NKOTA WATA: MINING AND METAPHOR IN HAMTAI-ANGA "GOLD DREAMING"

A thesis submitted for the degree of Doctor of Philosophy

by

Daniele Moretti

School of Social Sciences and Law, Brunel University

September 2006

For the attention of candidates who have completed Part A

i) Attention is drawn to the fact that the copyright of a thesis rests with its author.

ii) A copy of a candidate's thesis is supplied to the Library on condition that anyone who consults it is understood to recognise that its copyright rests with its author and that no quotation from the thesis and no information derived from it may be published without the prior written consent of the author or University, as appropriate.

Requests for such permission should be addressed in the first instance to the Head of Library Services.

ABSTRACT

This work examines a series of mining-related dream narratives as a means of gauging how a community of New Guinean artisanal and small-scale gold miners understands the nature of minerals and their place in the cosmos, and how this cosmological outlook informs the ways they operate qua resource extractors. Through a "structural-metaphorical" analysis of the symbolic themes and ethnographic context of Hamtai-Anga "gold dreaming," my thesis demonstrates that the miners of Kaindi conceptualise resource extraction in terms of a set of collaborative, procreative, and nurturing relations of "marriage" and of "affinity" between themselves, their spirit familiars, and the masalai (or guardian spirits) of the mines. According to this complex "holography of meaning", the miners are able to "generate," "exercise," and "make apparent" their extractive efficacy through a relational and elicitive engagement with their gendered "other"- or, in other words, by means of their capacity to make their female spirit familiars "fall in love" with them, "procreate" minerals like women procreate children, procure gold as wives provide garden food, and link them to the spirits of the mines as women link men to their in-laws. In order to secure and maintain their elicitive power, however, the miners must "enact" this metaphor by "behaving like" "good husbands" and "good affines" towards their familiars and the spirits of the mines. In turn, this means that the tropic conceptualisation of mining as conjugality and affinity with the masalai\familiars is a recipe for action imbued with its own intrinsic morality. This morality, moreover, is itself of an essentially holographic nature. Indeed, not only does it entail analogous normative structures at different "orders" of scale (that is both at the "microcosmic" "level" of interaction between the miners and their human spouses and affines, and in the "macrocosmic" plane of exchange between humans, spirit familiars, and spirits of the mines) but, as is revealed in my thesis, the two "orders" at which it unfolds are actually part of a single whole, so that the flow of analogy at the "macrocosmic" "level" has crucial implications for its "microcosmic" counter-flow, and vice-versa.

CONTENTS

ILLUSTRATIONS

ACKNOWLEDGMENTS

This thesis is dedicated to my wife, Katie, whose love and support inspired me and sustained me in the most difficult moments of this project, as in every other aspect of my life.

This work is based on a preliminary spell of field research carried out in the summer of 2001 and on a longer period of doctoral fieldwork undertaken between April 2004 and January 2005. During my first trip to Papua New Guinea I benefited from the guidance of Professor Lawrence Kalinoe of the University of Papua New Guinea (UPNG) and from some financial assistance from the ESRC-sponsored Property, Transactions, and Creations (PTC) Project. My doctoral research and fieldwork were made possible by two separate research fellowships from Brunel University and the Economic and Social Research Council (ESRC). I am deeply grateful to both of these institutions for their financial support. Archival research was also facilitated by two periods of employment as a research assistant, first with Dr Eric Hirsch of Brunel University under the auspices of the PTC Project, and then with Dr Colin Filer of the Resource Management in the Asia-Pacific Programme (RMAP) of the Research School of Pacific and Asian Studies, the Australian National University.

My most sincere gratitude goes to my doctoral supervisor, Dr Eric Hirsch, who has provided me with invaluable intellectual and professional guidance and support, not only for the duration of this project, but also for most of my undergraduate years. Similarly, I am profoundly indebted to all those Brunel anthropologists whose teachings and professional example over the past eight years have shaped my anthropological thinking and inspired me to pursue ethnography as a vocation. Some of the ideas contained in this thesis formed part of papers presented and/or circulated at Anthropology Group Seminars at Brunel, at a "Learning Event" organised by RMAP and the Philippine Sustainable Development Network that was held in Manila in June 2005, and at a session of the 6th Conference of the European Society for Oceanists held in Marseilles in July 2005. To all those who offered comments on those occasions, and of course

to those who discussed my thesis with me in the course of countless informal chats, I would like to extend my heartfelt appreciation. Similarly, I would like to thank Sandra Bamford, Pascale Bonnemère, John Burton, Hans Fischer, Maurice Godelier, Gilbert Herdt, Pierre Lemonnier, Jadran Mimica, and Birgitta Stolpe, who, at one point or other of my research corresponded and/or met up with me to provide me with much appreciated advice, bibliographic materials, ethnographic insights, and other valuable information that greatly facilitated my research effort.

For allowing me to carry out research in Papua New Guinea (PNG), I would like to thank the National Research Institute and the Morobe Provincial Administration. For their assistance in the field, I am indebted to a large number of people and institutions, including, in no particular order, the Bulolo District Administration, the Wau Ecology Institute, the PNG Department of Mining, Edie Creek Mining, Morobe Consolidated Goldfields, the Harvey family, the Kukubol family, the Palmers of the New Tribes Mission, and Bema High School.

My final and biggest thanks, of course, goes to all my Kaindi and Kaintiba informants, hosts, and assistants, whom, for reasons of confidentiality, I shall refrain from naming directly. Without the friendly welcome, hospitality, and support that they offered me in 2001, and then again in 2004-2005, and of course without the fascinating lifeworld in which they are enmeshed and which they sustain both "as a people" and as unique persons, this particular "ethnographic study" would simply never have come to light.

LINGUISTIC NOTES

The largest body of work on the Hamtai language (or Kapau) has been produced by expatriate and native members of the Summer Institute of Linguistics, the New Tribes Mission (NTM), and the Hamtai Church (see, among others, New Tribes Mission [undated]; New Tribes Mission [1974]; Fellowship of National Bible Churches Hamtai [2003]; and Oates and Oates [1968]), whose first hand knowledge and field data have also informed other studies of the language (see, for example, Lloyd [1973]). As a result, I have tried to adhere as closely as possible to the orthography found in these works in my presentation of Hamtai words and sentences. In this particular effort I have benefited immensely from the patient assistance of Mr and Mrs Tom Palmer of the NTM, who also kindly provided me with the linguistic materials from which I derived most of the following notes on spelling and pronunciation. It goes without saying, however, that I take exclusive responsibility for any linguistic inaccuracies that may be found in this thesis.

<u>Some notes on Hamtai spelling and pronunciation</u>

p	/p/	Normally unaspirated as in 'spin', becomes aspirated when followed by 'h'. When it follows a nasal ('m', 'n'), as in '*mpa*' (mushrooms), it is pronounced as English 'b'
t	/t/	Normally unaspirated as in 'step', becomes aspirated when followed by 'h' (e.g. *tha*, like this, thus). When it follows a nasal, as in '*Hamtai*', it is pronounced as English 'd'. In some words it is pronounced by some more like an English 'l'. For instance, '*matä*' (<u>masta</u>, white man) is actually pronounced by some as '*malä*'
k	/k/	Normally unaspirated as in 'skate', it becomes aspirated when followed by 'h' (e.g. *khowa*, a type of rodent)
q	/k/	A very back 'k', sometimes with friction. When at the start of a

		word it can represent an uvular stop. When placed between vowels it is sometimes flapped. Normally unaspirated, it becomes aspired when followed by 'h'
'	/?/	Glottal stop. Never occurs initially or finally. It can occur simultaneously with nasals 'n'n' but written as /'n/. The glottals are weak or missing in some people's speech but very clear in others
h	/h/	Pronounced as in English
v	/v/	Not as frictionised as in English, it occasionally sounds like 'w'. Sometimes it is very weak or is dropped altogether in pronunciation
f	/vh/	Really two phonemes in sequence. People often read and write 'vh' for 'f'
y	/y/	Similar to English usage, but occasionally frictionised to 'z' as in 'azure'. Becomes voiceless when followed by 'h'. When preceded by 'u' it sometimes sounds as 'uvy'
s	/yh/	Really two phonemes in sequence, pronounced like the 'sh' in 'ship'
w	/w/	Pronounced as in English. It becomes voiceless when followed by 'h' as in 'whale'
m	/m/	Pronounced as in English. Becomes voiceless when followed by 'h'
n	/n/	Pronounced as in English. It becomes voiceless when followed by 'h'
ng	/ŋ/	Pronounced as the 'ng' in 'sing'. It does not become voiceless when followed by 'h'. Before a velar stop only the 'n' is written, as in the English word 'ink'
i	/i/	Pronounced as [ee] in 'beet'. Can fluctuate to [ɪ]. Often has 'y'

		offslide that carries over nasals but which is not written
e	/e/	Pronounced as the ‘a’ in ‘hate’. Becomes [ɛ] before /q/
ä	/a/	Pronounced ‘a’ as in the English word ‘father’
a	/^/	Pronounced like ‘u’ as in the English word ‘hut’
o	/o/	Pronounced like ‘o’ as in ‘boat’, minus the glide
u	/u/	Pronounced ‘oo’ as in ‘boot’, minus the glide

TABLE OF SYMBOLS

My usage of the following symbols is largely inspired by the works of Lévi-Strauss (1968; 1970; 1990) and Kuper (1979; 1986). Like Lévi-Strauss (1990: 634) before me, I would like to make clear that these signs are not to be approached by the reader with the same rigour reserved for mathematical "instruments of proof", but rather as "shorthand patterns or expressions" aimed at summarising certain aspects of my arguments and, it is hoped, facilitating their understanding.

, this sign separates different elements of a same series of symbols, metaphors, objects, or events (e.g. a, b, c)

→ signifies transformation and is to be read as "is transformed into", "follows", and/or "becomes" (e.g. a → b)

∪ indicates conjunction and union, for instance between two apparently distinct metaphorical sets (e.g. a = b ∪ c = d)

: stands for "is to", as in "a : b = c : d"

= this symbol indicates an analogical-metaphorical connection between two (e.g. a = b) or more (e.g. a = b = c) conventionally separate elements. Furthermore, it can also signify "as", as in the aforementioned equation "a : b = c : d"

INDEX OF DREAMS

INTRODUCTION

In the late 1970s and early '80s, a sharp increase in mineral prices led to the expansion of prospecting activities across the globe. In the then largely under-explored Asia-Pacific region, this resulted in the opening of new mining ventures in "greenfield areas" inhabited by relatively "marginalised" indigenous peoples (Howard 1988; Ballard and Banks 2003). As these locales had been traditional foci of ethnographic attention, regional anthropologists became increasingly preoccupied with the dynamics of resource extraction and its implications for indigenous lifeworlds (Ballard and Banks 2003). In Papua New Guinea, where around 97% of the land remains under "customary" title and where law requires environmental and social assessment studies to be conducted for all proposed large-scale mining developments, this disciplinary focus was given added momentum by consultancy opportunities both within the extractive industry and for donors and advocacy groups with a stake in this sector and/or an interest in indigenous rights and the environment (Ballard and Banks 2003).

As a result, the past two decades have witnessed the growth of a rich "anthropology of PNG mining" that has contributed original insights on a variety of issues of global import, including the dominant discourses and practices of expatriates employed in the mining industry (Cannon 2003, in Ballard and Banks 2003); the intersection of "modernity" and "tradition" and the dynamics of race and class engendered by the incorporation of indigenous workers and residents in extractive operations and mining towns;[1] the problems of consultation and political legitimacy in the often fraught relationships between the state, mining interests, and local communities;[2] the social and ecological impacts of industrial resource extraction and its links with local conflicts and secessionist sentiments;[3]

---

[1] Ballard and Banks (2003); Connell (1992); Jorgenses (1998); Hyndman (1995); Imbun (1995; 1999); Polier (1994).

[2] See, among others, Ballard (1996); Banks, G. (2000); Brown and Ploeg (1997); Burton (1998); Connell and Howitt (1991); Denoon et al. (1996); Filer (1997b); Hirsch (2001); Howard (1991); Howitt, Connell and Hirsch (1996); Knauft (1993); Lakau (1996); and Toft (1997).

[3] Ballard (1996); Ballard and Banks (2003); Banks, G. (2000); Brown and Ploeg (1997); Connell (1992); Connell and Howitt (1991); Dinnen (2001); Filer (1997b); Howard (1991); Hyndman

the connections between national and international legislation and mining practice and the inclusive and exclusive politics of identity that seem to form an unavoidable corollary of resource development;[4] the particularly negative and marginalising impacts mining can have on women and gender relations (Bonnell 1997; Byford 2002; Macintyre 2002; Polier 1996); the social effects of emergent forms of "compensation" and "benefits" allocation for mineral resource extraction;[5] the influence of this form of "development" on indigenous economic forms and cultural notions of ownership;[6] and the marked mythical, ritual, and cosmological significance that minerals and extractive activities come to hold in indigenous lifeworlds.[7]

Despite this considerable scope and richness, however, the Melanesian literature on resource extraction has tended to focus almost exclusively on foreign-dominated, large-scale mining operations,[8] so that very little ethnographic insight exists on the country's largely indigenous artisanal and small-scale mining sector (ASM).[9] As a matter of fact, even after the notorious Mount Kare gold rush

---

(1994; 1995); Kirsch (2002; 2004); Lawrence (1994); Macintyre & Foale (2004); O'Faircheallaigh (1984); Toft (1997).

[4] See Brown and Ploeg (1997); Connell and Howitt (1991); Filer (1990; 1997b); Guddemi (1997); Nash and Ogan (1990); Hirsch (2001); Howard (1991); Jorgensen (2004); Kirsch (2004); Toft (1997); and Zimmer-Tamakoshi (1997).

[5] Bedford and Mamak (1977); Connell (1992); Connell and Howitt (1991); Filer (1990; 1997b); Filer, Henton and Jackson (2000); O'Faircheallaigh (1984); Toft (1997).

[6] Ballard (1996); Brown and Ploeg (1997); Filer (1990; 1997b); Jorgensen (2004); Guddemi (1997); Hirsch (2001); Lakau (1996); Toft (1997).

[7] Biersack (1995; 1999); Clark (1993; 1995); Guddemi (1997); Haley (1996); Jorgensen (1998; 2004); Stewart and Strathern, A. (2002); Weiner (1994; 1995); Rumsey and Weiner (2004).

[8] For a few isolated exceptions see Biersack (1995; 1999); Clark (1993; 1995); Ryan (1991); Vail (1991; 1995); and Wardlow (2004). Although Ryan (1991) and Vail (1991; 1995) are not anthropologists, their works have appeared in anthropological collections and/or are based on observations whose nuance and detail lends them a definitively "ethnographic" character.

[9] Although there is no universally accepted definition of ASM, I follow a combination of the common PNG (see Susapu and Crispin 2001) and the Mining, Minerals, and Sustainable Development Project's (MMSD 2001: 314) usage of the term. For the purpose of this thesis, "artisanal mining" indicates individual and household-based mining activities conducted almost exclusively by manual means, while "small-scale mining" refers to more extensive and mechanised activities with a capital investment of up to $25,000. In PNG, around 1% of ASM enterprises employ heavy machinery such as excavators, bulldozers, and high-capacity processing equipment such as trammels and jigs; 10% use just hand-held mechanised equipment such as pontoon dredges, hydraulic sluice pumps and sluice boxes; and the rest are artisanal miners who

brought it to international attention (Hancock 1994), commentaries within the discipline have remained so few that anthropological audiences could be forgiven for ignoring the very existence of such an industry in Papua New Guinea.

And yet, PNG is one of the countries of highest ASM intensity in the world. In pure economic terms, its ASM sector yields up to 150 million kina[10] of gold and silver per annum, which corresponds to around 1.4% of the country's GDP (Banks 2001: 38). In addition to this, even conservative estimates suggest that at least 60,000 people[11]- or around 1.25% of the country's entire population- are already directly engaged in this type of production, with an additional 420,000 indirectly benefiting from it through the provision of goods and services such as food, store goods, and transportation (Susapu & Crispin 2001; Crispin 2003; 2004; Lole 2005; MMSD 2002). If these statistics were not sufficiently impressive, moreover, it should also be noted that over the past two and a half decades the ASM population of Papua New Guinea has boomed to at least 17 times its 1980 size of 3,500 (Lole 2005), and that a relatively stagnant economy, the continued rise of mineral prices, and the imminent closure of a number of large-scale developments that are expected to leave behind marginal deposits amenable to ASM exploitation (cf. Susapu and Crispin 2001) suggest that this trend for growth is only likely to endure in the future.

Against a backdrop of general anthropological indifference to this increasingly important sphere of production and social reproduction, this thesis offers an ethnographic account of a community of indigenous small miners from the historical "Morobe Goldfields" of the Bulolo District of Papua New Guinea. Based on a main period of doctoral fieldwork conducted in 2004-2005, and on

---

rely entirely on very simple tools and earn an average of between K250 and K500 per month (Susapu and Crispin 2001: 8).

[10] The kina (PGK), which is divided into one hundred units called toea, is the national currency of Papua New Guinea. Introduced at independence (1975) at par with the Australian dollar, the kina started to be traded as a floating currency from the end of 1994. Over 1995, the kina averaged a value of 1.27220 USD. Over 2005, the currency's average value was 0.33008 USD (this information was obtained from the websites of the Bank of Papua New Guinea [http://www.bankpng.gov.pg] and the Onda FXhistory currency tool [http://www.oanda.com/convert/fxhistory], both accessed on 24/02/2006).

[11] At the higher end, which includes illegal and occasional miners, estimates go as high as 100,000 (Susapu and Crispin 2001; Crispin 2003).

earlier field research undertaken in the Summer of 2001, my study focuses in particular on how my informants thought about the nature of gold and its place in the cosmos, and on how this local "mining cosmology" influenced the ways they organised themselves and operated qua resource extractors.

Although a number of important commentaries have already focussed on the cosmological salience of minerals and mining for indigenous Melanesian lifeworlds, most of them have dealt primarily with the point of view of indigenous people as "landowners" "impacted" by the (actual or anticipated) large-scale extractive activities of foreign corporations. This thesis, by contrast, concentrates on Melanesians as "resource extractors," highlighting both their understandings of the positive and negative implications that their own mining efforts hold for themselves and their land, and the contours of an emic normative system aimed at maximising the former and minimising the latter. A second point of departure of this study, moreover, is that while most analyses of Melanesian "mining cosmologies" have taken ritual and myth as their prime sources of insight, my work relies on dreams as the main "point of entry" into this field of inquiry.

As for the actual unfolding of this thesis, it will commence with a broad historical and ethnographic introduction to the "Morobe Goldfields" and the wider Anga ethno-linguistic region (Section 1), which will be followed by a more detailed account of the specific location and circumstances of my fieldwork (Section 2). Thereafter, I shall explain how I came to be alerted to the importance of the oneiric in local resource extraction, and will provide a general introduction to Hamtai-Anga dream theory and oneiromancy (Section 3). This will then lead to a historical review of the main theoretical and methodological approaches within the "anthropology of dreaming" (Section 4). In turn, this will serve to contextualise my own method of dream research and dream analysis, whose main features will be introduced in Section 5 and then practically applied in Parts Three and Four of this thesis.

