprecise, gradational, multifaceted, contextual, or ambiguous ... In contemporary Melanesia this complexity is intensified and confused by the erosion or disappearance of many previously important relationships, and the rise of a plethora of new ones, especially those grounded in the acquisition and control of money.

The trick for betel people is to draw on well established relationships as well as to explore and nurture the diversity of new ties made possible in contemporary PNG.

The social and spatial patterning of trade, and the exclusion and inequality this creates, has significantly contributed to the efflorescence of intermediaries within the trade. This is by no means the only reason for the emergence of middlemen but it does help explain the diversity of niches they occupy. The social networks that people foster lead to their inclusion in certain spaces and exclusion from others. It is this exclusion that creates the niches within which intermediaries may operate.
Chapter 7

Relations of exchange

INTRODUCTION

This chapter is concerned with relations of exchange in the betel nut trade. What is the substance of those relationships amongst ‘betel people’? how do these relationships shape the market? and how do market transactions shape such relations? In particular, the chapter examines the mutually implicative interactions between the way betel nut is transacted (the mode of exchange) and the kinds of relationships that exist between parties to the exchange (see Robbins and Akin 1999). In doing so I maintain some of the distinctions made about the way in which people in particular types of relationships should and should not transact with one another, and provide detail on how people reinforce and utilise these distinctions. But I also seek to challenge some of those assumptions about what constitutes acceptable versus morally fraught transactions. My purpose here is to problematise the notion that market transactions are necessarily asocial, or even socially destructive, and to instead argue that they have the capacity to generate and maintain social relations of kinship and friendship and to contribute to social reproduction more broadly. This chapter is first framed by a discussion of the sociality of exchange. In particular I draw upon Robbins and Akin’s (1999) expanded conception of spheres of exchange, based on the articulation between objects, relationships and modes of exchange; on broader debates around gift and commodity exchange (Gregory 1982; Carrier 1991, 1998); and on discussions of the sociability of trade (Healey 1990; A. Strathern and Stewart 2000:21-41).
Chapter Seven

THE SOCIOALITY OF EXCHANGE

In Melanesia exchange is central to people’s identities and to their relationships with others (Healey 1979; A. Strathern 1979b). In exchanges with others, people are created and sustained, and they are linked into social networks of obligation, debt and reciprocity. People become, in this way, composed of their relations with others (M. Strathern 1988).¹

In this context the mode of exchange, the object of exchange and the social relationship between those transacting often closely articulate. Robbins and Akin (1999) examine the object/relationship/exchange nexus through a melding of Bohannan’s (1955) object focused spheres of exchange and Sahlin’s (1972) analysis of social distance and the mode of exchange.² Robbins and Akin (1999:8) highlight how ‘Melanesians regularly work to differentiate kinds of exchanges, kinds of relationships, and kinds of objects’, and are anxious about the collapse of these same distinctions. They argue:

For an exchange to be a morally neutral conveyance, not only must people in the right kind of relationship (or potentially in such a relationship) be transacting with the right kind of objects, they must also be doing so in the right way (1999:9).

This is by no means solely a concern for Melanesian societies. All societies make similar distinctions by which they demarcate spheres of exchange that separate off potentially contentious transactions that may undermine long-term societal reproduction (Bloch and Parry 1989:26).³ Here I am especially concerned with the nexus between the kind of relationships and the mode of exchange.

¹ People become defined ‘dividually’ as well as individually (M. Strathern 1988:13). That is, in transactions with other persons objects come to embody particular relationships. Persons detach parts of themselves which adhere to others, just as they too attach parts of others to themselves. In this process they become the product of these transactions, inseparable from and indebted to those that contributed to them being made as a person. See Mosko (2010) for a discussion.
² Also see A. Strathern and Stewart (1999). Bohannan (1955) describes how the Tiv people (Nigeria) divide objects into a number of hierarchically organised categories, with controls on the interchange of objects between categories or spheres. This took a very ‘object-centred’ approach to the understanding of exchange and social order (A. Strathern and Stewart 1999:164-5). This Robbins and Akin (1999) meld with Sahlin’s (1972) discussion of ‘social distance’ and the mode of exchange. Sahlin’s (1972:191-204) sets out the different modes of exchange as a schema of reciprocity. He argued the most intimate relationships, defined by both kinship and co-residence, are characterised by sharing, generosity, the absence of calculation, and an unbalanced flow of exchanges, what he terms ‘generalised reciprocity’. With increased social distance flows become more balanced and calculated, and the return becomes increasingly immediate (‘balanced reciprocity’). At the greatest social distance, beyond the moral universe, relationships become more antagonistic and self-maximising (‘negative reciprocity’).
³ For instance, in Australia the sale of human organs and human beings is widely considered repulsive, and payment for sexual relations morally questionable. It is no more acceptable to pay for a meal prepared by a spouse than it is to leave a restaurant without paying.
My focus on betel nut and the highly monetised nature of the trade means the objects of exchange (betel nut and money) are given.  

Modes of exchange and the kinds of relationships between transactors are mutually reinforcing and constituting. For instance, close kin are expected to share food and, equally, the act of sharing and eating together reinforces and creates kinship bonds (Robbins and Akin 1999:14). In this way the mode of exchange can also delineate social/group boundaries, in this instance between those with whom one shares and those with whom one exchanges in modes other than sharing. The mode of exchange is thus often used to make statements about the nature of a relationship. The extension of a mode of exchange normally reserved for kin, such as sharing, to non-kin can create more intimate relations that approximate kinship. Alternatively, if kin refuse to share this may amount to the denial of their relationship. The quality of a relationship, then, points to the appropriate modes of transaction.

Even subtle adjustments to the form of a transaction can greatly alter the meaning of that exchange. Carrier and Carrier (1989:160) describe how in Manus a trader wishing to conduct trade outside of personal relationships would land his canoe on a public beach whereas a person wishing to trade with a trade partner would land next to the partner’s house. The authors also emphasised the great deal of ambiguity that surrounded exchanges, and how opposing parties to a transaction often interpreted its social meaning in different ways (1989:156-162; see also Carrier 1998).

Socially approved transactions reaffirm relationships. Equally, refusal to exchange in acceptable ways can amount to a denial or delineation of those relationships (see Martin 2007). When people fail to exchange in the prescribed ways it is contentious and risks offending and jeopardising those relationships. The magnitude of an exchange is also significant. Giving too little may cause insult. On the other hand giving too much can be provocative, used to demonstrate one group’s superiority over another, and to shame the recipient group (Allen 1976:40-42). Though the mode of exchange may suggest or reflect the social distance within a particular relationship, because exchange is also constitutive and creative of relationships it can be intentionally manipulated. An

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4 Some barter does occur but this is at the margins. Most instances of barter are in the most remote production areas where cash has little use value due to the lack of places to spend it and the cost involved in getting to a place where it can be spent. Barter may be used by traders to under pay producers who are ignorant of the prices of those commodities for which they are bartering.

5 Zelizer (2000), in a different context, has demonstrated how different forms of monetary transactions typify, and even define, different types of sexually intimate relationships. Salisbury (1970:181-2) has similarly described the appropriateness of particular forms of transaction within Tolai marketplaces, and the relevance of the particularity of the social relationships between transactors.
exchange may then be used to foster, into the future, a relationship of greater intimacy or, alternatively, it may be enrolled to assert distance and to erect boundaries (cf. Bainton 2009).

Robbins and Akin’s (1999) concern is to understand the effect of economic changes associated with market exchange, commoditisation, and labour remuneration on social reproduction and in particular to map the integration of money (object) within Melanesian societies and exchange systems. They do so in light of the commonly perceived incompatibility between monetary transactions and close social relations, and the perception that money dissolves the distinctions people have created to maintain their societies. They highlight that while Melanesians have often readily embraced the introduction of state-based currencies, they have been resistant to its capacity to homogenise different modes of exchange. Melanesians have attempted to enclavise and domesticate money in different ways; they have restricted the contexts in which it may be used, and have provided mechanisms by which it may safely be incorporated. Many Melanesian groups have incorporated money (as symbol/valuable) into customary exchanges, without its role as currency commoditising these exchanges (Healey 1985; A. Strathern and Stewart 1999). People fear the capacity of money to bridge different exchange spheres, and that for instance relationships among kin based upon sharing and reciprocity may come to be based upon trade (cf. Maclean 1989). To buy and sell, they argue, risks undermining people’s connections as kin (Robbins and Akin 1999:14-15).

The distinction between gift and commodity exchange, introduced in Chapter 1, provides one framing between different modes of exchange and the distinct relationships these exchanges are capable of producing. Gifts, on the one hand, are conceptualised as fostering and reproducing sociality; they are inalienable objects, unable to be detached from their association with their giver, exchanged between people in enduring relationships. Commodities, on the other hand, are depicted as asocial; objects that are alienated from their origins and transacted within non-enduring relations (Gregory 1982). Gift exchange is seen to reproduce society socially whereas commodity exchange or trade is considered largely utilitarian, focused on the material reproduction of a society and on an equivalent return. Gell (1992:142) argues that this has often been reduced in Melanesian ethnography to ‘Gift-reciprocity-Good/market-exchange-Bad’. Healey (1990:7) describes, ‘[t]rade is thus overtly concerned with relations between material objects mediated by social relations, and prestations, with relations between people mediated by material goods’. The gift-commodity distinction provides a useful conceptual tool for analysing the relations between people and things, rather than a depiction of some empirical reality (Carrier 1995:192). Transactions in reality are, of course, messier with trade and gift exchange each comprised of both material and social concerns.
(A. Strathern and Stewart 2000:40; Healey 1990; Thomas 1991). Trade may be composed of exchanges that approximate both the conceptual ‘gift’ as well as the ‘commodity’.

In the PNG highlands context, Healey (1990:314-356) for the Maring, and A. Strathern and Stewart (2000:21-41) for the Melpa (Hagen), have argued for greater recognition of the sociability of trade, and the importance of foregrounding relations of friendship, hospitality and trust. They argue the need to move beyond a solely utilitarian notion of trade, and to examine the way in which it is socially generative and capable of making qualitative statements about social relationships (Healey 1990:315). This is a response to ethnographic accounts that polarise gift exchange and trade, and the tendency to analogise the latter with market exchange as conceived by economists (viz. utilitarian, commercial, competitive, impersonal). The concern is that when customary trade is drawn into closer proximity with gift exchange the conceptual rift is simply shifted to lie between ‘customary’ trade practice and marketplace trade and, that in doing so, the marketplace and other contemporary forms of trade then become elided with the market model.⁶

In the context of the contemporary betel nut trade I do not deny the presence of bargaining, intensely competitive transactions and self interest, but I also argue that this is not a wholly adequate depiction. My purpose is not to collapse all distinctions between different modes of exchange, or to deny the analytical utility of the gift-commodity distinction. Rather, in the same way that Healey (1990) and A. Strathern and Stewart (2000) have found resemblance in gift and barter trade, I argue that similar ideas of friendship, hospitality and trust also underlie much transaction within contemporary Papua New Guinean marketplaces. Although the marketplace and other contemporary forms of trade represent new modes of exchange in the highlands, there is no reason to assume they fundamentally alter social relations, even if sometimes they do.

In this chapter I pick up these different arguments surrounding sociality and exchange and in particular I examine them in relation to the contemporary betel nut trade in PNG. By emphasising the sociality of trade, I do not deny the betel nut trade’s utilitarian function. Money per se does not necessarily create social upheaval, as the various papers in Akin and Robbins (1999) affirm, although it does have the capacity to connect spheres and thus ‘lay the groundwork for wholesale homogenization’ (Robbins and Akin 1999:16). My argument here is similar; I argue that emergent forms of trade do not ipso facto undermine socially generative exchange, although it does have a

⁶ Healey (1990:280) perceived customary trade (in pre- and early colonial period) relations as distinct from contemporary marketplace exchange, particularly in relation to bargaining and other competitive trading practices. He does this contra Modjeska’s (1985) use of transactions in PNG urban marketplaces to understand the formation of exchange rates in pre-colonial trade (Chapter 8).
latent capacity to do so. Betel people trade first and foremost to make money. They pay a great deal of attention to price, which they discuss in reference to quality, supply and demand (as per market exchange), but also in regards to social relationships. The trade is full of ‘commodity’ type transactions but, as I will argue, this does not preclude the possibility that these same transactions may contribute to the relationships between people.

**FRIENDSHIP AND KINSHIP IN THE BETEL NUT TRADE**

Betel people of all kinds will often refer to others they know through the trade as ‘betel friends’ (*pren bilong buai na daka*). The betel nut trade provides an arena of social interaction in which diverse relationships, including friendship and kinship, become possible. The trade is formative of such relations but it does not determine them. In this section I follow A. Strathern and Stewart’s (2000:21) attempt to ‘reset the basic terms of discussions regarding trade and [gift] exchange not by way of opposing them but by linking them through the concept of friendship’ and extend it into the contemporary PNG marketplace. This is not to deny more impersonal forms of market trade, but rather to emphasise an aspect of trade often overlooked.

Those in the betel nut trade, as might be said of many Melanesian groups, are incessant network builders, always looking to foster new contacts. When colonial rule and state governance allowed people to extend their geographic and social horizons, people came into contact with greater numbers of strangers (Healey 1990:334). While those groups who had occupied the immediate borders of people’s social universes were often perceived as enemies, no such preconceived enmity need exist amongst those with whom there was no prior interaction (Keil 1974:101-2). Intermittent trade connections produced interactions between strangers. Sometimes this saw the emergence of more impersonal forms of trade, as Healey (1990: 298, 317) has argued, but as people moved further afield on a more regular basis and for more protracted periods, it became possible for these relations to be transformed. Strangers become *save fes* (literally, known faces) who may become friends and even kin. In this section I focus in particular on friendships emergent in the betel nut trade between lowland producers and highland traders, if only because they are the most unlikely of friends.

The structure of the betel nut trade is conducive to the creation of friendships; that is, ‘a state of mutual sociality predicated on goodwill and support that can exist either within or outside of the

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7 Keil (1974:101-2) described the tendency for trade to be pushed beyond the warfare field, ‘men are relatively safe when they travel once they get far enough from their own places to become “men from far away.”’
ambit of kinship and affinity’ (A. Strathern and Stewart 2000:22-23). Many traders trade in production communities, rather than at the town marketplaces, and this involves being in contact with those in the producing community for several days at a time; as a result friendships are forged. And while the town marketplace is a new institution of exchange, one that is often more impersonal, village based trading bears much similarity to trading expeditions of the past (Chapter 8).

Healey (1990) argues that trading partnerships he observed were based upon friendship, generosity and trust, affirmed through the extension of hospitality to visiting traders. Friends are those from whom one can safely accept food and shelter. Among the Maring people of the Western Highlands such an unrelated friend is referred to as ‘he-gives I-can-eat man’. Friends are entrusted with the visitors’ safe keeping (cf. A. Strathern and Stewart 2000). Healey (1990:349) notes:

Trade, then, is neither always impersonal nor strictly self-interested. Through trade, individuals extend their social horizons, linking themselves into a wider network than the limits of genealogical and coresidential reckoning encompass. Trade can mediate relationships between distant people by more than the equitable transfer of material goods. It does this by providing a context for other expressions of social solidarity, such as hospitality, trust, and generosity. These are articulated in the idiom of kinship and serve to bind the individual into an open-ended moral universe far exceeding the limitations of the everyday exigencies of group definition and political process.

The use of idioms of relatedness in trade provides a means to morally frame interactions and to provide familiarity in the unknown (Healey 1990:327-350). Relationships observed between betel nut traders and producers take a similar form when traders venture away from the town marketplaces and into the production communities where they quickly become a part of the social networks. A new trader in the village may sleep in the communal men’s house. In some communities they are always accommodated here, but after buying in the village a number of times they generally become the guests of one of the households (cf. West 2012:131-140). Traders commonly stay several days in the producing communities where it becomes possible to build friendships. For one betel pepper producer on Karkar Island:

‘When [the traders] stayed over there [on the mainland] we were not friends. Once they come to buy betel pepper, and they sleep in my house, and I feed them, by the time they leave we are friends ... and they return here’.

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8 A. Strathern and Stewart (2000:23) see ‘friendship and kinship as overlapping domains of reference’.
Traders socialise with their lowland friends, drink beer with them, exchange cigarettes, chew betel nut together, and share stories. This is certainly the case for Mark, who should be familiar from earlier chapters, although he differentiated himself from some of the other traders in this regard. He explains:

I often see other buyers do not communicate well with the villagers, like sleep in a good proper house and eat, and talk, share stories. [If you speak with them properly] it will be easy for you to get betel nut ... I communicate and talk properly with [the villagers] so they trust me and I trust them.\(^9\)

The extension of hospitality shows generosity and to accept food and shelter demonstrates trust. Indeed traders without pre-existing relationships will often bring their own food; they have heard stories of the lowland people’s powers of poison and sorcery.

Traders regularly return to the same communities to trade, and it is common for producers to refer to such regular traders as ‘locals’ (ai ple), people who belong in the community. When I asked Mary, a producer from the Turubu area (East Sepik), about one of the traders who regularly traded in her village and stayed with her family, she affectionately responded: ‘He is an old man of the house, he sleeps and wakes up here’. Referring to traders in this way suggests it would be a mistake to conceive of the relationships between producers and traders as being determined solely by their economic trading relationship. For Mary being a good host not only meant feeding and housing her visitors but also being their masu meri (spokeswoman). She took it upon herself to rebuke anyone who brought anything but the best betel nut to sell. Traders also make offers of hospitality in their highland villages, but few lowlanders can take them up on the offers.

In some relationships, trade is only one aspect of the association. One trader from Hagen recalled his friendship with a man and his family from the Ramu River and the family holidays he spends there: ‘Sometimes I go stay there for a couple of months ... my two wives as well, [and] my children ... it’s our place so we go and stay ... [we don’t trade betel nut] we just live there, catch fish in the bush’ (cf. M. Strathern 1975:264; West 2012:139). By referring to the Ramu River as ‘our place’ this man shows the close association he has there. Traders will often do favours for their Ramu friends, for instance they may purchase soccer boots, generators and other items at the request of their friends, in exchange for bags of betel nut. Framing transactions in such a way may be more amenable than a monetary transaction (cf. Robbins and Akin 1999:14) but such action is largely

\(^9\) Although relationships of trust are formed neither traders nor producers are naive. They are aware, and often even expect, some degree of opportunism (Chapter 8). Traders may not be strangers but they remain outsiders.
pragmatic; the trip to town is expensive for the villager. The following explores the specificities of a relationship between Mark and those producers within the community in which he trades.

Mark explicitly links his trading work to the good relations he has been able to develop with producers. He has traded almost exclusively in one village on the middle stretches of the Ramu River since 2002, and spends as much time there as he does at home (Plate 25). At first he was a stranger but soon after arriving he met Stanley at a dance party. They started drinking together and formed the beginnings of their friendship. When Mark became drunk and got into a fight with one of the locals it was Stanley who helped sort out the mess that ensued. They became friends and began talking about working together in the trade. Mark described to me the moment in which his relationship with the community became cemented. In 2004 there was a large flood in which the Ramu River burst its banks, flooding onto the river flats and ruining people’s gardens. The flood also made the road into Base Camp impassable making the Ramu inaccessible to all but the most hardened and enthusiastic traders. With their food gardens destroyed and relying on sago, and without money from selling betel nut, many villagers were struggling. Despite the difficulties of accessing the river at this time, Mark continued to trade. Mark sees this as a turning point in his relationship with the community. He recalls the villagers’ comments that in both good times and bad he comes to the village, something they will not forget, ‘I provide a service to them’.

10 Stanley intermittently organises for local music bands from Madang to come and play in the Middle Ramu where they tour a number of villages. Stanley charges gate entry and sells beer. When I visited with Mark, Stanley was organising just such an event. I travelled up river in the company of the band members together with several large speakers, amps, keyboards, guitars, other instruments and many cartons of SP lager. The band played from dusk until dawn three nights running.

Implicit in this concept of ‘service’ is a sense of sympathy for the producers. Traders often express that they feel ‘sorry’ (sori) for the betel nut producers with whom they trade. This is an important aspect of pre-colonial trade and gift exchange relations among Hageners, something which indicates respect and often generosity (A. Strathern and Stewart 2000:35), but here it is more often cast by betel nut traders in terms of underdevelopment; remote villagers are considered impoverished ‘bus kanaka’.12

Trading can also be productive of kinship, and here Mark’s and Stanley’s stories are also illustrative. Mark now trades on behalf of a hevi baia but previously he traded independently. Recall from Chapter 4 that Mark had met James, a Hagen hevi baia, on one buying trip, and the two had become friends. After witnessing Mark’s quality as a buyer, James asked Mark to come and buy for him and his wife Bettie. Mark agreed and began working for James and Bettie, using their money and trading at a much larger scale than previously. Mark became James and Bettie’s most valued buyer and after some time was informally adopted into their family. He went to live in their hamlet not far from Kaiwei marketplace and in 2008, according to Bettie, she and James paid a bridewealth of fifty pigs and K18,000 for Mark to marry the niece of one of the owners of Kaiwei marketplace.

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12 Bus kanaka, something akin to a country bumpkin or hillbilly, is used both disparagingly and in self deprecation.
Around the same time that Mark started to work for James and Bettie he also began to work with Stanley. Stanley and Mark assist each other’s trading work; Stanley helps Mark to buy in the production areas and to organise transport on the river, and Mark helps Stanley to transport his betel nut up the Highlands Highway and to sell it at Kaiwei. The two also reciprocate hospitality; Mark stays with Stanley’s family on the Ramu and Stanley, who is one of the few lowlanders who trades at Kaiwei, stays with James, Bettie and Mark when in Hagen. Each are well known and well liked in the other’s community, and each also knows a little of the other’s local language.

The relationship between Stanley and Mark, James and Bettie is also evinced in the naming of James and Bettie’s three minivans. Bettie proudly told me how in 2007 the whole family had attended when they purchased the first vehicle from Ela Motors in Mt. Hagen. They had paid the almost K60,000 for the vehicle in full and in cash. It was primarily Bettie’s betel nut trading that had earned this money but it was James who was responsible for running the vehicle (Vignette 8).

Stanley was in Hagen at the time the vehicle was purchased, and he reminded James and Bettie that it was his people’s betel nut and hard work that they had appropriated and turned to profit. It is common practice in Hagen to name vehicles, and James, in recognition of Stanley’s contribution, as well as that of his community, asked him to choose the name. The name Stanley chose was Matak, a namesake of his own large dugout canoe on the Ramu River, and proudly etched on its bow, but also in Stanley’s language, appropriately, the name of the small black ants that run around on the bunches of betel nut when they are harvested. It was then ‘Matak’ that was emblazoned in large yellow capital letters across the rear of the brand new dark green Toyota Hiace fifteen seater minivan, along with ‘Route 100’ designating it as a highway Public Motor Vehicle (PMV). Not long after purchasing the first vehicle Bettie purchased a second, and later a third, all identical and all with ‘Matak’ prominently across their tails.

The act of naming the vehicles Matak, in a novel way created a naming relationship between Bettie, James, Mark, and Stanley and as such made a statement about the quality of their relationship (cf. A. Strathern and Stewart 2000:25). Stanley was spending increasing amounts of time in Hagen and in 2010, when I returned to Kaiwei, I found Stanley, living in the same hamlet as Bettie and Mark. Bettie said of Stanley ‘he is like family, he is my brother’ and she felt a duty to look after him. In his co-residence and mutuality of interest with his hosts, Stanley became reckoned as kin. Such a relationship was reinforced by Stanley when, following James’ death (Chapter 8), he and other Ramu people contributed pigs to be killed in James’ name. Stanley had also taken a second wife from within James’ clan, such that the more generalised idioms of kinship which bound Stanley to
Mark, James and Bettie transformed into a more particular form of relatedness. Similarly, some highland betel nut traders have married women from the villages where they buy. The creation of affinal kinship ties, and the moral obligations these entail, may also contribute to making their relationships more temporally enduring.

Interactions between betel people are often marked by those same social features that bind people into relations of friendship and kinship throughout Melanesia. Kinship in Melanesia is often flexibly conceived; broadly speaking kin are people who ‘share substance’ (Wagner 1967; A. Strathern 1972c; Healey 1979; LiPuma 1988). This may be through their father’s semen and mother’s blood (as Melpa and Maring people conceive of relations of descent) or through the conveyance of substance created in marriage. Kin are people who contribute to each other’s nurture through coresidence, the sharing and consumption of food, and cooperation in work (such as the cultivation of gardens), exchange and conflict. Kin are morally obligated to each other, they are people who can be trusted and from whom support can be sought. But at the same time that kinship becomes defined by these qualities, it is the existence of these qualities that makes kin – that is, it is by behaving in the manner of kin that persons may become rendered as kin.

The argument pursued here is that the trade can produce relations of friendship and kinship. This is because trade provides a context within which other forms of sociality, typically associated with friendship and kinship, may be expressed. When traders show themselves to be trustworthy and reliable people to transact with they also show they are the right type of person to potentially be considered a friend or kin. Relationships crystallise around the trade, and are unlikely to have emerged in the absence of the trade, yet they are not bounded by it. The transactions taking place go beyond that of the commodity; as has been argued of pre-colonial trade, ‘parties may be quits with respect to a specific transaction, but their relationship may be based on a form of on-going friendship just as with ceremonial exchange’ (A. Strathern and Stewart 2000:21). It is the extent to which these commodity transactions in the betel nut trade are part of ongoing relationships of exchange to which I now turn.

‘INVESTING’ IN RELATIONSHIPS

Market exchange, immediate and monetised, is often seen as damaging to more intimate social relationships, and incapable of producing the types of sociality necessary to reproduce society (see, for a discussion, Bloch and Parry 1989 and Robbins and Akin 1999). But in the same way that Melanesian groups have domesticated money, insulating particular parts of their economies by
creating spheres of exchange, they have also domesticated the marketplace, refiguring it in more meaningful terms by melding it with pre-existing notions of exchange and sociality. This is clearly demonstrated in the emergence of distinctly Melanesian marketplaces (see Brookfield 1969b, 1969c; Epstein 1961, 1982; Bourke 1986a; Maclean 1989; Benediktsson 2002). At the same time, aspects of bisnis (business, money making activities) have become framed within broader exchange relations (see Curry 1999, 2003, 2005).