Entitled "The Metaphorical Structuring of Hamtai-Anga 'Gold Dreaming,'" the first of these will open by introducing what is the most frequent symbolic association of Hamtai-Anga "gold dreaming"- that is the metaphoric juxtaposition of minerals and garden crops on the one hand (Section 6), and mines

and gardens on the other (Sections 7). In order to account for this tropic representation of mining as gardening, Section 8 will reveal a number of basic similarities between the products, spaces, tools, and techniques found in these respective fields of production. In the very next section (Section 9), however, we will see that gardening and mining are also dramatically dissimilar in terms of their respective gendered associations and modes of organisation. Indeed, while dominant Hamtai practice and discourse define the one as both dependent on cooperation between the genders- and most especially between married couples- and quintessentially feminine, they characterise the other as an essentially male sphere of production from which all women should be ideally excluded.

Through a systematic analysis of the main symbolic themes found in a number of additional dream accounts, Section 10 will then demonstrate that this crucial contrast between gardening and mining is not an "oddity" that needs to be "explained away"- for example with the suggestion that gardening may simply be "similar enough" to mining to make a good oneiric analogue for it "despite" their respective differences. On the contrary, it is a fitting element within a broader symbolic "structure" of oppositions, associations, and transformations that conceptualises mining as a set of "collaborative, procreative, and nurturing" (Stewart and Strathern, A. 1999) exchanges analogous to those that (should ideally) characterise relations of marriage and of affinity.

In Sections 11 and 12, we will learn that this oneiric "holography of meaning" (Wagner 1986; 2001) relates specifically to the interactions between the miners, their spirit familiars, and the local spirits of the mines. In this sense, it will be argued that Hamtai-Anga "gold dreaming"- intended both as the act of dreaming and of interpreting mining dreams- operates as a symbolic system whereby efficacy in resource extraction is achieved through the metaphorical "structuring" (Wagner 1972) of this realm of human activity with the world of the mountain spirits, which is in its turn conceptualised in terms of the cooperative "structuring" of the masculine with the feminine.

In the first section (Section 13) of Part Four of this thesis, which is entitled "The Gender of the Gold- Mining and the 'Holographic' Morality of Conjugality and Affinity," it will then be shown that the "production of efficacy" through the

symbolic coordination of male and female is in fact a consistent feature of many other "masculine" spheres of the wider Anga economy, culture, and society. Although this "ethnographic fact" was once taken as proof of the "antagonistic" character of Melanesian gender relations- and most particularly of the "violent appropriation" of "female powers" by the men, who were then supposed to fuse them with "their own" in order to guarantee their material and ideological "domination" over women (see, in particular, Godelier 1986)- this thesis will argue instead that its most essential significance rests in a Melanesian mode of sociality were both identity and efficacy can emerge only through a (more or less cooperative or coercive) relational engagement with the "other" (M. Strathern 1988).

In the specific case of Hamtai-Anga resource extraction, this "engagement with the other" is predicated on a metaphoric conceptualisation of mining that is imbued with its own intrinsic morality (cf. Crocker 1977; Fernandez 1977: 113; Lakoff and Johnson 2003 [1980]; and Wagner 1978). Thus, as we shall see in Section 14, if the miners want to obtain dreams and minerals from their spirit familiars and from the spirits of the mines in the same fashion as they can expect to receive nurturance and assistance from their human spouses and affines, then they must endeavour to "behave like" "good husbands" and "in-laws" vis-à-vis these spiritual entities. In turn, of course, this means that the "macrocosmic" morality that guides the extractive exchanges between the miners and their environment is modelled on the same kind of morality that regulates the "microcosmic" social relations between spouses and affines.

As will be revealed in the final section (Section 15) of this thesis, moreover, this metaphoric conceptualisation and "moralisation" of resource extraction in terms of conjugality and affinity has implications for the gendered organisation of Hamtai mining. What is more, success or failure in maintaining a nurturing "microcosmic" flow of mineral wealth between husbands and wives are in turn believed to have an effect on the "macrocosmic" flow of gold between the miners and the spirits of the mines. On the strength of these findings, my work will conclude that the tropic morality of Hamtai-Anga resource extraction is itself of an exquisitely "holographic" nature, and this both because it replicates the

same normative structure at different "orders" of scale (i.e. the "microcosmic" and "macrocosmic"), and because the two "levels" at which it articulates are actually parts of a single whole and hold significant implications for one another.

PART ONE: The Golden Anga- An Overview of the Ethnographic Setting and Fieldwork Circumstances

1- The Morobe Goldfields and the Anga ethno-linguistic area

The first alluvial find in the Bulolo District occurred at Koranga, near present day Wau, in 1921 (see Figure 1).[12] Five years later a much bigger discovery was made in the Edie Creek[13] area of Mount Kaindi, and within just six months of this second strike some 219 white miners and 1,324 native labourers had already rushed to the mountain. In the decades to follow, the wider "Morobe Goldfields" attracted hundreds more prospectors, entrepreneurs, and adventurers from as far afield as Australia, South Africa, Europe, Russia, China, Japan, and North America, so that on the eve of WWII the number of foreign miners in the Goldfields had grown to 700, and that of their indentured labourers to above 7,000 (Booth 1924; Clune 1951; Demaitre 1936; Healy 1965; Idriess 1933; Kuluah 1983; O'Neill 1979; Sinclair 1998; Struben 1961).

Whether white or black, all Morobe miners lived and worked in harsh conditions, suffering from malnutrition and ailments like malaria, dysentery, blackwater fever, pneumonia, and tropical ulcers (Booth 1924; Demaitre 1936; Healy 1968; Idriess 1933; Kuluah 1983; Sinclair 1998; Struben 1961). At least for the expatriates, however, these hardships were balanced by the prospect of winning incredible fortunes by very simple means. In the Edie Creek area, for instance, a single sluice box could reportedly yield up to 28 ounces of gold per day, and miners with good teams of native workers were able to collect nearly 200 ounces of gold in a single day. As a result, between 1926 and 1927 alone a still contained number of diggers shipped out a total of 3.3 tons of gold from the Goldfields (Clune 1951: 213; Idriess 1933: 130; Leahy 1994).

---

[12] Although some German Lutheran missionaries, German soldiers, and various prospectors have been said to have visited the area before this date, the truth of these claims is hard to ascertain. In any event, these early encounters did not leave any enduring legacy in the area. For a critical review of this pre '20s contact history see in particular Burton (2001).

[13] According to Sinclair (1998: 41): "some credit Royal [one of the two discoverers of the 1926 find] with naming the Edie. The story goes that the track coming down from the Edie was so precipitous that Royal once said he wished he could be fitted with an Eadie freewheel brake, as found on bicycles of that era. So the creek was name Eadie, soon changed to Edie because someone thought the former sounded too much like a girl's name".

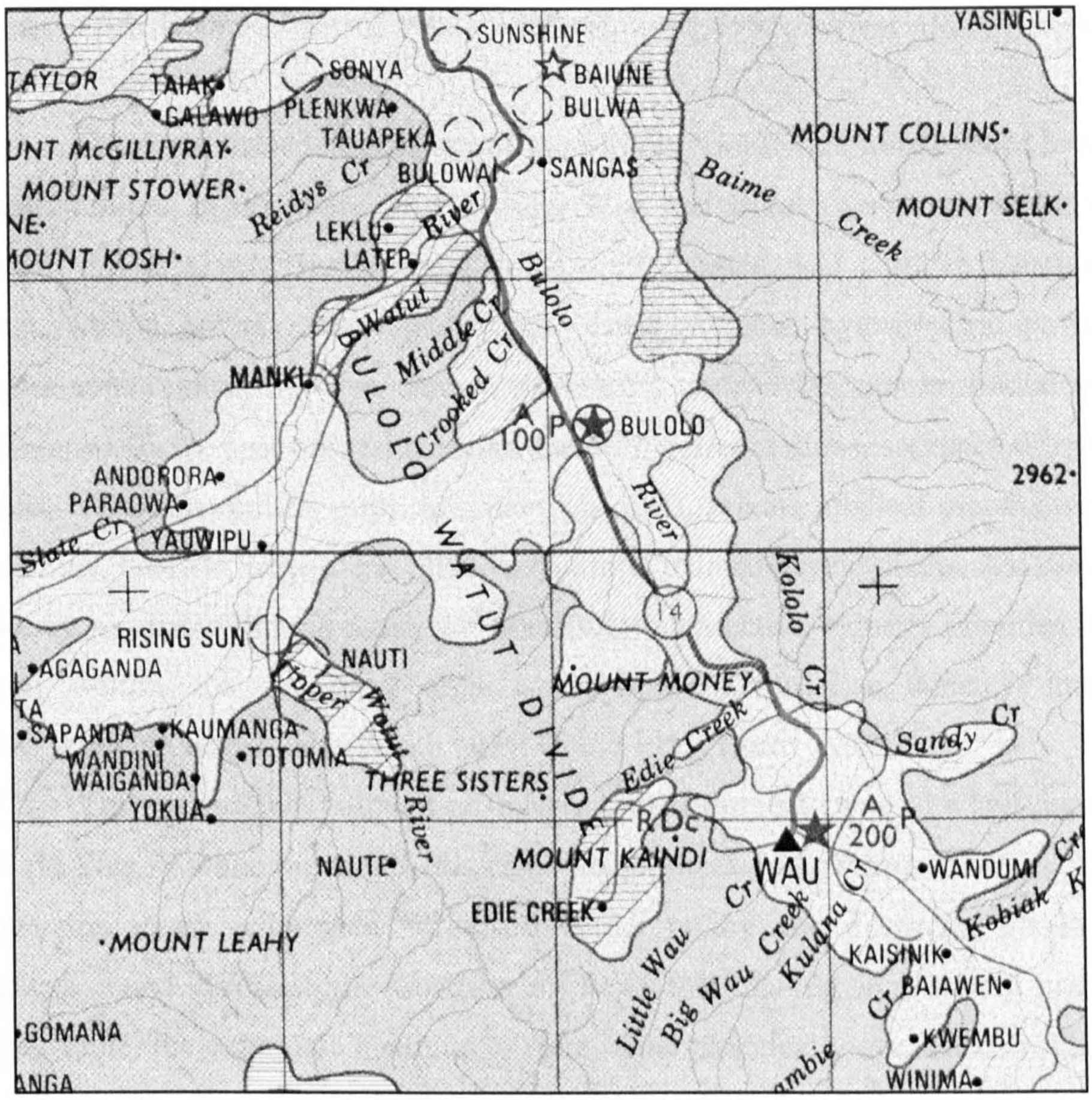

Figure 1. Map of the Mount Kaindi and Edie Creek area, with the Biangai villages (e.g. Wandumi and Baiawen) to the southeast, Wau to the east, Bulolo to the north, and the Upper Watut villages (e.g. Yokua, Totomia, Nauti, and Manki) to the northwest.

While some white miners did strike it rich, though, many were never so lucky. By the late 1920's, the cream of the "easy" gold had been worked out, and independent miners began to sell out to bigger syndicates and mining companies and to prospect in more remote parts of the District like the Upper Watut, and then further afield into the New Guinea Highlands. From then on, small-scale mining became secondary to the larger dredging, sluicing, and underground operations of companies such as Guinea Gold No Liability, Day Dawn Ltd, Bulolo Gold Dredging (BGD, a subsidiary of Canadian Placer Development Limited), and New Guinea Goldfields (NGG, a subsidiary of Russo-Asiatic Consolidated) (see

Clune 1951; Demaitre 1936; Healy 1967; Howard 1991; Idriess 1933; Sinclair 1998).

Thanks to these larger interests, the Morobe Goldfields were opened to air transportation. In the space of a decade, Wau and Bulolo grew into booming centres where several hundred expatriate men, women, and children benefited from, among others, coffee plantations, cattle projects, hydroelectric power, frozen meat outlets, bakeries, dairies, workshops, trade-stores, administration and company offices, post offices, cinemas, theatres, police stations, sports ovals, golf clubs, ballrooms, hotels, pubs, hospitals, chemists, private medical practitioners, solicitors, dentists, carpenters, plumbers, cordial manufacturing plants, and dress-making services. What is more, the Wau-Bulolo extractive industry provided the main stimulus for the growth of Salamaua first and then Lae, which is today PNG's second largest city (Booth 1924; Clune 1951; Lucas 1972).

This remarkable outburst of industrial development came to a halt during World War II, when the Goldfields came under attack from Japanese forces. The Australian army adopted a "scorched earth" policy and destroyed all local industrial and civilian infrastructures to avoid their falling into enemy hands. Meanwhile, the expatriate community were rather chaotically evacuated by plane and foot to the Papuan coast and then to Port Moresby, while indentured labourers and local communities were abandoned to their own fate (Hall 1981).

Between 1921 and the Japanese invasion, no less than 69,627 Kg of gold and 43,799 Kg of silver were extracted from the Goldfields (Lowenstein 1982: 136). Through these resources, Wau and Bulolo made a significant contribution to the expansion of the New Guinea economy and to the revenues of its Administration (Jackson 1991). In terms of mining royalties alone, for example (to which must then be added substantial import duties, rental and survey fees, and miner rights), public revenues rocketed from just £1,000 in 1926/7 to nearly £150,000 in 1939/40, and this was almost exclusively thanks to the Morobe Goldfields (Sinclair 1985: 92). Overall, Administration revenues increased from a total of £282,605 in the year of the Edie Creek discovery to £496,689 on the eve of World War II (O'Faircheallaigh 1989). In effect, these levels of mining-related growth were so high that the Morobe Goldfields could be said to have, as one

commentator put it, helped "to keep the Territory financially afloat at no cost to the Australian tax payer" (Tudor 1977: 67).

While this "colonisation on the cheap" was undoubtedly beneficial to the Commonwealth Government, O'Faircheallaigh (1989) has argued that in pre-war New Guinea mining revenues were mostly used to increase the numbers and wages of Administration officials and for initiatives whose main beneficiary was the Territory's expatriate community (cf. Worsley 1968: 42). In turn, this meant that native New Guineans gained very little from the early colonial extraction of their natural resources. Indeed, as far as the Anga people of the Morobe Goldfields were concerned, this pattern of exclusion from the benefits of resource extraction was, as we will see momentarily, very nearly complete.

At the time of colonial contact, the Goldfields were inhabited by the Biangai, who spoke a Kunimaipa family language and lived in the mountains south-east of Wau,[14] and by the so called "Kukukuku" people of the Upper Watut River Valley[15] (see Blackwood 1978), who were part of what scholars, missionaries, and some government literature now refer to as the "Anga"[16] ethno-

---

[14] For information on the Biangai see, among others, Burton (2001); Chinnery (1928); Halvaksz (2003; 2005); Jackson (1991; 1988; 2003); Lakau (1990); Martin (1992); Martin and Oulette (1981); Mitio (1981); and Oulette (1987).

[15] The name Watut came in use in German times. The "Upper Watut" themselves call their river Naiko above the "Hidden Valley" gold prospect and Awei below it (Burton 2001).

[16] Before contact, "the Anga" had no vernacular demonym for themselves. In early colonial times, they came to be known as "Kukukuku" (or "Kukakuka") in Papua and as "Rock-Papua" or "Rockmennschen" ("Skirt Papuan" or "Skirted men") in German New Guinea. Following World War I, when New Guinea passed under Australian administration, the term "Kukukuku" supplanted the old German name in most colonial documents. Various etymologies have been suggested for this label (see, for instance, Blackwood 1978; Godelier 1986; Nelson 1976: 238-239; and Sinclair 1966). According to my informants, the term originated in a first legendary encounter between their ancestors and a variously identified patrol officer (the name of the protagonists, the time, and the location of this event changed according to who was recounting it). Wanting to take a census, the official asked a local man for his name. Thereafter, he asked those of his two children, who were standing next to him. As young Hamtai children of both genders used to wear the same kind of clothing, the father thought the P.O. was inquiring about the sex of his children, so he answered "*qoka qoka*" (male and male), a statement the P.O. wrote down as "Kukukuku" and adopted as the collective name for the Anga people (cf. Burton 2001 for other versions of a similar encounter). In the post-war era, when it was found that the name "Kukukuku" was deemed offensive by certain Anga groups, linguists and ethnographers began to use the term "Anga", which signifies "house", "home", or "homeland" in most of this family's languages, as an alternative label (Blackwood 1939a; 1939b; 1978; Burton 2001; Detzner 1935; Godelier 1985; 1986; Fischer 1963; Lloyd 1973; Nelson 1976: 238-39; Wagner and Reiner 1986: 94, Note 77). In Kaindi and the wider Bulolo District, however, most "Anga" people are actually unaware of the existence of their new "politically correct" name and continue to employ the old term "Kukukuku"

linguistic family. The Anga people,[17] who are now estimated to number well over 90,000, occupy a territory that spans across the three Provinces of Morobe, Gulf, and Eastern Highlands, and speak thirteen closely related non-Austronesian languages belonging to the wider Trans-New Guinea Phylum (Bamford 1997; Blackwood 1978; Bonnemère 1996; Gordon 2005; Godelier 1986; Lloyd 1973; Mimica 1981; 1988; Wurm 1982). When the first miners arrived in the District, the Upper Watut was home to two distinct Anga linguistic groups. The first to have settled the area were probably a party of Angaatiha/Susuami-speaking refugees from the Langimar River area, who were locally known as "the Manki" (Burton 2001; Blackwood 1939b; 1978; Jackson 2003). From the latter half of the 1800s, however, a wave of Hamtai speakers from what is now the Aseki Sub-District of the Menyamya District of Morobe had also started to penetrate the

---

to refer to themselves and other groups of their ethno-linguistic family. As my informants used "Kukukuku" in all interviews I recorded, I decided not to change this label with "Anga" in all instances but to use both terms interchangeably.

[17] Over the past seven decades, this "culture area" has been studied by a number of anthropologists of different nationalities. In 1936, Oxford-based Beatrice Blackwood investigated the material culture of the Upper Watut, whose villages had by then been partly "pacified" and opened to outside visitors as a result of the establishment of the Goldfields (see Blackwood 1978; Knowles 2000). In 1958, German ethnologist Hans Fischer lived with the Yagwoia-speaking Jeghuje, about whom he published a detailed ethnography in the late 1960s (see Fischer 1968; Bonnemère 1996: 11). Some eleven years later, French anthropologist Maurice Godelier initiated a protracted ethnographic involvement with the Baruya of Wonemara, who, from 1974, also came to the attention of his conational, Jean-Luc Lory, whose research centred on local shamanic traditions (see Godelier 1986 and Descola and Lory 1982). In that same year Gilbert Herdt, an American, commenced fieldwork among the Sambia (or Simbari) (see Herdt 1981; 1987), focusing on their initiation practices and gender relations. Three years later the Yugoslavian-Australian Jadran Mimica initiated research among a neighbouring people, the Yagwoia speaking Iqwaye, on which he based two seminal accounts of Anga cosmology and counting systems (see Mimica 1981; 1988). A year later Pierre Lemonnier (see Lemonnier 2006), another French anthropologist with a strong interest in technology and comparative ethnography, worked first with the Baruya and then the Ankave, a people to the South of the Anga region, where he later carried out joint fieldwork with wife Pascale Bonnemère (Bonnemère 1996). In 1989 Sandra Bamford, a US-trained Canadian, went almost full circle by initiating research among the Kamea, a Hamtai-speaking group extremely close in both geographic and cultural terms to the Upper Watut, the first Anga people to come under professional ethnographic scrutiny. More recently still Birgitta Stolpe, a student of Herdt's, carried out research on the socio-cultural aspects of menarche among the Sambia (see Stolpe 2003). In addition to this, from the 1980s a number of anthropologists and other social scientists have been involved in consultancy work for mining companies and conservation interests operating in the Anga region, including the Lakekamu River Basin (Filer and Iamo 1989; Kirsch 1997; Conservation International 1998) and the Upper Watut (Jackson 1988; 2003; Burton 1997; 2001). Although very diverse in scope, focus, and theoretical interest, these ethnographies and consultancy studies suggest that the Anga possess a common stock of mythical and ritual repertoires, as well as relatively homogeneous material culture, economic practices, and social institutions (Bonnemère 1996: 39; Godelier 1985; Lemonnier 1992; Lloyd: 1973).