Betel people are qualitatively adjusting their transactions within the betel nut trade so these transactions do not undermine those social ties sustained through reciprocities, but they are also showing that market transactions, in themselves, are capable of contributing to social reproduction. A similar argument has been used by Healey (1990) to challenge the dichotomy between ceremonial exchange and barter trade. Commoditisation and market transactions can certainly cause tension within relationships, such as when labour and objects previously exchanged reciprocally now have to be paid for (M. Strathern 1999:96-99), or where the production of export cash crops has created inter-generational inequalities in access to land (A. Strathern and Stewart 1999:178). However, trade may also form a basis for positive social relations. This can be seen amongst the Maring people, where the introduction of the marketplace provided a source of tension, but also the basis for the expression of broader social cohesion (Maclean 1989). Maring groups become defined through, among other things, ‘shared substance’, the most pertinent here being the consumption of food produced within a clan territory.13 Maclean (1989) described how the broader distribution of food through the marketplace was seen by Maring as a vehicle to express solidarity within a cluster of clans whom consume one another’s food.

This example suggests there is no reason to assume contemporary commodity exchange, immediate and monetised, is inherently unable to form and maintain social relationships. This is likely most applicable to expansive societies like the Melpa (Hagen) in which kastam and bisnis are married, than in those societies in which kastam and bisnis are placed in opposition (see Foster 1995; cf. Mosko 1999). The capacity for market transactions to be socially reproductive does depend on them being reconceived through local ideas of exchange and sociality (Mosko 1999:60-61), or alternatively that the money attained through such market transactions be fed into other socially reproductive activities in a significant way.

13 A. Strathern (1973:29) describes of the Maring people that ‘Food [grown on clan land] builds their bodies and gives them substance just as their father’s semen and mother’s blood and milk give them substance in the womb and as small children’.
The Papua New Guinean tradestore is illustrative of the intertwining of sociality and business. Patterns of consumer spending are strongly influenced by kinship relations and clan loyalty and the establishment of a tradestore is seen to indicate group solidarity (Grossman 1986; Curry 1999). Initial investment for the establishment of tradestores is often along kin lines, reaffirming particular kinship relations. For instance, amongst the Wosera (East Sepik), contributions to the establishment of a tradestore often come from a man’s maternal uncle. This parallels those same social networks drawn upon for bridewealth contributions (Curry 1999, 2005). Curry (2005:237) argues such ‘investments of capital are often not in anticipation of future profits—rather, they are an investment in social relationships’, and further, that ‘tradestore investments help define groups and are relationship-forming in ways that are additional to, or qualitatively different from, more strictly defined market transactions’ (Curry 1999:13).

Purchases within tradestores may perform a similar function. Clan membership is one of numerous competing factors that influence consumer behaviour, particularly true where kinship is closely aligned with village settlement patterns (Grossman 1986:48; see also Curry 1999). Group members may also be obligated to purchase from stores belonging to members of their own group. The nature of the transaction itself is also important in shaping its meaning. For instance Robbins and Akin (1999:14) interpret people’s insistence that they receive credit at kin operated tradestores as an example of resistance to commercial transactions among kin, commercial transactions which might otherwise, as Grossman (1986:48) suggested, lead to individualism and as a result the weakening of social bonds. Credit prevents such transactions being subverted to a different transactional mode, making tradestore transactions no longer market transactions. The extension of credit by a tradestore operator may also be used to display generosity, with the purpose of attaining influence (although those tradestores that remain financially successful typically employ strategies that limit the extension of credit).

The example of the tradestore is presented here to contrast it with the betel nut trade. In the betel nut trade credit plays only a minor role. It is normally only extended within the most socially proximate relations, that is, only in both very close and trustful relations. On each trip a trader may only dispose of a couple of bags in this way.14 Offering credit thus demonstrates trust in the recipient and also sympathy, that they are ‘sorry’ for their friend or kin, who does not have the immediate funds to make a purchase, and wish to help them. Credit is most often offered by a trader by stating the value of a bag of betel nut which is to be repaid once the bag has been sold.

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14 The exception is when the marketplace is vastly oversupplied. Traders faced with a glut may try and induce sales by offering credit, but even then this only applies to a slightly larger circle of highly trusted kin, friends and regular customers.
Relations of exchange

But unlike tradestores which are notorious for closing down due to the extension of too much credit to kin, these debts are usually repaid within one or two days. The difference here is that the item purchased is to be resold rather than consumed, as is the case with tradestore purchases. Betel nut trading also occurs in a much more compressed timeframe than the sale of one’s tradestore stock, and as such the financial state of the business is more immediately obvious to the betel nut trader. Traders are compelled to make their enterprises financially viable or they do not remain traders very long.

Credit may be used in the betel nut trade, like in tradestores, to make a transaction more socially acceptable, but the vast majority of transactions amongst betel people are immediate and monetised. Cash is handed to the trader before the vendor takes control of the bag. This may occur even amongst the closest of kin and friends. It is common for traders to sell to their wives, mothers and other close kin, and for female vendors to sell to sons and husbands. This can occur without any change in the mode of exchange – that members of the same household transact with one another in this way highlights that one should not assume money is pooled at the household level. Matthew, a trader and hap-hap (‘half’ bag) vendor, describes: ‘My wife sells “loose” betel nut near our house … she comes and buys from me here [at Kaiwei] then she goes home to sell it. [In the evenings] I go and buy it back from her’. That these transactions are not immediately morally contentious may be, at least partially, attributed to the nature of the object being transacted (betel nut).

In the highlands, betel nut is without social ‘origins’, that is, local social relations do not factor in its production (M. Strathern 1992). It is therefore qualitatively different to, say, sweet potato or pigs that have been reared on a clan’s land, nurtured locally and through their production and exchange are conceived of as part of the flow of local substance that contributes to wealth, fertility and social reproduction (LiPuma 1988; A. Strathern and Stewart 1999). Betel nut’s recent introduction to the highlands gives it a certain social plasticity and moral ambiguity. In some ways it has become an object that, like traditional foods, is shared between friends and kin as an expression of sociality (Sexton 1988:126; Hirsch 1990, 1995, 2007). But it is also easily rendered as new and devoid of local substance. I believe this underlies the readiness of many highlanders to dismiss it – ‘It doesn’t help us with anything ... We chew, it goes red, we spit, that’s all’ – and the ease with which it has been adopted as a commodity.

Healey (1990) described far more protracted exchanges among Maring traders as being immediate rather than delayed exchanges. Betel nut traders may not get the full amount back if the vendor is unable to make back the full purchase price from her sales.
Chapter Seven

For betel nut, in the highlands, to act as a commodity between kin does not displace pre-existing notions of how kin may transact betel nut, as it might do among those lowlanders for whom betel nut is something that must be shared (Bergendorff 1996). The sale of betel nut between kin then is less likely to create moral angst than if, for instance, sweet potato were to be sold to those who might otherwise expect it to be shared (LiPuma 1988:86). That the betel nut transacted between traders and vendors is to be resold by the vendors, rather than consumed, is also likely to allow it to be more easily encompassed under an ideology of business, in which money functions as capital. It may in this way gain distance from those associations between consumption and nurture that may make the sale of other objects contentious. Commodity transactions amongst kin thus need not necessarily be seen as the undermining and upheaval of the existing social relations, in fact it is often quite the reverse. I argue that even immediate commodity transactions may be productive of sociality and be used to reinforce social relations. This is further explored below, but to return to the tradestore for a moment.

As with tradestores, betel nut traders often obtain start up capital from kin and such contributions may be used to reinforce particular relationships. But start up contributions figure much less prominently in traders’ stories. This is because in the betel nut trade it is possible to enter at virtually any scale and be viable. There is no minimum amount of money needed to establish oneself. It is possible, indeed common, for traders and vendors to start with very small sums of money and gradually scale up their enterprises as their profits allow rather than seeking kin support to enter at a larger scale initially. In this regard betel nut trading has the capacity to sustain more individually oriented enterprises. The different operating capital requirements also afford greater flexibility to betel nut traders compared to tradestore operators.

Betel people do reconfigure the mode of exchange to make statements that reinforce the intimacy of a relationship, for instance by incorporating aspects of the ‘gift’ into their transactions. Offering credit and giving extra nuts (discussed below) are examples of this. At the same time they may change the mode of transaction as a means to assert social distance. Traders, for instance, may emphasise when they give money to people who have worked for them that the transaction is a wage or a payment for work completed as a strategy to deny that they are indebted to the person (cf. Brison 1999:159). This enables traders to reject future requests for money: ‘I gave you money already ... that is enough for you.’ This may not always work. Different parties often see the same transaction in different ways (Carrier 1998:99-100).
Marketplace transactions for betel nut may also be socially productive, even without any change to the mode by which it is exchanged. What are ostensibly just commodity transactions are entangled within a larger pattern of ‘non-market’ exchanges, and relationships, that radiate beyond the marketplace. The completion of a transaction does not end the relationships between the two actors. As with bridewealth payments, competitive exchanges (e.g. *moka*) and compensation payments, betel nut transactions often form part of larger on-going exchange relationships. Market transactions for betel nut are not directly commensurate with other types of exchange; indebtedness in the customary domain cannot be repaid through the trade. But, similar to those contributions to the establishment of a tradestore, trade transactions around betel nut can contribute to reinforcing particular social bonds that are valued for reasons other than trade. As Lewis describes:

I have a town bus. If I am at Rainbow Store [in town] and coming to Kaiwei. If my vehicle is there and there is also another bus belonging to another group. My people will not use the other bus because we come from the same place and it is *our* vehicle. They want to give the money to us, [so that] I hold onto it. If there is trouble or a problem, the money is going to come from here. So they will not use another vehicle ... With my store at Kaiwei, my people will not make purchases at another store, they will only come to me. Even though the same kind of food is on offer, they will only come to me. The *wantok* system is strong on this ... Betel nut marketing works on the same principle.\(^{16}\)

Here the vehicle and tradestore are seen as inextricably entangled with the identity and social construction of the group, and vice versa. Purchasing from kin contributes to the pool of money in one’s own group and prevents the leakage of resources from the group (cf. Brison 1999:159). The leakage of group resources means they become lost from the flow of reciprocities within and between groups, something akin to the loss of resources through personal consumption (M. Strathern 1999:99). The retention of resources, and the maintenance of the social ‘base’ (Gudeman 2008), presents the potential for their ‘investment’ elsewhere. It contributes to the strength of the group and demonstrates group solidarity, part of a broader concern for group reputation (Ketan 2004). Another trader, Thomas, when asked what he would think if a family member bought betel nut from another trader responded:

I would be angry, I would be cross. I would think this but would not speak out. Why [would I be cross]? Because our money is the family’s. This money I earned and saved.

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\(^{16}\) People do of course frequent the stores of non-kin, to get a cheaper price for instance, but they prefer that store-owning kin are not aware of such transactions.
Whatever [the family's] needs I will help. So why have they spent this family's hard earned money on another group.

Evidently 'grooved channels' (Chapter 6) go beyond simple transaction costs. People choose to buy from kin, allies and friends because they wish to keep money within their group. If there are troubles then their group, which they will call upon for political and financial support, will have the means to provide it. These are important relationships to cultivate and maintain and the marketplace provides one of the avenues for achieving this. This is not to reduce the cultivation of relationships to solely utilitarian ends, but clearly relations can be used in calculative ways.

Trader remarks about retaining money within their groups also suggest that these Hageners see money, at times, as partly inalienable from those social relations that produced it. When money was introduced into Hagen, and many other Melanesian groups, it was rapidly assimilated into, and reformulated, local pre-existing idioms of exchange and relatedness (A. Strathern 1979a; A. Strathern and Stewart 1999; Akin and Robbins 1999). Money was incorporated into the Hagen moka exchanges, where it replaced shell valuables, and took on a symbolic value quite independent of its currency utility. Money now prominently figures in bridewealth, compensation payments, and payments to maternal kin in contemporary Hagen. It has become central to the cultivation of those social relationships which tie people together as kin (M. Strathern 1999). But money may also be used to conduct more or less impersonal transactions, and it is this tension within the multiple uses of money that contributes to its ambiguity and, as a result, the possibility that it may feature in transactions that outwardly appear to approximate the commodity but which also may bond people together (M. Strathern 1999). Money’s different uses do not necessarily displace each other, rather they may become simultaneously embodied in the same transaction. To an extent, it is only while money is routinely deployed in socially reproductive exchanges that the relations and transactions through which money is attained remain morally ambiguous. Thus, to the degree that market transactions retain their moral ambiguity, they also hold onto their capacity to be valued as socially positive.

When Lewis first talked to me regarding his friendship with Simon, another bevi baia, he said that Simon was simply a wamwock, a friend through his betel nut work (Chapter 6), but later Lewis described how he had ‘looked to [his] tribe’ when considering who to cooperate with. He said it was significant that they both belonged to two closely allied clans from within the Mokei Kuipi tribe section. It was mutual interest in trade that first brought Lewis and Simon together but it was their shared identity as Mokei Kuipi which enabled the relationship to be strengthened (cf. M.
Strathern 1975:198). Lewis described how he knew he could rely on other Kuipi for support as their ancestors had fought together but Lewis also emphasised that trust was between individuals.

Trust between Lewis and Simon had been reinforced through exchange, namely in the form of loans to purchase motor vehicles. Lewis had lent Simon K3000 and then another K3000 to buy two older vehicles, Simon then lent Lewis K10,000 for Lewis to buy his own vehicle. In 2007 Lewis had lent Simon a further K20,000 to assist in the purchase of a new Toyota Hiace. Lewis said, ‘with that money I thought of purchasing a house in town, renting it out. I had this idea but my friendship with Simon is more important to me.’ Lewis, using the language of business, spoke of ‘investing’ in such relationships (cf. A. Strathern 1971b:500-2). He was motivated by nurturing these social relations and fostering networks of trust to deploy into the trade. He and Simon were genuine friends but their investments with each other were calculated. They never lost sight of the balance of indebtedness. These loans, and the cars they purchase, become symbols of their relationship, and a measure of the trust between them. Money becomes a means by which social relationships may be evaluated, but perhaps also becomes the substance of the bond between them.

Lewis certainly valued his relationship with Simon for its contribution to his betel nut trading but he saw it as part of broader relations. He worked with other Kuipi, supported them, loaned them money, and they purchased from him, because the group relations enabled economic transactions to be valued as more than isolated transactions. A transaction with Kuipi could be valued in a way that trading with a Mokei Depi could not. Lewis said that with those Depi traders, including Bettie, James and Mark, he was cordial, he would say good morning and exchange information but he would not help them out with money. But Mokei Kuipi is a large group, and can thus only be seen as a broader allegiance upon which more individual relations are overlain. Lewis certainly did not have unquestioning trust in all Kuipi, but equally relations were not based on a predicated distrust as may be the case for non-Kuipi. Group membership is an indicator for traders as to who is, and is not, likely to be trustworthy.

17 Neither Lewis nor Simon considered such loans to constitute holding a share in the vehicles, nor did they have any say in the management of the other’s vehicle enterprises.
18 At the same time Lewis had given Simon the K20,000 he had also ‘invested’ K10,000 in a candidate in the 2007 elections. The candidate was successful and Lewis was not shy about his expectation of cashing in on this indebtedness.
19 Something similar can be seen in the purchase of shares. People most often choose to invest in shares to receive a financial return on such an investment, but people may choose to invest in an ethical share portfolio rather than a standard portfolio due to the positive overflows associated with the ethical investment. In both cases the investor makes money but ethical shares invested in ethical companies produce a qualitatively different outcome. In the betel nut trade, it is possible to make money irrespective of whom the betel nut is purchased from but by being selective with their purchases they are able to produce more positive overflows.
20 The whole Mokei tribe, which is split into the Kuipi and Depi paired tribe sections, in 1997 numbered an estimated 15,000 people (Ketan 2004:101).
Transactions for betel nut may also be socially productive in other ways which leave the mode of transaction unchanged but remain capable of supporting more enduring relationships. Betel nut traders, for instance, may buy all betel nut that is offered to them by producers, even if they have already purchased their desired quantity, out of obligation or generosity (cf. Sahlins 1972:309-310). Traders also reinforced social bonds with very minor purchases in the highlands roadside marketplaces. Matthew, discussed above, described how in the evenings he purchased betel nut to chew from those same people who had purchased from him earlier in the day, including his wife. He did this to demonstrate his support for them so that they in turn would continue to support him. Roadside stalls are also very social places, where people congregate and pass the early evening. In this way Matthew’s purchases from these vendors also provides a context in which other social bonds may be fostered, but only some of these bonds are likely to lead back to the marketplace.

Clearly betel nut transactions are not purely trade or commodity transactions; discrete, unencumbered and utilitarian. They can be so, but this is a lost opportunity. Instead, where possible betel people engage in transactions within more enduring relationships, relationships that have value beyond the marketplace. Through their trade betel nut actors seek to produce what Elyachar (2005) refers to as ‘relational value’; ‘the positive value attached to the creation, reproduction, and extension of relationships’ (2005:143), a ‘social surplus’ overflowing from diverse economic practices (Roelvink 2007:129; Gibson-Graham 2006b). Betel people are strategically and pragmatically using trade transactions to foster and maintain social relationships which they value both for trade and in their non-trading lives. They are also acting sub-consciously, simply doing what kin do. Trading with those with whom one also has relationships beyond the marketplace is able to be valued positively. Denying these same relationships within the marketplace has correspondingly negative implications.

THE GIFT IN THE MARKETPLACE: SELLING BUNDLES AND GIVING EXTRA

Marketplaces are often assumed to be solely sites of commodity transactions; the transactions are assumed to be discrete, unobligated and impersonal, and the object to be alienated. In these spaces the relationships created between objects are foregrounded, while those created between people are obscured. Certainly the main purpose of people’s involvement in betel nut marketplaces is to transact betel nut for money and vice versa, but this often entails other modes of transaction. Gift

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21 LiPuma (1988:87-8) similarly highlights, in a small Maring marketplace, that families buy and receive the same types of foods that they have sold and given.

22 Elyachar (2005) examines the production of ‘relational value’ within vehicle workshops in Cairo.
exchanges of different mundane guises have become an important part of everyday trading practice in betel nut marketplaces, and individual transactions may be comprised of both gift and commodity components, but this also raises questions as to what exactly is being conveyed in these spaces.

In the marketplace, relations are overtly created between objects, in this case between betel nut and money, expressed as a price. But betel nut marketplace vendors, as we have seen, are also intent on creating relationships between people. One way this is done is through giving extra above the transacted amount. Vendors referred to this as ‘giving a discount’ (givim diskam) or ‘giving extra’ (givim ekstra). Giving extra is used to please customers so as to generate repeat patronage, a vendor explained: ‘We give discounts. We want [our customers] to be happy. We make them happy and they will return and buy again’. Extra is also used by vendors to give differential recognition to qualitatively distinct relationships.

The ‘extra’ one can obtain in a transaction is not explicitly stated. The transaction for money is completed and only then is extra given at the discretion of the vendor. For instance a customer may purchase ten betel nuts for K2, and after being paid, the vendor may give the customer another two betel nuts. There is something of an assumption amongst customers that additional nuts will be given. Of the sample purchases field assistants made to ascertain prices, 93% of betel nut transactions and 83% of betel pepper transactions included some extra. Overall this extra, calculated by weight, represented 19% of the total betel nut purchased and 16% of the total betel pepper purchased. The amount of ‘extra’ received varied considerably.\(^{23}\) The samples purchased were small at K2; most customers typically buy a larger amount and would therefore be more likely to attract extra, and this extra would likely represent a greater proportion of the purchase.\(^{24}\)

While the majority of transactions attract extra, and therefore the giving of extra itself does not denote a close social bond, the size of this differs considerably based on the relationship between buyer and seller, or equally what the seller hopes that relationship may become. Regular customers, those who buy large amounts, close friends and kin are typically given more. One roadside vendor spoke of making purchases from vendors: ‘If I go to another [unknown vendor], I will give her K2, she will give me four or five betel nut, only the equivalent of K2 (long mak bilong K2). If I go to a save fes, she will make a K2 bundle of five or six and will also give me some extra’.

\(^{23}\) Twenty K2 samples of each betel nut and betel pepper were purchased each day of the marketplace surveys, sixteen days in total. This data is thus based on 320 samples of each betel nut and betel pepper (Chapter 1).

\(^{24}\) When customers buy small 50 toea plastic bags of lime they always receive extra. Once the small plastic bags are purchased the vendor adds an extra tablespoon of lime to the bag.
Chapter Seven


Note: Sample (piksä) betel nuts, with half their husks removed, are displayed on top of the K2 groups.

The amount of money exchanged for a bundle of betel nut is fixed, typically K2 in most marketplaces, but bundle size does vary. Vendors typically display a number of prearranged bundles on their mats (Plate 26). These are left unaltered in a transaction, instead it is through a less visible giving of extra that the ‘bundle’ size changes. The vendor is able to give the illusion of a fixed price to others while retaining the capacity to alter it based on the individual transaction. In this way the ‘extra’ gives vendors the capacity to recognise different relationships within the price. This conceals the price variability from other shoppers, although all shoppers are aware that a variable price exists. Wholesale traders also reduce the price for friends and regular customers although, unlike bundles, bags are a fixed size and therefore it is the price that varies. As with

25 Rarely betel nut may be sold in K1, K3 or K5 bundles. Betel pepper is also predominantly sold in K2 bundles although uncommonly it may be sold for K1.50. When this occurs the vendor usually writes the price on a scrap of cardboard with a permanent marker.
bundles, the variable price is concealed (Chapter 8). Giving extra is much less common in fresh food marketplaces, although it does occur.

Vendors present the transaction in such a way that it deliberately entangles commodity and gift (and market and mutuality) and what each type of transaction entails (Bird-David and Darr 2009; Gudeman 2008). Vendors explain there is a difference between selling 12 betel nut for K2 and selling 10 betel nut for K2 and giving 2 free. The overall ratio of betel nut to money is constant but the latter makes the customer happier, and can be seen as a comment on the substance of that relationship. A fixed price allows no comment to be made. The mode of transaction then does matter to the extent it both shapes and reflects the relationship between transactors. Giving extra softens what might otherwise be solely a commodity transaction; it is used to create relations that are focused upon the trade and at the same time maintain and avoid undermining relationships radiating in from beyond the marketplace.

Giving ‘extra’ gives an impression of generosity, or at least that a fair amount or ‘good measure’ has been conveyed (Sahlins 1972:302-8). ‘Good measure’, that is, giving sufficient amount so as to obviate any suspicion that a transaction is inequitable, develops trust, and the good terms of the transaction entice future transactions. Giving more than is required could also be seen as creating indebtedness that is repayed through continuation of the relationship through further transactions (Sahlins 1972:297-308). A customer is of course likely to prefer a greater return for money spent, and this creates the desire to return, but an obligation may also exist. Vendors are explicit about the obligation they perceive to exist and are at times quite direct in telling their customers of their expectations. By giving extra vendors are also recognising the existence of a relationship and, conversely, not giving extra is tantamount to the denial of any relationship. Betel people are acutely aware of the effect that the way a transaction occurs has on the meaning conveyed in that exchange.

Qualitatively distinct relationships are also marked in other ways. It is common for customers who possess a particularly close relationship with a vendor to approach the vendor from behind or the side, rather than from in front as most customers would do. Maclean’s (1989:88) account of a small marketplace similarly highlights how different forms of transactions may be distinguished within the same social setting. Marketplace vendors sold food but they also gifted it amongst themselves. Women seeking to make a gift to another vendor, he notes, approached the vendor from behind, whereas cash transactions were done from in front. The physical conduct of the customers of

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26 Gudeman (2008:57) understands similar actions to ensure that a fair transaction has occurred, that is the objects transacted being commensurate with each other, something he likens to the baker’s dozen.
vendors thus also highlights the greater familiarity between transactors which underlie the use of gifting in the marketplace.

Such exchanges may also be viewed in relation to M. Strathern’s (1992) observations on substitution and value which, although focused on gift exchange, she says has relevance to barter and marketplace transactions (cf. Hirsch 2007:86). She suggests that the important feature of exchange is that the two items are substitutable – that is, that the social relations that produced one item may be displaced by the social relations that produced another. This is in contrast to viewing exchange as being based on equivalence – that is, a calculation of the relative worth of one item as opposed to that of another item (money:betel nut), whether worth be determined in relation to labour, utility or some other measure (see Godelier 1977; Gewertz 1983; Modjeska 1985). It is substitutability, M. Strathern, contends, that leads Melanesian people to conceive of exchanges in one-for-one form (e.g. one pig for one shell), even where multiple items are exchanged (e.g. one unit of fish for one unit of sago), such that when betel nut is sold in bundles ‘[w]hat is exchanged is one “unit” of betelnut for one “unit” of money’ (Hirsch 2007:86).

Since the ‘unit’ of money is fixed, price hinges upon the size of the bundle, and in this respect Melanesian marketplace vendors have often been seen as unresponsive, at least in the short term, to changes in supply and demand (Brookfield 1969b; Epstein 1982; cf. Modjeska 1985). From this M. Strathern (1992:186) suggests that when marketplace (vegetable) vendors refuse to haggle and to increase the size of their bundles, instead preferring to throw produce away or take it home, that this might reflect a reluctance to accept what they perceive to be inappropriate matches (not substitutable). It is social relations that determine whether two items are substitutable for each other. This, M. Strathern highlights, is considered in relation to the social relationships responsible for the items production (‘origins’) and those responsible for its extraction.

These early characterisations of Melanesian marketplace vendors are no longer adequate particularly for betel nut vendors: betel nut vendors do haggle and increase the size of their bundles. I suspect this, at least in part, highlights a specific difference between produce which is one’s own and that which has been purchased with the purpose of reselling it. For Hagen vendors, betel nut is without the same ‘origins’ as home grown produce. There is little to be gained from holding onto purchased betel nut; its value lies in its exchange.