Upper Watut, winning more and more land from the Manki and becoming both numerically and militarily dominant throughout the area (Blackwood 1939b; 1978; Burton 2001; Jackson 2003).

Upon the arrival of the first miners, the Upper Watut were living in scattered family hamlets of between one and six dwellings built in defensive positions on steep mountain ridges. The core of these communities usually comprised of the children and grandchildren of an original group of brothers (Burton 2001). In time, however, these isolated hamlets could grow into collections of settlements clustered on two or three adjacent spurs. As their size increased, "traditional" Watut villages would come to include increasing numbers of matrikin, affines, and more distantly related kin and unrelated outsiders (Blackwood 1939b; 1978; Burton 2001). Whatever their size, though, these settlements remained very fluid, with people frequently moving in and out to reside with different relatives and affines and to spend days, weeks, or even months in isolated habitations nearer their gardens and hunting-gathering grounds (Blackwood 1939a; 1939b; 1978; Burton 2001; Jackson 2003; cf. Bamford 1997; Bonnemère 1996; Bonnemère and Lemonnier 1992). Unlike other Angans, the Upper Watut possessed no permanent men's houses (though temporary ones were erected for male initiations), and each (monogamous or polygamous) family lived in a separate house and was economically self sufficient (Blackwood 1978; cf. Bamford 1997).

The main subsistence activity of the Upper Watut was a form of long-fallow swidden agriculture in which plots of land were cleared from first and secondary forest, planted a couple of times with sweet potatoes and a variety of other cultigens such as taro, yams, sugarcane, greens, and different kinds of bananas, and then left to regenerate for up to twenty years. Gardens were not always fenced and only the simplest drainage techniques were used to cultivate sweet potatoes (Blackwood 1939b; 1978; Burton 2001; Jackson 2003; cf. Bamford 1997; 1998a). Pig rearing was also undertaken, though not with the intensity typical of many Highlands areas. In addition to this, a significant part of subsistence needs were met by the gathering of fruits, nuts, grubs, insects, eggs, mushrooms, and edible plants, ferns, and mosses from the forest. Hunting and

fishing made a quantitatively limited contribution to the Upper Watut diet, but held very important ceremonial functions. Among the most common prey were wild pigs, wallabies, cuscus, phalangers, tree rats, lizards, snakes, bush fowls, cockatoos, pigeons, cassowaries, eels, frogs, and other small rodents, birds, and fish, which were hunted and fished with the bow and arrows, by means traps, and through poisonous roots (Blackwood 1939b; 1978; Burton 2001; cf. Bonnemère and Lemonnier 1992; Bamford 1997; 1998a).

In terms of social organisation, the Upper Watut belonged to a number of ancestral lines for which Burton (2001) has suggested the name of *taka*.[18] As noted by Burton (1997; 2001; and cf. Bamford 1997), these groupings were similar to "surnames" in the sense that families bearing each ancestral name could be found throughout the Hamtai language area. Each particular *taka* was associated with a tree or plant and was believed to have descended from a same mythical ancestor (Burton 2001). Members of a given line recognised certain obligations towards other members geographically and genealogically distant from them, such as offering them shelter or even allowing them to cultivate a plot of land on request (Burton 2001). This notwithstanding, ancestral lines would not appear to have been corporate groups either in military terms or in relation to landownership and economic organisation (Burton 1997; 2001; cf. Bamford 1997). Indeed, military alliances always involved local groups (usually united through participation in a single male initiation "confederacy") containing people of different *taka*, and members of a same line could easily find themselves on both sides of any given conflict (Blackwood 1978; Burton 2001; cf. Bonemère and Lemonnier 1992). As for the tenure and exploitation of land and other local resources, the largest operative entities were particular localised lineages within the larger ancestral lines. Even within these sub-groups, moreover, specific gardening plots, trees, and other subsistence resources were actually held and used

[18] My informants maintained that the Hamtai people were divided into twelve *taka*. The five larger ones, which most of my informants said to be the original "clans" to have emerged at creation, were the *Nä'othi'ya*, *Equ'ta*, *Titha'ma*, *Aphe'ä*, and *Ängamthí'ya*. The names of the remaining *taka*, which were said to have emerged from intermarriages between the original five ancestral lines, were given to me as *Tausa'a*, *Qapata*, *Tänhe'a*, *Änkaphea*, *Wangathe*, *Yakuyänha'a*, and *Päthe*.

independently by the various families that composed them (Burton 2001; Jackson 2003).

In relation to marriage, the Upper Watut lacked any exogamous descent groups and any prescribed or forbidden categories of marriageable kin beyond relatives considered to be too closely connected (such as first and, according to my informants, even second and third degree cousins) (cf. Blackwood 1978: 110).[19] The gift of a woman did not necessarily need to be reciprocated with another woman either immediately or in successive generations, but had always to be repaid through the exchange of bridewealth (and possibly, in older times, certain forms of bride service) (Blackwood 1978; Burton 1997; cf. Bamford 1997; 1998b). According to Blackwood's (1978: 110) data (which were obtained in the 1930s), the majority (62%) of Upper Watut families were monogamous, around 31% contained two co-wives, and some 8% of married men had three wives.

As is the case in all other Anga groups, male initiations constituted the most significant ritual complex of the Upper Watut. Collectively known as *äpa* ("song", "dance", "ritual meeting"), or, more specifically, *hingoamänga* (a composite of "*hingo*", which means [among others] "nose-hole" and, with the verb stem "*–tap-*", to pierce the nose; and "*hamänga*", the vernacular name of the red pandanus), these rituals consisted of two main stages. In the first one, boys as young as six underwent nose piercing and moved on from the status of *ime'ä* (child) to that of *haiwa* (initiated boy). Some years later, the initiates underwent a second ceremony that involved the consumption of the juice of cooked marita (red pandanus), and which marked a second transition from *haiwa* to *hiknga* (young, unmarried men) ready for marriage.[20]

Unlike many PNG Highlanders, but in common with their fellow Angans, the Upper Watut lacked any large-scale system of wealth exchange, whose role in

---

[19] This differentiates the people of the Upper Watut and Aseki areas from other Hamtai (Kapau) groups. Among the Kamea of Gulf Province, for instance, the preferred marriage partners are "real" and "classificatory" second degree bilateral cross-cousins (Bamford 1997).

[20] All the names provided in this description belong to the Hamtai language. During fieldwork I did not work with any Angaatiha/Susuami speaker and I do not possess the equivalent terms used by the Manki. For a more detailed description and analysis of the Hamtai and wider Southern Anga initiation complex see Bamford (1997; 1998a; 1998b; 2004); Blackwood (1978); Bonnemère (1993; 1996; 1998a; 2004b); and Lemonnier (2004)

terms of socio-political organisation was filled by chronic warfare, shamanism, and male initiations. Consequently, Anga politics were not dominated by the "big man" who, according to Sahlins' (1963) classic formulation, achieved and concentrated power through a combination of magical skills, oratorical gifts, fighting prowess, productive ability, and the capacity to accumulate and competitively redistribute wealth.[21] Instead, they were the prerogative of what Godelier (1982; 1985; 1986) has described as "great men"- that is ensembles of distinct political figures, each of whom tended to occupy a specific economic, military, and ritual niche and held limited political influence moderated by mutual interdependence and reliance on community-wide consensus (Blackwood 1978; Bamford 1997; Burton 2001; 1997; Bonnemère 1996; Bonnemère and Lemonnier 1992; Godelier and Strathern, M. 1991; Herdt 1981; 1987; and Lemonnier 1990; 1997; 1998; 1999).

In the early 1920's, when the first gold finds were made in the District, its Upper Watut communities were at war with each other and with the Biangai of the Wau Valley. Because of this chronic warfare and the cold and humid climate of the region's highest peaks, parts of the Valley and of the surrounding chains were uninhabited "buffer-zones" used "only" for hunting, gathering, trading, and

---

[21] It is here important to note that, from as early as the 1970s, Sahlins' (1963) straightforward "big-man/chief" opposition has come under sustained criticism on a variety of grounds, including: *firstly*, its implicit characterisation of Melanesia and Polynesia as strictly bounded and homogeneous "geo-cultural areas", despite clear indications to the contrary, and its a priori definition of a limited number of ethnographic cases as "pan-Melanesian" and "pan-Polynesian" political forms (Chowning 1979; Douglas 1979; Terrell et al. 2001); *secondly*, its failure to recognise that what it regarded as archetypical "chiefly" or "big-men" power-strategies, such as resource accumulation and redistribution, ritual knowledge, or violence, were in actual fact always present (if often at different structural levels or to different degrees) in both kinds of political systems (Chowning 1979; Douglas 1979); *thirdly*, the fact that it ignored the coexistence in all Pacific societies, whether achievement or ascription-oriented, of opposite principles of political accession and succession at different social levels, and that such principles were, even at the same level, never wholly mutually exclusive (Chowning 1979; Douglas 1979); *fourthly*, the ways in which it underplayed the fundamental differences between ideologies and practices of power in both Melanesia and Polynesia (Douglas 1979); *fifthly*, its questionable evolutionary connotations, which largely ignored the "adaptive" potential of all indigenous political forms vis-à-vis historical change (Chowning 1979; Douglas 1979; Terrell et al. 2001: 98-9); and *finally*, its inadequate consideration of the role played by both common and regionally, nationally, and locally-specific colonisation processes (e.g. pacification, foreign legitimisation of some local forms of leadership over others, the democratisation or monopolisation of local economies and exchange, Christianisation, etc.) in the emergence of contemporary Pacific political relations (Chowning 1979; Douglas 1979).

ceremonial purposes. As a result, following the opening of the Goldfields the Colonial Administration labelled thousands of hectares of land in the Wau Valley and Mount Kaindi "Waste and Vacant", declared them "Crown Land", and opened them to white settlement and exploitation (Burton 2001). In effect, this deprived the Upper Watut of important sources of subsistence and meant that both they and the Biangai were denied protection as indigenous landowners and denied compensation for the alienation of their land. In addition to this, as the Koranga and Kaindi deposits thinned out, hundreds of prospectors moved into the Upper Watut and, when local Anga groups tried to protect their homelands, they were repressed by Patrol Officers and, in some cases, forced to resettle to give way to European penetration.[22]

If they failed to receive any direct compensation for the alienation and exploitation of their land, the Upper Watut and other neighbouring Anga groups did not fare much better in terms of other types of development "opportunities" such as employment or trade. By the first decade of the 20th Century, the Anga had already acquired a universal reputation as *the* most treacherous, bloodthirsty, and capable fighters of Papua New Guinea. The Upper Watut, it would seem, were no exception to this and attacks on prospectors, miners and indentured labourers in the Morobe Goldfields were not uncommon and often deadly. For their part, the expatriate community and Administration officials tended to respond repressively to acts of native assertiveness, and even those adventurous Anga who attempted to approach the Morobe mining enclave for trade or other amicable reasons risked becoming the targets of pre-emptive gun fire from nervous miners (see, for instance, Burton 2001; Leahy 1994; Roberts 1996; Simpson 1953; Sinclair 1966; 1998).

With such high levels of distrust entrenched on both sides, interaction between Anga and Europeans remained, in the main, sparse and violent. By the mid-1930's there were 240 white miners and 2,500 native labourers operating in

---

[22] For instance, in her unpublished notes Blackwood has this to say in relation to the Nauti area of the Upper Watut: "There was once a larger population in this country but K. Bridge (the Otibanda District Officer) hunted them out and rounded them up because they were raiding and stealing from the miners. Most of them crossed the Watut and settled in the foothills of the Ekuti ranges' (Pitt Rivers Museum Archives, B. Blackwood Collection, Box 8, 8.2.5).

the Otibanda area of the Upper Watut. All the indentured labourers, however, had come from other parts of New Guinea, and only a few Anga men had accepted employment with the miners. Similarly, though by this time some Watut communities had started to grow introduced crops to sell to the expatriate enclave, this trade remained rather limited in both volume and scope (Simpson 1953; Sinclair 1998). For these same reasons, virtually no services such as aid posts, schools, or trade stations were brought to the Upper Watut and the wider Anga region until well after the end of the war. In 1933, a successful attempt was made to open a Patrol Station at Menyamya, in the centre of the Anga region. Nevertheless, it soon transpired that there was no gold to be won in that area, so the Administration deemed the whole exercise a waste of resources and shut the station down almost immediately after its opening.

What remained of pre-war Wau and Bulolo was eventually recaptured by allied forces, the two townships rebuilt, and mining operations restarted in earnest (Healy 1967; Sinclair 1998). It was only in this second phase of development that significant numbers of Anga entered the Wau-Bulolo economy as indentured labourers, and it wasn't until the 1950s, when mining operations were already winding down and the local expatriate community gradually shrinking, that national miners began to work independently of Europeans (Lowenstein 1982: 15). Before this time, the individual white miners, the larger companies, and the Australian Administration alike were only interested in New Guineans as labourers, and were generally unwilling to make gold-bearing grounds available to natives or to teach them how to prospect and mine for themselves. It was only through the efforts of a first nucleus of native miners, a change in Administration policy, and the help of some sympathetic NGG supervisors and a more supportive Mining Warden that the situation gradually changed and nationals began to be issued with mining permits (cf. Burton 2001 and Sinclair 1998: 337-38).

From then on, more and more independent New Guineans entered the mines and by 1976, or just a year after independence, native miners had become responsible for some 80% of the annual alluvial gold production and 45% of the total yearly output of the Morobe Goldfields. Despite this rapid increase in indigenous mining, however, only 29% of the gold extracted from Morobe up to

1977 was actually won by nationals (Lowenstein 1982: 16; 137). Furthermore, as expatriate miners began to leave in anticipation of independence and the larger companies scaled down their operations, hundreds of their Finschaafen, Sepik, Highlands, Kunimaipa, and Goilala labourers were left behind. Unwilling or unable to return to their native villages, many of them settled in the Goldfields and started their own mining operations, so that a significant portion of the gold produced by nationals in the post-war Morobe Goldfields was actually won by people other than the Anga.

Apart from an increased presence in the Morobe extractive industry, the post-war years saw growing numbers of Angans enter employment as, among others, domestic help, plantation workers, and trade store assistants. In addition to this, they were gradually encouraged by Agricultural Extension Officers to enter cash cropping, and particularly coffee growing. Important as these programmes were in offering rural Anga communities a means of earning cash, it must be remembered that while Wau and Bulolo expatriates had been growing coffee since the 1930s, this crop was not introduced to the Upper Watut, Aseki, and Menyamya areas of Morobe until the 1950s (Sinclair 1998; cf. (Dick & McKillop 1976).

Similarly, in the post-war era the Administration made an unprecedented policy commitment to "open up", "pacify", and "develop" the whole of Papua New Guinea. In Angaland, this process began with the reopening of Menyamya Station in 1950 (Simpson 1953). Nevertheless, crucial services and infrastructure like schools, aid posts, roads and airstrips did not actually reach the Upper Watut or much of wider Angaland until the late 1960s or early 1970s, or just a few years before independence (Jackson 2003a). Indeed, to this day the people of the Upper Watut remain disadvantaged in terms of their access to capital, health and education compared to other people within the District, the Province, and wider PNG (Jackson 2003a). Similarly, the Menyamya District of Morobe and the Kaintiba Sub-District of Gulf Province, from which all other Anga settlers in Wau, Bulolo, and Kaindi originated, still suffer from inadequate or totally lacking infrastructure and services, poor soil fertility, and growing population pressure,

and their people live on very low incomes of just 0-40 kina per annum (Hanson et al. 2001).

A final post-war development in Administration policy involved a greater recognition of native rights over alienated land. In the Wau-Bulolo area, this had important and enduring repercussions on local power relations. In 1962, the Biangai initiated a dispute over 6,000 hectares of "Crown Land" that had been alienated in the 1920's, and which included the Wau Township and several historical agricultural and mining leases. Ten years later, the Supreme Court found the Biangai to be the customary owners of the area, ordered the restitution of 4,800 hectares of it to them, and awarded them a total of 100,000 Kina in compensation for the remaining 1,200 (of which only a fraction was ever actually paid). In 1995, the 1972 decision was upheld once more (Jackson 2003a; Sinclair 1998). Rightly or wrongly, these events left the Anga with a sense of having been twice dispossessed, first by the Australian colonisers, who alienated the "6,000 hectares" for white exploitation only to return it to the "wrong" claimants, the Biangai, and then by the PNG State, whose Land Courts have been responsible since Independence for upholding this colonial "miscarriage of justice".

Furthermore, just as they were beginning to enter it and share in its benefits, the Anga saw the economy and society of the Goldfields fall into a spiral of rapid decline. In the post-war era the major mining company in Bulolo, Bulolo Gold Dredging (BGD), gradually closed its operations, which came to a halt by the mid 1960s. In turn, this meant loss of employment and company services which, as we saw above, led to large numbers of migrant labourers settling in the Bulolo District without jobs or land of their own. In the end, BGD managed to keep itself and the town afloat by entering a joint forestry and logging venture with the Commonwealth (and then PNG) Government, but this was done at the price of the exploitation of further customary land (Healy 1967; Howard 1991; Sinclair 1998). Similarly, NGG wound down its operations in the Wau Valley and Kaindi, and just a year after Independence (1976) it shut down its Wau sawmill, putting 140 people out of work. By the end of the 1970s, most expatriates had left the township, which had started to suffer considerably from the economic

slowdown, rising unemployment, fast growing immigration, squatting, and "rascalism" (crime) (Lawrence 1994; Sinclair 1998).

By the early 1990s, NGG had ceased all operations. As this company was not only the major local employer, but also the provider of a range of essential services such as a clinic that treated 7,500 cases per year, all of the water and power supply for the township, and donations to various charities, schools, churches, and clubs, this closure proved a devastating blow to Wau and the local and settler communities that relied on its infrastructure and economy (NGG Holdings Limited 1985; Simpson 1998). At the same time, and probably at least in part due to this loss of services and employment, law and order problems reached new heights and Wau acquired a national and international reputation as a "cowboy town" that endures to this day- and not without reason, as statistics from 1999, 2001, and 2002 show murder rates as high as 30.8 per 100,000 inhabitants, attempted rape and sexual assault at 9 per 1000 adult females per year, and grievous bodily harm and serious assault of 13 per 1000 citizens (and these are only the reported crimes which, if my own fieldwork experience is anything to go by, are but the proverbial "tip of the iceberg") (Jackson 2003a).