Despite this, I argue that substitution continues to be seen as important by vendors. Betel nut resold has an equivalent monetary value, that is, the displayed bundle or what was referred to above
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as ‘mak bilong K2’. Anyone, irrespective of their social relationships, may walk into a betel nut marketplace, hand over K2 and come away with a handful of betel nuts, but the transaction must also be substitutable, and this is where the giving of extra is important. The amount of betel nut that is substitutable for K2 differs based on the specificities of the relationship between transactors, such that 10 nuts may be appropriate for a stranger, 12 nuts (10 + 2) for a regular customer and 14 (10 + 4) nuts for a family member. As M. Strathern (1992:188) highlights, substitutability is not premised on social equality (cf. Modjeska 1985). The customer’s evaluation of quantity and quality is important in eliciting the transaction although quantity and quality are also an outcome, factored upon social relations.

By separating the two components of the transaction (purchase and ‘extra’), vendors can also be seen to be reinforcing, if only momentarily, a distinction between commodity and gift. Each part of the transaction is seen to have a distinct purpose. But at the same time they break down barriers about what a transaction in the marketplace can be and what it may do. Once given, ‘extra’ becomes part of the overall purchase. It is resold (alienable) in the same way, the customer making no distinction from the other betel nut purchased. Nonetheless it is an important part of the transaction.

M. Strathern (1992:183-186) similarly highlights the distinction drawn in Hagen between a pair or a match, and extra. *Moka* exchanges have two parts, the first repays or matches a previous debt, the second is considered extra (or ’on top’), and is the component which confers prestige (also A. Strathern 1971a, 1977). Giving extra betel nut does not confer prestige, but it does constitute a qualitatively different component of the transaction, and just as the extra in *moka*, it induces further transactions. Unlike *moka*, however, the transactions are not reversed. Betel nut always flows in one direction (vendor to customer) and money in the opposite direction (customer to vendor), so that when extra is given the customer always remains in some way indebted to the vendor; although this is not to deny the vendor’s dependency upon the customer.

It is noteworthy that vendors also give samples (*piksa*, literally picture or example) to customers in an attempt to attract them into a transaction. They call out or hiss, *sst*, to potential customers walking by and extend their arm with a *piksa* for the perusing customer to inspect. These *piksa* are often displayed, with half of their husks removed, on top of a ‘group’ before they are given out. It frustrates vendors if people accept these with no intention of buying and vendors will often call for the person to return the sample. If the *piksa* is of good quality then there is an expectation by the vendor that a transaction will follow but if the sample is of poor quality no obligation exists.
Gift exchanges also have a broader role within the trade. Producers, for example, also give hospitality to traders, and they give betel nut to cultivate these relationships. Mary, the Turubu producer and host mentioned earlier, described:

‘We sell him five bags and five we give him free ... I give for free because I want to make friends with them, it is the way to get friends. [The traders] will look at how we act and they will say “I have good friends there, I will go and stay with them.”’

Gifting is an everyday part of the trade. All betel people seek to create bonds with other people in the marketplace through giving small amounts of betel nut to them to chew, or giving a cigarette. They do this with lots of people, friends as well as strangers. One trader, Robert, explained: ‘if you are a person who gives betel nut to people ... one day you will be in a marketplace and a man who you gave to will recognise you. [He will say] “okay, you saved me with betel nut, now I will save you.”’ Another trader, Sine, continued that if you are the type of ‘man who “saves” young men with a cigarette, betel nut or a drink of Coke’ then if you are held up by raskols or have some other trouble ‘these save fes men will save me and my money’. Martyn Namarong (2011b), a medical school drop out cum street vendor and internet blogger, makes a similar observation: ‘Betel nut and cigarettes are the currency for gaining social capital. When you buy a betel nut or cigarette from the street vendors or for a street boy, you have gained a friend who will watch your back.’ In the marketplace betel people do not only transact in utilitarian ways, they transact in particular ways that create relationships. They cultivate relationships for their own sake but they also do so pragmatically in ways that assist them to trade.

CONCLUSION

Relationships between those in the betel nut trade are formed primarily for the purposes of trade, for ‘[t]raders do not meet to exchange compliments, but to exchange commodities’ (Gell 1992:159). Traders do not trade in search of friendship. Those friendships that do form between producers and traders, and amongst other actors, would not usually be maintained were trading relations to cease. But while trade continues, it should not be assumed that these relationships are limited to a utilitarian trade focus. Interests in trade do not automatically displace other values attached to relationships. Trade relations regularly overflow the market as much as mutuality factors in the creation of the market (Gudeman 2008). Betel nut trading occurs both within and outside of friendship (cf. A. Strathern and Stewart 2000:23-25), something that clearly emerges in the discussion of trade interactions in the following chapter. This chapter has highlighted those trade
interactions within friendship because they confound assumptions so often made about the nature of trade relationships.

This chapter has argued that trade has the capacity to contribute to a whole gamut of relations and may be productive of both kinship and friendship. The commercial transactions within the betel nut trade often represent only one facet of a much more diverse social relationship between transactors. Trade interactions often occur within a context of other exchange relations that originate beyond the trade. Friends and kin are not only created through people's participation in the trade but also relations between friends and kin may be maintained and reaffirmed through commodity exchange (Curry 2005). Relationships may, out of pragmatism, be fostered and maintained for the purpose of trade, but equally relationships that involve trade may be maintained for their own sake.

In relation to ‘customary’ trade in PNG, Healey (1990:315) has argued that ‘trade is not simply a utilitarian pursuit but one that allows individuals to make qualitative statements about social relationships’. I argue that this is also true of trade in the marketplaces of contemporary PNG. Betel people routinely give ‘extra’, reduce prices and occasionally offer credit, as a means to make comment on the nature of their relationships. The actions of betel people highlight the entangling of different modes of exchange, including those which approximate both the ‘commodity’ and the ‘gift’. I have argued that commercial transactions surrounding betel nut are regularly used to foster and maintain a wide variety of relationships, including those between the closest of kin. Betel people have negotiated this by making changes to the forms of exchanges, for instance, by incorporating into their transactions features common to more socially intimate relations. But they have also done so by understanding their transactions through place-based ideas of exchange and sociality (Mosko 1999:60-61), and in such contexts it is possible for the transactions to appear no different to a utilitarian commodity transaction; for a person buying betel nut it may be simply the choice to buy essentially the same commodity for the same price from a friend rather than from a stranger. For this to continue, however, a significant portion of the money attained through trade needs to be fed back into other socially reproductive activities. In this way buying from kin need not be rendered socially destructive, but can provide a means to express group solidarity and to maintain one's support networks. At least in Hagen, to choose to buy from non-kin over kin is likely to be more socially destructive. In many respects it is not the transaction per se, or the profits accumulated, that are contentious, rather it is how the money attained through these transactions is later distributed that is significant.
Chapter Seven

This is not to refute the changing social relations, and often negative impacts, brought about by the expansion of new forms of exchange, nor to argue that relations created through trade be undifferentiated from other forms of relations created through other means of exchange. Rather my concern is to emphasise the potentially socially generative nature of trade transactions, and the capacity for trade to sustain diverse social relationships. This is more likely in those societies in which bisnis is closely married to other aspects of sociality (Foster 1995). Just as money’s incorporation into exchange does not automatically collapse distinctions between different spheres of exchange, and make such exchanges any less social (Akin and Robbins 1999), marketplace exchange and trade need not necessarily undermine sociality.

In contemporary PNG, where people’s social networks are expanding spatially and people are becoming connected to others in new ways, the betel nut trade provides a context in which people may build relationships. Just as pre-colonial trade provided ‘a context for the construction of ties of kinship in distant regions, so incorporating partners into a wider moral order’ (Healey 1985:141), in the contemporary context the betel nut trade binds distant others into both a material and moral economy.
Chapter 8

The place of traders in the making of a Melanesian market

INTRODUCTION

‘Markets’ are laden with economic assumptions about how they function and how they should function, the types of transactions that occur, the relationships between market participants and how these participants behave and make decisions. But these assumptions often do not match the conduct of trade in ‘real markets’ (Benediktsson 2002). Markets are global phenomena but they are also always manifest at the local level in particular places. ‘Place-based’ (Curry 2005:233) ideas about exchange and sociality create local markets and shape the interactions between market participants. In a world in which development is increasingly being pursued through markets and trade, understanding the local influences of culture and sociality on the construction of markets is central to good development outcomes. For the disadvantaged to be included rather than excluded from market-led development processes, development must proceed with detailed local understandings of the dynamics of trade and of the nature of the interactions between people who trade for their livelihoods. It is in this context that I examine the conduct of trade interactions in the contemporary betel nut trade in PNG.

The complex networks of betel people are comprised of both vertical and horizontal interactions. Vertical interactions, those relationships between buyers and sellers (Figure 6), and horizontal interactions, those between actors in similar market positions are closely interconnected. These interactions are not mutually exclusive. Interactions between producers and traders are also shaped by relations amongst traders, and relations amongst producers.
Chapter Eight

The efflorescence of intermediaries in the betel nut trade means the interactions amongst betel people are both numerous and diverse. Here I focus on the highland wholesale traders (baias), and the vertical and horizontal relationships in which they engage. The focus on traders is due to their prominent role in the trade and because they best highlight the changes and innovations that now characterise PNG marketplaces and marketing practices; most notably the operation of intermediaries and the rise of more competitive market practices. Although focused on the social construction of one particular part of the betel nut trade, this is a part crucial to shaping the trade as a whole and I believe the processes observed here are indicative of those that occur in other sections of the trade.

I thus attend to three broad questions: What is the nature of those 'horizontal' relationships amongst traders? What is the nature of those 'vertical' relationships between traders and those with whom they buy (producers) and sell (marketplace vendors)? Lastly, what is the interaction between these vertical and horizontal relationships? That is, how do the relationships amongst traders shape their interactions with producers and vendors, and conversely how do traders' relationships with producers and vendors influence their interactions with other traders?

Examining the 'place-based' making of the betel nut trade entails studying those 'communal agreements ... shared languages, mutual ways of interacting, and implicit understandings' that pervade all trade systems (Gudeman 2001:11). Communal agreements and norms in one respect outline principles about how traders should behave, but they also present opportunities to exploit. When there is an expectation for people to act in a particular way, there can be considerable advantage but also risk in acting otherwise.

Trade interactions are complex and there are inevitable contradictions in the behaviour of different actors, tensions that are inherent within economy more broadly, and which are brought to the fore in framings that contrast, but also confound, market and mutuality (Gudeman 2001; 2008), *bisnis* and *kastam* (Foster 1995; cf. Mosko 1999), gift and commodity (Gregory 1982; Carrier 1995). Betel people, traders best of all, constantly manoeuvre in relation to one another. They manoeuvre so as to gain most advantage from the market conditions presented to them and they strategically nurture the social networks that enable them to operate in, and manipulate, the market. The dynamics of space and place are central to shaping these interactions.

This chapter is initially framed by the relationships amongst traders, which provide the context for the subsequent examination of their interactions with producers and vendors. These interactions
are lastly analysed in relation to explanations of the conduct of exchange in ‘traditional’ trade and in early PNG marketplaces.

**BETEL NUT TRADERS: COMPANIONS AND RIVALS**

Betel nut traders are the main drivers of the trade, and their relationships with one another are critical to shaping the trade as a whole – I focus here on the horizontal relationships between traders rather than the hierarchical principal-agent relationships between *bev baias* and their workers. Traders come from throughout the highlands, but it is the Hageners who are most dominant. Hageners, due at least in part to the prominence of Kaiwei in the highland trade, are the most prominent traders present in the lowland marketplaces and production areas, both in the number of individuals present and in terms of the scale at which they trade.1 This heavily male-dominated collectivity travel together and to the same places and in this context a loosely-bound fraternity has emerged within which there is both a strong expectation that they will support one another, and considerable rivalry (cf. Gell 1992:158). The interaction between competition and cooperation is an important feature of all markets, but, due to the dominance of Hagen traders, I first briefly ground the ideas of competition and cooperation in Hagen sociality, before further exploring the relationships amongst Hagen’s betel nut traders.

Competition for prestige is an important dynamic of Hagen sociality and has long been the ‘motor of history’ there (Stewart and A. Strathern 2005:132). In the past, *moka* gift exchanges provided a key context in which prominent men (big men) vied for prestige by amassing and redistributing wealth (pigs and shells) (A. Strathern 1971a). Big men gained renown from the indebtedness the exchanges created, but also through demonstrating their efficacy; their ability to influence large numbers of supporters, and to coordinate and have ‘pull’ on networks of exchange. In contrast, to be without effective relations, influence and wealth was to be ‘rubbish’. These ideas were readily transferred into new contexts, and entrepreneurship (*bisnis*) became an important arena for this competition (A. Strathern 1972a; Ketan 2004).2 *Bisnis* reinforced the idealised role of males in Hagen as ‘transactors’ (M. Strathern 1972b) and offered a new way for Hagen men to demonstrate their efficacy.3 By establishing a large coffee block, acquiring a tradestore or a vehicle, and more recently, being a successful betel nut trader, a man could show his ability to attract the support of

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1 A Simbu man who trades out of Goroka explained: ‘Hageners usually carry over K5000, K10,000, K15,000 ... because [people from] three provinces buy wholesale in Hagen ... Us from Goroka [we carry] less than K3000, sometimes when betel nut is really short we carry K4000 or K5000.’

2 In Hagen the biggest arena of all is now state politics, which has become closely associated with business (Ketan 2004).

3 Men’s role as ‘transactors’ contrasts with women’s idealised role as ‘producers’ and as a ‘road for valuables’ (M. Strathern 1972b).
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others in his pursuits. *Bisnis* also provided a source of money to be invested into competitive gift exchanges such as *moka*, and following its decline in the 1990s, compensation and bridewealth payments (A. Strathern 1979a; Stewart and Strathern 2005:125).

This competition is nevertheless underpinned by cooperation and support. It occurs within a context in which people conceive of themselves as comprised of their relationships with others (M. Strathern 1988). It is these social relations that compel traders, and other entrepreneurs, to behave in particular ways, and which heighten the animosity and aggrievement felt by others when they do not (cf. A. Strathern 1972a, 1972b; M. Strathern 1999; Martin 2007). They also provide the basis for a highly contextual and relational morality. As Read (1955:260) commented of another highland group, ‘moral obligations are primarily contingent on the social positioning of individuals’, that is, on particularistic relationships with others. In Hagen the clan group and its lower segmentary divisions are the most important groupings in terms of political and social action, and where solidarity and cooperation is greatest, however the clan is also an important locus of competition (A. Strathern 1971:15-36; M. Strathern 1972b:6-12). In both gift exchange and *bisnis* there is pressure to cooperate with and support one’s clansmen so as to out compete other groups, yet at the same time within the clan numerous men may vie for eminence. I argue that a similar interplay, between the social pressure to conform and cooperate yet to also compete, is observable in the relationships amongst Hagen’s betel nut traders.

Hagen’s betel nut traders are connected to one another in diverse ways. The clan and tribe affiliations that are central to social action and identity in Hagen are important reference points for traders; they indicate which other traders are more or less likely to be trustworthy, however the alliances amongst traders extend well beyond these social groupings. Traders are mostly known to one another, sometimes in enduring relations of kinship and friendship but often only as *save fes* (known faces). They identify with one another as Hageners and as traders (cf. M. Strathern 1975). As discussed in Chapter 7, trade can provide a context for expressions of sociality more commonly associated with kinship and friendship (Healey 1990:349; A. Strathern and Stewart 2000:21-41). Amongst traders it is particularly as travelling companions, fellow travellers and as familiar people in foreign places, that social solidarity and trust may be expressed. Kin (and friends) express these qualities – including through sharing, and cooperation in work, exchange and conflict – but equally it is the existence of these qualities that creates kinship (Robbins and Akin 1999).

When traders travel together (*raun wantaim*) they share food, transport, resources and information, sleep in the same places, fight alongside each other, ensure one another’s safety, work together and
cooperate in the marketplace, and through doing so trust and solidarity are developed. Traders often see these aspects of their relationships as the basis for the moral expectations that they have of one another; so that just as friends in Hagen are said to ‘go around together’, it follows that those who travel together are friends (A. Strathern and Stewart 2000:25). Friendships in Hagen are often expressed in idioms of kinship (A. Strathern and Stewart 2000:21-41; cf. Healey 1990), and traders similarly frame their relationships in this way; often expressing the sentiment that they should travel as if they were brothers, and are thus compelled to show solidarity. But the rendering of fellow traders as brothers is not a romanticised idea of trader mutuality, for in Hagen ‘brothers’ (clansmen) should be supportive but they are also said to be jealous of each other (A. Strathern 1971a:26). Traders, like clansmen, are both companions and rivals; people from whom both cooperation and competition is expected.

Traders cooperate and collude with one another, but at the same time they recognise the context of their interactions, a market, and each of their interests in attaining and benefiting from trading ‘green gold’. While traders do compete (resi) with each other it is felt they should do so with regard to their fellow traders. This does not, however, constitute a generalised morality that encompasses all traders; rather their obligations to one another are contextual and relationally particular. As in any social group, the relationships amongst traders are comprised of diverse associations of variable intensity and durability. Traders thus routinely interact with some traders with whom they possess considerable solidarity and friendship, and with others for whom they hold no particular affection or obligation. This shapes the dynamics of cooperation and competition amongst traders. It is important to recognise that instances of cooperation amongst one group of traders may at the same time present itself as competition with another group of traders. Amongst traders these group boundaries are often unstable. The following highlights some of the different dimensions of the co-present rivalry and camaraderie that exists within the collectivity of traders, in particular the different motivations, expectations, tensions and negotiations that occur within the trade.

**Competition, cooperation, collusion and sanctions**

It is when traders are travelling and buying in the lowlands that they most clearly emerge as a group. Traders, particularly those who trade in the same area, regularly cooperate with each other, and there is pressure upon traders to act with a level of solidarity, to share information and be honest with one another. Mark explained:

> When I come down river and I meet other traders who buy in the same village I tell them the price I paid: ‘you must follow this price or reduce it, don’t increase it’ ... I
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speak truthfully [with other traders] because we buy in the same village. When I have a need, like if I am short of fuel or money, then they help me. When they are short I will help them, so we must be honest in our work. When we come to sell we sell in the same place, then afterwards we will travel as brothers. Whatever troubles we meet, we meet together.

Acting in such a way also promotes friendships and obligations and becomes the basis for trust. All traders have an interest in suppressing rises in buying prices and in preventing other traders venturing into the area from accidentally paying too much and establishing higher expectations amongst producers. Traders also often try to avoid competing with each other on buying price in the lowland marketplaces where, instead of competitively bidding against one another, typically one trader will be allowed to negotiate with a producer and only if negotiations are abandoned will another trader try his luck.

Traders also cooperate on setting the selling price in the highland marketplaces. The expectations for traders to cooperate when selling are most explicit when traders have worked together when purchasing in the lowlands. Lewis, a Hagen hevi baia, commented:

We came on the same trip, the expenses involved were the same so we have to get the same price. It will be bad if some people get less, because if you give a lower price then all the customers will come to you ... it is not allowed because we as a group have to sell at the same price.

Lewis’ comments refer to a buying trip to Popondetta in which there had been considerable coordination and assistance between him and two other hevi baias. They had shared transport and accommodation, and assisted each other with labour and other resources over a week, and had worked together to keep the price low (discussed below). These three hevi baias had also worked together intermittently over several years.

Even when traders have not collaborated in buying they will still often consider other traders when determining the price. Supply and demand are of course important considerations, but all traders also have a vested interest in avoiding a selling war and will therefore price their betel nut so as to not prevent other traders from also being able to make a profit. Jack, a small betel pepper trader, explained:

Before I sell my [betel pepper] baskets, I keep an eye out and look around. It wouldn’t be good if they put their price at K70 and I put my price higher at K90 or K80 so
[customers] won’t buy my baskets. Or it wouldn’t be good if they marked theirs at K40 and I came down lower to K30 or K20 and they wouldn’t be able to sell their baskets. So we assess it and together we set one price that others can buy at.

But within a market there is of course an incentive to act in terms of individual interest, which may or may not align with the interests of traders at large.

Trader interactions can also be intensely competitive; ‘a survival of the fittest’ one trader explained. Traders ‘race’ (resi) to secure supply; throwing themselves into the water to meet the arriving betel nut and betel pepper boats in a bid to reserve the load, even though, as highlanders, they can barely swim and are terrified by crocodiles. Such is the competition to get betel nut. In these situations smaller traders will often ally themselves to out manoeuvre a hevi baia, and make space for themselves in the market. Information is hidden from rival traders and at times deliberately misleading information is given. Traders also compete on price in both their buying and selling markets. They may increase the price they pay in the lowland marketplaces to push out other prospective buyers. In the highlands marketplaces they will drop their price to ensure a faster sale. Traders may also try and poach supply from other traders by ruining an agreement between producers and the other traders by offering to pay more. It is not that traders behave in contradictory ways but their actions are shaped by the market dynamics and their particular relationships with those other traders present. Trading can provide the context for people to work together, develop trust and goodwill towards one another but for traders who do not have such a basis for their relationship there is less compulsion to act in each other’s interests.

The impact of competition is particularly evident in relation to securing transport. One hevi baia, Lewis, described how the competition amongst traders led to an escalation of the charter rates for a medium sized fishing boat, Lucy II, to do a return trip between Lae and Popondetta:

We were giving the owner K5000 at the start ... Then others saw that I was bringing betel nut and they went and enquired. ‘How much is Lewis giving?’, the owner: ‘K5000’, the trader: ‘I will give K5500. Get my name on the list.’ Because there was only one vessel that was taking betel nut and many traders, there was considerable demand for Lucy. The prices gradually increased from K5000 to K15,000.

When this occurred Lewis found another boat to make the trip however he soon faced the same problem. Traders reflect that this must be expected within a market; they recognise that all traders are attempting to create space for themselves and this may entail competition, nevertheless, traders do become frustrated and disputes are frequent.
This is evident in the pressure traders place on each other, when buying in the lowlands, not to agree to pay a higher price in order to obtain a purchase. When traders increase prices without regard to the interests of other traders, frustration and conflicts arise. Traders are quick to sanction any trader who acts to the detriment of the broader group’s interests. One trader, Ben, emphasised that traders should work together and should act as equals and in consideration of others:

When we are on the road, or we see a trader, we tell them to buy around a certain price. There can’t be someone who buys at a different price. If a man buys at another price then a group of traders will get together, approach him and ask: ‘Why did you buy at that price? How much money do you have? What is the colour of your money? We have the same type of money as you! Where do you think you sleep? Do you think you have descended from the sky to buy? What kind of house do you sleep in? You sleep in the same kind of house as us, we are at the same level! You must follow what we say, you must be empathetic. We have also risked our lives to come; we have travelled a long way.’

Sometimes altercations between traders can become violent. A trader from Hagen gave this account:

I hit a man from Wabag at Base Camp. I had gone down and bought for K70 [per bag], returned to Hagen sold out and returned on a second trip. People were buying for K60 and some for K70. Those from Wabag and Tambul who intend to sell at Porgera, they have wealthy people to sell to. They had bought for K130 ... ‘Only yesterday I paid K70. You have increased the price hey!’ I was angry so I hit a Wabag trader ... Their vehicle was loaded and they were ready to leave. I got a large coconut log and blocked their way. I told them ‘give me K200 and your vehicle can pass, if not the vehicle and the betel nut will stay here.’

The failure of traders to consider the thoughts and feelings of other traders is one of the most common causes of conflict, nevertheless traders, particularly bevi baias, frequently act without reference to others if they think they can get away with it (cf. M. Strathern 1985:125). There is an obvious tension between the smaller traders and the bevi baias who by virtue of size are able to ignore some of the behavioural boundaries that constrain others. For example, Nathan, renowned as a bevi baia, moni man (literally, money man), and a price leader in the betel pepper trade, is accused

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4 Base Camp (near Bogia) is a key transit point and wholesale location for betel nut coming out of the middle Ramu, Madang Province. Wabag is in Enga Province, and Tambul is in the Western Highlands close to the border with Enga. Porgera, in Enga Province, is the site of a large gold mine and as a result is a particularly lucrative market for selling betel nut (Map 1).
The place of traders in the making of a Melanesian market

by other traders of regularly using his cash resources to pay higher prices to remove competition by smaller traders who cannot match what he pays. As a result he achieves a near monopoly. A small trader explained: ‘If [Nathan] hears that we are buying for K40 a basket, he will offer K60’. The smaller trader exclaimed, ‘em i no givim spes long mipele’ (literally, he doesn’t give space to us – there is no room in the market for us). That larger traders are not letting smaller traders into the market is a common complaint. Another trader grizzled: ‘[Hevi baias] block us. If we are coming by boat or dinghy, they can hire a ship ... they do not worry about money. They can pay twice as much and still make money ... They have ruined the market.’ Larger traders may be able to ignore moral boundaries but smaller traders lack the economic and political muscle to do similarly or to sanction them. Clearly traders do not always act cooperatively and in each other’s interests, but acting individually to the detriment of other traders, if discovered, does have consequences.

The safe-keeping of others

The solidarity amongst traders is not simply about managing prices and reducing transaction costs. In PNG travelling with large amounts of money, and being known to do so, as betel nut traders do, is a risky undertaking. Criminals (raskoks) are a significant concern for betel nut traders, and many have horrific tales and scars to prove it. Traders thus rely on other traders for support and protection, and in distant marketplaces even relatively weak social ties may become important associations. It is when traders are away from home, and therefore at most risk, that they are under the greatest pressure to consider other traders in their actions and in particular to look out for one another’s safety.

In relation to another highland society, Sillitoe and Kuwimb (2010) describe: ‘When people are together, perhaps as travelers, they are expected to look out for one another’s welfare; if one suffers a serious injury or is killed, the others are held responsible and are expected to compensate the unfortunate’s kin’. Traders from Hagen felt that as ‘brothers’ they should meet troubles together, something they said distinguished them from others. While others, they said, will think of self preservation, Hageners will ‘fight and die together’. To ‘fight’ and ‘die’ is productive and reinforcing of broader social and trading alliances. To not do so can place stress on these same relations, as the following story highlights.

In early 2008 two traders, James and Colin, travelled to Madang Province together in search of betel nut. James and Colin’s relationship was amiable without being particularly close. They belonged to different clans, with adjacent territories, of the Mokei Depi tribe section. As is common amongst traders, they traded independently but travelled together. On the return trip they
reached Young Creek on the Highlands Highway just before it steeply ascends into the highlands. Here Colin decided to leave James and to return to Madang to buy more betel nut. James, who was driving his own vehicle, continued into the highlands alone. While passing through the Eastern Highlands James’ car left the road and he was killed. Some say it was the result of a raskol hold up, others suggest the outcome of alcohol and fatigue. Both have claimed the lives of many traders.