At the time of my second fieldwork, the future of the Bulolo District rested on a combination of old and new prospects. To begin with, small-scale mining continued to make a significant contribution to the District's economy and was practiced on a permanent or occasional basis by up to 75% of the Wau area population (Susapu and Crispin 2001). In addition to this, forestry, logging, and cash-cropping remained important productive fields. In terms of newer developments, the Wau Ecology Institute, a local NGO with a long record of work in research, conservation, and sustainable development had just been appointed to administer a 2,000,000 Kina (see Note 10) Japanese Social Development Fund Project to support artisanal and small-scale mining (ASM) in Papua New Guinea. Furthermore, the Asian Development Bank (ADB) had opened a Wau Microbank to provide saving opportunities and small loans to local small-businesses and individual "grassroots".

Most importantly of all, though, a (relatively) large mining project was about to commence operations and was expected to have a significant impact on

the District through increased employment, demand for goods and services from urban traders and rural producers, the payment of rent and royalties to local landowners, and the provision of new community services and infrastructure such as aid posts, roads, and contributions to schools, churches, and other local bodies. This silver and gold development by Morobe Consolidated Goldfields (MCG) involved two local deposits known as "Hidden Valley" and "Hamata", which were located between Mount Kaindi and the Upper Watut. Although the first payable gold at Hidden Valley had been discovered in 1928, its viability as a large operation and the discovery of Hamata rested on a phase of renewed local exploration in the early 1980s. Since then, a combination of technical, legal, and economic difficulties had meant that a number of companies had succeeded each other in the ownership of the prospects before operations could finally commence (Howard 1991; Jackson 2003a; 2003b; Lowenstein 1982).

2- Haus Kapa and Mount Kaindi

That, then, was "the lie of the land" when I arrived in Wau in 2004. At the time I had no definite idea of where I wanted to settle to carry out my research. As my earlier "foray" in the local historical and anthropological literature had made me particularly interested in Anga culture and society, I knew that I wanted to work in an area inhabited exclusively or primarily by miners belonging to that ethno-linguistic family. In light of this choice, the best fieldwork locations appeared to be the Upper Watut itself or the Edie Creek area of Mount Kaindi. As I considered these possibilities, I quickly came to realise that they constituted two very different research scenarios, each of which offered a distinct set of investigative problems and opportunities.

Thus the Upper Watut was a region of historical Anga habitation and, as I gathered from various Upper Watut informants I met in Wau, its communities engaged in alluvial mining on a more occasional basis alongside a number of other "historical" and "contemporary" core occupations such as hunting, gathering, fishing, subsistence gardening, cash-cropping (especially of coffee), small trading, mining company employment, and the "extraction" and

redistribution of "compensation" and other benefits from the government and from local resource developers.[23] Mount Kaindi, on the other hand, was an area of more recent settlement where ASM and ASM-related services constituted the primary sources of livelihood for a majority of people. In addition to this, the mountain's extractive scene included not just alluvial mining but also artisanal hard-rock operations, thus being rather more varied than that of the Upper Watut.

Despite these underlying differences, however, I was convinced that both places would have made good fieldwork settings and could have yielded equally valuable research data. In the event, my final decision was influenced by a series of logistical and personal considerations. The Upper Watut was harder to reach than Kaindi from either Wau or Bulolo. Indeed, fewer and less regular PMV[24] runs serviced that area and, as I had already learnt in 2001, arranging ad hoc transportation there could be, not only quite problematic, but also considerably more expensive. In turn, this would have increased the cost of securing and transporting supplies and would have made it harder for me to reach the District townships or the coastal city of Lae in case of medical emergency and to keep in touch with my wife and family. Mt. Kaindi, by contrast, was only a few hours away from Wau, and most days of the week some private vehicles travelled back and forth the steep and narrow road that connected the two, taking people and goods on board for a relatively modest fee. In turn, given that Wau was linked to the national and international telephone grid, was connected to Lae by air and daily PMV services, and contained a number of large and well-stocked trade stores, this would have made it much easier for me to communicate with my family, to front eventual medical problems, and to acquire the comestibles, batteries, medicines, household goods, and other supplies I needed for fieldwork with far less disruption to my fieldwork budget and my research activities.

With these considerations in mind, I acquired a few weeks' worth of supplies from the local stores and proceeded to arrange my passage to Kaindi.

---

[23] As Filer (1997a) has observed in characteristically sharp tones, the past few decades have witnessed a gradual and not always easy transformation of Papua New Guinea from "a nation of gardeners" to one of actual or aspirant "rent collectors".

[24] Public Motor Vehicles (PMV) is the designation used in PNG for buses, mini-buses, trucks, pick-ups, cars, or any other vehicles that offer transportation for a fee.

With the help of some of my old contacts I was able to get in touch with the management of Edie Creek Mining, who very kindly consented to take myself and my cargo up to Kaindi in their company vehicle and to let me stay in their compound until I found some more permanent living arrangements. In addition to this, my old friends helped me search for a suitable person to assist me in the initial phases of my investigation.

In the end I settled for Yiany[25], a man in his late twenties who had moved to the District as a young teenager from a village near Aseki. Since his arrival in the Goldfields, the youth had lived with a number of friends and "relatives" (mostly well disposed but very distant classificatory kin and/or fellow Seventh Day Adventists [SDA]) both in Kaindi and in Wau, where he had worked alternatively as a subsistence gardener, a miner, a gold trader, a store assistant, and a "youth worker" for the local SDA church. Having grown up in a relatively isolated rural village, obtained basic schooling and church education, and spent nearly a decade and a half in the more "cosmopolitan" Bulolo District, Yiani had a good familiarity with both "traditional" Hamtai life and the more "westernised" environment of the Goldfields. What is more, he possessed an excellent degree of fluency in Hamtai-Anga, Tok Pisin (pidgin), and the English language. At the time of fieldwork, he was unemployed, unmarried, and without children, which meant that, unlike most other local youths who had family obligations and mining or other daily work to attend to, he was willing and able to follow me wherever my research would take me and to assist by teaching me Tok Pisin and Hamtai, accompanying me on my excursions to the various workings and mining settlements of Kaindi, and helping to translate during and after interviews, public and private speeches and discussions, and other such occasions.

The fact that he was a strict SDA comported a number of advantages and disadvantages. On the positive side, for example, he wasn't easily distracted from the research effort by the gambling sessions and beer parties which were

---

[25] Like all the other personal names that I give for my informants, Yiany is a pseudonym. In the case of Hamtai, Menya, and other PNG names I either give each particular person of whom I am speaking a common vernacular name other than his or her own, or, more frequently, a made-up name that sounds like a vernacular one but has no actual meaning. As for names of a Biblical and other western origin, I also give each person in question a name different from his or her real one, and, in keeping with local pronounciation, I present them in their common pidgin spelling.

constantly taking place in Kaindi. At the same time, though, he refused to accompany me to any of these "inappropriate" events which, being part of what Evans-Pritchard would have defined as the local "grain of culture" (Kuper 1993: 62), I was nonetheless determined to observe and to learn about. In the same way, he declined to do any work or to accompany me anywhere on Saturdays, when I had to travel and meet and interview people on my own, or to take part with me in the core rituals of the ceremonial offerings my hosts made to the local spirits of the land (which will be described later on in this thesis). In the initial phases of research, when I still hadn't settled in my new surroundings and my knowledge of pidgin- let alone Hamtai- was very minimal indeed, this represented more of a challenge. Even then, though, I fully accepted his religious beliefs, and, while never hiding my agnosticism and secularism or refusing to engage in a critical discussion of Christianity when he or anybody else invited me to, I always did my utmost to respect them. In the event, his reluctance to engage in some times and aspects of my research turned out to be a blessing in disguise, because it meant that I "emancipated" myself from over-reliance on his assistance much earlier than I might have been inclined to do of my own accord.

As time went by I became increasingly intimate with the local environment, made the acquaintance of more and more of its people, developed relations of friendship with many of them, and acquired greater and greater linguistic competence. In turn, this meant that after a few months of fieldwork there was little I could not do without Yiani's assistance. Indeed, even though I was still unable to translate directly to and from the difficult Hamtai language,[26] in which I continued to be helped by him and others for the duration of fieldwork, I was fluent enough in pidgin to conduct a great part of interviews and observations on my own. By that time, though, Yiani and I had spent many months living and working together, and I had come to consider him as a friend as much as a research assistant, to enjoy his companionship, and to care for his well being. For these reasons as much as the fact that rascalism and the treacherous nature of its mountain landscape made Kaindi a difficult area in which to move around alone, I

[26] The complex nature of the Anga languages has already been remarked upon by, among others, Blackwood (1978) and Mimica (1981).

asked him if he would carry on working with me to the end of my stay, to which he eagerly consented. And so we went on living, travelling, and learning together for the duration of my stay, and I continued to pay him what I could for being my "field assistant" until I left PNG in 2005.

As soon as our stores were assembled and we were ready to go, we left for the Edie Creek area of Mount Kaindi (see Figure 1). Located to the south of the Wau Valley, between the headwaters of the Upper Watut and the Bulolo Rivers, the mountain reaches a height of 2,500 metres above sea level and is connected to a ridge that joins with the Ekuti Dividing Range to the south, which is in turn the main Papua-New Guinea divide in this section of the island. On the opposite side to Kaindi, the Wau Valley is overlooked by the Kuper Range. On all four cardinal points, Kaindi and the Wau Valley are surrounded by higher peaks and thus protected from both the North Eastern and South Eastern trade winds (Lawrence 1994; Lowenstein 1982; Gressitt and Nadkarni 1978).

In relation to climate, the average annual rainfall is not as high as in other parts of New Guinea, but is fairly evenly distributed through the year and considerably higher than in the Wau and Bulolo Valleys (2,700 mm versus 1,948 and 1,626mm respectively). In addition to a rather regular rain regime, Kaindi's climate is characterised by a general high humidity and the frequent presence of thick fog (see Figure 2). Its average temperatures, which stand at around 15.5-28.7 °C at 1,800 metres and 11.5-19.6 °C nearer the summit, are much lower than the Wau maximum and minimum of 28.1 and 16.6 °C. In precontact times, Mt. Kaindi was fully covered in thick mid-montane tropical rainforest that supported a considerable variety of animal species. Although its flora and fauna remain quite rich and diverse to this day, however, the area has since then suffered considerable environmental damage from the over-hunting of local wildlife by its ever-increasing mining population, and from the water pollution, soil erosion, and deforestation caused by past and present mining activities, tree cutting for earlier commercial and mining related logging and the more recent slash-and-burn agriculture and fuel needs of indigenous small miners, and the severe drought and fires caused by the nationwide "El-Niño" weather phenomenon of 1997-1998 (Gressitt and Nadkarni 1978; Lowenstein 1982).

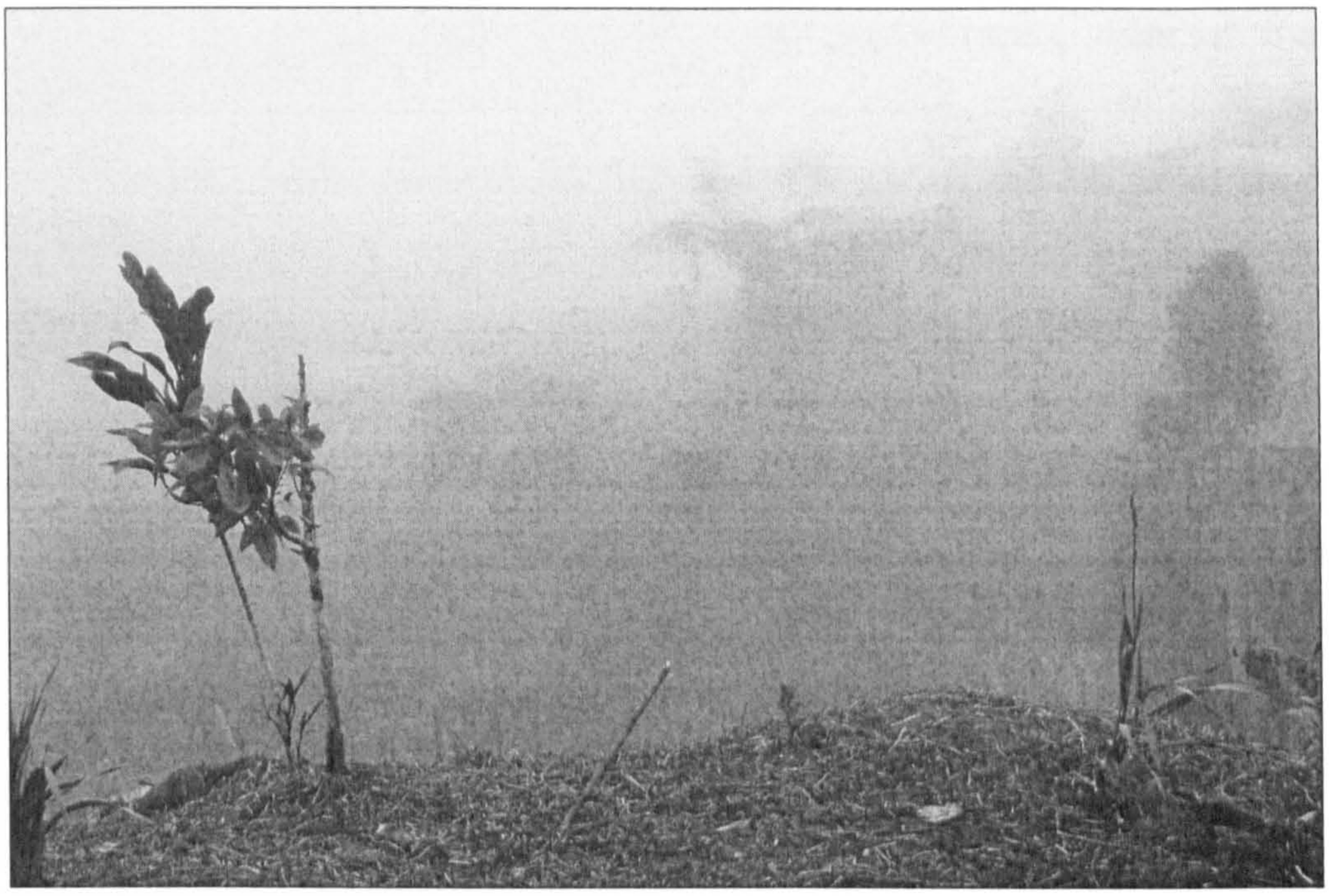

Figure 2. A typically foggy Kaindi day.

Because of its colder and humid climate and of tribal warfare, Mount Kaindi had not been permanently settled in pre-contact times, although the Anga and Biangai peoples of the neighbouring Upper Watut and Wau-Bulolo Valleys would seem to have visited it regularly for hunting, gathering, trade, and ritual purposes (Gressitt & Nadkarni 1978; Lawrence 1994; Lowenstein 1982; Plane 1967). A further reason why the mountain had been shunned for permanent occupation was the belief that it was inhabited by cohorts of powerful forest spirits (or masalai in Tok Pisin). Indeed, according to Hamtai legend, the name Kaindi (or *Qäinti*, in the Hamtai pronunciation) is a corruption of "*qe'a qanti!*" This expression of fear- which literally means "liver-feel-it!" or "I am scared!"- is supposed to have been uttered by a group of Upper Watut ancestors who, having once found an unusual concentration of game during a hunting trip to the mountain, asked themselves whether to kill them but, fearing they might be a manifestation of some powerful local masalai, decided against it. From then on, the fearful name stuck as an eternal reminder of both the rich wildlife (and thus, in pre-contact times, of the wealth) that inhabited Kaindi's hunting grounds, and of

the potential dangers that might befall those who tried to exploit them (cf. Burton 2001).[27]

As seen in the previous section of this thesis, at the height of the pre-independence extractive era Edie Creek had been occupied by hundreds of expatriates and over a thousand native labourers who worked individual claims or in the sluicing and underground operations of a number of mining companies.[28] Back then the area had benefited from electric power and had sported industrial processing plants, individual and company residential units, a hotel, a boarding house and restaurant, an association equipped with a club house and tennis, billiard, and snooker facilities, a post office and general trade store, and even a cinema (Gressitt and Nadkarni 1978; Sinclair 1998).

At the time of fieldwork, on the other hand, Mount Kaindi was home to over 2,000 indigenous people, of whom roughly 45% were women and over 46% children and youths below the age of fifteen (PNG 2000 Census). Although people were found in all parts of the mountain, most mining operations were located between 1,000 and 2,300 metres of altitude and clustered in and around the Edie Creek Basin area (Lowenstein 1982). Scattered in a myriad of settlements of between one and over forty households, this mountain community lived primarily from alluvial and hard-rock mining supplemented by the small trade of gold, locally grown food, and comestibles and trade goods acquired in other parts of the District and Province, as well as from a limited degree of subsistence agriculture, hunting and gathering, and the rearing of small numbers of domestic pigs, chickens, goats, ducks, and even the occasional cassowary. The relative importance of these forms of production was nevertheless far from consistent, and certain settlements at the fringes of the mountain seemed to be primarily dependent on subsistence and "commercial" agriculture rather than resource extraction. Even there, though, many youths and men undertook casual work in adjacent mining areas and engaged in the gold trade on a more or less

---

[27] For the Biangai, on the other hand, the name is a contraction of "*kai Indi*", which in their language means "the river Indi" (Burton 2001).

[28] The alluvial and hard-rock mining companies that operated at Mount Kaindi at various times were NGG, Enterprise of New Guinea Gold, Edie Creek Goldmining Company, Day Dawn Gold, and Day Dawn South NL (Lowenstein 1982).

regular basis in order to supplement their subsistence diets with imported goods and to enhance their comparatively more modest agricultural incomes.

While the local population included both recent and long term migrants from all corners of Papua New Guinea, its main core and the focus of this ethnographic study were Angans who had started to accrue to the area in the immediate post-war era, first from the Upper Watut and Aseki regions of the Bulolo District, and then from the Menyamya District of Morobe Province and, to a lesser extent, the Kaintiba Sub-District of the Gulf Province of Papua. Though a portion of this Anga "community" belonged to the Menya linguistic group, the vast majority were Hamtai speakers. The "Hamtai"[29] language, which was formerly known as "Kapau", is the largest of the thirteen Anga languages and is spoken by over 45,000 people who occupy nearly half of the entire Anga region (Gordon 2005). As far as I was able to reconstruct from my own informants and from the literature,[30] the historical culture, sociality, politics, and economic forms of these various Hamtai speakers were very close if not identical to those already described for the Upper Watut.[31] Given that my Menya informants were few in numbers (so that I was able to obtain much less information from them than from my Hamtai informants), that most of them were married to Hamtai men and women and/or were of mixed Menya and Hamtai descent, that many of their "traditional customs" appeared to have been akin to those of the Hamtai, and that

---

[29] According to my informants, the label Hamtai derives from the vernacular word "*ämtä*", an interrogative meaning "where from" (as in "*ämtä pn?*"- "Where do you come from?"), which is also used to refer to the area between Aseki and Kaintiba from where the majority of this people claim to have originated.