Following James’ death suspicion fell upon Colin. People questioned; why had he left the vehicle at Young Creek? Was foul play involved? It was a common sentiment that they should have travelled together and supported one another. James’ relatives demanded compensation from Colin’s group. Colin’s group paid K3000 to James’ wife, but denied culpability. This was not considered sufficient by James’ kin who believed he had a greater level of responsibility to look out for his travel companion. In response Colin’s family gave an additional K1000, this time enclosed in a bible, an indication that Colin was being honest and had no part in James’ death. This was accepted by James’ wife, Bettie, who is said to have slept with the bible under her pillow. While suspicion remained, it was considered that God would pass judgement on Colin’s honesty. Later that year Colin was bringing a boat load of betel nut back from the East Sepik when his boat capsized. Colin drowned. For some this indicated a connection between Colin and James’ death. This event reinforces the broader implications for traders if they fail to meet the social expectations of how they should act towards one another as fellow traders and as travelling companions.

**Not being ‘rubbish’ and ‘burning money’**

Betel nut traders echoed the concern for both monetary profit as well as social status that is imbued in Hagen conceptions of *bisnis*, an ideology within which betel nut trading has been encompassed. Thomas, a betel nut trader, who also aspired to raise his status in local politics, explained: ‘If a man has a small business … a man is successful; others think they must emulate his success. [They think to themselves] If I remain a man of no account his success will humiliate me’. Another trader, Ben, explicitly connected this to the expansion and success of Hagen businesses throughout PNG: ‘if a Hagener sees another Hagener with a big *bisnis*, he will think to himself, “I am as good as him, but he has beaten me ... he has done this so I must do the same” ... They compete. In this way Hageners have started their own businesses’. Hageners are indeed said to ‘copycat’.

Betel nut traders directly compare their own success in relation to other traders, not wanting to be out done by them. Thomas, a betel nut trader, explained:

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5 Finney (1973:83) similarly refers to ‘imitative innovators’.  

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If a man starts trading betel nut, and has only a small amount of money, like if he is carrying K3000, K2000 or K4000 and he buys 20 bags, 10 bags or 15 bags. If he sees another trader travelling and buying lots, he will feel ashamed. [He will think to himself], ‘I am only buying a small amount and this bugger is carrying lots of money and buying lots. I too must think the same way, make lots of money and buy at the same level he is buying. If he is buying 50 bags, I must get 50 bags.’

As in the pursuit of moka, to be seen to be inferior is shameful. Amongst traders this is not a desire for equality, or even prestige; rather, it is the desire to not be underneath anyone, to not be ‘rubbish’. It is also not simply about what another trader has accumulated, but instead it is to show oneself as equally efficacious. Accumulation may be one aspect of this. To an extent, trading success in itself can be proof of one’s mettle, and a trader may achieve a reputation as a prominent market actor, but traders primarily see this as a rivalry amongst those at their own level. Only for a few does it amount to a pursuit of prestige on a broader stage. These concerns about status held by traders have contributed to driving the trade but they have also at times manifested in negative ways.

Traders occasionally act maliciously in their attempts to gain the upper hand in contests with other traders. They go beyond what is considered socially acceptable competition between traders and out of jealousy deliberately set about ‘burning’ the money (paiaim moii) of other traders. In this way traders, rather than growing their own trading activities to make themselves commensurate with another trader, seek to make other traders commensurate with themselves. One trader explained: ‘a trader will see another making a lot of money ... one time they arrive the trader will think “you behave like this and you get more money. I must devise a way to make you lose your money”’ – This is referred to as jelas pasin or jelas resi (literally, jealous behaviour or jealous competition).

Traders spoke with a glint in their eye of ways in which they might impede another trader’s passage back to Hagen and how they might ‘burn’ his money and along with it his name. One trader reported paying security staff at the Oro Bay wharf to prevent his competitor entering the wharf area until the ship, upon which his competitor had wanted to travel, had departed. The trader, left behind, had no other way to transport his betel nut to Hagen, and in the end his betel nut was left to rot. Traders also bribe police officers to stop and search other vehicles transporting betel nut, to either delay them so that they miss their ship or to delay their arrival at Kaiwei: ‘We bribe them with some money and tell them, “this vehicle coming afterwards, you must check it. The driver doesn’t have a license or he is overloaded with betel nut. Charge him.”’ Police are more likely to act upon such infringements, and detain a vehicle, if a trader has persuaded them to do so. Arriving in the
marketplace first gives traders a greater chance of selling for a higher price. Conversely, traders who arrive later typically receive lower prices due to the tendency for prices to decrease throughout the day. Some level of trickery is expected but this form of behaviour is considered particularly malicious and is the source of conflict if discovered.

But, as M. Strathern (1985:125) has observed, in Hagen conflict does not impinge on a cultural ideal of peaceful relations, rather it provides a means by which people can demonstrate power and efficacy. Traders may in this way show they are able to outwit another trader, and that they have the requisite social relationships to do so. They can show themselves to be someone with significant clout within the market, or at least someone who is not ‘rubbish’. That said, conflict does have the potential to ‘disturb’ the operation of the market.

One means for resolving conflict, including between traders, is through the ‘committee’ at Kaiwei, established by the main marketplace owner and comprised of four respected men belonging to his clan. This committee is responsible for mediating any disagreements that arise between marketplace goers and for maintaining general good behaviour in the marketplace. The committee may convene to consider a case but more often disputes are mediated on the spot on a more informal basis before they escalate. The committee can recommend compensatory payments be made or trading bans imposed, but its primary role is mediation rather than judgement. The underlying motivation for the committee is to contain conflict so as not to disrupt trading.

Trader interactions are thus characterised by a complex interplay of rivalry and companionship. The idea that traders should cooperate with one another is strongest while they are away from Hagen, and in this context even relatively weak associations may become important. But once traders have returned to Hagen to sell, and no longer depend on each other for protection and to achieve shared objectives, other social relationships including their clan become more meaningful referents. Nevertheless there may still be considerable advantage for traders to continue to work together. Traders also know that there may be a point in the future that they will need each other's support and traders are therefore inclined to maintain at least cordial relations with one another. The collective of traders recalls the dynamics of intra-clan relations where in external relations (in this case trading away from home) there is pressure and advantage to presenting group unity, however internally there may be considerable disunity. So although cooperation is common, it only extends so far. The strong spirit of competition among Hagen men tends to make alliances ephemeral. For traders to make money they must ‘find gaps’ (painim gap), or opportunities in the market, and it is often through breaching particular social expectations that they etch out these spaces.
A. Strathern (1971a:220-1) argues that the expansion of social networks both sets the Hagen big man free, enabling him to exchange at a larger scale and to become an even bigger big man, but he also highlights that these networks make political relations inherently unstable. The same is true of Hagen’s betel nut traders. Betel nut traders’ expanded social networks enable them to trade in distant locations, and to exert a high degree of influence in these spaces, but these relationships are only a tenuous basis for trust. It is within this context that the transactions between traders and their suppliers and customers must be considered.

**BETEL NUT TRADERS AND PRODUCERS**

Relations between traders and producers are diverse. In some circumstances interactions are tense and heated, marked by distrust and animosity, whereas in other contexts they can be amiable and friendly and based on hospitality and trust (Chapter 7). The great majority of the time relations between traders and producers are amicable, characterised by some negotiation over price, a healthy degree of suspicion towards one another and mutual recognition that they are all betel people. Producers and traders freely enter into transactions with one another, and actively seek each other out. They complain about one another; the traders mostly about the low quality betel nut or pepper they are sold and that the producers do not understand the risks traders take, and producers about low prices and the highlanders’ bargaining tactics. But all relations, even those in which amity prevails, are based upon power asymmetries. Buying interactions occur in two types of locations; the lowland marketplaces, and the village production areas (Chapter 5). This is not only an important spatial distinction but is also central to the nature of those relationships exhibited.

**Traders and producers: bargaining and collusion in the lowland betel nut marketplaces**

The lowland betel nut marketplaces are lively sites of commerce and sociality. Transactions are in most cases impersonal and bargaining is the norm. Bargaining can be passive – traders make an offer and the producers can take it or leave it – or it may be heated and involve verbal altercations, and on occasions producers may be forced to receive less than they were willing to.

When bunches of betel nut are being purchased traders may negotiate with a single producer for several bunches at the same time. Negotiations are done quickly to confuse the producers who are less practiced in arithmetic. Flashing their money to entice the producers, traders may also resort to

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6 In this discussion I am also concerned with lowland transit points such as Boroi, Base Camp and Kubugam, in addition to the lowland urban marketplaces (see Table 15).
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persistent hard bargaining (Plate 27). The following negotiations occurred between a male trader from Hagen and a female producer-seller in Wewak’s Dagua marketplace. Commonly, friends, family and onlookers become involved in the negotiations. The liveliest exchanges may draw a small crowd.

Highland trader: How much?
Producer-seller: K15.
Highland trader: I will give K10.
Producer-seller: K10 no, K15.
Highland trader: And I said I will give K10.
Producer-seller: You cannot take it for whatever you want.
Producer-seller’s son: Buy it [at K15] and take it.
Highland trader: Shut your mouth, you are too small.
Lowland (male) onlooker: Forget it, another trader will buy it.

But the trader persisted and in the end he got his price, although not without being verbally lambasted by the producer-seller.

Plate 27: Traders buying bunches of betel nut from producer-vendors in Wewak’s Dagua marketplace (East Sepik), September 2007.

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7 Dagua marketplace, located on Dagua Road in Wewak, is Wewak’s second largest marketplace. In 2007 it was busiest on Sunday and Monday when the main marketplace was closed.
8 Female producer-sellers are often accompanied to the marketplace by male kin for safety (see Beer 2008:101).
Producers in all the lowland marketplaces complain of the way in which highland traders bargain (cf. Anderson 2008:65, 69-70). It is common to hear this being discussed as something highlanders have introduced, and that it is not the habit of lowlanders to bargain. Highlanders are commonly perceived by lowlanders as being aggressive. The producers are aware of how traders are likely to behave but they have little bargaining strength. Producers in the marketplace are essentially price takers. Once producers have reached the marketplace they have already incurred the costs of the trip, they have harvested the betel nut which has to now be sold or it will begin to deteriorate. The faster perishability of betel pepper means the situation for pepper producers is even more pressing. While fresh food producers may be able to consume what remains unsold at the end of the day, this is not possible for betel nut or pepper producers who gain nothing from holding onto their produce. Many producers also want to return home rather than spend a night in town. Producers therefore must sell, and traders are all too aware of this. A Turubu producer commented on selling in Wewak:

When [the traders] reduce the price, we feel bad in our hearts but we do not have another way to get money so we must sell. Because our money is betel nut, we sell it, get money and buy the things we need. So when they come and bargain with us, we are accepting ... it is alright, we did not cut the tree down to sell it, we just picked it and the tree is still standing ... we will sell again.

Some producers react to finding themselves in this position by filling the centre of their bags with poor quality nuts and sometimes include leaves, sticks, rocks and other rubbish; something they say makes things fair. Traders, frustrated by this behaviour, push the prices ever lower to compensate. There is a distinct lack of trust between producers and traders. Most traders would happily pay more if they could be assured of better quality, and most producers would provide betel nut of a higher quality if their efforts were rewarded by the price, but in the absence of trust and sustained relations both parties expect the worst.

The relationship between producers and traders within lowland marketplaces is often an uneasy one, a marked contrast to the relationships between producers and traders in the production areas (discussed below and in Chapter 7). Producers inherently distrust traders and privately accuse them of lying about the prices they receive in the highlands, which is to an extent true. The reality is that traders receive prices higher than that which they tell producers but lower than the inflated

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9 It is common to hear producers refer to highlanders in such stereotypes, and to contrast a generalised pan-highlands mode of behaviour to a pan-lowlands one.
10 A betel pepper producer from Karkar Island spoke of the tricks producers and traders play on each other: ‘The highlanders come down and just play with us ... That is why we do these things [tricks], everything must be fair. They want betel pepper, we want money, that is why we do these things. Make it fair for us’.
perceptions that producers hold (cf. Anderson 2008:69). Producers most often eventually accept the prices offered by the traders but their frustration with their position can spark violence. One betel pepper producer described:

Lots of times we [physically] fight them. [The traders] come and get betel pepper however they want to ... reduce the price. We get angry and frustrated, so we hit them. We fight with them, afterwards we fix it by paying compensation, we collect money and give it to them ... that is how we market.

In the marketplaces producers are most often in a subordinate position to the traders, despite producers being in closer proximity to their home villages than the traders. The producers feel at home in these marketplaces yet it is most often outsiders who dominate and are able to control the prices on the day.

The composition of traders in the marketplace has a central influence on the conduct of trade. Where there are only a few traders in a marketplace, often travelling as brothers, they are able to collude, bargain hard and play various tricks to manipulate the market. Traders are adept at tinkering with the overt appearance of demand in the marketplace.

When visiting Popondetta with a group of Hagen traders in 2007 I observed the following tactics. Rather than all the traders going to the marketplace, which would give the impression of higher demand and competition amongst the traders, the traders did not attend the marketplace until late morning. This, the traders said, gave the producers time to become anxious and hot in the sun. The traders then sent a single trader to negotiate a price. The producers in the belief that there was only one buyer competed for the lone trader's custom, which drove prices lower. Many producers suspect these tricks – ‘They did not come for nothing. They have come to buy betel nut. We should hold our price’, one producer commented – but because producers come from numerous villages it is difficult to act in a coordinated fashion. Once a price was established all the traders came to the marketplace and continued buying at that price.

Similarly traders often disguise their intentions to buy. Ben, a buyer for one of Hagen’s *bevi baias*, Lewis, explained how he is able to work with other traders in Popondetta to push prices down:

They do not know we are all traders. We hide it and keep that to ourselves. First we go [to the marketplace] and show our faces ... we have some tricks and techniques we employ. The producers ask us ‘Are you here to buy betel nut or not?’ We respond: ‘No, we are not able to buy betel nut now, we will buy tomorrow or maybe the day
after’. We are playing a trick. We have money [to buy with] but we trick them. The producers think about their betel nut, it is afternoon, and it is just today that they have come to town. Their homes are a long way away and they have incurred the cost of transport to come [to town]. So we [the traders] say ‘we are sorry for you, but if you are able to reduce the price...’, then [the producers] say ‘ssss you take it.’

This kind of ‘technique’ works best in marketplaces with a large number of sellers and a limited number of traders, in this case due to poor access to the main lowland-highland transport routes and the associated high costs of transport.

**Trader oligopsonies and selling timetables in the betel pepper trade**

Kubugam is a small village along Madang’s North Coast Road. It sits in a small sheltered cove facing Karkar Island, the largest source of betel pepper for the highlands. Each morning, except Sunday (at least purportedly), betel pepper producers travel from their villages on the lower slopes of the island and load their baskets of betel pepper into dinghies for the run across the Isumrud Strait to the mainland. When they arrive at Kubugam the highland traders are waiting on the shoreline. When prices in the highlands are high, competition between buyers is fierce. Traders wade and even swim out to greet the boats (Plate 28). Conversely, when prices in the highlands are low, instead of a frenzied rush to reserve betel pepper, traders feign disinterest.

Plate 28: Traders wade into the water to reserve betel pepper baskets at Kubugam, October 2007.
When the betel pepper arrives on the beach the traders set about reserving betel pepper baskets. They indicate which baskets they intend to buy both verbally and often by physically rearranging a producer’s baskets on the shoreline. They do this by rotating the baskets perpendicular to how the producer had placed them, or by shifting them to a new location. When highland prices are very high traders negotiate a price and pay immediately to secure a purchase. More often the traders reserve baskets without either paying or even setting a price, much to the frustration of the producers who sometimes react by again rearranging the baskets to reassert ownership over them. Traders for the most part respect the right of other traders to reserve baskets. Arguments, and occasionally physical confrontations, occur with those who do not.

Most traders do not transport the betel pepper until late in the afternoon; there is no advantage arriving in Hagen before the following morning’s trading starts, so although there is a rush in the early morning to reserve baskets, transactions often do not occur until the afternoon. This gives traders time to phone friends in Hagen to get information on supply and prices there, and for them to discuss with other traders at Kubugam the price they will offer producers. Traders and producers convene in separate groups to discuss what they will offer or accept. The traders then make their offers. If this price is not accepted they will reconvene to determine another price. This is often a protracted process. Price negotiations are not done collectively; rather they are a dyadic process occurring between a single trader and a single producer. A number of traders negotiate with different producers at the same time but all with the same price. Once a transaction has occurred, other producers are loath to receive less and equally traders are reluctant to pay more, so the price of the first few transactions each day sets a benchmark price for all subsequent transactions. These first transactions are to an extent communally agreed upon in advance so that the result is somewhat of a collective agreement. Individuals do often break ranks and act individually, which attracts strong criticism and anger.

Part of the tactics employed by traders is to wait until the late afternoon before they make their offers. When supply is high and prices low, the traders show indifference to buying. Much to the angst and frustration of the producers, the traders pass the time socialising and playing cards with each other, ignoring the producers. Producers and traders know that betel pepper is highly perishable and will fetch a lower price, or may be unsellable, the next day. The islanders are also keen to make the crossing back to Karkar whilst it is still light. This all plays into the traders’ hands. As the day wears on producers are quicker to break ranks and concede to a lower price.
In early 2007 attempts were made to regulate supply and prices at Kubugam, due to the volatility of prices. In less than a week in October/November 2007 I recorded the price rising from K60 to K130 per basket due to a supply shortage. In the peak season of February 2007 the price was K10 and I was told not long before, it had reached as low as K5. The price follows a seasonal pattern, although for various reasons the price can change significantly at any time of year. It costs K5 just to transport each basket to Kubugam, plus K20 each way per person, plus the paid labour costs of picking. Understandably the Karkar Islanders were frustrated by such low prices and by the highlanders’ aggressive bargaining. According to one Karkar producer/trader ‘[bargaining] is not good practice! It is not the way to sell things. It is bad, but the thinking of men is to reduce the price.’

When Kubugam was heavily supplied, the traders exploited the competition between producers. The producers, despite all coming from Karkar Island, and the majority from the Takia language group, were only occasional collaborators. Producers reported withholding supply in order to increase prices but coordination was difficult and self-interest regularly split any tenuous unity that existed. One producer remarked:

It is not good when one person marks the price at K40 and another man prices [his betel pepper] at K30. It is better if they all go with the same mind and agree to sell at K40; but not if one person hides and sells for himself, and another also sells for himself. They are possessed by money now.\(^{11}\)

It was in direct response to the low prices created by over-supply and competition that a committee was formed by members of the Kubugam host community, and a selling timetable established.\(^{12}\) A committee member explained:

The price of betel pepper dropped very low. They had pushed the price down to K5 for a large basket. We saw this happening, and felt sorry for the Karkar Islanders. We saw that if lots of betel pepper continued to come, the price would remain the same ... So we told the islanders that they must follow a timetable. When they follow a timetable less betel pepper will come. The Hagen traders will take it up to Hagen and make good money, because there will not be lots of traders who will compete with

\(^{11}\) What I have translated here as ‘They are possessed by money now’ was in Tok Pisin, ‘ol i guria long moni nau’. Guria in other contexts means to tremble or fear, but in this context it is used to mean a strong temptation or desire that compels action. This has connotations of greed.

\(^{12}\) The majority of the betel pepper producers on Karkar Island are of the Takia language group. There are some small pockets of the Takia language on the mainland very close to Kubugam. The host community at Kubugam village are of the Bargam language group, although there has been significant intermarriage between the groups (Hepner 2006; Lewis 2009).
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each other to decrease and increase the price. So that when they buy for K30 here, they can sell for K70-80 there. When they return they will have more money to buy betel pepper with. They will buy at a good price which the Karkar Islanders have set.\textsuperscript{13}

An understanding of the laws of supply and demand was explicit in the creation of the timetable. The aim was to limit supply both at Kubugam and as a consequence also in Hagen, and therefore to push up the prices in both marketplaces.

We have tried to control the price and the movement of betel pepper. So that when we say 150 baskets must come from the island, then 150 will come down and go up to Hagen. So when the Hageners sell it they will not be competing with other betel pepper.

The timetable set out, according to village, who would sell on certain days.\textsuperscript{14} The timetable also had another objective, one focused on externalities experienced by the host community. The tendency for traders to push sales to the late afternoon invariably meant that some producers, who held out too long for a better price, would be stranded on the mainland overnight. This had become a burden for the Kubugam residents who ended up accommodating the islanders.

However, the timetable failed to gain broad support. It did not have a strong leader championing it, and it proved impossible to manage the desires of the producers and coordinate the different villages involved. It was also led primarily by the host community. Producers had mixed feelings towards the arrangement. Some believed in the broad premise of the free market although acknowledging its flaws. Others thought the scheme good in theory but difficult at best to implement:

People do not follow it. Anyone goes. If it was just Kevasob village following a program it would be alright, some people would go today and others tomorrow. But with every place [involved] it does not work. You think it is just you going, but no they all go too. Or they think it will be just them but we also go.

\textsuperscript{13} Such a proposition on the part of the betel pepper producers is not dissimilar to the way in which production quotas were established in the international trade in coffee.

\textsuperscript{14} Lime producers from Labubutu (Morobe) have also experimented with creating a similar timetable whereby the village was divided into different groups which would take it in turns marketing in Lae.
For another:

When people do not have kerosene or soap, then they will break this ‘law’. They will harvest whenever they want and go sell it. So this ‘law’ of theirs, this timetable of theirs, has not been working well.

There were plans afoot to make traders buy at a set location on Karkar Island but producers thought that if the highlanders resisted this shift then there would be individuals amongst the producers who would break ranks and seek to capitalise on an unsupplied Kubugam marketplace. I returned to Kubugam numerous times in 2007 and found that the timetable had failed to gain acceptance.

Traders and producers: relations in the betel nut production areas

The relations between producers and traders in the production areas, commonly referred to as the haus dua (house door), are considerably different to those in the large marketplaces. Here traders do not have the same dominance that they do in the more impersonal marketplaces. Producers have greater negotiating strength and relations with traders are often characterised by friendship, hospitality and trust. The conduct of trade remains relationally specific, that is, shaped by the degree of amity and mutual recognition between individual traders and individual producers. Interactions are not antagonistic but a degree of wariness still exists.

Most traders who buy at the haus dua concentrate their buying in a limited number of areas. During their regular visits traders develop enduring and often friendly relations with some of the producers (Chapters 7), and this is reflected in the conduct of trade. Transactions are characterised by familiarity between traders and producers, and are often conducted with a degree of banter. Explicit competition between producer and trader is suppressed in favour of the development of more enduring relations. Traders are trusted to pay a fair price and producers are trusted to sell quality betel nut. There is also, I believe, a genuine concern for one another's wellbeing.

Key to haus dua relations is the producers' more empowered position. They are on their own land, surrounded by kin, neighbours and friends. The village is thus very much a space which belongs to the producers, a space where they feel confident and can exert considerable agency. The traders are on foreign soil and are considerably outnumbered by the producers which limits their ability to bargain. The position of producers is further bolstered by the fact that they have not incurred any travel expenses and as Mary, a producer from Turubu, explained: 'If they come to the village and try to bargain, they cannot, we remain steady because we are in our place. We have not harvested
yet, the betel nut is still on the tree.’ There is not the same rush to sell before it deteriorates and so producers can exert greater control over the price. As Mek, a trader from Hagen, described:

When we visit a village ... the committee of this place will come, they will give you the price for their betel nut ... then you will discuss this with the committee ... You will talk until you agree on a price ... If you become tired of this you can leave and go somewhere else, no problem.

Invariably the price is reduced from the initial asking price based on the discussions. Once a bag price has been decided upon it is up to individual producers to decide how many bags they want to fill at that price.

Traders must maintain good relations with the producers who supply them otherwise they run the risk of being denied supply. Bill, one of the few lowland traders who ventures up to Hagen, said: ‘you will give [producers] a bag [to fill] and your bag will bounce back and they will say “we do not have any betel nut”. It is important. You must have a good relationship with the producers.’

Although producers have greater negotiating strength here, the haus dua is not a seller’s market. Producers have needs and wants for which they require cash. For these producers, especially those in remote communities, there are few other sources of cash available to them. Waged employment is not an option and their export cash crops often do not fetch a high enough price to make their harvest and transport to town worthwhile. Equally little is to be gained from letting the betel nut dry on the palm, and there is too much to be consumed locally. The producer is then compelled to sell, and a lower than desired price is better than nothing, especially since the producer has incurred no or few costs.

To a large extent producers remain price takers. Producers only rarely question the prices they receive from regular traders. For instance, when Mark traded in the Middle Ramu in 2007, the price for bags had been set but the price for bunches, given the considerable variation in size and quality, was determined at the time of purchase. After inspection Mark would hand over the money based on his evaluation of its worth. In one buying period bunch price ranged from K2 to K20, and by

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15 There is considerable pressure on lowland traders to be fair to the producers who supply them. Their relationships pre-date their trading activities and they must maintain these relationships beyond the bounds of trade. I give little focus to the lowland traders as they are a much smaller group than the highland traders. Often lowland traders will work in conjunction with a highland trader rather than on their own.
The place of traders in the making of a Melanesian market

weight between K1.50 and K4.40 per kilogram (Chapter 5). The money was simply accepted, the trade occurred in near silence. Mark was trusted to ‘peim honest’ (pay a fair price).

It should not be assumed however, that no conflict occurs between producers and traders at the haus dua. Not all producers are to be trusted and producers are aware that some traders mislead them as to current prices in the highlands. Few producers have been to the highland marketplaces and are therefore mostly ignorant of the current price a bag will fetch there. Producers rely on what the traders tell them, out-of-date information and tok win (hearsay), something traders manipulate to their advantage. Responses to frequent questions about what producers knew of prices in Hagen showed most, even those who had strong ongoing relationships with particular traders, remain poorly informed, misled, or at least somewhat self-deluded – producers remember the high prices they have been told but tend to forget the low prices.

Collusion amongst traders also occurs in the village although less commonly than in the marketplace. The supply of betel nut in a single village is not enough to support a large number of traders at one time and therefore there is unlikely to be more than a few traders present. Very often these traders are travelling companions. If traders observed that producers from a particular area were pricing their betel nut too highly the traders may make a pact not to buy in that village for a short period in the hope that a boycott will compel the producers to bring prices down. Ben, a Hagen trader, told how traders would:

Put a ‘law’ that [we must not buy in that village] ... let [the producers] reduce their price first. Producers will see that there is nobody coming to buy, and that their betel nut has gone yellow and that they are doing it tough ... there is nobody who will come and ‘feed’ them. So they see they must put a price that traders will agree with.

Most traders who buy in the village want a fair price rather than the lowest price. This means that, counter intuitively, the village price may be higher than that prevailing in the town marketplace. I accompanied traders who chose to purchase ten kilogram Roots Rice bags of betel nut in the Turubu area for K25 when that morning they had witnessed the same size bags being sold for K10 at the marketplace in Wewak (Plate 29). This was not generosity on the part of the traders; rather it was an investment in the long term relationships with the suppliers in the village. The marketplace always presents a gamble as to the quality and quantity of betel nut available, whereas in the village the trader is usually able to get sufficient volume and enduring relationships mean that it will be

16 Traders do not use scales. They found me doing so quite amusing.
better quality. Generosity is also constrained by the fact that traders irrespective of where they buy ultimately sell in the same marketplaces.

Plate 29: Traders from Hagen buying betel nut from producers at the haus dua, Turubu, September 2007.
Note: The ‘Farmset’ bags have been left open ready to be topped up with maus buai before being sewn up.

BETEL NUT TRADERS AND HIGHLAND MARKETPLACE VENDORS

In the highland marketplaces traders engage in another key interaction, this time with their customers, the betel nut vendors. Interactions are often lively, involve intense negotiation and at times heated exchanges. Vendors complain that traders price too highly and often sell them poor quality betel nut. Traders likewise grumble that vendors damage their betel nut by poking needles into their bags in order to test the quality of the betel nut inside, and that the vendors regularly request partial refunds. Each has an economic imperative; traders must sell to cover their costs and make some money, while vendors must buy at a price that will allow them to turn a profit.

The relationships, and therefore the interactions, between traders and vendors can be different from individual to individual. In the marketplace traders encounter kin, friends, regular customers, and strangers with whom they hope to establish regular ties, alongside locals to whom they hold no obligation or affection, and naive strangers who they may take advantage of (Chapter 6). The relations between traders and vendors are very often personal but need not be friendly.17

Traders and vendors: negotiation and transaction

Supply shapes the daily nature of the market at Kaiwei. Vendor numbers, and thus demand, remain relatively stable (Figure 10) whereas trader numbers and the supply of betel nut fluctuate more erratically (Figure 11 and 12). When they arrive traders may find an oversupplied marketplace and be forced to compete for customers. At other times traders arrive to find the marketplace undersupplied and vendors, money held aloft, thronging around the arriving vehicles (Plate 30); a situation conducive to trader collusion.

Note: The bag type (a clear plastic rice bale) indicates that this betel nut is from Oro.

Active selling techniques and bargaining is the norm. Traders ‘advertise’ to potential customers by calling out the price; often the full price and a reduced price are called out in the same breath, in much the same way as store retailers post recommended retail prices alongside reduced sales prices. A trader for instance may call out ‘250, 240, 230’ meaning that the ‘first price’ of K250 has been reduced to K240 and finally to K230. But these prices are public knowledge; in reality this same betel nut could be purchased for even less. There is no single price for a bag of betel nut, instead a range of prices exist (cf. Alexander and Alexander 1991:499).

The range of prices is possible due to the concealed nature of transactions. Prices are not so much negotiated verbally as they are negotiated through the actual movement of cash. A customer makes her offer by handing cash to the trader or salesman and seeing whether it is accepted or not. The
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seller carefully counts the money and if deemed insufficient the cash is returned. The customer often resists taking the money, sometimes to the extent that it is forced into her hand or perhaps tossed onto the ground in front of her (Plate 31). Negotiating in this way conceals the amounts changing hands from other customers and as a result it is possible for transactions to occur at a number of different prices.

Plate 31: A trader's customer refuses to take her money back, Kaiwei, August 2010.
Note: The trader deemed the customer's offer too low.

The actual price for which betel nut is transacted is shaped by the existing relationship between the trader or salesman and customer, or equally by the relationship the seller hopes to forge with a new customer. Kin, friends, regular customers and potential regular customers routinely pay less than others. Traders may also reduce prices to compensate a customer for poor quality betel nut sold previously.

Relations between traders and vendors are shaped by their dependence upon each other. A growing number of vendors are becoming increasingly dependent on betel nut selling for their income. Some vendors now sell fulltime, have inadequate gardens to feed their families, and are increasingly
dependent on cash for their subsistence. They must trade. But vendors are not totally subordinated to the traders. Traders as middlemen must also sell. They have outlaid thousands of kina to purchase and transport their betel nut and therefore simply do not have the option to not negotiate. Neither is it easy for the traders to access alternative marketplaces in search of a better price (Chapter 6).

But there are occasions where traders are not compelled to negotiate (although the right sort of relationship will always gain some concession). The large number and heterogeneity of vendors is something exploited by traders. Trader collusion is generally only possible when the supply on the day is dominated by a small number of traders. Traders always ‘look for gaps’ (painim gap) in the market in which they may themselves hold a monopoly, or as a group are able to work as an oligopoly. At Kaiwei this is not the norm but does occur relatively frequently. Matthew, a wholesale reseller at Kaiwei, described how he might conspire with another trader to fix the price and how a typical dialogue with a potential customer may unfold.

I talked with the other trader and arranged [a price] … [for example] if a customer comes to [the other trader] and asks ‘how much is the betel nut?’ the other trader will say ‘K200’. The customer, ‘I’ll give you K190?’ The trader will respond ‘No, you check over there’ [pointing the trader to me]. Now the customer comes to me, ‘brother, how much is the betel nut?’ I say ‘K200’. He says ‘I will give you K190?’ I will say ‘No’.

The customer will say that the other trader is selling for K190, but I know otherwise because the other trader and I have an agreement (pasim tok).

Another trader put it more bluntly: ‘If there is only the two of us [in the marketplace], okay flat price. No second price.’ Traders may also collaborate to withhold supply from the marketplace, or to trickle supply into the marketplace so as to keep prices high. The oligopolies that form are often only temporary and episodic. They are opportunistic and occur particularly between friends and travelling companions.

Trickery often features in the relationships between traders and vendors. Traders may attempt to pass off poor quality betel nut, repackaged in new white glossy bags, to unsuspecting buyers. Vendors have their own tricks. Some may collect discarded yellow betel nuts from the ground and show these to a trader, claim they are his, and demand a partial refund.18

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18 I learnt many of the tricks of the trade when I became involved in selling myself. During the Kaiwei marketplace surveys, in order to obtain price data, each day my research assistants purchased K40 worth of betel nut and K40 of betel pepper. To recover some of the costs from this expensive exercise I organised to have the purchases resold...
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The way the transactions occur is also used to deceive customers. For instance, traders may make an arrangement with a customer to help set a particular price. If say, a trader wants to receive K200 for a bag of betel nut, he may ask the known customer, to visibly give him this amount, in cash, for a bag. The trader will count the money openly, and may verbalise the amount received, so that other potential customers see that K200 is what other people are paying. Other customers are then more likely to buy at that price. Afterwards the trader will give K10-20 back to the conspiring customer. The trader benefits by selling more of his betel nut at a higher price, and the conspiring customer benefits from a discounted rate.

In an uncertain and risky trade, actors look for familiar faces and those with whom they have some connection. To a person visiting from outside of Hagen, without contacts, seeing someone from their home province, with whom they share a language, holds some promise of a more reliable transaction. But in the marketplace this trust is routinely exploited by a group of intermediaries who specialise in tricking unwitting strangers.

Intermediaries typically work on behalf of a trader or salesman. They utilise their cultural identities to steer prospective customers towards a particular trader. An Engan man may for instance see a woman from Enga, wanting to buy betel nut, wandering around the marketplace. He will approach her, speaking their local language and, pretending to be a friendly *wantok*, tell her that his co-conspirator is selling the best or the cheapest betel nut. This may be far from the truth. The woman without other friends accepts the man’s advice, and may give him a few kina for his help. The trader will later pay the intermediary a small cut of the sale’s proceeds.

Though both vendors and traders look for opportunities to gain some advantage over each other, the maintenance of good relations is important. Bettie, the *bevi baia*, explained that if her customers like her and think she is a *gutpela meri* (good woman) then she will make a greater profit. Traders are also aware that for them to be successful they must price their betel nut in such a way that vendors are able to make money out of it. For Chris, an emergent *bevi baia* in 2010: ‘If you buy good betel nut and you reduce the price so that the women can make a profit. Then they will be happy with you ... Once they make a profit, next time you trade you will be able to sell quickly’. Certainly there is something to be gained from a good reputation in the marketplace irrespective of whether you are dealing with known or unknown others. Traders and vendors enter transactions expecting to bargain, but a trader who is obstinate and uncompassionate is unlikely to be successful.

In roadside marketplaces. The women who did this for me tried numerous tricks including presenting me with betel nut belonging to other vendors that they had collected from the ground, and down playing their returns.
Male traders and female vendors

Relations between traders and vendors are also gendered. Traders are predominantly male while marketplace vendors are overwhelmingly female. This aligns with Hagen idealisations of men as ‘transactors’ and women as ‘producers’ (M. Strathern 1972a:132-156). In the past public exchanges such as *moka* and long-distance trade were the preserve of men whereas women were primarily responsible for planting, maintaining and harvesting food gardens and disposing of the produce.\(^19\)

Sale of fresh food in the marketplace is likely an extension of the female role as producer and distributor of foodstuffs (A. Strathern 1984:70-89; Sexton 1986:43). This is reaffirmed by the fact that the fresh food sold by women in the early marketplaces was largely surplus from their subsistence gardens. Further earnings were controlled by women and used to buy fresh food and store goods for family consumption. It is considered shameful for men to sell in the marketplace, particularly the staple sweet potato (Jackson and Kolta 1974).

But betel nut vendors are not producers, although the money they earn does largely have a subsistence function. The vendors like the traders are intermediaries, they are transactors.\(^20\) The gendered role distinctions within the betel nut trade have to do with travel. Men, as traders, have continued their role as travellers and as those who transact in foreign territory. Women, as vendors, on the other hand ‘stay at home’ (M. Strathern 1972a:152, 161), something also true of most female traders (Chapter 5).

Another reason why marketplace vending has primarily fallen into the hands of women is that it is not considered lucrative. In general men have focused on more profitable economic activities, and so where they have been involved in the sale of fresh food it has tended to be on a larger scale (Sexton 1986:43). When betel nut was sold in the highland marketplaces in the 1970s betel nut vending was a profitable activity and had therefore become ‘a largely male preserve at Mount Hagen’ (Jackson and Kolta 1974:12). It is likely that as the wholesale trade of betel nut emerged in the 1980s and 1990s this lucrative opportunity was taken up by men and the less profitable vending role was left to women.

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\(^{19}\) In Hagen men had primary responsibility for the preparation of garden sites. Men also planted particular crops notably sugarcane, banana, taro and pandanus. Men were thus also producers. Women may make small gifts of pork. They may also privately, but not publicly, exert considerable influence over the dispersal of pigs they have reared. Women are thus also transactors (M. Strathern 1972a; A. Strathern 1984).

\(^{20}\) In Goroka marketplace vending of betel nut is done equally by men and women. In Goroka, wholesale traders trade at a much smaller scale than do Hagen traders. Traders from Goroka have therefore, due to economies of scale, tended to purchase in less distant marketplaces. This has made this activity open to women. Further, in Goroka the potentially highly profitable wholesaler niche is small and therefore men have taken to marketplace vending as the next most profitable activity. This has also to do with the blurring of trader and marketplace vending roles in Goroka. Many of those sitting down vending in the marketplace sell bags that they themselves travelled to the lowlands to buy.
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Hagen is a strongly male dominated culture and roles within the society are highly gendered (M. Strathern 1972a; A. Strathern 1979a). Men dominate the public arena and consider themselves stronger and more capable of negotiating than women. Women are nonetheless vocal in their criticisms. M. Strathern (1972a:141) highlighted that women may vocally raise grievances in their own communities but find it more difficult to do so in exchanges elsewhere. Through marriage a women contributes to opening and facilitating transactions between her husband’s group and that of her natal kin. As such she may have considerable influence over these exchanges. Women must also be treated respectfully due to the risks associated with women’s divided loyalties between her natal group and her affines. But male-female marketplace relations, Maclean (1989:89-95) argues, ‘rest either on generalized exchange or on pooling within the household, not on a balanced sale, and they are always a relation between specific persons, not between males and females in general’.

The influence of gender on market interactions between male traders and female vendors is less evident. Traders and vendors may be kin, and therefore must act accordingly, but most transactions are with non-kin. It is common for men to treat female vendors with a degree of contempt, but for their part women are often not shy about airing their grievances with traders who they feel have treated them unfairly. The question remains as to which women may have the right to ‘speak’ in the marketplace and in which contexts? Women are likely to find it more difficult to negotiate partial refunds following bad transactions, but a vendor’s male kin are usually present in the marketplace and they will intervene if necessary. That said, traders are reliant on maintaining good long-term relations with their customers. An examination of the gendered relations in the marketplace would likely prove fertile ground for future research but is not considered further here. There are clearly structural influences that shape the roles that men and women take on in the market, and this influences their interactions. But vendors complained of traders, and not men. I believe that the gendered relations simply reinforce the subordination of vendors that stems from their market positions as traders and vendors, and not as men and women.

Traders and vendors: ambivalence towards the wantok system

Within the marketplace, actors possess ambivalent feelings towards the wantok system – that is, people favouring their social networks of kin and friends. Regulated markets typically have strong laws protecting participants against nepotism, collusion and similar actions. Such formal laws are absent in markets characterised by informality, however informal regulation of similar practices occurs. In the betel nut trade showing favouritism towards friends and kin is expected and

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21 This ambivalence can be seen more broadly in the political arena where what for some is seen as nepotism is perceived by others as fulfilling obligations towards friends and kin (wantoks).
encouraged, and is criticised and complained about. Andrew, a member of the Kaiwei marketplace committee, explained how favouritism is expressed. He speaks of when two vendors compete for the same betel nut in an undersupplied highland marketplace, a situation in which it is not uncommon for vendors to throw money through the car window to secure a purchase:

If a vendor has already thrown some money into the car for a bag and another person gives the trader money for the same bag. If the trader wants to give it to the other person, and he takes her money and gives it to her, the [first] vendor will say [to the trader]: ‘Hey! You are following the wantok system. I reserved that betel nut. It was wrong of you to give it to her.’

Of course, actors complain only when transactions go against them. Given the ‘grooved channels’ that exist between different actors (Chapter 6), criticism of this was surprising. Andrew reasoned: ‘The same vendors stay in the marketplace. The traders travel with [the vendors’] money so they must be fair to all vendors’. Being fair entailed traders more equitably distributing the supply among their customers. Andrew continued:

But if they are not fair and they show favouritism for one vendor or use the wantok system, then this is bad behaviour. They must be fair to all vendors so [they all] can make some money ... When betel nut is in low supply you must be fair and only give one bag to each vendor.

Agnes, a regular vendor at Kaiwei, echoed Andrew’s comments about fairness in an undersupplied marketplace: ‘[If traders] follow the wantok system, they see those they know and take their money but they do not take my money quickly. There are disputes over this.’

Criticism of the wantok system by vendors could be interpreted as support for a free market, in which buyers compete with each other to secure a purchase. It reads as a call for protection from nepotism, a characteristic of most Western markets. But I suggest this can also be seen as an act of apportionment (cf. Gudeman 2008), and an expression of the idea of fairness within the market. This is certainly not all pervasive but in this case the rationing of one bag per vendor provides a space in which exchange is not based on free competition but on consideration of giving others room to participate.
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DIPLOMACY, SOLIDARITY AND INEQUALITY IN THE BETEL NUT TRADE

Accounts of pre-colonial trade in PNG emphasised ‘the absence of the “market” situation of generalised competition between sellers to find buyers, and among buyers to find sellers’, and the absence or suppressed nature of bargaining (competition between buyer and seller) (Gell 1992:149; see Sahlins 1972:297-301). In these absences, it was argued that social relationships – characterised by diplomacy, solidarity and inequality – rather than the market, contributed to explaining the conduct of trade and the setting of exchange rates. Similar observations were made of the conduct of trade in early colonial marketplaces in PNG (Epstein 1961, 1968, 1982; Brookfield 1969b; Hogbin 1969). Though the contemporary trade in betel nut presents a very different situation to trade of the past, these explanations of the conduct of trade have resonance.

Prior to the safety provided by colonial rule, trade outside one’s homeland was fraught with danger. Strangers were treated with an air of suspicion and interactions readily became volatile; quickly shifting from ‘trading goods to trading blows’ (Sahlins 1972:302; cf. Mead 1930:118; Salisbury 1970:177). For traders, physical threat, sorcery and poison were ever present concerns, making social distance rather than physical distance the critical factor in the movement of traders and goods (Hughes 1977:204-5; Burton 1985:229; Healey 1990:239-40). It was common for trade to occur within partnerships in which partners would ensure each other’s safe-keeping. Sahlins (1972:302-8) saw these relations as characterised by diplomacy, maintained through the generosity of conveying ‘good measure’ (cf. A. Strathern 1971a:216). This maintained amicable relations but also created a debt that must be reciprocated, and hence the continuation of the relationship.

Trade also occurred outside of partnerships, where relations between parties were more ephemeral and less personal. Unlike the diverse groups of each buyers and sellers presented by the ‘market situation’, Keil (1977) argued, non-partnership trade in pre-colonial Melanesia tended to be dyadic interactions; a single solidary group of ‘buyers’ and a single solidary group of ‘sellers’. A sense of allegiance, shared purpose, and social obligation within each group acted to establish conventional rates. If in a transaction one group member was to accept a lower rate, or offer too much, then this would pressure his entire group to do likewise: “Individuals simply do not have the opportunity to accept less or charge more than the fair amount” (Keil 1977:273-4).

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22 The broad characteristics of pre-colonial trade in PNG are discussed in Chapter 3.
23 Keil (1977:273) characterises these interactions as based on ‘impersonal reciprocity’. I agree that they may not have the option to charge more or accept less than a conventional amount but this need not be a ‘fair’ amount. There is nothing to stop conventional rates being set at unfair levels.

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Both Sahlins and Keil presuppose social symmetry. By contrast, Modjeska (1985) – drawing on Godelier’s (1977) account of Baruya salt traders,24 Gewertz’s (1977, 1978, 1983) study of middle Sepik fish-for-sago barter gatherings, and Epstein’s (1982) research on colonial urban fresh food marketplaces – emphasised the power asymmetries that underlay many trade relations and which established conventional exchange rates.25 He argued that these transactions were premised on an ‘undiplomatic trade inequality’, a condition that approximated market disequilibrium; ‘trickery and terror rather than overbalanced generosity actually sets the [exchange] rates’ (1985:149).26

Modjeska argued that traders were concerned to receive qualitatively and quantitatively adequate return; whether this constituted bargaining is debatable (Healey 1990:280). Although the tendency for exchanges to take a one-for-one form gave the overt appearance of ‘price’ fixity (Chapter 7), the variable quality amongst goods left considerable room to shift the terms of exchange (A. Strathern 1971a:217). Within conventional rates, negotiation occurred which emphasised both the materiality of an exchange, but also appealed to a trader’s compassion (Godelier 1977:146; Keil 1977:263; Gewertz 1978:38; cf. Healey 1990:324-5).

In the past trade was not necessarily personal, but it did occur predominantly within particularistic relationships of amity and enmity which shaped the conduct of trade. Goods were not displayed for all and sundry but to specific individuals and groups in particular places (cf. Keil 1977). Even when the opposite party was personally unknown, the transactions were not anonymous. It was in those infrequent situations when strangers were engaged in trade that more intense, and perhaps profit oriented, negotiations around ‘price’ existed (Sillitoe 1978:271; Healey 1990:348; Carrier and Carrier 1989:159-162). That colonialism has brought more strangers together more often has meant that explicit bargaining has become a more common feature of trade in contemporary PNG.27

Early studies of the conduct of trade in modern Melanesian marketplaces also emphasised the suppression of competitive trading practices: bargaining or haggling were absent, sellers adopted a passive approach to selling rather than using hard sell techniques, and there was little overt competition amongst either sellers or buyers (Epstein 1961, 1968, 1982; Brookfield 1969b; Hogbin 1969; see Modjeska 1985; Bourke 1986a). Epstein (1968:142-145) and Brookfield (1969b:19) each

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24 The Baruya reside in the Kratke Range in the Woenenara subdistrict located in the south-east of the Eastern Highlands province.
25 Epstein’s (1982) publication is based on fieldwork undertaken between 1967 and 1969. Also see Carrier and Carrier’s (1989:156-9) discussion of trade power asymmetries in Manus Province.
26 Modjeska’s critique is directed at Sahlins and does not make mention of Keil’s research. Modjeska, following Sahlins, assumes that in the absence of bargaining it is the seller who sets the ‘price’. Power inequalities manifest in different ways in different contexts, and I believe there is no reason to assume that the advantage of any inequality should fall with the seller. Outright bargaining is only one means by which prices may be shifted.
27 Healey (1990:348) highlights that haggling can be an expression of inequality between a core and a periphery.
observed the existence of a degree of solidarity amongst marketplace vendors, who were often linked through interpersonal social ties, and often sat next to kin and friends in village groups within the marketplace. The refusal to haggle and undercut prices, Brookfield (1969b:19) argued, represented ‘collective bargaining’ in the group’s long-term interests. That marketplace vendors were non-specialist producer-sellers who were not dependant on trade for their subsistence was also significant in reducing any desire for competition; vendors, it was noted, were often content to take produce home rather than sell it for what they deemed an inadequate return (Epstein 1968:142; Brookfield 1969b:19). As with pre-colonial trade, bundles of produce were priced by convention rather than by bargaining, and substandard bundles often remained unsold. Later studies have highlighted the existence of more competitive marketing practices (see Jackson and Kolta 1974:36). Competitive practices, if sometimes subdued in character, have now become a feature of marketplace exchange and have certainly become prominent in the betel nut trade, although diverse social and economic considerations remain important in shaping the conduct of trade.

Like trade of the past, trading betel nut involves a measure of diplomacy and tact. Betel nut is traded across cultural boundaries, and as a result can involve considerable risk, particularly in the absence of a strong state. Conflict between participants in the trade quickly and frequently erupts. Minor scuffles are important in shaping prices, and regulating behaviour in the marketplace, but larger conflicts that restrict trade are counterproductive. As A. Strathern (1971a:216) noted of pre-colonial trade, ‘trade does not necessarily make friends, but it is important, if the trade is to continue, not to make enemies.’ The same is true of the contemporary betel nut trade. Disgruntled producers may refuse supply or supply poorer quality nuts, and unhappy vendors can slow sales.

Poor relations may also lead to threats to personal safety, and physical confrontations are reasonably common. As with traders of the past, some betel nut traders fear poisoning, sorcery and the misfortune brought by unappeased anger, if they are too sharp in their dealings (cf. Godelier 1971:63). Chris, one of Hagen’s nascent hevi baias, explained:

We are afraid of those who do sorcery or ‘poison’. If you follow their wishes you will travel alright. If you do not follow their wishes and you anger them, [for example] if they want K100 for their betel nut and you bargain them down to K50 or K60 [then]

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28 Epstein (1968:143) similarly described: ‘On walking through [Rabaul] market one got the impression of facing a body of monopolistic sellers rather than a large number of small individual vendors in competition with each other.’

27 The absence of the state was central to Sahlins’ (1972:302) ideas: ‘When people meet who owe each other nothing yet presume to gain from each other something, peace of trade is the great uncertainty. In the absence of external guarantees, as of a Sovereign Power, peace must be otherwise secured: by extension of sociable relations to foreigners – thus, the trade-friendship or trade-kinship – and, most significantly, by the terms of exchange itself.’

29 Drawing on Sahlins (1965) [revised and republished in Sahlins (1972:277-314)].

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they will be angry. If they are angry, they will ruin you. You will have a car accident, or your boat will capsize and you will go into the water ... If they are content then you will travel safely home.

I was told of one trader from Hagen who regularly fell sick to malaria. Other traders considered that sorcery cast by producers, disgruntled by the trader’s aggressive bargaining tactics, had weakened the trader’s resistance to malaria infections.

Anger also brings misfortune. This occurs without any intent to bring harm on the part of the aggrieved. A marketplace supervisor in Madang’s Balisigo marketplace, for instance, pointed out that if a trader negotiated hard enough so as to upset the producer-sellers then the ‘anger of the women will go with [him]’, and something unfortunate will occur to the trader en route to the highlands. Anger is recognised to be a malevolent force amongst Hageners (A. Strathern 1968; M. Strathern 1968). Sorcery and the effects of unappeased anger are conflated here because Hagen traders cannot fully comprehend lowland peoples’ powers, and therefore they routinely connect the two. But it is not the mechanism that is of interest, what is important is that many Hageners recognise the need to be cautious in their transactions and that hard bargaining is considered by many a risky practice. Traders pride themselves on their ability to bargain down the price, something central to a trader’s financial success, and negotiations may be intense and heated, but for many it is done bearing in mind the risks and is conducted with a measure of diplomacy.

Traders aim to negotiate with producers, and ‘grease’ them (grisim or grisim bel32), so they remain wanel (in agreement, or of the same mind/heart) (cf. A. Strathern and Stewart 1998:184). Traders highlight issues of quality, but they also emphasise the risks they face, both financially and to life and limb, the substantial costs incurred on the road and the low prices they receive in the highlands – many of these risks are real although they are often exaggerated. Traders present themselves to producers as having good reason to drop the price. This causes less resentment than if a trader was to resort simply to hard-nosed bargaining for maximising self-interest. Though producers may complete a transaction not entirely satisfied, they should not be angry. Traders reason with...
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producers, rather than imposing their own will, nonetheless they are obviously aware of the few choices open to producers.