[30] See in particular Bamford (1997; 1998a; 1998b; 2004); Bjerre (1958); Bonnemère and Lemonnier (1992); Lemonnier (2004); and Simpson (1953).

[31] A significant difference reported in the literature has to do with marriage practices. According to Blackwood (1978) and Burton (2001), the Upper Watut lacked any exogamous descent groups and any prescribed categories of marriageable kin. In addition, they appear to have avoided unions not only between all parallel cousins, who are actually classed as "siblings" in their kinship terminology, but also between "closely related" bilateral cross-cousins. Among the Hamtai-speaking "Kamea" of the Gulf, on the other hand, Bamford (1997) found the preferred marriage form to be between second degree bilateral cross-cousins. The majority of my informants, who came from the Aseki region of Menyamya, claimed to operate a system analogous to that of the Upper Watut and to shun unions between even second and third degree bilateral cross-cousins. Nevertheless, given the high level of marriages between migrants from different Hamtai-speaking areas and also to non-Angans typical of the Goldfields, my genealogical data is at present insufficient to verify the actual validity of this claim.

both groups lived and organised themselves in analogous ways in the context of the Goldfields, I shall henceforth treat them as a single "culture group" to which I will broadly refer as the "Hamtai". Furthermore, I will confine myself to the use of the Hamtai vernacular- with which I possess a greater degree of familiarity- to refer to those social and cultural practices, forms, norms, and concepts that were shared by both sub-groups of actors.

From the late 1950s, the first of these Anga migrants (mostly former NGG employees and tributers[32]) had commenced to work independently of Europeans, and by the following decade some had managed to win the ownership of both old and newly registered mining leases. In some cases, these "Hamtai pioneers" had won considerable fortunes which they had reinvested in mining, housing, commercial properties, and alternative enterprises in and beyond the Bulolo District. Almost invariably, however, lack of education, poor finance and management skills, reliance on dishonest expatriate and national managers, and social pressure and family politics had led to the collapse of these mechanised operations and the alternative businesses which they had generated. As these early fortunes were won and lost, more Anga and PNG migrants continued to accrue to Kaindi to find their own mining grounds or to work as labourers and tributers for established white and indigenous leaseholders and for NGG. For a variety of reasons (which included the aforementioned gradual decline of the District's post-war economy, the consequent shrinking employment opportunities in the local large-scale extractive industry and in other economic areas, the mineral price boom of the 1970s-80s, greater freedom of movement following independence, and the deregulation of the ASM sector in the late 1980s and early '90s[33]) this process accelerated significantly over the past two decades, with the result that the

---

[32] A "tributer" is the holder of a "tribute agreement" with a company or other leaseholder whereby s/he is allowed to mine that company's or other leaseholder's tenement provided that the holder shall receive a portion or percentage of the minerals won by the tribute holder (see Moretti 2006b).

[33] Before those changes had taken place, only miner ID holders were allowed to mine and to legally sell gold. Today, on the other hand, miner IDs no longer exist and intra-national gold transactions are fully deregulated. In addition to this, all PNG citizens are now legally permitted to carry out alluvial mining on their own "customary" land, and, with prior agreement from a local "landowner", on any other unregistered piece of land without the need to apply for an alluvial mining lease (James and Walker 1995; Lole 2005; Susapu and Crispin 2001).

Edie Creek population more than doubled between 1980 and 1990, and nearly tripled again between then and the year 2000 (National Population Censuses 1980; 1990; 2000).

On my arrival at Mount Kaindi, many local leases (some of which formed part of the aforementioned "6,000 hectares") remained in the hands of the early "Hamtai pioneers" or of their descendants, who employed close and more distant relations as well as considerable numbers of unrelated Anga and non-Anga people as labourers and tributers. The majority of the independent indigenous miners, however, operated in small family groups on "customary land" that had never been officially registered for mineral development.[34] Despite the relatively common usage of portable water pumps, only one indigenous operation was sufficiently mechanised to warrant the title of "small-scale". Another small-mining enterprise belonged to an Australian expatriate, while Edie Creek Mining (ECM) itself- which had inherited some of NGG's leases in the early 1990s and was by far the largest of this small mechanised operations- was owned 51% by an Australian expatriate and 49% by two local landowners associations, the Kukukuku Development Corporation and the Biangai Development Corporation (cf. Neale 1995; and Sinclair 1998). All other mining activities, whether alluvial or hard rock, were conducted by means of gravity-powered water and very simple tools such as crowbars, spades, shovels, hammers, panning dishes, wooden and metal sluice boxes, and mortar and pestle.

A mere few hours after reaching ECM I had the good fortune of meeting the local kaunsil (the elected political representative for Kaindi), who, on hearing about the reasons of my coming, invited Yiani and myself to move to his mining settlement. I was so impatient to get started with my research that we immediately assembled our mattresses, mosquito nets, and a few cooking items and food supplies and followed him up a steep and muddy road that climbed through

---

[34] According to the new Mining Act (1992) this is perfectly legal as long as: a) the miners can demonstrate customary ownership of the land they work or an agreement with its customary owners; b) they limit themselves to the exploitation of alluvial deposits; and c) they use no mechanical mining equipment including water pumps. In relation to these clauses most operations I encountered were less than "kosher" as the customary ownership of the area is still hotly disputed between and within local Anga and Biangai communities, miners worked indiscriminately alluvial and lode deposits, and water pumps were used whenever they could be afforded or borrowed.

ECM's leases and onto our final destination; the settlement of "Haus Kapa".[35] Like a "traditional" Anga village, this mining colony was perched on a cluster of adjacent spurs that overlooked the Edie Creek on one side and the Wara Wau (Little Wau Creek) on the other (cf. Figure 3). Furthermore, the village nested near the conjuncture of the main Kaindi-Wau road with the historical Bulldog track, a motorable road that ran all the way to the Hamata and Hidden Valley deposits, and another motorable road which led to a number of settlements on the Western side of the Edie Creek Basin.

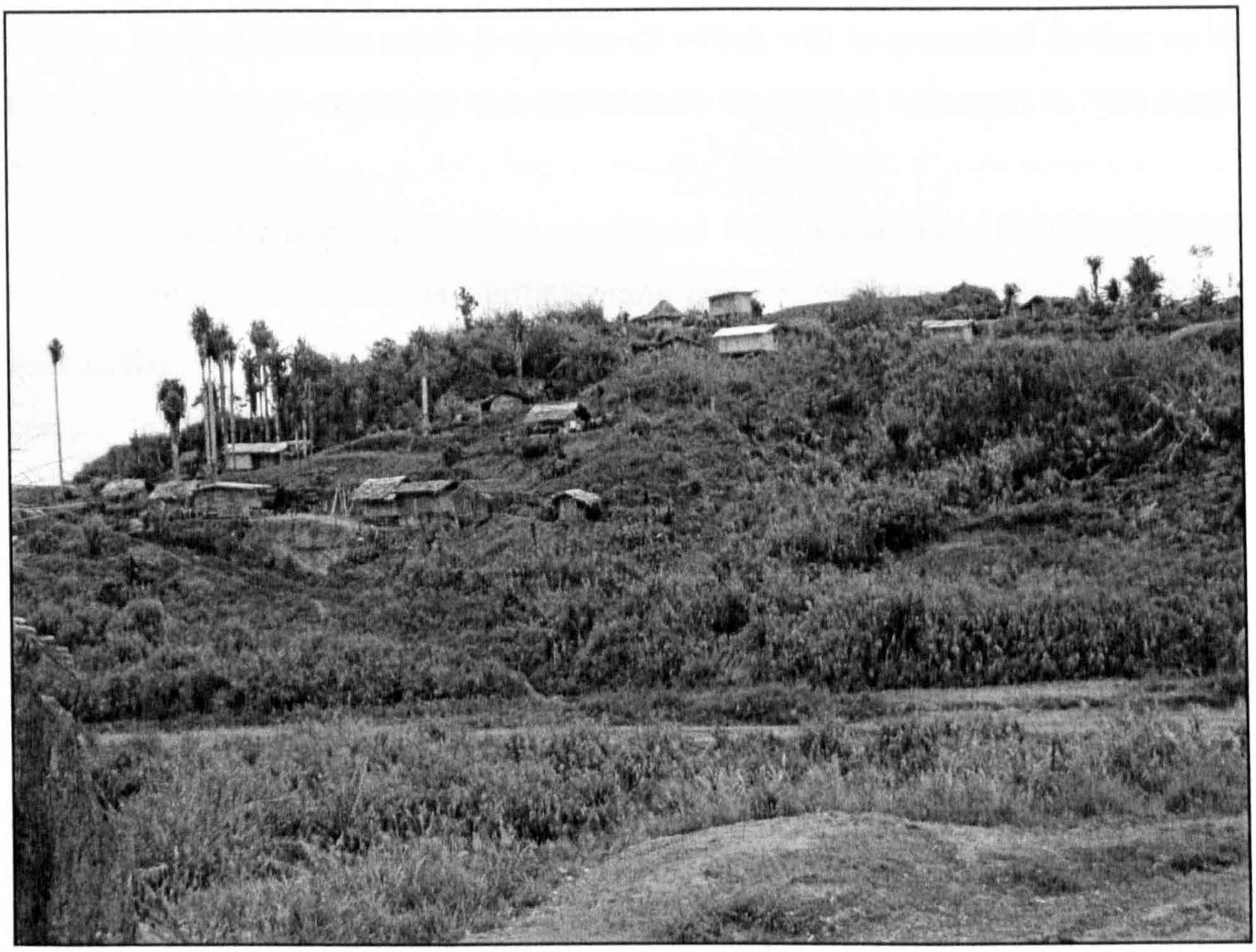

Figure 3. A Hamtai mining settlement.

With around 40 households and a population of nearly 180, Haus Kapa was one of the largest settlements in the mountain. The central part of the village, which I shall call HK1, was occupied by the extended family, affines, distant

---

[35] As is the case with a few other areas described in this thesis, the name of this settlement is actually a pseudonym. The reason I chose this particular name, which is the pidgin term used to indicate a house with a corrugated iron roof, was simply the fact that the central part of the settlement was formed by a cluster of buildings sporting that kind of roofing.

relations, and unrelated workers of a man called Nisimas, who was also the kaunsil's father-in-law (tambu, *näinko*). Now in his late fifties or early sixties, Nisimas had been one of the most successful of the early "Hamtai pioneers", and his life history was characteristic of a majority of them. Born in a hamlet of the Aseki area, Nisimas had lost his father to illness when he was still a baby. After her husband's death, Nisimas' mother had moved back to her natal village to live with her brothers. Sometime later, she married a local man who already had three wives and many older children of his own. When he was in his early teens, Nisimas heard about the white towns of Wau and Bulolo. His grandfather had told him the Hamtai creation myth (a version of which will be presented further on in this thesis) and had explained that the Morobe Goldfields belonged to "the Anga people".[36]

With little hope of securing much land for himself either in his long-dead father's village or that of his stepfather and mother, Nisimas decided to seek his luck in the mines. Thus he travelled to Wau, where he found employment with a certain "masta Scori",[37] first as "hausboi" (i.e. domestic helper) and then in the mines, where he learnt how to extract and process gold. When his indenture came to an end, he returned to his mother's village. By then he spoke fluent pidgin, so the local Lutheran missionaries hired him as a translator. They, however, paid him

---

[36] Although the Upper Watut regard themselves as the sole legitimate landowners (papagraun, or *qoäqäwo*) of the Goldfields, all Hamtai and even Menya settlers I met in the Bulolo District considered themselves to be "local landowners" rather than outsiders or, even worse, "squatters". Broadly speaking, this claim was justified in a number of ways. To begin with, people would often refer to the single origins of all Hamtai and wider Anga people as proof that all Anga lands belonged to each and every Anga group. Furthermore, particular individuals would mention specific tumbuna stori (or tumbuna histri, meaning ancestral tales) about how one or more of their own ancestors had been the first to "discover" the Upper Watut and had invited the poor, landless forefathers of its present occupants to settle this new found land whilst they returned to their own vast holdings in their villages of origin. In addition to this, people would refer to past military alliances between their own ancestors and those of the Upper Watut, suggesting that the former had helped the latter win their present day land. Similarly, they would appeal to present and alleged past affinal relations between themselves and particular Upper Watut lineages. Finally, some noted that their families had now been working particular areas of the Bulolo District for generations, shaping the local landscape and learning about its ancestral histories and resident masalai, and that as such they had acquired true rights of ownership over them.

[37] This was almost certainly G.A. "Scotty" [because a Scot] Sutherland, one of the first and most longevous white miners to have worked in the Edie Creek area. At the time when Nisimas claims to have arrived at Kaindi, Sutherland held a tribute there in partnership with another expatriate called Ned Partridge (Sinclair 1998).

even less than the old masta, so after marrying a woman from his mother's village Nisimas decided to go back to Kaindi. Instead of seeking employment, this time he asked masta Scori to lend him some mining tools so he could work for himself, and the white man obliged him. In the early 1970s, after a long period of hard work and meagre results, Nisimas prospected an area just below present-day Haus Kapa. Eventually, he reached the head of a small tributary of the Wara Wau, where he discovered the most profitable ASM deposit to have been found in the Wau-Kaindi area since the Second World War.

In the following decades, Nisimas extracted "millions" from that land,[38] which he invested in a large house in Wau town, in various pieces of machinery and vehicles for his mining operations, and in alternative businesses ventures, bank accounts, and company shares. As his fortunes had grown and he had acquired a biknem (a "big or well known name", " a reputation", "fame") for himself, increasing numbers of close and distant kin, affines, and non-related workers and "supporters" had come to live and work in his holdings. As had been the case with most "Hamtai pioneers", though, a combination of bad management, worse investments, and chronic jealousies and internal conflicts between different family factions had eventually dissipated most of the family fortune. When I arrived at Haus Kapa, Nisimas retained his Wau home, his gold leases, and his Kaindi lodgings, but none of his other capital and assets, which had been repossessed by the banks from which he had borrowed in better times. By then too old to endure the rigours of Kaindi, Nisimas was spending most of his time in the warmer climate of Wau, where he lived alongside his aging first wife[39] and some of his younger children and grandchildren. Although he visited Kaindi on an occasional basis to check on the local workings and make (more or less successful) demands for a portion of what they had recently produced, his leases had been divided into two separate areas controlled by his first and second born

---

[38] Between 1972 and 1982 alone, when global gold and silver prices averaged USD 269.647 and USD 8.5776 per ounce respectively (http://www.kitco.com, accessed on 25/02/2006), Nisimas extracted a declared eighty-five kilos of gold and nearly seventy kilos of silver from his leases.

[39] His second wife, a Chimbu, had died of illness before giving him any children. His third wife, a Menya-speaker, had given him a son, who was still attending school in Wau, but had been, as he put it, "chased away" by his first and now only remaining wife.

sons who, alongside a number of cousins, affines (including, as we will see later on, the kaunsil himself), and other related and unrelated residents, were nevertheless still vying for ultimate ownership of the whole holdings.

As for the wing of the settlement which I shall call HK2, this was occupied by the (actual and classificatory) children, grandchildren, nephews, nieces, affines, and unrelated workers of a now dead NGG tributer. According to Nisimas' family, this group of "homeless" NGG tributers had initially been "allowed" to settle on "their land" because they were related to one of Nisimas' longest serving and most trusted bosman (mining overseers). Since then, the two groups had also been linked by new relations of marriage, most notably between one of the original tributer's ZS and one of Nisimas' actual daughters. At any rate, though, as far as the HK2 people were concerned their houses and workings did not actually lie within Nisimas' leases but on a "no man's land" that separated these from the holdings of ECM and the other aforementioned expatriate miner. As a result, various HK2 residents were enmeshed in ongoing land disputes, not just with Nisimas' family, but also with ECM and the other expatriate-owned operation, who also claimed ownership over parts of the land where the HK2 people lived and mined.

Finally, HK3 was inhabited by some other affines and unrelated workers of Nisimas'. In addition to them, the area was also occupied by the extended family of the second born son of one of the best-known living members of the early "Hamtai pioneers". According to this man, who held unregistered "claims" all over Mount Kaindi, the HK3 area and some of the workings below it lay outside Nisimas' leases and belonged to himself and his family. This assertion, which is contested by Nisimas' sons, has been the cause of a rather fierce and protracted land dispute between these two neighbouring families.

PART TWO: A Field of Dreams- An Introduction to the Scope and Methods of this Study

3- The "prospecting function" of dreams

As soon as I reached Haus Kapa I was surrounded by a large group of people who wanted to know who I was and why I had come to their village. I told them I was from Italy, a land they knew as the homeland of the mythical Romans of the Bible and the country of the Pope. I also said that I was a university student in England, which they knew as the faraway mama kantri ("mother country") of Papua New Guinea and the home of the equally mythical wait kwin ("white queen"). What followed thereafter was one of the most momentous conversations I have ever had in my life, which, as is perhaps common to most of these "first ethnographic encounters", I experienced with a draining mixture of apprehension, excitement, and confused anticipation.

Although none of my audience had a clear idea of what an anthropologist was or what he or she did for a living and why, many were familiar with other researchers who had worked in the District. For example, a few remembered a waitman ("white man") who had recently lived with their neighbours and "arch-rivals" the Biangai (see Halvaksz 2003; 2005). If the Biangai had had such a person to stay with them, it was reasoned, than it was only logical that "the much more interesting and welcoming Kukukuku" should also have one of their own. Even more than Halavksz, however, people remembered the social scientists who had worked as consultants for Morobe Consolidated Goldfields (MCG) (see Burton 1997; 2001; and Jackson 1988; 2003). In turn, this meant that some of them asked if I had come to collect their tumbuna histri (ancestral histories and genealogies) on behalf of the kampani (company) so that it and the gavman (government) could learn once and for all who were the true local landowners and who were just "squatters" with no right to stay and work in Kaindi and to gain any services or compensation from the incipient mining project.[40]

---

[40] Although I didn't know this at the time, this logic stemmed from widespread rumours that the government would soon bring in new mobile police units to round up and expel all illegal miners from Kaindi in order to "clear the way" for MCG's operations.

This was, of course, something I had expected and dreaded even before I had left for the field. Eager to dispel any misconceptions about myself and limit unwarranted expectations about what I would be able to do for (or against) any of my prospective hosts and informants, I stated categorically that I had nothing to do with either MCG or the government, and that I was only an independent student with a limited amount of resources at my disposal to carry out my research. I then explained as best I could that I had come to Haus Kapa in order to learn about the culture, history, and way of life of its people. In particular, I put it to them that my reason for doing this was that, even though ASM was already a very important economic activity within Papua New Guinea, few people outside the country knew anything about the daily lives of the many tens of thousands of indigenous persons who carried it out on the ground. On hearing this, many assented that what they were doing was indeed very important "work" and that, if I wanted to learn about mining, I had certainly come to the right place because Wau and Bulolo were the as ples (the origin) of the gold that had built Papua New Guinea and the world, and the Kukukuku of Kaindi were without doubt the best indigenous miners in the whole of the country.