Diplomacy is an important skill for betel nut traders to possess. Traders nurture positive relationships, do favours for producers, and do their best to purchase all betel nut offered to them, but they usually do not transact with generosity and ‘good measure’ (Sahlins 1972; cf. Healey 1990:300-3) (Chapter 7). Transacting with ‘good measure’ means giving sufficient amount so as to obviate any suspicion that a transaction is inequitable. In the past this pertained to exchange partnerships, situations in which exchange was delayed and the roles of transactors reversed over time. But in the betel nut trade, where there are repeated interactions but no partnerships, there is no delay and no reversal. For the most part mutual benefit rather than indebtedness drives continued exchange.

Different parties may of course perceive the same transaction in different ways. One party may think of themselves as being generous in the transaction whereas the other party may consider only that fair equivalents have been conveyed (Carrier and Carrier 1989:156-162). Traders may believe they are paying a fair price and see themselves offering a ‘service’ to producers without another source of income, while producers, hearing the stories of the profits traders can make, may see themselves as hoodwinked and under-remunerated.

Group solidarity, following Keil (1977), has a considerable influence on the trade but it rarely takes the shape of two internally solidary groups (one buying and one selling) of equal standing, each compelled to transact at conventional and fair rates. Producers may show considerable internal allegiance when selling to traders in their own communities, however the large number and heterogeneity of producer-sellers in urban lowland marketplaces, and the expenses they have already incurred, makes achieving solidarity difficult. In the highland marketplaces, traders’ customers (vendors) are also diverse and large in number which makes market coordination as a collective unfeasible. Other alliances, such as shared clan affiliation, held between particular traders and vendors also conspire against collective action as a group of vendors against a group of traders. For producers and vendors then group solidarity is often elusive, and when it emerges it is short-lived and tenuous at best.

33 Though traders do not transact with good measure, marketplace vendors do. When the marketplace vendors onsell to roadside and street sellers the majority of the time they give additional betel nut at the end of the transaction (Chapter 7).
In contrast, traders are much more successful in attaining a level of cooperation and using this to shape the market due to their small numbers, mutual interests, and shared sense of fraternity. Cooperation, and the expectation that they should consider other traders in their activities, bonds traders as a whole, but it is amongst traders with a shared identity where solidarity is greatest. However, what constitutes shared identity is fluid, typically conceived more broadly when further from home. To collude, traders also need to overcome any personal tensions and competition between them, and negotiate inter-group enmities. Relations of friendship and kinship that connect traders with both producers and vendors also factor in the capacity for traders to act collectively. What cooperation entails is also widely variable, from simply sharing information about road conditions to actively colluding to manipulate a whole marketplace. The state of price, supply and demand shapes the potential for cooperation and collusion. When prices in the highland marketplaces are high and the trade becomes potentially more lucrative, traders are more likely to act more individualistically. Alternatively low prices in the highlands make for small margins and in such situations traders need to work together against producers to suppress prices so that profits can still be made. Collusion amongst traders is largely opportunistic, and is not so durable or predictable that it may be considered cartel-like, but when the right people, place, time and conditions align it can have a profound impact on market dynamics.

The betel nut trade is not characterised by evenly matched groups of buyers and sellers. Instead, trade is conducted with an assumption of status inequality between transactors, and as a result bargaining and other techniques to shift prices are commonplace (cf. Modjeska 1985:158). The absence of bargaining in early marketplaces meant the person who set the price (the seller) was more powerfully positioned (Modjeska 1985:158-160), but with the prominence of active bargaining in the modern betel nut trade, sellers hold no particular advantage. Traders as a group are more often dominant in both buying and selling roles – although bargaining is only one means to shift prices, as the discussion of the behaviour of betel nut traders has shown.

Traders use their better knowledge of the prevailing conditions in different marketplaces over vendors and producers who typically do not travel. They play down prices in highland marketplaces to producers, and they exaggerate the prices in lowland areas and the expenses of travel to marketplace vendors. Traders also exploit the dependence of producers on income from betel nut, the result of low export cash crop prices, poor access to markets for these crops, and the desire and need for producers to earn cash. The small number of traders, in contrast to the much more numerous producers and vendors encourages collusion.
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A trade inequality also results from the fears that many lowlanders have of highlanders and the highlands. Lowlanders often see highlanders as aggressive and travel to the highlands unsafe. Irrespective of how accurate this perception is, it is an image that highland traders are all too happy to perpetuate. Fear keeps many producers out of highland marketplaces. This gives highlanders greater control over these spaces but it also keeps lowlanders poorly informed as to current market conditions, and therefore reduces their ability for informed negotiation. Traders also often perceive producers from more remote areas to be uncivilised *bus kanaka* (country bumpkins) (Modjeska 1985; Hirsch 1990). Traders pity them, but they also see this to justify their trade status inequality.

Though I have argued that diplomacy is an important aspect of the trade, there is no lack of short term opportunism involving trickery and obfuscation. Given the potential profits to be made from the trade the incentive to act dishonestly in transactions is great. Deceit for many is only considered problematic if one gets caught. Traders, for instance, proudly recounted how through their cunning they were able to push the lowland buying price down, pass off old betel nut for new, or ‘burn’ the money of other traders. Diplomacy in many cases is no more than an attempt to conceal trader stratagems. Market tricks often rely on a degree of collusion, stemming from group solidarity, as is evident in the tactics used by traders in Popondetta to downplay demand. All betel people have their own deceptive tactics. A betel pepper producer from Karkar Island commented: ‘We do lots of tricks because highlanders are tricksters. We are also tricksters’.

Marketing behaviour on occasion can descend to the use of stand-over tactics, intimidation and violence. Traders are not shy about pulling each other into line, and they have been successful at marginalising non-local traders in their marketplaces. Traders may also show aggression, although not physical, towards producers who they perceive to be stubbornly sticking to an unreasonable price. At 40-Mile marketplace in the Markham Valley I witnessed a trader in a disagreement with a female producer over the price of a bunch of betel nut. The encounter ended when the trader grabbed the bunch of betel nut over which they had been negotiating, threw a few notes on the ground (less than what the producer demanded), and marched off. The producer left the money sitting on the ground for several minutes, until it was clear the trader would not return, before she reluctantly picked it up. Most transactions are conducted relatively calmly but sometimes they can be accompanied by impassioned verbal altercations between transactors. It is this aspect of the betel nut trade that resonates with Modjeska’s (1985: 161) characterisation of pre-colonial trade as premised on an ‘undiplomatic trade inequality’.

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34 The fact that producers (due to plant ecology) are lowlanders, and the traders are overwhelmingly highlanders means that betel people often perceive the trade as interactions between broad cultural groupings, and in this context cultural stereotypes are commonly drawn upon.
The place of traders in the making of a Melanesian market

The dynamics of space and place are critical to the nature of trade interactions. The production village, lowland urban marketplace and highland marketplace, as the three key spaces in which traders transact, present very different contexts for trade. The specific locale is also important. Each gives rise to a particular set of power relations, amongst a particular constellation of actors, and this influences how ideas about competition, solidarity and diplomacy manifest and how transactions occur. These power relations are constantly contested and negotiated in the construction of markets.

CONCLUSION

The conduct of transactions for betel nut show considerable variation. It encompasses diplomacy, group solidarity, collusion and deceit. It is also always underlined by power asymmetries between participants. Each marketplace and each day presents a slightly different situation. The market conditions of supply and demand change, as do the individuals who comprise the collective of buyers and sellers present, and the dynamics within the marketplace change accordingly. But it is the traders who more often than not occupy the dominant market position.

There are often tensions in traders’ behaviour, the basis for which may be found in the co-present social pressure within Hagen sociality to both compete and cooperate. In a society in which material wealth readily translates to social prestige, the betel nut trade provides a new arena for social competition. Being a major player in the marketplace may achieve some renown; but more significantly it yields money that may be converted to vehicles, corrugated iron roofing and other material markers of success. But for most traders the pursuit of prestige is not a primary concern, yet there remains a strong desire amongst traders to assert agency and not to be out-done by their counterparts; to not be ‘rubbish’.

This rivalrous assertion of agency amongst traders manifests as a pursuit for profit. To raise their profits traders must increase the difference between expenses and returns. A trader can do this by achieving economies of scale, or by finding cheaper transport, but for the most part increasing profits means suppressing their buying price and to a lesser extent pushing up their selling price. Competition amongst traders in this way also becomes competition between traders and producers and between traders and marketplace vendors. The expectation that traders should show solidarity also focuses the nexus of competition on the vertical relations between buyer and seller, particularly in transactions with producers.
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Betel nut traders negotiate a variety of relationships with both known and unknown others. Traders are opportunists; to make money they must ‘find gaps’, which often involves tricking those who they interact with, but they also recognise the importance of social relationships to the success of their trading activities. In some cases this means ‘greasing’ or lying to maintain their relationships with producers. They may also act surreptitiously, for instance when they ‘burn’ the money of other traders. But equally, a trader with enough clout can be brazen in his tactics. This can be seen in the way *bevi haias* constrict the space within the market for other traders to act. It is also evident in the lowland marketplaces where traders employ assertive bargaining tactics against producer-sellers who in this situation are essentially price takers. Seeming contradictions in the behaviour of traders towards one another, and with producers and vendors should be understood within their contexts, and the mutually reinforcing influences of relationships and space/place. Traders, as do all betel people, evaluate (consciously and subconsciously) the potential gains and losses, both social and economic, which come from acting in particular ways. They negotiate this tension daily and often not without friction. Power asymmetries, the different manifestations of competition and cooperation, and social pressures upon diverse groups of betel people critically shape the trade and contribute to the diverse ways in which Papua New Guineans are actively remaking their markets.
Chapter 9

Conclusion

This thesis has told the story of the commoditisation of betel nut in Papua New Guinea and the social and physical construction of a flourishing, contemporary, and indigenous market for it. It has recounted the adoption of betel nut by a group of people, the highlanders, who have no shared history with the substance but have become the drivers of its commoditisation. Most importantly it has explored the daily lives of those people involved in the commodity phase of its biography, the ‘betel people’, and examined the relationships between them.

While betel nut has long been exchanged throughout lowland and coastal PNG, it was absent from the highlands in the pre-colonial era, and did not pass along pre-colonial highland trade routes. The early colonial period saw betel nut make short forays into the highlands but the real impetus for the trade came with the increased mobility of highlanders within a transforming economy and the upgrading of the Highlands Highway in the mid 1960s. Highlanders became increasingly involved in the cash economy, most notably as coffee smallholders, and became interested in bisnis. Since the 1970s the betel nut trade has effloresced, and has fundamentally changed the nature of highland and lowland marketplaces.

Betel nut trading is now a prominent livelihood activity for a large and increasing proportion of both rural and urban Papua New Guineans. It connects rural and urban spaces, highland and lowland, and taps into the ‘money places’; large scale resource extraction enclaves. For a few it buys glistening new Toyota Hiace minivans. For many it pays school fees and buys corrugated iron roofing, while others are fortunate if it provides them with an occasional evening meal of tinned...
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fish and rice. For those Papua New Guineans involved in the trade, betel nut is their ‘sweet potato’; it staves off hunger and provides an income upon which they subsist. It provides the everyday money on which people rely ‘thirteen days a fortnight’ (Chapter 3).

THE BETEL NUT TRADE

The contemporary trade in betel nut connects many parts of PNG through the movement of people, ideas and things (most notably betel nut and money) in a trade that is of considerable magnitude, scale and complexity. Betel nut is traded throughout PNG in short and long chains but it is the long-distance wholesale trade from the lowlands to the highlands that has been the focus of this thesis.

Both betel nut and betel pepper are grown widely throughout lowland PNG, but particular areas have emerged as important supply areas for the long-distance trade (Chapter 2 and 4). The two species produce year round, however they have seasonal variation in productivity. The ecological, geographic and climatic diversity of PNG means that different source areas are in their flush periods at different times throughout the year. This causes the supply reaching the highland marketplaces to fluctuate, which provides the underlying pulse of the trade. Traders follow the flush periods normally exhausting the nearest source areas first and travelling further afield as supply demands. They have become increasingly mobile and have created connections with ever more distant peripheries.

The wholesale traders are the central actors in the trade. They are virtually all highlanders and are overwhelmingly male. Female traders tend not to travel but they may finance and coordinate buying trips. Indeed women are prominent amongst beri baias. Travelling traders are hardened characters who regularly move between the highlands and lowlands usually spending around a week on the road for each trip. Traders travel to the lowland marketplaces and transit points and some venture into remote areas to buy from the producers in the production villages. Betel nut may be purchased pre-packed in bags, or bunches of individual nuts may be purchased before being packaged for transport.

The betel nut bags (and betel pepper baskets) are then loaded onto canoes, dinghies, boats and ships; minivans, trucks, and occasionally aircraft. It is only on the large ships and the aircraft in which commercial freight companies are involved. Betel nut flows through ‘formal’ transport channels such as the country’s road network, major ports and airports. But more important are the
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informal transport networks of small boats, minivans and people on foot, that transport betel nut along the coast, rivers, minor roads and foot tracks, and which service the country’s out-of-the-way and in-between places. These informal networks bridge and bolster the country’s fragmented formal transport system and are critical to the rural economy of PNG. The traders themselves are betel nut’s constant companion throughout its travels. Once on the roads the betel nut is transported up the Highlands Highway to large wholesale marketplaces in the highland urban centres. The risks associated with transport are great. Boats, overloaded and in poor weather, capsize at sea; cars crash as a result of speed, fatigue, alcohol, overloading, poor vehicle maintenance and the derelict standard of the Highlands Highway. Bags of betel nut are lost and traders die; such is the lure of ‘green gold’.

Betel nut is transacted in diverse locations; in the production communities at the producer’s haus dua, in lowland marketplaces and transport hubs, in large highland wholesale marketplaces and smaller roadside marketplaces, in highland rural villages and urban streets (Chapter 5). The specificities of place shape the transactions that occur in these locations, as do their connections with other places. Each place in negotiated by a distinct and diverse collective of actors.

The trade continues to grow. The total volumes are increasing, as are the volumes traded by individuals. There is also a high level of specialisation in the functions performed by different actors, and in the commodities in which they trade. For instance, traders are dedicated large volume wholesalers and do not usually arrange their betel nut in ‘groups’ for sale. Similarly traders and marketplace vendors only rarely trade in both betel nut and betel pepper at the same time. Lastly, though most betel people — especially at the household level — maintain diverse livelihood strategies, growing numbers of traders and vendors are spending a greater proportion of their time and labour transacting betel nut, and are becoming increasingly dependent on it for their livelihoods.

A feature of the betel nut trade that distinguishes it from the fresh food trade is the importance of intermediaries or middlemen. From producer to end consumer betel nut may be sold-on as many as five times, and rarely fewer than three times. The main actors in the trade are the producers, the wholesale traders, the marketplace vendors, the street and roadside sellers and the consumers. Traders buy and later resell, usually at different locations, exploiting price differences. There are also those engaged in arbitrage, who buy and sell the same item in the same marketplace on the same day profiting from bulk-buy discounts, and price increases throughout the day. An array of other intermediaries also transact on behalf of others, either on a freelance basis or in enduring
associations. Other actors transport betel nut and perform various other supporting roles within the trade. A central question to which this study has attended is how this diverse collection of actors interact and, in doing so, construct this market.

TRADING NETWORKS

The betel nut trade brings numerous people together to conduct the trade. Some of these people are known to each other, as kin and friends, and have a shared history inside and outside the marketplace, while others may be strangers who are unknown to each other and whom have no ongoing relationship. Some betel nut transactions are anonymous and impersonal, and some are intimate. The majority of transactions however are centred upon ‘weak ties’ (Granovetter 2005) (Chapter 6).

The betel nut trade is, for the most part, not a spot market in which relationships are simply between things, in this case money and betel nut, manifested in a price. To be sure, the quantitative and qualitative assessment of betel nut does matter; no one sets out to pay too much, or to receive too little, but the marketplace also reflects and expresses relationships between persons, and between persons and things. The trade is socially embedded. In different contexts traders, vendors and street sellers shop around for the best price. But those traders who buy in the production areas, and the street sellers who buy in the highland marketplaces, follow already well-trodden paths, or in Geertz’s (1978) term ‘grooved channels’, back to the same suppliers (see Alexander and Alexander 1991; Bestor 2004). However, traders, vendors and street sellers are not locked into these patterns of clientelisation through relations of debt. Neither producers nor vendors are compelled to utilise a certain trader by virtue of the provision of credit or resources, something widespread in other commodity chain relations (cf. Acheson 1985; Alexander and Alexander 1991). The great majority of transactions for betel nut involve the immediate exchange of cash, so that credit plays little role in the trade.

Patterns of repeat patronage contribute to minimising transaction costs and are underlined by trust created over time. Repeated patronage is most pronounced between marketplace vendors and their customers (the roadside and street sellers). Street sellers usually prefer to maintain relations with a small number of suppliers rather than dealing with a single supplier. When traders purchase in the villages of the producers, the relationships between producers and the traders are often enduring. Traders routinely return to the same villages and transact with the same people and in doing so develop familiarity, and frequently amity, with their hosts. The transactions between wholesale
traders and marketplace vendors are less patterned and consolidated because most traders do not maintain a permanent presence in the marketplace, due to their travels to buy betel nut, although vendors favour particular traders when those traders are present. In lowland marketplaces, where producers sell to traders, minimal or no ongoing relationships exist between buyer and seller. Where minimal bonds exist between buyer and seller, it is common for intermediaries to occupy this space and to mediate interactions. Specialised buyers, who have fostered relationships with the highland traders and with the producers, operate in the lowland marketplaces. Likewise specialised salesmen work between the wholesale traders and the highland marketplace vendors.

Personal relationships also influence where traders and marketplace vendors may trade. Traders do not have the freedom to sell in any marketplace but are limited to selling in those marketplaces where they have developed social relationships that afford protection for the trader. Few traders and vendors restrict non-local traders and vendors from operating in their marketplaces, although this may occur. But without a network of relations outsiders become the targets of raskols who may steal their betel nut bags and their money. When non-local vendors and traders sell in marketplaces where they are not known, they most often do so by having a local person transact on their behalf. Traders and vendors say they gain strength from their land, that is, from being local landowners and therefore being related to many people in the marketplace; something they do not have elsewhere. This allows them to hold large amounts of cash openly in the marketplace without fear of being robbed. They say ‘this is our place, why should I be afraid?’ Relationships offer security but they are also about exclusion. Whether due to the benefits they gain, or simply because they have few other options, in general betel people, whether producers, traders, marketplace vendors or roadside/street sellers, show a tendency to repeatedly interact in the same places. The tendency to operate in the same locations is more pronounced than the propensity to trade with the same people. These highly place-based social relations, through the restrictions and protections they create, have also produced those niches where intermediaries may mediate the different social relationships.

It is clear that social relations bear upon the structure and function of markets, but betel nut crosses too many ethnic and linguistic borders for trading to be focused only upon ethnic divisions and kinship. Kin relations matter, and in some circumstances are crucial, but generally they are of lesser utility in trade. Weak ties (save fei) are a much more important basis for betel nut trading (cf. Granovetter 1973). Relations in betel trading are more often based on other social connections including school and work acquaintances, and friendships. Most importantly are those friendships developed through the trading of betel nut and betel pepper (mipela pren bilong buai na daka).
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Through interaction in the trade, kin and friends become trading allies but trade acquaintances can also become kin and friends (Chapter 7). Traders regularly and repeatedly visit the same lowland villages in order to purchase betel nut, and routinely stay for several days at a time. These communities become homes away from home. Traders are extended hospitality by the producers, they socialise with those in the village, and they exchange everyday gifts of cigarettes, betel nut and Coke. Relationships are extended beyond their utilitarian value as merely trade associates. Trade remains the focus of their interactions and in the absence of trade these relationships would likely dissipate, but while trade continues such relations are valued for more than trade purposes.

Trade provides a context for diverse forms of sociality and also diverse forms of exchange. The trade in betel nut incorporates transactions that approximate both the commodity and the gift, and as a result these transactions retain a moral ambiguity. Transactions for betel nut have a clear utilitarian basis – people trade betel nut to make money – but in fulfilling these objectives betel people often seek out transactions that also contribute to their social reproduction. In this way seemingly straightforward commodity transactions of betel nut for money may contribute to reaffirming relations of kinship and friendship, and trade transactions may be conceived as part of a broader set of exchanges which contribute to cultivating solidarity and kinship, and to creating obligations. Through trade commodities are transacted but in doing so betel people also make qualitative statements about the substance of their relationships with others. However, this is dependent on these transactions being reconceived through local ideas of exchange and sociality (Mosko 1999), or alternatively that the money attained in transacting betel nut in the marketplace be redeployed into socially reproductive activities in a significant way.

Betel people pragmatically manipulate their social networks. They actively extend their connections to other betel people in distant places but they also seek to place limits upon what kinship and friendship entail (cf. Kirsch 2001; Bainton 2009). Betel nut traders, reminiscent of capitalists, achieve a profit through extending their activities to an ever widening periphery, and by trading with people with whom relations are indeed unequal. Traders must also keep the requests of their kin at bay, a common story amongst other indigenous entrepreneurs (cf. Curry 2005; Cahn 2008). Paradoxically, weak ties with trading friends can become enduring and are attractive because they can be readily severed. Strong ties amongst kin cannot be denied or broken, and kin must therefore be distanced in the bisnis context. The way in which traders construct, cordon and manipulate their social networks fundamentally shapes the structure and the practice of the trade.
The interactions between the diverse groups of betel people are complex (Chapter 8). The conduct of the trade is underlain by power asymmetries that are spatially contingent and are regularly contested, negotiated and reconfigured. But there is also a measure of diplomacy, and only occasionally generosity (cf. Sahlins 1972). To an extent, this diplomacy reflects a concern for the wellbeing of those with whom trade is conducted, but more importantly it is about establishing and maintaining enduring relations that benefit trade, and in many cases fear of the repercussions of driving too hard a bargain. Group solidarity also has a profound impact, for instance when traders band together in lowland marketplaces, although it does not produce a situation in which parties to exchange have no choice but to adhere to a customarily established price (cf. Keil 1977). Instead, in the context of unequal power relations, the group solidarity amongst traders means the trade is often better described as an ‘undiplomatic trade inequality’ (Modjeska 1985:161).

The highland traders are more often than not positioned more powerfully, and have the greatest agency to shape the market in their favour. In the case of producers this power asymmetry is largely a factor of their isolation from other markets and the obvious truth that betel nut rotting on the ground is worth nothing. In both buying and selling locations, highland traders also exploit the lack of good information that remote producers and sedentary vendors have about prices at opposite ends of the value chain. Within the betel nut trade competitive trading practices are highly visible; hard bargaining occurs, traders ‘race’ to make purchases, and active selling techniques, such as calling out to potential customers, are used.

However, relations are not always focused on vertical competition between seller and buyer, supplier and customer. In Hagen sociality there is an acute sense of competition between men (A. Strathern 1971a). For traders this means other traders are both companions and rivals. This is productive in the sense that it spurs a drive for self achievement, something that traders suggested explained the success of Hageners in *bisnis* and the Hagener dominance in the betel nut trade. However, it is also something that manifests as malicious behaviour. So that while traders encourage each other to cooperate, and their collective dominance in the trade is to a large extent based on this, they also find that group solidarity and alliances are often opportunistic, ephemeral, tenuous and possibly treacherous.

Amongst traders the tension between cooperation and competition also shapes the interactions that traders have with both producers and vendors, and impacts the trade as a whole. Traders pragmatically assess what stands to be gained and lost in different relationships and in different transactions; sometimes coolly and sometimes emotionally. Ultimately traders are in the market to
trade and make a profit but, as A. Strathern (1972b:373) has done, I question whether these new highland entrepreneurs are the kind of men who will endure considerable social costs to realise monetary profits. Traders daily negotiate just that, and even as individuals do not respond consistently. They negotiate relationally specific social networks with others, heedful of the impact of space and the particularities of place.

PAPUA NEW GUINEAN MARKETPLACES: FROM PRODUCER-SELLERS TO MIDDLEMEN

The contemporary betel nut trade is most clearly characterised by: the long-distance movement of the commodity; the dominance of middlemen and wholesalers; a high level of specialisation; and the commonplaceness of competitive trading practices. These features mark distinct changes from the early marketplaces studied in the 1960s. These marketplaces, in which both fresh food and betel nut were sold, were characterised by: produce moving only short distances; the preponderance of producer-sellers and the near absence of middlemen and wholesalers; limited specialisation; and the absence of competitive practices (Epstein 1961, 1982; Brookfield 1969a, 1969b, 1969c; see Bourke 1986a).1 Subsequent studies documented a number of changes to these characterisations – often emphasising the trade in betel nut as the area in which change first occurred and in which transformations were most developed (Jackson and Kolta 1974:esp. 35-8; Jackson 1976a; Bourke 1986a, 1986b; Walsh 1986; Benediktsson 1998, 2002).2 This thesis has been concerned with the characteristics and dynamics of middlemen participation in the betel nut trade, however, it is worth briefly considering how these same features are reflected in the marketplace trade of fresh food.

Although undoubtedly the greatest transformation of marketplaces over the past forty years has occurred in relation to the sale of betel nut, some of these changes have emerged to a lesser degree in the trade of fresh food. Similar to the trade in betel nut, fresh food is also being transported over long distances, and in considerable volumes. The long-distance movement of fresh food observed by Bourke (1986a) and Benediktsson (2002) has continued to grow in scale. Peanuts and coconuts grown in the lowlands are wholesaled in large quantities to the highlands (Plate 32). Likewise fresh

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1 There have been numerous studies of marketplaces in Melanesia. See Harding (1967); Epstein (1968, 1982); Brookfield (1969a, 1969b, 1969c); Daleyne (1969); Hogbin (1969); Salisbury (1970); McCullough (1971); Jackson and Kolta (1974); Hide (1975 unpublished, 1978 unpublished, 1993 unpublished); Howlett et al. (1976:237-243); Jackson (1976a); von Fleckenstein (1976); Gewertz (1977, 1978, 1983); Sillitoe (1978); Mahoney (1980); Flores and Harris (1982); Bourke (1986a, 1986b); Walsh (1986); Carrier and Carrier (1989); Maclean (1989); Benediktsson (1998, 2002). Also see Sahlin (1972); Keil (1977); Modjeska (1985).

2 There is an increasing distinction between the spaces in which betel nut and fresh food are sold. Betel nut sales are banned from the main fresh food marketplaces in Madang, Lae, Kainantu, Goroka, Kundiawa and Mt. Hagen. In Popondetta and Wewak betel nut is still sold in the main government fresh food marketplaces. In most minor marketplaces fresh food and betel nut are still sold together. Marketplaces that are dominated by betel nut, such as Kaiwei, also contain fresh food sales.
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food grown in the highlands, including sweet potato, potato, oranges, mandarins, broccoli, carrots, cucumber, cabbage, onion, tomatoes and capsicum, is sold in considerable volumes in the lowland urban marketplaces including Lae, Madang and Port Moresby.³

Similar to betel nut marketplaces, fresh food marketplaces are also showing increasing role specialisation, however it is considerably less developed than that observed in the betel nut trade. In urban areas there are also increasing numbers of full-time vendors for whom marketplace selling is their main livelihood activity (Brown 1988:134; FPDA 2009).³ Competitive trade practices also occur including bargaining by middlemen (Vinning et al. 2008:5) and calling out to attract customers, although again this is considerably more subdued than that occurring in the betel nut trade.

Plate 32: Wholesaling of peanuts produced in the Markham Valley in Mt. Hagen’s main fresh food marketplace, November 2007.
Note: Peanuts, like betel nut, are sold in bags, ‘half’ bags and in groups.

Of particular importance to the future of fresh food marketplaces is the increasing role of intermediaries in marketplace trading. For instance, fresh food producer-sellers on occasions also act as intermediaries, supplementing their own produce with that of other producers. Sometimes they sell on behalf of a friend or family member, and on occasions may buy produce from other producers to sell alongside their own. Urban residents in Port Moresby, Lae and Mt. Hagen buy

³ Marijuana is another highland crop sold discretely in the lowlands.
⁴ Most but not all fresh food is sold through marketplaces. Producers and intermediaries also sell to commercial wholesale depots, and directly to stores and institutions like schools, hospitals and gaols.
direct from producers and also from other intermediaries and then retail the produce in the urban marketplaces (Benediktsson 2002:218-9; Vinning and Galgal 2008; Vinning et al. 2008). Intermediaries have also started to buy from producers in the highlands, at the farm gate, on the roadside, and outside the urban marketplaces, and then transport the produce long distances to lowland marketplaces either to sell directly to consumers or to other intermediaries (Plate 33). The role of intermediaries in marketplaces has increased significantly in Port Moresby, where intermediaries may have surpassed producer-sellers in terms of the number of sellers and volume traded (FPDA 2009:4, 19).

Intermediaries operate to different degrees in the trade of the various export cash crops including cocoa and coffee, and in the sale of fish (see Kinch 2006). Some of these intermediaries are agents for different companies, while others operate on a freelance basis.

The Feeding Port Moresby Study, (FPDA 2009) which surveyed a total of 109 marketplace vendors from six Port Moresby marketplaces, reported that 55% of marketplace vendors surveyed were intermediaries, and of these 63% had purchased from other intermediaries. Walsh (1982) described how many Port Moresby street sellers (those selling outside designated marketplaces) were reselling produce they had previously purchased from producer-sellers in the urban marketplaces.

However, unlike the long-distance highland betel nut trade, producer-sellers remain a core feature of fresh food trade. For instance, Eastern Highland sweet potato producers travel to Port Moresby

Plate 33: Wholesaling of fresh food produced in the highlands outside Mt. Hagen's main fresh food marketplace, November 2007.

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5 Intermediaries operate to different degrees in the trade of the various export cash crops including cocoa and coffee, and in the sale of fish (see Kinch 2006). Some of these intermediaries are agents for different companies, while others operate on a freelance basis.

6 The Feeding Port Moresby Study, (FPDA 2009) which surveyed a total of 109 marketplace vendors from six Port Moresby marketplaces, reported that 55% of marketplace vendors surveyed were intermediaries, and of these 63% had purchased from other intermediaries. Walsh (1982) described how many Port Moresby street sellers (those selling outside designated marketplaces) were reselling produce they had previously purchased from producer-sellers in the urban marketplaces.
where they sell their produce in the capital’s marketplaces (Benediktsson 2002). When compared to intermediary selling, producer-selling is a relatively inefficient marketing practice. Producer-sellers struggle to make economies of scale, and during their selling trips they are not investing labour in production. Because of their irregular marketplace attendance producer-sellers also typically have poor knowledge of market trends, particularly in distant marketplaces, and are less well practiced sellers which places them at a disadvantage. Increased intermediary involvement in fresh food markets is likely to be beneficial, but there are strong reasons producer-selling remains a dominant strategy; levels of distrust are high, particularly of middlemen, and trips to the marketplace are not always primarily motivated by selling and profit (Jackson 1976a).

While a number of the changes observable in the betel nut trade are also evident in fresh food marketplaces, it is unlikely that fresh food marketplaces will ever come to fully resemble the betel nut trade. Betel nut when compared to most fresh foods has high weight value and low bulk which makes it cost effective to transport. Betel nut also has a larger price difference between producer and consumer which gives considerable latitude for intermediaries to operate (Table 16 and Figure 14). Most importantly, there is considerable demand for betel nut and a high willingness to pay, something it shares with many drug markets: carotene simply is not as addictive as arecoline.

Intermediary involvement in the marketplace sale of fresh food is unlikely to ever develop to the extent that it has for the sale of betel nut, nevertheless it is clear that intermediaries are becoming increasingly prominent in Papua New Guinea’s fresh food marketplaces. This means that, while producer-sellers may have provided a good frame for planning for marketplaces in the past, greater consideration now and in the future must be given to intermediaries and their growing and important role. Understanding how middlemen participate in the betel nut trade, and the dynamics of their interactions within the marketplace, will likely contribute to understanding middlemen in fresh food marketplaces.

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7 Betel nut sold by producers at the haus dua for K2.50/kg, may then be sold in Kaiwei market by wholesale traders for K8.00/kg and then by marketplace vendors for K11.00/kg. Sold on the streets of Mt. Hagen it may be sold for K27-38.00/kg. This does not account for costs incurred and is not a good indicator of likely profits particularly for street sellers (Chapter 5). Each of these actors is also selling in hugely different volumes. By way of contrast in 2005 sweet potato sold for around K1.30/kg in Port Moresby and K0.55/kg in Madang (McGregor and Bourke 2009:279). Similarly, in 2006 an Eastern Highland producer of ‘airstrip’ coffee might receive K0.44/kg for their coffee, which when sold as a bag of beans in America sells for K17.50/kg (see West 2012:16-17). Admittedly more processing and transport costs occur in the coffee trade. In 2006, the weight value of dry cocoa beans transported by a middleman in Morobe Province was around K4.80/kg (Kinchi 2006:16-17).

8 Carotene is an important dietary source of vitamin A which is found in a range of vegetables, particularly those, such as sweet potato and carrots, which are orange in colour. Arecoline is the main alkaloid in betel nut, responsible for its stimulating and addictive properties (Chapter 2).
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DEVELOPMENT AND MARKETS: WHAT DOES FOLLOWING BETEL NUT TELL US?

Development and markets are intimately entangled. Benediktsson (2002:22) comments that: ‘[p]articipation in a market of some sort – almost any sort, it sometimes seems – has long been seen as a prerequisite for rural advancement, or “development”, in the highlands of Papua New Guinea’ (cf. Maclean 1989:79). A ‘road to the market’, for export crops, fresh food and labour, has become symbolic of development and the capacity to participate in the modern world through the money and material things market participation brings (Hirsch 1994). This association is real. The most disadvantaged areas of PNG are those with the poorest access to markets and services, and conversely those with the best access to markets and services exhibit the best indicators of wellbeing (Hanson et al. 2001; Gibson and Rozelle 2003; Allen et al. 2005). Further, increases in cash incomes generally lead to improvement in people’s food security, nutrition and health.

Export cash crops are an important source of income for rural Papua New Guineans, however equally important is the, often overlooked and undervalued, diversity of ‘informal’ economic activities in which people are engaged. Most prominent amongst these activities is marketplace selling, particularly of fresh food and betel nut (Bourke 1986a; Allen et al. 2009). Marketplaces represent a smaller but more regular source of income than export cash crops for a large number of Papua New Guineans. They play an important function in the redistribution of wealth between rural and urban areas, and are particularly important for women, who are the main participants in these spaces. With this in mind, what can be learned from following betel nut? What might betel

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9 ‘Road’ in *Tok Pisin* (*roṭ*) also refers to a way, or means by which, an objective is achieved. Goddard (1995:70) for instance highlights a number of *roṭ* by which development is to be brought about including business, religion and crime.

10 This is also a factor of geography and history. In pre-colonial PNG, those areas with the least favourable environments had the lowest population densities. Poor environments and low populations attracted less in the way of both government and private sector development. This has acted to reinforce pre-existing inequalities in PNG (Allen et al. 2005).

11 The contribution of income to food security was demonstrated following widespread failure of subsistence food crops in the 1997-1998 drought in PNG. Those people with access to cash, whether from the household itself or obtained through social networks, purchased rice and other store goods to deal with the ensuing food shortage. The most vulnerable were those remote areas where cash incomes were very low, and where few people possessed social networks connecting them to kin employed in the urban areas (Bourke 1999; Allen and Bourke 2009a:62-7). Higher cash incomes also improve nutrition. Many rural diets are inadequate in fat and protein, so increased purchase and consumption of energy dense imported foods such as lamb flaps and tinned meats contributes to improved nutrition and associated health benefits (Heywood and Hide 1992; Allen et al. 2005; also see Gewertz and Errington 2010). Cash incomes also improve access to health services, if only to pay for the high transport costs to reach the nearest health centre. Subsistence production is the greatest strength of the PNG rural economy but concepts such as ‘subsistence affluence’ deny the food insecurity and poverty that exists in many rural areas throughout the country.

12 ‘Informal’ economic activities are often overlooked, at least partially due to the lack of data on such activities. As a result they are underestimated and considered of peripheral importance. This has particularly been the case in PNG where the informal economy has often been considered minor and underdeveloped (see Conroy 1974;Connell 1997:205-7).
people be able to tell us about other markets, and about the role of markets in development, in PNG? That the betel nut trade was constructed by Papua New Guineans, without external input, gives it particular pertinence.

Following betel nut demonstrates the social embeddedness of markets, and the influence of place-based practices on their structure and operation. It draws attention to the complexity inherent in all markets; the diverse collection of actors, their multiplicitus networks of associations, and the geometries of power between them. Betel people highlight that social relationships enter every facet of the trade. They are the basis for their participation in the marketplace and assure their ability to trade. They offer safety in some spaces and exclusion from others. Social networks also ensure supply of betel nut and that it will be of the desired quality. They represent a potential strain upon the financial viability of a business (cf. Curry 2005), a source of support, a basis for patronage, and the means to sanction. They elicit cooperation, but also competition, and they underlie power asymmetries.

For markets to be made to ‘work for the poor’ (Ferrand et al. 2004), and provide a basis for addressing disadvantage, recognition of the social embeddedness of trade must be central to development project planning. It is widely recognised that good development outcomes, market focused or otherwise, require in-depth understandings of local sociality, culture and geography. Despite this numerous interventions into markets provide only technocratic fixes, often transposed into place, with little thought given to the local social complexity, power dynamics, and likely constraints and assets. New technologies of production and marketing can play an important role in addressing disadvantage, but they must not emerge in a social vacuum.13

Following betel nut also brings into focus the considerable challenges faced by Papua New Guineans in their engagements with markets, and for development planners seeking to intervene. Geography, perhaps more than anything else, has shaped the country’s markets and its people’s fortunes: ‘underdevelopment and poverty in PNG is not the outcome of unequal market forces but is primarily the outcome of environmental conditions that prevent people from engaging with global and domestic markets’ (Allen et al. 2005:201). PNG’s transport network is uneven, fragmented, unreliable and expensive. Information communication has dramatically improved with the growth in mobile phone use since mid 2007, nevertheless many parts of PNG, particularly the more remote areas, have no coverage. Even in the best serviced areas, attaining reliable information

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13 Fair trade marketing networks provide an example of a market intervention full of good intentions yet which has in many instances been adopted formulaically without sufficient consideration given to how it might play out in place (Neilson 2008).
can be difficult. Banking services are insufficient and lack utility for many traders, and crime on the roads and in the marketplaces is an ever present concern. Environmental constraints also curtail the different markets open to people. It is very difficult not to frame the situation in a language of deficiency (cf. Gibson-Graham 2005). Given the substantial friction experienced by market networks in PNG, that commodities do move at all is attributable to the perseverance, resilience and sense of humour, amongst market participants. The challenges are considerable but, as betel people demonstrate, not insurmountable.

Despite the criticisms levelled at the weakness of the state, the poor condition of the country's roads and other infrastructure, among various other challenges, betel people demonstrate their resourcefulness, skill, ingenuity and vitality. Betel nut traders encounter the same problems as all traders in PNG; they travel the same roads and the same seas and they do so with comparably perishable commodities. The success of the betel nut trade lies in its informality and flexibility. Betel nut does not travel in refrigerated containers on large trucks and ships. It is moved in minivans, small dinghies and canoes, offloaded on beaches and river banks, and carried by foot across landslides. Betel nut does not wait around on wharves or in wholesale buying depots and is not sold through stores, but is quickly transacted through informal marketplaces. If ships are delayed, traders take the 'back road' (Chapter 4). Social relations rather than contracts link buyers and sellers and provide the necessary trust and sanctions between them. While betel nut traders have proved resourceful and capable of overcoming many of the problems they encounter, no traders would complain if roads were better maintained, shipping timetables and carriage policies more stable, telecommunications more accessible, financial services more readily available, or if there was greater security on the roads and in marketplaces.

The betel nut trade also highlights the success of an endogenous market, conceived by Papua New Guineans themselves and created spontaneously, rather than being prefabricated externally. The betel nut trade is large, complex, vibrant and growing, perhaps because of, not in spite of, the absence of external assistance. It is a success story of indigenous entrepreneurship, and is demonstrative of how many Papua New Guineans have responded to the opportunity of a financially sustainable market. Numerous market-led agricultural developments in PNG have foundered upon unviable markets. Price collapses or overoptimistic price predictions, poor returns for labour, and the overreliance on non-local actors (government and donor) has seen the decline

14 Under normal conditions betel nut lasts around a week, betel pepper a few days. Betel nut's husk does make it robust.
15 Betel nut traders are however subject to rather unpredictable and frequent changes to shipping policies regarding the transport of betel nut.
or departure of many commodity crop markets from PNG (eg. cardamom, chilli, pyrethrum, rice, rubber and vanilla) (Allen et al. 2009). International markets can be fickle, and niche markets and income opportunities often fall short of the inflated expectations of their grassroots participants/ recipients (see West 2006).

PNG’s betel nut marketplaces grant considerable agency to their participants. Unlike the wholesale vegetable depots and the coffee factory doors, the country’s informal marketplaces are spaces which belong to the grassroots participants (cf. Benediktsson 2002; West 2012). They are spaces in which local people have significant control and the capacity to influence, negotiate and contest. They have their own geometries of power, in that particular groups and individuals have more agency than others, but betel people are not isolated from the centres of power. They are not simply price takers on the periphery but are active price makers. Prices are shaped by the relationships that betel people have with one another rather than simply by supply and demand. All actors have some awareness of the role market conditions play. They refer to the marketplace being sot (undersupplied) or pulap/bam (oversupplied), but these are not immutable market forces, they are conditions to manipulate and conceal as they daily make and remake the market. The market is not remote and abstract. It is real. Betel people can see the number of vehicles arriving in the marketplace, count the bags and baskets, and watch money change hands. They can inspect the betel nut’s qualities; the appearance of the skin, the texture of the flesh, and its taste. They know and recognise many of the other market actors. They can hold hands and throw punches. The market is visible and tactile and this is much of its appeal.

That the betel nut trade is potentially very lucrative has attracted both producers and intermediaries. For those who are innovative and overcome those obstacles faced by other trades, there is considerable financial reward. Other features have also facilitated the trade’s success. Production requires relatively minimal labour, minimal capital inputs, and ‘only an extension of present activities and not the introduction of a whole complex of new techniques and practices’ (Stephen 1974:384). It is also a trade in which the benefits may be shared relatively equally amongst all members of producing communities (Stephen 1974:384). As a cash crop it has also been successful due to betel nut producers, traders, vendors and roadside sellers also being betel nut consumers. Betel people have an expert knowledge of their commodity which producers of export cash crops like coffee, cocoa and vanilla do not have.

It is also important to note that betel people have been able to shape the structure of the enterprise themselves. The structure of the betel nut trade enables people to participate at any scale of
magnitude, from the large and complex operations of *bei baias* dealing in hundreds of bags, to individuals selling single betel nuts from their pocket on a street corner. Betel people have thus been able to determine the business model they adopt. For some this has meant working with a group of close kin. Others have selectively drawn upon their social networks, keeping close kin at arms length and strengthening their weak ties with distant others. The betel nut trade undoubtedly owes some of its success to the space it gives to individuals. Market-led development projects in PNG have often failed because they are based on a conception of community that presumes a level of group coordination and cooperation at a scale where this is unsustainable and tenuous; cooperatives are a key example (Sillitoe 2010:459-61; Brooks 1996:8). To what extent might the rise of intermediaries and the negotiation of accumulation evident in the betel nut trade, signal broader economic changes and possibilities in PNG?

Following betel nut, and other commodities, also points to the intersections between the marketing networks of different commodities, and the ingenuity of Papua New Guineans. Trucks freighting goods for big resource extraction companies up to the highlands will often backload fresh food ‘off the books’ (Benediktsson 2002:209-10). Betel nut traders have also created linkages with other market chains. Along the Morobe coast, fishing boats purchased through a donor funded loan scheme, and powered with discounted diesel from a logging operation, are being used to move betel nut during the Popondetta buying season (Vignette 1). The betel nut trade evidently benefits but this also increases the financial viability of the fishing boats. Minivans which carry betel nut up to the highlands return to the lowlands with passengers and fresh food. Similarly, employment as a caretaker at a local church can also provide a secure fence from behind which betel nut can be sold. Development interventions into market networks would do well to examine the interrelationships between different commodity networks, including betel nut, rather than attending to each in isolation. Could empty boats travelling from Lae to Popondetta assist service provision and market access along the Morobe or East Sepik coastline? Could lowland bound PMVs help move other commodities?

Further, the betel nut trade demonstrates the importance of diverse livelihood strategies. Traders highlight that they are able to take the considerable risks they do because ‘*kaukan na kol wara i stap*’ (‘there is [always] sweetpotato and cold water’), that is, they can fall back onto their subsistence base. Overreliance on any single livelihood activity is risky. This was reinforced for Mekeo betel pepper producers when pepper prices suddenly dropped in the mid 1990s (Mosko 2005:19), and for betel nut producers in the Markham Valley in the wake of a disease that has devastated their plantings. How might development interventions build on complementarities between the
production and trade of different export and domestic cash crops, subsistence production, and non-agricultural sources of income?

There are few cash earning activities available to grassroots Papua New Guineans that offer better returns for labour than betel nut (cf. Allen et al. 2009:411-419). The potential profits from betel nut have attracted export cash crop smallholders and wage earners alike, much to the ire of many politicians, bureaucrats and development practitioners. Sillitoe (2010:468) comments:

> there is a certain irony ... in Highlanders ... supplying what is in heavy demand – that is, responding to market forces as advocated by development program-funding capitalist states – only to find that when they do act on price and cultivate [and trade] the most profitable crop for sale, their would-be developers, for all their trumpeting of free markets, consider their behaviour regressive and seek to suppress the trade.16

The attempted suppression of betel nut sales by local authorities has been a recurring occurrence in PNG’s urban areas since at least the 1970s. From 2008 there has been a more sustained effort to regulate betel nut sales and consumption in Port Moresby (Appendix 4). The further irony is that by authorities pushing betel nut sales out of government controlled spaces, this trade has become even less legible and less controllable (Scott 2009). Even if such regulation is ultimately deemed beneficial, it will not be effective while selling betel nut remains considerably more lucrative, and often more accessible, than the alternatives. Betel nut selling is likely to prove an enduring aspect of many PNG livelihoods well into the future. It will therefore be more fruitful to plan to work with the betel nut trade rather than rail against it. This will entail considering how betel nut fits into diverse urban and rural livelihood strategies, and recognising the interconnectivity within the PNG economy (Chapter 3).

Lastly, following the money earned from betel nut should cause pause for thought. Many of the PMVs that service the Highlands Highway have been purchased with money earned through betel nut trading. Road traffic associated with the trade has also provided income earning opportunities to women who sell in small roadside marketplaces throughout the lowlands and highlands. Many of these marketplaces would not exist without the custom of passing betel nut traders. On the Ramu River betel nut earnings have been used to purchase outboard engines. This has improved transport on the river and enabled residents to transport their cocoa to buyers in Bogia and Madang, as well as access health and education services. The transport and sale of small amounts of betel nut is also commonly used to defray the costs of travel for other purposes. Small but regular earnings from

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16 Sillitoe’s comments are primarily on marijuana but he does make reference to betel nut, to which his observation is equally pertinent.
betel nut are also an important part of livelihood strategies based on more periodic or seasonal returns, as is the case with export cash cropping and wage employment. Money accumulated from betel nut sales is spent on school fees and is also invested into other enterprises such as tradestores and chicken rearing. Admittedly, a sizeable amount is also spent on card games and on alcohol consumption. While this spending is often frivolous, card games do have an important redistributive function whereby ‘money goes back into social ties’ (A. Strathern 1991:212). Though betel nut, as a result of the ‘informal’ nature of its sale, is not directly taxed, a considerable portion of earnings from betel nut sales ultimately find their way into the shops to purchase goods which do incur a value added tax, and thus contribute to government revenue. The betel nut trade is contributing significantly to improving the livelihoods and wellbeing of grassroots Papua New Guineans. How might the effects of regulation of betel nut reverberate through the economy?

Betel nut, and its trade, is not without its opponents or negatives. There is enough evidence that it is deleterious to health to warrant concern, limited household incomes could be better spent on other things, and its consumption literally leaves its ‘mark’ on the towns. But there are more pressing areas of social concern, where the time and resources of government could be more fruitfully deployed, than the regulation of the sale and consumption of betel nut. Could money be more profitably spent improving marketplace facilities, and providing vendors with clean water, sanitation and garbage disposal – or, for that matter, on improving the country’s health and education delivery – rather than employing ‘city rangers’ to chase sellers from the streets with fan belts and to raze their stalls? Admittedly such actions are not entirely sanctioned by the authorities, but a problem of translation certainly exists. It seems that the fear held by authorities of things beyond their control has driven them to a futile, and potentially damaging, pursuit of betel nut (what, for instance, may become of the idle hands created?) Betel nut after all is engrained in sociality throughout the country and contributes to a great number of livelihoods. Any attempt to regulate it is likely to prove a Sisyphean struggle.

The widespread consumption of betel nut throughout PNG has also provided a commonality upon which an ‘imagined community’ and national culture may be founded (Hirsch 1990; Foster 1992b). Similarly, I believe that spatially extensive betel nut trade networks provide a context for diverse groups of people to interact and thus find commonality. To the extent that betel people of diverse backgrounds have developed relationships that overflow conventional boundaries to trade has contributed to a broadening moral community. Although the concern remains that the performance of trade power asymmetries also holds the potential to intensify identity conflicts,
such as those tensions evident between lowland producers and highland traders in the lowland marketplaces.

**BETEL NUT, COMMENSURABILITY, AND THE GRASSROOTS**

In the late afternoon and on the weekends, those who have employment in town will often come to Kaiwei marketplace. These people are conspicuous by the way they carry themselves and the shoes they wear. I asked a betel nut trader his thoughts. He said, ‘he walks around like he is a big man, what for? I think he must be thinking of his education or his office work. But our main thought is that he is no match for us in terms of money, we make money every day’. Betel nut work is typically cast as ‘something of the grassroots’ and is often referred to disparagingly as ‘rubbish work’ yet, as the trader above suggests, this is in contradiction with the money to be made from selling betel nut. By a different measure, those higher earning betel people perceive themselves as equals or even superior to those in wage employment. There is some satisfaction in having a wage earner come to you, as a lowly betel nut trader or vendor, to borrow money. Betel people are also able to demonstrate their efficacy in the contexts of bridewealth and compensation payments, by contributing as much as, or perhaps more generously than, their employed counterparts. Education and wealth can no longer be considered synonymous. In this way, betel nut trading is being used by Papua New Guineans to resist those emerging class distinctions in PNG, in which commensurate difference is becoming incommensurate difference – that is inequality of degree is becoming inequality of kind (Gewertz and Errington 1999:1-3).

At the same time that betel people assert themselves as commensurate with saveman (educated people) and wage earners, they also reinforce that they remain fundamentally ‘grassroots’. Although trading betel nut has emerged as a new arena of competition between men in Hagen, few traders see themselves attaining any significant social status through trading betel nut per se. ‘I have no education; I just stayed at home … If through my betel nut work I get a car, still no one will take note of me … I am a villager, I am grassroots. I have a car, I have a house, everything, except I do not get recognition’ expressed one trader. So while beri baias may achieve local renown as influential market actors, and may be known widely in betel networks, proud that producers in the Middle Ramu, or vendors in Wabag, know their names, they readily acknowledge that they are unknown in wider circles. As village/grassroots entrepreneurs they are of a qualitatively different league to Hagen’s big businessmen. In the competition amongst traders there is a concern for social status, but this is focused on their counterparts, those at their own level. They are concerned that they not be belittled by another’s success (Chapter 8).
Betel nut traders remain enmeshed in their cultural milieu. *Hevi baias* are not ‘big shots’, new model entrepreneurs who have distanced themselves from their communities (see A. Strathern 1972b; Martin 2010). They continue to live on their clan land, and though their houses may be a little more impressive than others within the hamlet, they continue to live much as their neighbours do. *Hevi baias* have largely attracted wealth without creating incommensurate difference. How long will this remain? Betel people say they gain ‘strength from their land’, in reference to the support they receive from their place-based social networks of kin and friends, but they recognise this will only remain true if they continue to nurture these social relations and maintain a ‘hand in the community (komuniti)’. They must contribute to the community’s reproduction through everyday practices of giving, customary exchange practices and, in contemporary Hagen, contributions to youth groups and sporting teams. In Hagen it remains the case that to be relationless is to be ‘rubbish’ (M. Strathern 1999:99).