As I had occasion to learn in the months to follow, this initial explanation had not dispelled every doubt or (from my own ethnocentric perspective) "wild speculation" that locals harboured about the "true reasons" for my coming (see Note 61). Nevertheless, by the end of it my hosts had unanimously declared that "it was a good thing" ("em gutpela" in pidgin, "*awa ti*" in vernacular) that I had come to live among them, and proceeded to show me around the area and to ask an infinity of questions about my family, my country, and my general background. After a conversation between the kaunsil and some of Nisimas' children, it was decided that Yiani and I should take up residence in Nisimas' now vacant house. This was a rather spacious, elevated dwelling built from sawn timber and roofed with corrugated iron sheets, which was centrally located within the settlement. Although I initially accepted this as a temporary arrangement, Yiani and I ended up living there for the entirety of my stay. The first time Nisimas came to Kaindi he insisted that I should carry on living in his, as he put

it, "pipia haus" ("rubbish house")[41] for as long as I pleased. When I replied that I did not want to oust him from his home, he explained that long before my arrival he had already avoided sleeping in that building, which, lacking a hearth and the degree of insulation provided by a more "traditional" style of housing,[42] was far too cold for an elderly couple like him and his wife. Instead, they preferred to live in the warmer "bush house" of one of their daughters, so my occupancy of their house was no trouble at all.

Although I had initially toyed with the possibility of moving to one or more other settlements at successive stages of fieldwork, I later decided against this on a variety of grounds. To begin with, as time went by and my bond with the Haus Kapa people grew deeper, I felt progressively uneasy at the idea of moving to a different location. At the same time, the longer I stayed and the harder it became to relocate to a different settlement without giving the impression that I was doing so because I was dissatisfied with my hosts. Even from the strict point of view of my research objectives, moreover, the longer I spent in the settlement the more its people felt confident to discuss with me the more personal and

---

[41] This is a standard comment that Hamtai people make when visited by a white person (which should of course be answered with the reassurance that "no, your house is very good" ["*a'a, nta änga okä awa ti*"). The difference between European and native housing is often used in Hamtai myth, ancestral histories, and everyday discourse as a condensed symbol for the wider inequalities that exist between the two groups in relation to material possessions, "knowledge", and socio-political status. For example, in many tellings of the Hamtai creation myth, which often involves the first mythical ancestor dying in an accidental or murderous house fire, my informants stressed that the house where the ancestor lived had burnt down so quickly because, like all "traditional" Hamtai houses, "it was a badly built house, not like the beautiful houses of Europeans". The particular irony of Nisimas' statement was that his Kaindi residence was, by comparison to most local habitations, let alone those of more rural parts of PNG, a very expensive and "prestigious" building fashioned from factory-made materials according to a European-style design. And yet, as we shall see in a minute, he had long refused to live in it, opting instead for a more traditional house built from bush materials which, although allegedly "inferior" to a European-style house, was much better at holding the heat of a hearth and keeping the cold fogs out in the typically gelid Kaindi nights.

[42] Although some local houses were built exclusively with "traditional" Hamtai materials like vines, wood, and various kinds of bark and pandanus and bamboo leaves which could generally be obtained from the local forest (for a detailed description of historical Hamtai house-styles and building techniques see in particular Blackwood [1950 and 1978]), most included in their designs bits of sawn timber, nails, plastic sheets, corrugated iron, and dried kunai (*Imperata*) grass that could only be acquired (local landowners usually demanded compensation for kunai bundles harvested from their lands) from the shops and grasslands of the Wau Valley, and which had then to be transported to the mountain at considerable cost.

"secret" aspects of their lives and beliefs,[43] including, as we shall see later on, their own dreams. In turn, this made me reluctant to risk losing this bond of friendship and trust to move somewhere else where I may have had to start the whole process anew. Furthermore, the more familiar I became with Kaindi's extractive landscape the more I realised that I had been lucky to "land" Haus Kapa as my host village in the first place. Indeed, not only was it inhabited by one of the oldest and most prominent of Kaindi's indigenous mining "dynasties" but, as one of the largest settlements in the mountain, it contained a good mix of informants that included high numbers of young and old men and women, children, registered leaseholders, mining labourers, tributers, store keepers and workers, gold buyers, and other independent small market traders, thus offering a representative microcosmos of the wider Kaindi landscape. In addition to this, the village was centrally located within Kaindi, which made it an ideal base from which I could regularly and easily reach the vast majority of the mountain's extractive workings, hamlets, and villages. Furthermore, it overlooked both the main Kaindi market, which every other day attracted a wide variety of food growers and sellers, gold traders, and miners from all parts of the mountain, the Wau Valley, and the Upper Watut, and the main Wau-Kaindi road, so that I was able to observe, meet, and make myself known to a variety of informants, and to gather first and second hand intelligence about all the latest arrivals, departures, and general happenings in the area.

Throughout my stay at Kaindi I continued to carry out participant observation and interviews with the residents of Haus Kapa, whom I followed regularly to the mines, the markets, and faraway gardens, or with whom I shared "lazy" days of storytelling and/or card playing within the confines of the settlement. At the same time, I also paid frequent day-long visits to other local communities and workings in order to interview as many different informants as I could and to gain a more complete view of the total Kaindi extractive landscape. On a typical night I would visit a neighbouring home to gather demographic data

---

[43] Even though the most secret and personal data I gathered in the field will be withheld from this or any other future piece of work, it was nevertheless very important for me to get it because it threw light on some of the subjects explored in this thesis.

or to exchange tales with its occupiers. Nevertheless, note-writing duties and/or sheer tiredness after a day spent walking under the sun and/or negotiating dangerously steep and slippery mountain paths led to many an evening spent in the confines of my house.

Figure 4. The main Kaindi market.

Every few days I would go to the ECM compound (which was the only area of Kaindi to be linked to the Wau electric power grid), where I was kindly permitted to keep the bulk of my food and medical supplies. There I would recharge the batteries of my digital camera and download digital images and recordings onto my computer. Thereafter, Yianni and I would do our laundry and enjoy the luxury of a hot shower before filling our bilum (net bags) and backpacks with enough supplies to last us three or four more days and climb back up the steep road to Haus Kapa. Every other day I would buy fresh fruit, vegetables, and other consumables from the main Kaindi market (see Figure 4) and from the local shops. This I did as much to make my own (admittedly pitiful) contribution to the mountain economy as for the fact that it was the only means of adding fresh food to my diet and a good way to meet local traders and other potential informants.

Nevertheless, the difficulty and cost of transporting goods between Lae, Wau, and Kaindi, and the limited purchasing power of local retailers meant that general prices in the mountain were nearly one and a half times higher (148.55%) than down in Wau (which was already a considerably dearer market than Lae).[44] As a result, every three or four weeks I would take a weekend trip to Wau to procure the bulk of my supplies and to exchange news with my wife and family.

A mere few days into this routine I happened to interview Stiven, a very articulate man who was Nisimas' nephew[45] and who had in the past been one of the latter's chief bosman. When I asked about the techniques locals used to prospect for gold, Stiven explained that they observed the features of the landscape and the colour and texture of its soils, then he illustrated how they painstakingly dug and panned samples of earth and gravels to ascertain the presence or absence of gold in a given area and to follow whatever traces they found to their source. In addition to that, though, he commented that the best way the Hamtai possessed of locating minerals was actually through the medium of dreams. As a matter of fact, he asserted that the capacity to "see" a "gold dream" ("*nkota wata*", where "*nkota*" means gold and "*wata*" means "dream" and, with the addition of the verb stem "*'an-*", which has the more general meaning of "to look" or "to see",[46] "to dream". Because of this, throughout this thesis I have tended to render the Hamtai "to dream" with the English expression "to see a dream" [cf. Mimica 2006]) was what enabled his people to find gold even where the powerful machinery of the foreign companies failed to do so- an ability which he claimed had earned them the admiration of white prospectors and the respectful title of "lokal geologis" ("local/native geologists"). To illustrate how these "gold dreams" worked, he recounted the following happenings, which he claimed to have taken place a number of years earlier.

---

[44] These statistics are based on the prices of the same 21 items (which included, amongst others, tinned meat and fish, salt, cooking oil, soap, rice, sugar, tea, eggs, kerosene, cigarettes, and betel nuts [buai]) that I collected from five stores in Kaindi and five stores in Wau.

[45] To be precise, he was Nisimas' wife's brother's son (WBS).

[46] Cf. Kempf and Hermann (2003); Robbins (2003); and Stewart and Strathern, A. (2003).

Dream 1

One time I saw this dream [...] what I saw was... I saw a horse, a white horse. A white woman was riding it. She had come over to marry me, but there was a fence between us. She called my name and I said, "what?" And she said, "I have come looking for you, Stiven". I climbed up the fence, almost to the top, and then I asked her, "Why, why have you come looking for me?" "To marry you", she said, "That's why I have come!" After that I climbed down the fence, but she kept shouting and shouting at me, then she rode her horse towards the fence and she jumped clean across it. She landed on my side and repeated, "I have come to marry you". Then I looked around and I saw acres upon acres of gardens full of bananas, pineapples, and many other fruits like that, all very ripe. The white woman waved her hand around and said, "I have come to marry you because you have all of this, because you own it all!" All right, when I woke up I thought about [the meaning of] my dream. [Nisimas] had told me that, if I ever dreamt of places with women or gardens, that meant that there was gold there, so I knew there was gold in the location of my dream. So I immediately walked to that spot and I sat down on a rock. As I sat there the whole dream came back to me very clearly, so I called the boys and we started digging. We dug and dug forever. For months and months we kept working there, and we got some nine kilos of gold from the veins I had discovered.

As I listened to Stiven's story, I was enthralled by the mystery of its symbolism and was awakened to the notion that dreams might play a significant role in indigenous mining. With hindsight, this "revelation" is hardly surprising. From its very inception, the Anga ethnographic literature has hinted to the centrality that dreams hold for this people- a point most forcefully brought home by Herdt's (1987: 174) characterisation of the Sambia as "a dream culture". As already apparent from Blackwood (1978: 144), moreover, Hamtai and wider Anga oneirology share a common aetiology of the dream. During sleep, the *mtnga* ("life energy", "air", "breath", "warmth", "steam", "vapour") of the dreamer detaches itself from the body, thus becoming a *hikoäpa* ("disembodied spirit").[47] In this state, it either wanders to near and faraway places where it encounters an array of other disembodied spirits- including the ghosts of the recently dead and of long

[47] Sleep is only one of the contexts in which a person's *mtnga* can detach itself from the material body to become a disembodied *hikoäpa*. A most notable other case is death, when this transformation is permanent (In this sense, it could be said that for the Hamtai sleep resembles a "mini-death" cf. Lattas [1993: 64]). Furthermore, when one's *mtnga* is stolen by a sorcerer it also comes to be referred to as a *hikoäpa* until it is returned to the body of its owner (Bamford, personal communication; and Blackwood 1978).

departed ancestors, the spirits of the land and of the forest, the dangerous familiars of shamans and sorcerers, other classes of helpful familiars, or simply the detached selves of other sleepers- and/or is itself visited by one or more of these entities. For the Hamtai and for the Anga more generally, it is these disembodied journeys and spiritual encounters which lie at the core of the dream experience (Bamford, personal communication; Bjerre 1958: 75; Blackwood 1978; Godelier 1986: 91; 1998: 9; Herdt 1977; 1992; 1994 [1981]; Mimica 1981: 119-21; 2003; 2006).

In sum then, for my informants dreams were not strictly "subjective" experiences but something endowed of its own experiential reality and connected to what we would define as the "objective" external world (cf. Bourguignon 1972; Burridge 1969; 1995 [1960]; Kempf and Hermann 2003; Kennedy and Langness 1981b; Lohmann 2000; 2003b; Mimica 2006; Poirier 2005; Tedlock 1992a). In actual fact, dreams were considered even more meaningful, or "truer", than waking experience, and were deemed akin to the powerful x-ray vision that enables shamanic "seers" to apprehend and manipulate what are normally hidden and secret aspects of the cosmos (cf. Mimica 2006). Furthermore, in contrast to the "regressive" approach championed by Freud (1994 [1900]), who proposed that dreams should be decoded primarily by reference to the past, Hamtai-Anga oneirology espouses a "progressive" interpretive framework akin to Jung's (2002: 43) notion of a "prospective function" of dreams- i.e. the belief that dreams foreshadow and provide guidance towards future events and achievements (Basso 1992), of which the "prospecting function" of some oneiric experiences is a particular instantiation. Thus, among the Hamtai as for other Angans, dreams are held to have a "prophetic" function in a variety of different contexts. In particular, they are believed capable of revealing the future acquisition of shamanic and healing powers, predicting incoming enemy raids and sorcery attacks, forecasting illness and death, indicating success or failure in hunting, travelling, trade, sporting contests, gambling, or amorous pursuits, or foretelling the conception of a child (cf. Blackwood 1978; Descola and Lory 1982; Godelier 1986; 1998; Herdt 1977, 1982a; 1987; 1989a; 1992; and Mimica 2003; 2006).

More than a simple "prophetic" character, however, my informants attributed their oneiric life with what Basso (1992) has labelled as a "performative" function. Thus, as already mentioned above, dreams were regarded as the "real" actions performed by the disembodied spirit of the dreamer. Rather than just predicting some future event, though, the performance of these oneiric actions represented a first step towards their future realisation in waking life. In other words, then, performing a certain deed in a dream was regarded as an enablement or, in the case of an inauspicious dream omen, a "sentence" to carry out or suffer a certain action or event in the immediate or distant future (cf. Mimica 2006).

Of course, the (positive or negative) "enabling performances" of dreams do not always come true in waking life. To begin with, the future meaning of what is experienced in dreams is often obscure, and if one does not succeed in interpreting it correctly the events to which it refers might not actually occur. For example, if one dreams of intercourse with a known woman, this may mean that the woman in question is willing to have an affair with the dreamer. On the other hand, though, the dream may signify that the dreamer will catch some prey if he immediately goes out hunting. Now, if a specific sexual dream is an enablement towards an affair, but one takes it as a good hunting omen, one may embark on a hunting trip only to return home empty handed and convinced that that oneiric experience was a "trick" or "meaningless dream" (giaman driman or driman nating). Even if one does interpret a dream correctly, moreover, one may simply refuse to make use of its enabling power. Thus, to stay with our previous example, one may correctly interpret the dream but refuse to seek the affair for fear of possible reprisals from the cuckolded husband and/or his own spouse. Similarly, if one has an inauspicious dream, such as one of being hit by a landslide while travelling between Kaindi and Wau, one may simply avoid that journey, thus impeding the predicted/performed events from actually taking place. What is more, even the positive and negative enablements afforded by "true" and correctly interpreted dreams can be thwarted by ritual, magic, or sorcery, or can be annulled by some misbehaviour on the part of the dreamer (cf. Tedlock 1992b). On the positive side, this means that if one has an ominous dream, such as of being killed

by a cannibal sorcerer, one can employ the services of a healer or of another sorcerer to counteract it. On the negative side, though, it signifies that a jealous sorcerer may use his or her magic to stop the positive "gold dreams" of a miner from actually yielding minerals. In a similar vein, if, after having received a good mining omen from the guardian spirits of the gold, one commits some action which is deemed offensive by them, one may actually lose the enabling power s/he had originally gained from it.

In any event, as I extended my inquiries to other informants I gained ample confirmation that, despite the occasional opacity of their meanings and the fact that their performative enablements did not always come true, "gold dreams" represented a very important phenomenon in the lives of the miners. As a matter of fact, many of them seemed to consider "gold dreaming" to be coextensive with, and indispensable for, the extraction of minerals. That was the case, for instance, with a young Hamtai man who explained to me:

> This is how it is; you white men use machines to mine. You bring big machines over and you use geologists to find out where the gold is. But we Kukukuku, we have no machines; we have only our dreams. If we see a dream, we find gold, if we don't, we don't; and there is no other way.

Following these early indications of its importance for indigenous mining, "gold dreaming" quickly emerged as a central concern in my research agenda. As a result, for the duration of fieldwork I continued to investigate the general principles of Hamtai-Anga dream theory and oneiromancy, to collect accounts of actual instances of "gold dreaming" experienced by local miners, and to observe how these dreams were shared, interpreted, and followed in practice. Before committing to an account of how I obtained my data and how I intend to interpret them, however, I shall offer a brief outline of "the anthropology of dreaming". In turn, this will serve to provide the reader with a better sense of how my approach resembles, or differs from, other methodological and theoretical perspectives within this sub-field of anthropological research.

4- Anthropological approaches to dreams

Though relatively few ethnographies have focussed exclusively or predominantly on dreaming, anthropologists have been interested in dreams from the very inception of the discipline.[48] Since the birth of anthropology in the Victorian era, a number of different approaches have emerged and succeeded each other within this field of enquiry.[49] First among these was the "rationalist approach" (Goulet and Young 1994) espoused by scholars like Tylor (1871) and Spencer (1876). According to this perspective, "primitive peoples" were incapable of distinguishing between dream and reality. As a result, it was suggested that dreams- in which one was apparently able to see and interact with persons known to be dead or faraway and to travel to distant places while one's body remained immobilised by sleep- had provided the earliest basis for beliefs in the spirit world and the afterlife, and thus for religion itself.

While this understanding of "the primitive mind" and the role played by dreams in the development of religion had already been challenged by a number of alternative perspectives (such as that "sociological school" [Evans-Pritchard 1965] of religious theory of which Durkheim[50] was perhaps the most influential exponent), the most important development for anthropological dream research came with the publication of Freud's *The Interpretation of Dreams* (1994 [1900]),

---

[48] A considerable number of reviews of the anthropology of dreaming are now available to the reader. Those which have informed my own examination include: Bourguignon (1972); D'Andrade (1961); Charuty (1996b); Edgar (1994; 2004); Firth (2001); Goulet and Young (1994); Graham (1999); Heijenen (2005); Jedrey and Shaw (1992b); Kennedy and Langness (1981b); Lohmann (2003b); O'Nell (1976); Poirier (1994b); Stewart (2004b); and Tedlock (1992b; 1994; 2001).

[49] In line with other reviews of "the anthropology of dreaming" I have found it useful to segregate these approaches from one another and to present them in chronological order. Although these various perspectives have tended to emerge at different times and have been more or less dominant at particular historical moments, I would nevertheless like to make clear that "in the real world" they have not been as clearly demarcated and mutually exclusive as I have made them here for purely heuristic purposes. Indeed, proponents of at least part of the tenets of each period continued to exist in other periods and in the present, and often what are indicated as "innovations" of one period over the other are more a matter of degree than of a radical qualitative jump (cf. Goulet and Young 1994).

[50] For Durkheim's critique of the role played by dreams in the formation of religious belief see in particular his "*The Elementary Forms of the Religious Life*" (1995).

which gave it both a fresh impetus and a much needed new focus. The two most important figures in the early phase of this "psychoanalytical approach" (Goulet and Young 1994) were the two medical-men-cum-anthropologists William Halse Rivers and Charles Gabriel Seligman, who had become interested in dreams while involved in the treatment of "shell-shock" victims in World War I.