Betel nut trading, as with other *bisnis* in PNG, is an articulation of exogenous models of enterprise and endogenous ideas of sociality and exchange. Confounding to western profit oriented ideas of business, notions of *bisnis* in PNG may have more to do with concerns about social status than with economic profits (A. Strathern 1972b; Curry 2005; Banks 2006b). For some *bisnis* owners to amass sufficient funds and to subsequently purchase a vehicle, or build and stock a tradestore, may be an end in itself, the owner content with having demonstrated individual and group power and efficacy (A. Strathern 1972b:373; Goddard 1995:68-9).

But, in contrast, trading betel nut requires no asset acquisition. The materiality of betel nut trading, some empty bags, a needle and thread, and a wad of cash, confers little prestige by itself. Trading provides money that opens numerous ‘roads’, one of which is prestige. So for those traders wanting to attain a ‘name’, permanent-material houses, tradestores and particularly vehicles remain key markers of success – although this alone may not be sufficient (see above). A small trader commented that when a betel nut trader purchases a vehicle ‘he is publically showing that he is this kind of man or that kind of ma. Now the community only look to him. He is a man with a car. Whatever we need he will help with. We will look solely to him’. Traders who choose this path expose themselves to heightened social pressure to redistribute their wealth, something that has challenged the financial viability of many enterprises in PNG (Brooks 1996; Curry 2005). For some of the largest traders there must be something of a conundrum as to how they can be successful betel nut traders, purchase brand new vehicles and engage in conspicuous consumption, yet remain grassroots. There is an evident tension between accumulation and mutuality.
Betel nut trading may enable largesse and a handful of traders may aspire to also be part of that prestigious nexus between business and politics in contemporary Hagen (Ketan 2004), but for most betel people their grassroots *bisnis* is more about the everyday improvements in their standard of living. Trading and vending are foremost about attaining cash income for everyday consumption. That the proceeds of betel nut trading need not be highly visible enables many betel people to quietly toil away, without attracting the gaze of too many others. They may thus focus their attention upon a more immediate group of kin. Betel nut money contributes to nurturing their social relations and to meeting various social obligations. It is important for all betel people that they are seen to be redistributing their wealth, but for most this is less about prestige and more about not being perceived to be rubbish. Creating social distance and erecting limits to redistribution are important strategies for accumulation, but alternatively so is a level of obfuscation and concealment.

The betel nut trade has also been particularly successful in the highlands because it has provided a source of income that is not tied to land. The main cash earning opportunity open to most Hageners has been coffee smallholdings and, less profitably, but more significant for women, market gardening – both agrarian.\(^{17}\) The shortage of land in Hagen, and the consequent deprivation of cash earning opportunities for a younger generation of men, has created considerable intergenerational animosity (A. Strathern and Stewart 1999:178). That young men can earn money from betel nut trading, may contribute to relieving some of this pressure; a ‘finance’ strategy that has overcome some of the limits of ‘production’ (A. Strathern 1969, 1978).

The potential profits from selling betel nut have attracted some wage earners and businessmen to try their hand at betel nut trading, and the development of such a trend warrants attention. But though there is considerable lure in a ‘one day fortnight’ brought by ‘green gold’, today’s betel people do not want their children to become tomorrow’s betel people. Despite the evident monetary rewards, the betel nut trade is something that one becomes involved in because there are few other viable and rewarding livelihood opportunities available. Most people want something better for their children. Somewhat paradoxically the aspirations parents have for their children is a waged job and a life in town. One trader remarked on his situation and that of many others like him: ‘Our parents did not put us through school, so we just stayed at home and got into this betel nut work. Now I do not want my children to do the same ... So I must trade in betel nut, pay their

\(^{17}\) In Hagen Central a period of depressed coffee prices 1999-2005 (ICO 2012) has led to the neglect, and sometimes clearing of coffee plantings, so that more time and space can be invested in market gardening. Given the responsibility women have for food gardens, and the control they exercise over earnings from it (A. Strathern 1984:79; Sexton 1986:63-6), this may have positive implications for the incomes of women.
school fees. They must go to school and live in town'. Of course, their desire is for well paid
government and private sector employment and modern Western style houses, not the urban
minimum wage and a life in the settlements. The children can always fall back on the betel nut trade
should other 'roads' not prove fruitful. It is encouraging to see the commitment that many betel
people have invested in the education of their children, and that of their kin. The response in
Hagen to the proliferation of shell valuables was to abandon shells in favour of money, and for
men to use money moka to retain gendered distinctions. Similarly, as money becomes more
dispersed and is used by grassroots people to erode social divisions, educational attainment
continues to create social cleavages, something betel people are seeking to overcome. But while
betel nut is alluring, there is also the pervasive knowledge that betel nut trading is risky business;
too many traders have died in search of green gold. Vendors are also acutely aware that betel nut
marketplaces are dirty and unhealthy places where people become ill. No one wants this for their
children.

The development aspirations of many betel people and Papua New Guineans more broadly are not
totally incongruent with those visions of development practitioners. They want higher incomes,
corrugated iron roofed houses, clean water, access to functioning health services and schools. But
they also aspire to have ‘their own culture on a bigger and better scale than they ever had it’ (Sahlins
2005:24). Access to markets and the associated increases in incomes becomes a means for greater
and broader engagement in ritual and customary exchange (Hirsch 1994), something central to
people’s conceptions of wellbeing (Curry 2003). As A. Strathern (1976:1) observed:

Everywhere in Papua New Guinea nowadays people say they want development, and
they mean by that something which will earn them money. They want money in their
hands. But what they finally do with the money will not necessarily follow the
orthodox economists’ theories or what administrators would like them to do with it.

The proceeds from selling betel nut are enabling many grassroots Papua New Guineans to attain
some of the improvements in their lives to which they aspire. The outboard engines purchased by
villagers in the remote Middle Ramu for their dugout canoes have substantially improved people’s
access to health services, education and markets, and to the availability of everyday goods like soap,
kerosene, salt, tinned fish and rice. On Karkar Island, the hub of betel pepper production, villagers
have funded the construction of churches and have used the money to help members of their
community in difficulties. In Hagen people have put corrugated iron roofs on their houses,
connected the electricity supply and water tanks, and paid school fees. They have purchased PMVs, set up tradestores and chicken rearing enterprises, and they have contributed to their social reproduction through bridewealth and compensation payments.

This thesis has explored the betel people’s making of a flourishing, indigenous and contemporary market in Papua New Guinea. The betel nut trade is of considerable scale and complexity, and contributes to the livelihoods and sustenance of many. The social embeddedness of the trade gives it form; it enables and excludes, it compels compassion and protection, and demands deceit. It creates space for intermediaries, connects and entangles distant others, and distances the socially intimate. The trade is full of contradictions and tensions, but also the aspirations of a great number of grassroot Papua New Guineans. This is what we find when we follow betel nut.
References


AIR NIUGINI. (2007) 'Flight manifest data compiled by Air Niugini for author, Port Moresby, December 2007'.


BOURKE, M. (2011) 'Poverty in rural Papua New Guinea', Presentation provided as part of the AusAID Pacific Islands Seminars by State, Society and Governance in Melanesia Program, Australian National University. Canberra, 6 and 7 July.


300


DOWSE, G. K. (unpublished) 'Data from a study on the prevalence of glucose intolerance in PNG.' International Diabetes Institute (Baker-IDI Heart and Diabetes Institute) [Some findings of this study were reported in Dowse (1994)].


EMTV. (2007) 'Tok Piksa (Julius Chan and betel nut)'. Papua New Guinea: EMTV.


ESSO HIGHLANDS LIMITED. (2010) 'Betelnut free workplace guideline': Esso Highlands Limited. Email distributed to PNG LNG staff and contractors, 24 June.


HOVERMAN, S., M. KENNEDY, and A. SIMONELLI. (1981) 'Hiritano Highway: Social and economic impacts environmental report No. 6 (Graduate School of Environmental Science)'. Melbourne: Monash University.


HUNT, G., and J. C. BARKER. (2001) 'Socio-cultural anthropology and alcohol and drug research: Towards a unified theory', Social Science and Medicine, 53: 165-188.


LUTKEHAUS, N. (1981a) 'Diffusionist questions reconsidered, or who are the betel people?' Paper presented at the 10th Annual Meeting of the Association for Social Anthropology in Oceania, San Diego, 25 Feb -1 March.


MAHONEY, D., N. QUINN, P. AFENYA, S. HUGMAN, and M. SAPPU. (c.1985) The technology and economics of slaked lime (kambang) manufacture for betel nut (inai) mastication in Papua New Guinea: Unpublished. Department of Chemical Technology, Department of Fisheries and Papua New Guinea University of Technology.


MCKILLOP, B. (c. 2006) 'Lifeline: A short history of the Highlands Highway'.


NFA (NATIONAL FISHERIES AUTHORITY). (2006a) 'Small-scale fisheries in Morobe Province: Landing, market and buyer surveys in Lae.' Port Moresby: National Fisheries Authority (NFA).


OFOTALAU, A. 'A week of records: And more than half of Solomon's MPs lose their seats' Pacific Magazine 2006.


PNG BUSINESS MONTHLY. (c.2007) 'Price hike of betel nut and veggies push inflation up' Details unknown. Newspaper article pinned to notice board at University of Papua New Guinea in December 2007.


STRATHERN, A. (1972c) One father, one blood: Descent and group structure among the Melpa. London: Tavistock Publications.


STRATHERN, A. (1979a) 'Gender, ideology and money in Mount Hagen', Man (NS), 14: 530-548.


VINNING, G., and K. GALGAL. (2008) 'Fresh fruit and vegetable market observations: a rapid appraisal of Malaoro market, NCD, Port Moresby': Fresh Produce Development Agency (FPDA).


Appendix 1

Seasonality of betel nut (Areca catechu) across various locations in PNG

<table>
<thead>
<tr>
<th>Location</th>
<th>Most abundant</th>
<th>Least abundant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramu River (Madang)</td>
<td>November – February</td>
<td>June – August</td>
</tr>
<tr>
<td>Madang town (Madang)</td>
<td>January – March</td>
<td>August – December</td>
</tr>
<tr>
<td>Mt Lamington area (Oro)</td>
<td>Non-seasonal</td>
<td>Non-seasonal</td>
</tr>
<tr>
<td>Biwat (East Sepik)</td>
<td>Non-seasonal</td>
<td>Non-seasonal</td>
</tr>
<tr>
<td>Markham Valley (Morobe)</td>
<td>April – July</td>
<td>September – November</td>
</tr>
<tr>
<td>Finschhafen</td>
<td>May – July</td>
<td></td>
</tr>
<tr>
<td>Bereina area (Central)</td>
<td>May – September</td>
<td>December – February</td>
</tr>
<tr>
<td>Kerema area (Gulf)</td>
<td>March – June</td>
<td>November – December</td>
</tr>
<tr>
<td>Kandrian (West New Britain)</td>
<td>February – August</td>
<td></td>
</tr>
<tr>
<td>Milne Bay Islands (Milne Bay)</td>
<td>May – July</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Seasons reported by villagers to author unless otherwise footnoted. Note: The majority of this data is based on recall by a limited number of villagers from each location and should therefore be considered indicative only.

Seasonality of betel pepper (Piper betle) at various locations in PNG.

<table>
<thead>
<tr>
<th>Location</th>
<th>Most abundant</th>
<th>Least abundant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markham Valley (Morobe)</td>
<td>February – March</td>
<td>October – November</td>
</tr>
<tr>
<td>9 Mile, Lae (Morobe)</td>
<td>March – June</td>
<td></td>
</tr>
<tr>
<td>Karkar Island (Madang)</td>
<td>December – February</td>
<td>April – August</td>
</tr>
<tr>
<td>Bereina area (Central)</td>
<td>January – May</td>
<td>June – December</td>
</tr>
</tbody>
</table>

Sources: Seasons reported by villagers to author unless otherwise footnoted. Note: The majority of this data is based on recall by a limited number of villagers from each location and should therefore be considered indicative only.

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1 Bourke et al. (2004:138) based on CPI data,
2 Watson (1987a:237) and villagers reports to author.
3 Bourke et al. (2004:138) based on CPI data, Bourke et al. (2004) based on Aiyura/Kainantu/Okarumpa (Eastern Highlands) survey data 1979-1982 (The Markham Valley was virtually the sole supply area at this time), and the author’s own data.
4 Bourke et al. (2004:138) based on Port Moresby CPI data, Walsh (1982:8), and information reported to author by villagers.
5 Bourke et al. (2004:207) based on information from villagers.
6 Bourke et al. (2004:207) based on information from villagers.
7 Bourke et al.’s (2004:82) data on the Kainantu market suggests that peak supply in the Markham is December to April and low supply August to October. The extent to which this varies from my informants observations may well be explained by the strong presence of highland betel nut and therefore betel pepper in this market. It may also be inaccuracy of informants’ recollections.
8 Mosko (2005:18) based on dry season at Maipa and Ioi villages.
Appendix 2

Betel nut: A harmful and addictive substance

Medical research indicates that betel nut is associated with various health problems, although a smaller number of studies do highlight some benefits. The main aim of this appendix is to turn the reader to some helpful literature should they wish to know more. The various properties and long term effects associated with chewing betel nut can be attributed to a number of alkaloids present in the nut, most prominently arecoline, as well as compounds within the betel pepper. Lime, which is heavily alkaline and facilitates the release of alkaloids, also contributes to the effects, as does the process of chewing itself. The use of these three ingredients, the combined effect of tobacco either chewed in the quid or smoked, and other environmental factors have acted to complicate the findings of much of the research on betel nut, although more recent studies have improved the identification of causal factors.

Betel nut chewing is associated with a number of long term deleterious health effects.¹ A large proportion of the research is focused on the oral health consequences of chewing. Betel nut is associated with a number of oral lesions which have the potential to become cancerous. These may affect both the soft tissues of the oral cavity and the upper digestive tract (Trivedy et al. 2002). According to the PNG Medical Society as many as two thousand people die each year in PNG as a result of oral cancers linked to betel nut (Gerawa 2009). Betel nut may also affect the hard oral tissues including attrition from constant chewing. There is some evidence to suggest that it may reduce the incidence of dental caries (Trivedy et al. 2002).

More recently, studies on betel nut chewing have drawn attention to a wider range of health consequences. These include effects on: the cardiovascular system including hypertension and cardiac arrhythmia; the lungs including aggravated asthma; the liver leading to abnormal liver function and potential cirrhosis; the thyroid; and the gut, such as peptic ulceration (Boucher and Mannan 2002). Betel nut also acts as a vermifuge; some researchers have questioned whether this helps control heavy intestinal parasite loads (Wyatt 1977:460-1). Betel nut is also thought to affect the pancreas, it is associated both positively and negatively with diabetes (Boucher and Mannan 2002; Dowse 1994; Benjamin and Margis 2005). It also has an effect on the brain potentially

¹ I have drawn heavily here on a number of papers published in a special edition on areca nut in Addiction Biology in 2002 (see Boucher and Mannan 2002; Chu 2002; Trivedy et al. 2002; Warnakulasuriya and Peters 2002; Winstock 2002). A number of primarily older studies have focused on betel nut in PNG including Burton-Bradley 1966, 1978, 1980; Talonu 1989; Taufa 1988; Dowse 1994; Weegels 1984; Thomas and MacLennan 1992; Newell 2002; and Benjamin and Margis 2005.
reducing the severity of schizophrenic symptoms (Boucher and Mannan 2002). It also can create dependency both addictive and habitual (Winstock 2002; Burton-Bradley 1966), not dissimilar to nicotine, although some medical anthropological research on the stimulant suggests otherwise (Watson 1987a:219). Research has also suggested an impact on pregnancy outcomes including an association with low birth weights (Senn et al. 2009). Betel nut’s use as an appetite suppressant may also be connected with negative nutritional and health outcomes, particularly in pregnant women (Byford 2001; WHO 2012:37).

Consuming tobacco in addition to betel nut exacerbates a number of the ill health effects (Winstock 2002). In PNG chewing tobacco with betel nut is very rare; however people do commonly smoke tobacco during or following betel nut consumption, and it is typical for cigarettes to be sold alongside betel nut by roadside/street vendors. The World Health Organisation (WHO) has suggested that indiscriminate spitting associated with betel nut consumption may contribute to the spread of tuberculosis (WHO 2012:47). The practice of sharing lime containers may also contribute to transmission of communicable diseases.

Researchers have also pointed to the important cultural aspects associated with consumption that need to be considered regarding any attempts to curb consumption (Winstock 2002). Burton-Bradley (1978:240), albeit at a time when there was considerable debate and much inconclusive research, in response to calls to reduce or ban consumption cautioned ‘[t]he opening of Pandora’s box to no purpose then could well let loose a whole series of new evils’ (cf. Marshall 1982; Lepowsky 1982; Schwimmer 1982). Burton-Bradley’s caution to ascribing dominance to the western scientific discourse remains valid, especially given the high cultural value placed on betel nut across Melanesia. Attempts to regulate betel nut will be met with strong resistance. Nevertheless it is clear that betel nut is not a harmless substance.

Papua New Guineans, even in quite remote areas, do have some understanding of the health implications of chewing, at least in the case of mouth cancer. On numerous occasions I was shown articles torn out from newspapers reporting the link between betel nut and mouth cancer. People would often interpret mouth ulcers as cancer, and would be careful not to let the lime burn their mouth. There is also some misunderstanding surrounding the health messages. For instance, one Mt. Hagen women commented on her addiction to betel nut by saying ‘betel nut cancer has got us’ (Kansa bilong boai em i kisim mipela). While NGOs and government have made some attempts to reduce consumption, it is unlikely that this has had much impact on the trade. Some people I talked to gave up betel nut, at least temporarily, due to persistent ulcers. Others continued to chew even
when aware of the risks. In *Betelnut Bisnis*, a documentary by Chris Owen (2004), there is a telling scene; a friend is talking to Lucas, the main character, about his young daughter who has developed a persistent mouth sore from chewing betel nut. On screen Lucas’ young son chews. After hearing the story Lucas acknowledges concern, turns to his son, and tells him to add more lime.
Appendix 3

Percentage of households who reported to have earned money from the sale of betel nut in the past twelve months, in the Papua New Guinea 1982/3 National Nutrition Survey. Source: PNGIMR (1983). Note: Excludes Simbu and North Solomons provinces.

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Appendix 4

The emergence of the Port Moresby betel nut trade

The trade in Port Moresby has a similar history to that of the highlands and, being the national capital, this has been far better documented. The development of the Port Moresby trade came about with the growth of the urban area from migration after World War II (Mosko 1999). According to Hau’ofa (1981:18) the Mekeo people of the Bereina area ‘[s]ince the 1950s ... have largely dominated the lucrative betelnut market in the rapidly growing city of Port Moresby.’ Stephen (1974), citing official estimates, noted that in 1958-9 around eight tonnes of betel nut and other produce was transported from Bereina to Port Moresby by air and sea each week (around 400 tonnes per annum).1 By 1963-4 the annual figure was estimated to be around 500 tonnes, and by 1967-8 an estimated 600 tonnes of betel nut was sold. In 1972, Ansett Airlines alone lifted 286 tonnes of betel nut between Bereina and Port Moresby. This is likely to be only a fraction of the total which includes betel nut lifted by Trans-Australian Airlines and two smaller charter planes and no doubt a substantial amount transported by sea. By the early 1970s ‘Officials at Bereina estimated conservatively that the Mekeo betel nut trade was worth a million dollars a year’ (Hau’ofa 1981:18).2 At this time Stephen (1974:340) noted that ‘very few [Mekeo] people appear to be planting betel nut on any large scale’. In 1972 the Bereina area was connected to Port Moresby by the Hiritano Highway, and from this point much of the betel nut began to move along this road by truck rather than by air and sea.

By 1980 over 1200 tonnes of betel nut was being sent down the Hiritano Highway to Port Moresby each year. Around 63% of this was from the Bereina/Central Mekeo area and around 24% was coming from the North Mekeo area and from Gulf Province. This was estimated to be worth K2.5 million per annum3 (Hoverman et al. 1981:40, 80). Working from this figure Walsh (1982) estimated betel nut sales in Port Moresby to be worth around K3.5 million in 1982.4 Walsh (1982:14, 20) conducted a detailed survey of street vending in Port Moresby in which it was reported that betel nut vendors accounted for 57% of vendors in Port Moresby, and of these 64% were Mekeo villagers, the remainder were largely highland and Goilalan migrants. In this report Walsh (1982:65) made the recommendation to the National Capital District Interim Commission, for whom the report was written, that they should:

1 Stephen (1974) cites district annual reports that give weights in imperial tons (1016 kg) rather than metric tonnes (1000 kg). Because the cited figures were estimates, and the small volumes involved, I have simply replaced tons with tonnes as others have done (see Hau’ofa 1981:18).
2 Equivalent to K14,475,000 in 2007. The Papua New Guinean kina replaced the Australian dollar as the national currency in 1975. The kina was initially at parity with the dollar.
3 Equivalent to K16,200,000 in 2007. Hoverman et al. (1981) calculated betel nut to be worth K2/kg. These estimates derive from village survey and traffic survey data collected to assess the social and economic impacts of the Hiritano Highway.
4 Equivalent to K20,100,000 in 2007.
encourage the emergence of small scale city middlemen to replace the Mekeo vendor on the streets or, if this is not considered practical, try to encourage middleman interception of *bmai* prior to its arrival in the city.

Middlemen did take control of the Port Moresby market although this was not a result of any government policy. Up until this point Mekeo people had been responsible for transport to the city and the retail sale of the betel nut there. Mosko (1999:54) describes: ‘In the mid- to late 1980s … groups of unemployed non-Mekeo urban migrants mostly from the Highlands forcibly took over the retail trade’. These middlemen waited just outside the city at Brown River and Laloki to intercept the arriving betel nut producers, sometimes by chasing the vehicles down at high speed. This sometimes created considerable angst amongst the producers (see Bergendorff 1996:137; *The National* 1995:8; *The National* 1996:16). Producers soon began to see these locales as end destinations for their trade ventures.

For these new middlemen it was a lucrative enterprise. One seller I interviewed made substantial amounts of money reselling in Koki marketplace in the late 1980s. However, throughout the 1990s more and more sellers had entered the trade which made it more difficult to make the large profits experienced in earlier years. Producers from Gulf Province had also started to trade larger volumes into Port Moresby. Betel nut was also intermittently being flown in from the Markham Valley and even Rabaul during periodic shortages (Philemon 1986).

Wholesaling occurred in different marketplaces throughout Port Moresby but in 1991 the National Capital District officials relocated wholesaling to Tokarara marketplace (Avei 1991, *Post Courier* 1991:14). Trade also continued just outside the city. The trade continued to grow. In 1993-4 Mosko (2005) estimated that around 2-3 tonnes of betel pepper, worth K10,000-15,000, was transported from one North Mekeo village to Port Moresby daily. This village alone was estimated to be earning around K800,000 per annum (Mosko 1999). At this time middlemen came to these wholesaling points to make their purchases which were then on-sold throughout the city.

By the mid to late 1990s the practice of buying in out-of-town wholesale marketplaces had become unsafe for buyers travelling to the marketplaces due to numerous robberies along the Hiritano Highway (Fito 1997). As a result the wholesaling of betel nut and pepper moved closer to town, including to 8-Mile. Around the same time producers began to carry their produce to safe houses in town in particular at Erima, Gordons and Gerehu where the producers would sell

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5 Equivalent to K31,000-K46,000 in 2007. At this time these North Mekeo villages had a near monopoly on the betel pepper trade due to a severe drought affecting other producers in the region (Mosko 1999, 2005).
6 Equivalent to K2.5 million in 2007.
it from behind the protection of a fence. Here the producers sell to middlemen who then sell it in open betel nut marketplaces and roadsides throughout the city.

Note: People are buying betel nut and betel pepper from producers on the other side of the fence.

There have been numerous and regular attempts by various authorities to regulate the betel nut trade and the consumption of betel nut in Port Moresby since at least the 1970s. Some of these attempts have been more successful than others. During fieldwork in 2007, betel nut was back on the government agenda following an oral health symposium. In 2008-9 the National Capital District Commission (NCDC) with the assistance of their city rangers ‘cleaned up’ the streets of Port Moresby, cracking down on the sale and consumption of betel nut outside of designated public spaces. This displaced much of the selling activities, creating new winners and losers, but informants suggest it has not done much to curtail the trade, although the streets of Port Moresby are now undoubtedly much cleaner.7

7 I have not focused on the 2008-9 attempts by the NCDC to crack down on the betel nut trade for two reasons. Firstly it occurred following my fieldwork period. Secondly, my focus is on the highlands trade which has been unaffected by this regulation.
Appendix 5

The production areas and trade routes for the Port Moresby betel nut trade

The trade supplying Port Moresby, the national capital, is on a scale similar to that of the highlands trade. The market has two main production areas, Central Province, in particular the Bereina area to the north-west of the capital; and Gulf Province, namely the area around Kerema. These two areas make up the bulk of the trade although some betel nut is sourced from the coast south-east of Port Moresby. Betel nut on occasion also comes by ship from Popondetta and Milne Bay and by air from Popondetta and Lae. Betel pepper is predominantly of Bereina origin although smaller quantities do come from elsewhere. The highland betel nut and highland betel pepper are not a significant feature of the Port Moresby market.

Betel nut and betel pepper from around Bereina and Kerema is brought down the Hiritano Highway to the city. Many of the supply areas have no road access so, in these areas, betel nut is brought by boat down the various river systems to the road network. Once in town the betel nut and pepper is wholesaled from behind cyclone wire fences in certain residential areas, notably Erima, Gordons and Gerehu. From here it is distributed to numerous marketplaces, the main ones being Gerehu, Erima, Gordons, 4-Mile/Boroko, Koki, Tokarara and numerous smaller marketplaces such as Sabama and Rainbow.