Though fully conscious of the importance of Freud's work for anthropological research, Rivers (1923) did not accept all of its underlying principles. For example, he was undoubtedly in broad agreement with Freud's idea that dreams are an expression of an earlier, more "primitive" mode of thinking. Nevertheless, while he accepted the distinction between a "manifest" and a "latent" dream content, he questioned the thesis that all dreams are wish-fulfilments and that they ultimately relate to incidents from the dreamer's infancy. Instead, in a fashion similar to Jung (2002), he highlighted their "constructive agency" as commentaries on, and attempts to resolve, individual psychological conflicts. Furthermore, Rivers (ibid.) argued that Freud had seriously overrated the frequency and importance of sexual symbolism in dreams. Similarly, pace Jung and certain sections of Freud's vast opus,[51] he questioned the existence of a set of universal dream symbols which held the same meaning across different cultures, and, even where these did appear to exist, was more inclined to account for them in terms of cultural diffusion than as a proof of the existence of some universal unconscious forms.

Although he also drew attention to Jung's view that dreams are attempts to adapt to current and future personal difficulties, Seligman (1923; 1924; 1932) was more prepared than Rivers to accept the theory that dreams are expressions of more or less repressed desires. Again unlike Rivers, moreover, Seligman (ibid.) was particularly interested in what Freud (1994 [1900]) had termed "type dreams", that is oneiric experiences whose manifest content had the same cross-cultural latent meanings. To test the actual existence of this universal unconscious symbolism, Seligman (ibid.) issued a number of calls for greater ethnological research on dreaming, which he thought would shed light on the general

---

[51] See in particular Freud (1994 [1900]), and Freud and Oppenheim (1958).

differences and similarities between our own unconscious and that of "primitive peoples".

Seligman's "call to arms" led to the publication of several short reports about the dream contents, dream theories, and oneirocritic practices of "primitive peoples" from various corners of the world. In addition to this, it inspired Lincoln (1935) to write the first "comparative" anthropological study of the significance of dreams in a variety of cultures and of historical periods (with a main focus, however, on Native America). In general terms, Lincoln (ibid.) accepted the Freudian tenet that dreams reflected censored wishes connected, among others, with family, birth, love, and death. Nevertheless, he argued that anthropologists should focus primarily on the manifest content of dreams, and this both because it revealed much about the everyday social and cultural life of the society in which it was found, and because in "primitive" cultures "repression" was minimal and the manifest and latent contents of dreams were more closely aligned than those of "civilised" peoples. In addition to this, Lincoln (ibid.) suggested that as much attention should be paid to the "cultural" as to the "personal associations" present in dreams. Furthermore, he introduced a distinction between what he termed "individual" and "culture pattern" dreams, which was somewhat akin to Malinowski's (2001 [1927]) differentiation between "free dreams", which are shaped by the personality, life-experiences, and desires of the individual dreamer, and "official dreams", which depend primarily on custom for their formation and their exegesis, and which relate to the social role of the dreamer and to the social life of the group of which s/he is a member.

While it was justly criticised by many successive writers, Lincoln's (1935) notion of "culture pattern" dreams was important in a number of ways, and not least because it drew attention to the fact that dreams are social phenomena which can influence a person's claims to certain social positions and his/her capacity to influence other social actors, and because it invited anthropologists to pay attention to the "ethnographic" as much as the "psychological" content of dreams. What is more, while it did present some cases for universal symbolism, Lincoln's (ibid.) work revealed first and foremost the great diversity of ways in which dreams functioned and were interpreted in different societies (Charuty 1996). In

turn, this encouraged a more "relativistic" turn in the anthropology of dreaming. Of course, Lincoln (1935) was not the only one, nor indeed the first, to contribute to this process. For example, in *Sex and Repression in Savage Society* (2001 [1927]) Malinowski had already employed Trobriand dreams to criticise Freud's emphasis on sexual repression and to question the universality of his paradigm of the "Oedipus complex".

What matters most for the purpose of this review, however, is that by the 1930s many anthropologists had come to question the idea that dream symbols could hold the same cross-cultural meanings, had largely abandoned the project of individuating the "type dreams" sought by Seligman, and had become more cautious about the straight-forward cross-cultural applicability of western psychoanalytical models. At the same time, though, the rise of the functional-structuralist school meant that dreaming came to be increasingly regarded as the subject matter of psychology. As a result, dreams kept being recorded as they were encountered in the field but remained a largely marginal topic of analysis within the British tradition of social anthropology.

In the American tradition of cultural anthropology, on the other hand, dream research benefited from the rise of the so-called "culture and personality school". According to this perspective, cultural forms of child rearing and socialisation led to shared personality traits in particular societies, which could therefore themselves be studied as "quasi-individual personalities". Within this theoretical paradigm, dreams came to be seen as means of gauging the psychological traits and pressures that a particular culture induced in the individual, as well as the individual and collective stresses caused by social change and acculturation. By and large, the insights of psychoanalysis continued to play an important role in this anthropological tradition and eventually led to the development of an "ethnopsychiatric" approach to dreams which married psychoanalytic (and particularly Freudian) concerns, theory, and methods with a greater focus on cultural analysis and emic dream-theory (see Devereux 1969 [1951] and Kilborne 1978).

In the 1950s, however, the casual discovery of REM (Rapid Eye Movement) sleep led to an alternative "content analysis approach" (Goulet and

Young 1994) to the anthropology of dreaming. In the initial phases of this era, the discovery of REM led to the erroneous conclusions that dreaming was confined to this particular sleeping state, that it was merely the product of the physiology of the sleeping mind, and that as such it would eventually be explained, or explained away, by the neurophysiological sciences. Despite this "positivistic shift" in the general field of dream research, most anthropologists remained convinced that the dreaming mind was not qualitatively different from the waking mind, and that dreams did indeed have meaning (Bourguignon 1972). In any event, the REM revolution had the effect of refocusing attention from the latent to the manifest content of dreams. Within psychology, the work of Hall and Van de Castle (Hall 1951, 1953; Hall and Van de Castle 1966) was seminal in developing formal content analysis techniques for the coding and comparative study of the manifest content of dreams both within and across cultures (D'Andrade 1961; Poirier 1994b; Tedlock 1992b; 1994; 2001). In anthropology, this new theoretical and methodological emphasis was pioneered by Dorothy Eggan (1949; 1952; 1955), whose work explored the manifest content of dreams to shed light on the same old preoccupations of the "culture and personality school".

Following the eventual collapse of this "school", though, anthropological dream research experienced a progressive marginalisation from which it did not fully recover until the late 1970s-1980s (Tedlock 1992b). Having said this, the period between the 1950s and 1980s witnessed a series of unjustly overlooked theoretical and methodological developments that I shall characterise as the "structural-metaphorical approach" to the study of dreams. Thus, in a course entitled "*l'Avenir de l' ethnologie*", which he gave in France in 1959-1960, Lévi-Strauss (1987) mentioned the importance that an "ethnography of the dream" could have for anthropology, particularly in relation to the articulation of nature and culture, society and the individual, and structure and event. Nevertheless, while he appears to have considered the possibility of applying structuralist principles to the analysis of dreams (Kuper 1986), Lévi-Strauss never picked up this task himself- or at least never published about this topic.

In the mid-1960s, however, one of his students, the French anthropologist Lucien Sebag (1964), produced an article about a series of dreams he had

collected from a married but childless Guayaki woman during a period of fieldwork in Paraguay. In it he argued that these dreams could only be analysed through a combination of personal and, to borrow from Lincoln (1935), "cultural associations" acquired by means of interviewing and ethnographic observation. Furthermore, he proposed that their full meaning would emerge only if they were considered in their totality. In an attempt to marry psychoanalysis with the principles of structuralism, he showed that the different oneiric experiences were recombinations and transformations of a set of problems connected to the dreamer's personal history and how this had been shaped by her position within Guyaki society.

In a nutshell, the central themes of the dreams related to the woman's feelings of abandonment and rejection by her father, who, disappointed with having had a daughter and not a son, had remained distant and uncaring towards her and had given her away in an early marriage to an older and possessive man. In her various dreams, the woman conducted a form of unconscious symbolic dialogue through which she worked out different resolutions to her existential problems, which included her own death and consequent reunion with departed loved ones; the substitution of her husband with various father figures and, ultimately, her own father; and her eventual success in providing the latter with male heirs, which, in turn, repaid him for what she had taken away from him by having been born female, and won her his gratitude and final acceptance as a daughter and as a woman. Although this article represented a first interesting attempt to develop a structuralist approach to the study of dreams, Sebag died not long after publishing it, and for a time no one reprised the project he had so promisingly initiated.

In the late 1970s and 1980s, Adam Kuper remained unaware of Lévi-Strauss' and Sebag's earlier efforts. Nevertheless, a "revelatory" dream (Kuper 1979) of his own inspired him to engage in an independent effort to outline a structural approach to the study of dreams. In a series of single and co-authored articles, he[52] analysed a number of dreams experienced and/or collected by Freud

---

[52] See Kuper (1979; 1983; 1986; 1989); and Kuper and Stone (1982).

(1994 [1900]), Rivers (1923), Devereux (1969), and Dr. Rosalind D. Cartwright. Contrary to the common belief in their "bizarre" and "illogical" nature, Kuper suggested that single dreams and dream series are actually structured by the same determined "grammar" of dialectical rules that characterise the analogic mode of thinking which Lévi-Strauss (see in particular Lévi-Strauss 1968: 228) had uncovered in myth and in human cognition. According to him, dreams acted as modes of argument which, through a series of oppositions and transformations (i.e. inversions and substitutions) of an initial dream situation, attempted to mediate and resolve one or more of the dreamer's personal problems, conflicts, and existential dilemmas.

Although this proposition is best understood by reference to the analysis of dream series (for which I refer the reader to Kuper [1983]), it is here simpler to use a single and rather mundane dream as a way of demonstration. In his 1923 monograph titled "*Conflict and Dreams*", Rivers reported a dream he had had at a time when he was torn about whether he should accept the position of President of the Royal Anthropological Institute (RAI) if it were offered to him. In his analysis of this particular dream, Kuper (1979) showed that the unfolding of its events represented the progressive substitution of complementary and opposite characters which concluded with the appointment to the presidency of a certain "S. Poole", who was at once a person other than, and yet a transformation of, the dreamer himself. In turn, this showed that the dream employed structural rules of opposition and transformation to resolve River's "existential dilemma" by at once making him, and not making him, RAI President.

Inspired by Kuper's work, the French anthropologist Philippe Descola (1989) attempted his own application of structuralism to the study of dreams. Rather than finding structural rules in the ways his Jivaroan Achuar informants dreamed (or at least remembered and reported) their dreams, as both Sebag and Kuper had done, he found them in how they interpreted them. According to him, then, the Achuar interpreted dreams by means of analogy and/or by inverting their content along opposite categories such as nature and culture, vegetal and animal, masculine and feminine, aerial and aquatic, and above and below. For example, the dream of being charged by peccaries, whose manifest content is about an

aggressive encounter between "humans" and "non-humans", was interpreted as predicting a skirmish with one's enemies, which involves the aggression (analogy) of humans against humans (animal-human transformation). Similarly, a dream of shooting a bird, which is an aerial inhabitant of the above, was interpreted as an omen that one would soon catch a fish, which is instead a dweller of the aquatic below. As for the analogical axis of Achuar oneiromancy, dreaming of being suffocated by a mosquito net was interpreted as an omen of being crushed to death by an anaconda.

Despite their methodological and theoretical originality, these varieties of structuralist dream analysis were subjected to a number of often misplaced criticisms and failed to take the hold they deserved in the anthropology of dreaming. From the mid to late 1960s, however, the direct influence of Lévi-Strauss and a small number of other anthropologists combined with growing attention to "outside" influences like the work of the seventeenth century Italian thinker Giambattista Vico, the American pragmatic philosophical tradition, literary criticism, semiology, and structural and cognitive linguistics, generated fresh interest in the value of metaphor for anthropological research (Fernandez 1991; Sapir and Crocker 1977; Tilley 1999).

In the midst of this disciplinary climate, the American anthropologist Roy Wagner (1972) took the first step[53] in developing what was to become, despite the frustrating opacity of some of its central aspects, a highly influential "tropic" (or metaphor-based) theory of cultural meaning. As the author himself suggested in its preface, *Habu* (1972) was actually inspired by a study of Daribi magic and dream interpretation. Among the Daribi, as for the Anga, dreams constituted the adventures and interactions of one's detached spirit in that existential dimension which, while normally hidden from view, was an equally "real" part of the "objective" world modern European culture confines to waking experience. Again in common with the Anga people, the Daribi believed that dreams could be sources of important revelations that enabled one to successfully undertake certain activities or to avoid incoming failures and dangers.

---

[53] However, as Wagner (1972: xi) himself suggests, the argument he developed in *Habu* was an extension of certain ideas he had first presented in his earlier *The Curse of Souw* (1967).

In order to access their enabling power, however, dreams had to be correctly interpreted by the metaphorical re-casting of their symbolic contents along different and often contrasting lines. For example, a Daribi man once reported a dream of attempted intercourse with a menstruating woman, which he interpreted as an omen of hunting success. According to Wagner (ibid.), this conclusion rested on a number of interrelated analogies. For example, the image of the dreamer's penis attempting to penetrate a bleeding vagina was reminiscent of an arrow causing an open wound in the hunted animal. Similarly, the explanation implied an analogic link between women and game, which was one of the most important components of the bridewealth that Daribi men had to pay to obtain women in marriage. At the same time as analogy, however, Daribi dream interpretation relied on the contrast of opposites. Thus, in relation to the aforementioned dream, Wagner (ibid.) noted that among the Daribi hunting and sex represented strictly segregated kinds of activity. Rather than detracting from the validity of this particular oneirocritic effort, however, the "conventional" separateness of these two realms of action lay at the core of its very efficacy. Indeed, for Wagner (ibid.) the power that Daribi thought assigned to metaphor derived precisely from its ability to bring two or more conventionally separate symbolic fields "into alignment".

In the case of dream interpretation, the separate fields belonged to the dream content itself and to the realm (or realms) of waking activity to which each particular dream was interpreted to refer (e.g. sex and hunting). Nevertheless, this "innovative" structuring of distinct spheres of meaning was not a peculiarity of dreams or of dream interpretation. Rather, it was characteristic of most other aspects of Daribi culture including, *inter alia*, kinship, magic, and ritual. According to Wagner, therefore, the "structuring capacity" of tropes was, at least in Daribi culture, a fundamental component of the generalised perception, production, and appropriation of power. Indeed, it was precisely by means of this metaphoric "assimilation of the external" (Wagner 1972: 173) that one was able to "borrow" the power of one or more given domains, such as that of the spirit world and of sexual reproduction, in order to become more effective in one or more

other conventionally unrelated domains, such as the human productive sphere of hunting.

Although Wagner continued to expand these original insights in a number of successive books (see Wagner 1978; 1981; 1986; 2001), dreams and dream interpretation failed to remain a central concern of his work and theoretical effort. In addition to this, while they provided inspiration for a small number of other Oceanists (see, for instance, Weiner 1986; Mageo 2004; and Stephen 1995), his particular "metaphorical" approach to the study of dreams and his more general theory of cultural meaning remained rather marginal influences within a wider anthropology of dreaming which, since the early 1980s, experienced an international revival that led to the publication of a large number of individual articles and of entire books,[54] special issues,[55] edited collections,[56] and PhD theses[57] dedicated to this topic.

By and large, this latest phase of research has been dominated instead by a "communicative/experientialist approach" to dreams (Tedlock 1992b; 1994; 2001; and Young and Goulet 1994). Inspired by a renewed interest in certain aspects of psychoanalysis, sociolinguistics, interpretive anthropology, and social constructivism, this "new wave" has questioned some of the methodological and analytical directions espoused by previous approaches. For example, its exponents have noted that in the past dream reports tended to be elicited "out of context" and to be treated as objects to be compared cross-culturally without sufficient attention to their specific ethnographic content or to the "communicative context" in which they were shared (or not shared) in their culture of origins. Furthermore, in interpreting both the manifest and latent content of these "dream objects," western dream theory was given much greater emphasis than emic oneirology. Moreover, when exploring native dream theories, anthropologists tended to focus

---

[54] See Edgar (2004); Graham (2003); Jama (1996); Jouvet and Gessain (1997); Parman (1991); Poirier (2005); and Stephen (1995).

[55] See Charuty (1996a); Kennedy and Langness (1981a); and Poirier (1994a).

[56] See Bulkeley (2001); Burkhard (2001); Jedrej and Shaw (1992a); Lohmann (2003a); Mageo (2003); Perrin (1990); Shulman and Stroumsa (1999); Stewart (2004a); and Young and Goulet (1994).

[57] Heijnen (2005).

on their uniformities rather than on dissonance or on the creative ways in which particular individuals interpreted and communicated specific dreams. Similarly, insufficient attention was dedicated to the social and political motives behind particular incidents of dream sharing and dream interpretation. Finally, dream ethnographers often failed to reflect on how their own dreams changed during fieldwork, and on what their own dreams and those of their informants had to say about the relationships that subsisted between themselves, their closest informants, and their wider host communities.

In order to rectify these shortcomings, the approach has insisted that anthropologists pay as much attention to native oneirology and dream sharing practices as they do to the content of the dream reports they obtain in the field. In particular, it has invited them to take note of how dream theories are transmitted and modified through time, of how dreamers draw on shared ideas about dreams and their interpretation to produce innovative personal meanings, and of how the latter are transmitted to others to once again acquire an "intersubjective dimension". In relation to this last point, the approach has demanded that ethnographers focus on the social norms that determine what dreams are and are not shared and why, on who can or cannot divulge and/or interpret particular dreams, and on why certain interpretations of a dream are more or less likely to be accepted by a given community or by certain factions within it. Moreover, it has suggested that they pay attention to the linguistic forms that particular cultures employ to relate dreams and to what these linguistic conventions and emic dream theories reveal about local conceptions of "the self" and of local ontologies of the dream. In addition to this, the approach has also asked that dreams be interpreted as "a field of power" (Jedrej and Shaw 1992b), inviting anthropologists to examine: *a)* how people make use of their own and other people's dreams to shape their personal careers and status or to affect those of others; *b)* how these are more generally deployed to foster or resist particular socio-political objectives; and *c)* how an individual's social position and power can affect the credibility of his or her claims to have experienced certain dreams and of the interpretations they offer for their own dreams and for those of others.

What could arguably be defined as the most original and significant contribution of this approach, however, has been its promotion of a more "reflexive" and "experientialist" attitude to the study of dreams. For example, it is a well known fact that the potential for misunderstanding, manipulation, frustration, and conflict forms an intrinsic part of all research relations. In this light, recent anthropological work has suggested that monitoring the dreams of our informants, and especially those in which we feature directly or indirectly, as well as our own whilst we are in the field, offers an opportunity to gauge these sources of tension, and thus to achieve a more positive relationship with our informants. In addition to this, many ethnographers have noticed significant changes in their dreaming life during prolonged periods of fieldwork in other cultures. In particular, the contents of one's dreams and one's ways of remembering and making sense of them would appear to become progressively closer to those prevalent in one's host culture.

Rather than being peculiar to the ethnographic situation, this process is analogous to that whereby the patients of a Freudian therapist come to experience and to report progressively more "Freudian" dreams, whereas those of a Jungian psychoanalyst produce and relate more and more "Jungian" ones (Stephen 1995). In relation to anthropology, however, this fact is proof that dreaming, dream sharing, and dream interpretation are forms of communication that anthropologists can apprehend in the same way they can learn the languages of the peoples they study. In this sense, the "adaptive" changes in an ethnographer's dreams and understandings of the dream can be read as positive signs of "enculturation" (or "acculturation") and of the interpretive understanding of the waking and sleeping lifeworld in which s/he comes to be immersed over fieldwork.[58]

As a matter of fact, it has even been argued that sharing our dream experiences with our informants can help to show them our commitment to, and increasing participation in, their ways of experiencing and accounting for dreams,

---

[58] Although the taboo against "going native" is still very strong in the discipline, some anthropologists have taken these changes in the ways they dreamt and understood their own dreams as indications of the need to question their ethnocentric assumptions about both waking and sleeping life and to "take much more seriously" the cultural understandings and life experiences of their informants (see, for example, Ewing 1994; and Young and Goulet 1994).

thus facilitating the disclosure of a greater part of their dreaming life to ethnographic inquiry. Similarly, some have suggested that sharing and discussing our dreams in the field can provide additional means of learning about native oneirology and can lead to the acquisition of valuable information about subjects which are not directly related to dreaming itself.

At the same time though, anthropologists have now become more conscious that the sharing of intimate dream experiences between informant and researcher can result in relations of psychological dependency, or, to borrow from psychoanalysis, in the unconscious "transference" of some of the hopes, fears, and desires of the former onto the latter, and vice versa. Nevertheless, as was suggested above this kind of positive and negative projection is not confined to dream research but is present in all situations of ethnographic inquiry. What is more, the monitoring of our own and our consultants' dreams can actually offer a means of gauging and addressing the more negative sides of these research relations, and, as some anthropologists have convincingly argued, acting as attentive and uncritical listeners for our informants' dreams and the deep feelings that are embedded in and/or are aroused by them can actually have a beneficial psychological effect for our consultants.

Having said this, though, it is still necessary to be aware that inducing our informants to reveal and dwell upon certain deep oneiric experiences and the feelings associated with them can also have a negative effect. Furthermore, it is important to acknowledge that, while offering a long-term sympathetic ear for the dreaming experiences of our informants can have a positive psychological effect for them, the abrupt severance of this relationship at the conclusion of fieldwork can precipitate negative feelings of loss, betrayal, and confusion. As a result, the "communicative/experientialist approach" has alerted us to the need that all anthropological dream research be conducted with extreme sensitivity to the psychological needs and well-being of those who come to be involved in it (see Ewing 1994; 1994; Young and Goulet 1994; Heijnen 2005; Herdt 1992; 1994 [1981]: 343; Herdt and Stoller 1990; Kracke 1981; Le Vine 1981; Lohmann 2000; Stephen 1995; Tedlock 1994; 2001).

5- Dreams as "the royal road" to Hamtai mining cosmology and practice

According to the now dominant "communicative/experientialist approach" to dreams, in order to understand indigenous ideas about dreaming, dream sharing, and dream interpretation, anthropologists must pay particular attention "to dream expression as 'naturally occurring discourse'- that is to reports that occur in the context of social interaction- rather than to specifically elicited texts" (Graham 1999; also see Tedlock 1994; 2001). As many ethnographers have already noted, however, even in those societies where they are regarded as very important dreams are not always openly shared and discussed.[59]

In relation to Hamtai-Anga "gold dreaming", for instance, a miner will typically keep a "good" dream secret until after it has "come true". In effect, this means that a propitious "gold dream" will prompt a miner to sneak out of his house, go to the place of which he thinks he has dreamt, and mine it in secret until all or part of the promised gold has been yielded. Nonetheless, if a dreamer is pretty certain of the true meaning of a dream and knows in advance that he will need help to mine the area shown in it, he may immediately wake up his spouse(s), children, siblings, or fellow workers, reveal his dream to them, and ask that they join him in a mining expedition. Conversely, if one doubts whether a given dream is a mining omen or something else altogether, one may discuss it with family and/or close mining associates upon waking, and seek their advice before setting out on what could turn out to be a wasted day of hard labour. In any event, a dreamer will never divulge a detailed account of a good mining dream too widely for fear that its enabling "power" may be misappropriated or spoiled by those who come to hear about it. As a result, Hamtai-Anga "gold dreams" tend to be made public only after the minerals they promised have been retrieved, and even then only within the confines of the household, the extended family hamlet, or the dreamer's most trusted circle of co-workers.

As it can easily be imagined, this posed serious limitations on my ability to encounter "gold dreams" as "naturally occurring discourse". In turn, this means

---

[59] See for instance, Burridge (1956); Eggan (1949); Herdt (1992); Herr (1981); Hollan (1989); Poirier (2005); Robbins (2003); Stephen (1995; 1996); and Tedlock (1992b).

that most of the oneiric narratives presented in this thesis were actually elicited by me during a series of ethnographic interviews. As was also the case with myth, my informants would usually ask that these dream-related interviews be conducted in the privacy of a family home, in some quiet corner of their hamlet, or in a segregated area of the mines. Unlike the most secret mythical narratives, however, men were generally happy to discuss their "gold dreams" in front of female relations, and vice versa. Similarly, apart from a very few instances no one objected to Yianni being present during the interviews and were happy for him to help translate to and from Hamtai when necessity arose. What is more, my informants did not generally object to their dream narratives being recorded. When this was not the case, or when I was otherwise unable to make use of my recording device, I would instead take notes of the dream as it was being told, which I would then expand into a fuller text as soon as possible after the interview. Nevertheless, whether translated verbatim from a recording, or reconstructed from a set of written notes, I always endeavoured to keep the resulting text as close as possible to the narrative style employed by its teller.

In a majority of cases, dreams were narrated to me in pidgin or in a mixture of Tok Pisin (pidgin) and Tok Ples (vernacular). Although this was partly due to my greater command of pidgin than of vernacular, it was also a reflection of the fact that a majority of local Hamtai men and women below the age of forty routinely spoke Tok Pisin over Hamtai even among themselves. As a matter of fact, a significant number of younger people had only limited knowledge or no knowledge at all of the language of their forefathers. Having said this, I always asked my consultants to relate or retell some of their dreams or parts of them in Tok Ples so that I could learn vernacular concepts and linguistic forms connected to dreaming in general and/or to their specific contents. In this as in the translation of dreams related only in Hamtai I was assisted by Yianni and/or by those pidgin or English speaking relations of the narrator who were present at the time of the interview.

As observed in the previous section of this thesis, anthropologists have become increasingly aware that dream sharing can foster processes of "transference" between ethnographers and informants, particularly when this

relationship is sustained over a longer period of time. As a matter of fact, it is well known that anthropologists can sometimes be more or less willingly co-opted into some sort of "therapeutic role" by their informants and confidants (Herdt 1992; Stephen 1995). Like Stephen (1995), however, I found that when the majority of my informants- including those with whom I developed the closest and most enduring personal and professional relationships- related their dreams to me, they saw themselves as doing this in order to impart me knowledge rather than seek some form of advice from me. As a matter of fact, if at the beginning of fieldwork a few of them were curious to know how a European would interpret their dreams, as soon as I explained that we tend to see them as reflections of personal memories and psychological wishes and conflicts rather than as "objective" communications relating to the external world they came to the conclusion that whites had clearly no clue of what dreams were really about or of how they should be interpreted. In turn, this meant that they soon desisted from asking my own interpretations of any of their dreams and concentrated instead on using these to educate me about the "proper" way of dealing with the oneiric.

On my part, I always strived to confine myself to the role of listener (Stephen 1995: 114). Of course, this does not mean that I was a totally passive one. On the contrary, both during and after the narration of each particular dream I would ask the dreamer several questions about its content and meaning. In particular, these queries related to the "cultural associations" (Lincoln 1935) that could be derived from their plot and imagery. For example, if a dream represented a future mineral find in terms of picking a particular cultivar from a garden, I would ask the dreamer to elaborate on the salient cultural, social, and ritual characteristics of that crop and to explain why they thought that it might constitute a good omen for the extraction of gold. At the same time, though, I would also ask the dreamer about the personal and social context in which the dream was first experienced and about its subsequent implications for his or her individual and social life. In effect, this meant that I did probe into the "personal associations" contained in my informants' dreams. Even then, though, I always refrained from burrowing too deep into the most personal psychodynamic aspects of my

informants' accounts or from intervening in, or commenting upon, them in any expressly "therapeutic" way (Stephen 1995: 114).

Even so, it is known that anthropologists do not always have to play the active role of the analyst to induce some degree of transference on the part of their consultants (Le Vine 1981; Stephen 1995: 339, Note 5). In my case, I eventually did come to feature in the oneiric world of my informants. For example, a few months into fieldwork one of my closest friends narrated a dream to me and a group of other men and women who had assembled outside my house for a morning chat. According to him, in the dream he had seen me walk around Kaindi barefoot. Uncertain about the meaning of that dream, but feeling it was a positive and important sign, he asked if any of the people present could interpret it for him. On hearing that, one of the men in the audience claimed that the dream had shown that I, a "highly educated" white man from a rich country where everybody wore wonderful shoes, had sacrificed all that (or, in the imagery of dream, had shed my shoes) to come to Kaindi to live with and like the Kukukuku (or, as the dream had put it, to walk barefoot like many of them do) as no other white man had ever done before. In turn, he suggested, this was a sign of my sincere intentions and a message to the dreamer and all other people who heard of the dream that they should trust me and help me with my research. On the basis of this and other similar experiences, I would say that my close contact with the people of Kaindi did induce the formation of an oneiric connection between informant and researcher. Like Herdt (1994 [1981]: 343), however, I found the fact that I gradually came to figure in my informants' dreams and even to play a central role in some of them to be a positive indication of growing trust between them and myself.[60]

As this trust continued to grow more and more people agreed to discuss their "gold dreams" with me[61] so that, by the end of fieldwork, I had obtained

---

[60] Having said this, it is quite possible that some of my informants may also have had dreams about me in which I played a negative role and which were symptomatic of distrust and possible relational stresses between us. If they existed, however, none of these more negative examples of oneiric transference were reported to me.

[61] In the initial phase of fieldwork my efforts to learn about "gold dreaming" were made more difficult by a rumour that I had after all been sent by some foreign mining interest intent on

close to ninety detailed oneiric narratives from a large number of men and women. Given that they were revealed mostly *a posteriori* and that I could access them only as verbal accounts, the "gold dreams" presented here are not "real dreams" (Kuper 1979: 647), or, if there is such a thing, "unadulterated neuropsychological phenomena", but rather "retrospective dream narratives" (cf. Stephen 1995) which have inevitably been "socialised" during their verbalisation and revised in light of the events that followed them and which were subsequently interpreted to have been forecasted and made possible by them. Rather than being peculiar to "gold dreaming", however, this "retrospective elaboration" is a common characteristic of Hamtai-Anga dream culture (cf. Herdt 1992; Basso 1992; Firth 1934; Herr 1981; Hollan 1989; 2003; Lohmann 2000; Poirier 2003; 2005; Tedlock 1992b; and Williams 1936).

As already discussed, this is partly due to fear that the enabling powers contained in "good dreams" may be stolen or thwarted by those to whom they are prematurely disclosed. Even in case of a negative omen, moreover, such as a dream in which one sees another man, woman, or child killed by illness or by some sort of accident, one may refuse to divulge it before the facts to which it refers have occurred for fear that, should they actually eventuate, one may be accused of having caused them through sorcery or poison magic. Furthermore, there is the fact that the Hamtai are just as subject as we are to that process Hacking (2002) has called "losing dreams"- that is waking up with the feeling of having dreamt something which we cannot recollect until some successive incident prompts us to "remember" it. In addition to this, though, Hamtai dream interpretation is also more often than not a case of "*post hoc, ergo propter hoc*" (cf. Williams 1936). In other words, dreamers frequently have dreams which they can clearly remember but whose meaning is not immediately clear to them, and which they keep to themselves until, at some later stage, some events occur which appear to be directly related to them and which prompt them to make the dreams known to others.

---

learning about, and ultimately stealing, this powerful form of oneiric prospecting for its own benefit. As time went by and people got to know me more closely, however, the rumour faded away and more and more men and women got to trust me enough to discuss their mining dreams with me.

As a matter of fact, my own fieldwork experience has taught me how easy it is to fall prey to this sort of "retrospective oneiric prescience". Thus, at the beginning of my sixth week at Haus Kapa, Yiani left Kaindi to attend a function at the SDA mission in Wau and I spent my first night alone in our home. In the night I had a nightmare in which I heard a multitude of people surround my house and break into it. When they kicked down the door I saw that they were machete-wielding men with reddish eyes and bodies so dark as to be made out of shadows. In the dream I was armed with a revolver with which I managed to shoot down the first few assailers that entered the house. As I was doing that, though, I kept thinking that sooner or later my bullets would run out and my enemies would overcome me. Thankfully, however, the dream came to an end before my ammo. When I woke up and thought back to the nightmare, I was struck by the close similarity of its dynamics and the appearance of my oneiric adversaries to those characteristic of a certain category of dreams of which I had heard from my informants and which were emically interpreted as symptomatic of sorcery. Not believing in sorcery as an "objective reality", I explained these similarities in terms of my unconscious internalisation of the oneiric imagery I had heard from my informants, and interpreted the nightmare as a product of the anxiety and homesickness caused by my being in what was still a rather unfamiliar environment (which had undoubtedly been accentuated by my having faced my first night alone in Kaindi).

On the third morning after the dream, though, Haus Kapa came under attack from a band of rascals. In an incredible bowel-twist of fate, a call of nature prompted me to depart from my home just moments before their arrival. As I was going about my business in a haus pekpek (latrine) hidden in the forest at the far margins of the settlement, I heard some screams and then my name shouted over and over. Thereafter I heard what sounded like shots and, when I finally emerged from the forest, I saw large numbers of men, women, and children running to and from their respective homes. In the confusion I caught up with a group of friends who explained what was going on. By the time we reached the spur overlooking my house, the rascals were driving away in the direction of Hamata. According to my informants, the bandits had hijacked a company car that was travelling to Wau

from Hamata or Hidden Valley, which they had then used to carry out a raid in our settlement. In the event, it turned out that the rascals had appositely come to steal from a HKII based storeowner-cum-gold buyer whom they somehow knew was then holding on to a considerable amount of gold. Nevertheless, as the store in question was located in a spur just below my house, my friends had initially assumed that the rascals might have come to steal from me (at the time some Kaindi people were still convinced that I was a gold buyer and that I may have cash and other sorts of riches on my person and in my home) and had tried to locate me and to alert me to the danger by shouting my name.

As a number of Haus Kapa men armed with bows and arrows, bush knives, and steel axes assembled and prepared to chase after the rascals, the local kaunsil began to shout that the night before he had had an oneiric sign of the attack which had just taken place. According to him, he had told his lain (i.e. his own close relatives and neighbours) about it so that they would be prepared for the attack. As soon as I heard those words I just couldn't help remembering the dream I had had a few nights before and thinking: "so this is what my nightmare was really about! It was nothing to do with sorcery or field-induced anxieties; it was an omen of an impending attack on our village!" Of course, as soon as those words crossed my mind my deeply engrained fear of "going native" and losing my "scientific objectivity" (cf. Ewing 1994; and Young and Goulet 1994) set in and made me conclude that the nightmare had indeed been caused by my psychological situation, and that it was only by chance that it had occurred just a few days before an actual act of aggression against my host community. Nonetheless, this experience opened my eyes to how easy and "rational" it can be to recollect and reinterpret dreams retrospectively and to believe that they anticipate future events. Furthermore, it made me realise that even if an oneiric account begins to circulate only after the event it is alleged to have prophesised has taken place, this does not necessarily mean that it has been wholly made up.

This said, it is entirely possible that some of the dreams I obtained had been purely invented, copied from other dream-inspired narratives or from tales with no "actual" foundation in dreams, or radically re-elaborated in view of events which had followed them or to fit some particular social strategy pursued by their

narrators (cf. Heijnen 2005). At any rate, given that my study does not set out to investigate dreaming as a neuropsychological phenomenon, but rather "gold dreaming" as a cultural phenomenon, none of these possibilities represents in itself an insurmountable problem. Of course, the fact that I will not focus on "gold dreams" as primarily "psychological objects" does not mean that the dreams I collected had not been shaped by individual memories and psychodynamic processes, or that I regard these as totally unimportant. Rather, what I am suggesting is that, as Mimica (2006) has noted for the Yagwoia, the imagery of all Hamtai-Anga dreams originates from, and can be interpreted through, both the individual psychology and life history of the dreamer, and the wider cultural, social, spiritual, and physical landscape of which s/he is a part. To get a better sense of what I mean by this, let us consider the following dream, which was related to me by a middle-aged miner during a visit to his workings.

Dream 2

One day I was cutting some trees down in order to clear this place (for mining). I was still preparing the ground when one night I fell asleep and I saw a dream. In this dream I saw my sister [...], my true sister, who came up to see me. In this dream I didn't see any other place... it was the exact same spot where we are mining now. All right, I saw my sister there... or at least I thought she was my sister, because when I looked harder and I called her name I realised that she was actually a misis... a white woman... my sister turned into this white woman who had come to get me. She came to me and said, "I've come to stay with you. You are clearing this place so I have come over to find you. You are on your own and there's so much hard work to do! I am feeling sorry for you so I have come to stay with you." She spoke like that and I got up and said, "No, no, I am sorry but I am already married!" But she replied, "It doesn't matter, I'll stay with you all the same". So I saw this dream and I woke up in the middle of the night! I was really shaken by what I had dreamt and I just couldn't go back to sleep. I kept thinking about what I had just dreamt and I said to myself, "Hey, this must be a dream about gold; I must go to that place right now and work". It was still the middle of the night and everybody else was asleep. Only my little son was awake... he was still a little child then, but I told him to help me pick up my tools and to come with me. We walked down to the clearing I had made and we started to dig. We filled a first dish, then a second, and then a third, and that's when we found the first gold. I didn't notice it at first threw the dish's contents away, but my child saw the gold and said, "Hey, father, that is money you are throwing away!" So I looked at the ground more carefully and I saw a very rich vein full of gold dust and

goldstones. I sent my child back home to pick up some empty bags. When he got back we filled the bags and later I panned, spun and cooked the gold, and then I sold it for about 8,000 kina. It was a lot of gold I sold, but back then the price of gold was very low, maybe three or three kina fifty per gram... today I would have got five times that or more!

In this particular dream, the location that had occupied the waking mind of the dreamer for many days emerges as a setting for what is only a thinly veiled erotic encounter. What is particularly interesting, however, is that the encounter in question involves, at least initially, the dreamer and his true sister. In this sense, the imagery and theme of this dream could be seen to reflect an incestuous desire on the part of the dreamer, and the almost immediate transformation of his sister into a white woman could be viewed as an attempt to "displace" (Freud 1994 [1900]) this sexual longing by redirecting it towards a radically different target (i.e. obviously unrelated white woman for closely related black woman). Indeed, the great uneasiness that the dreamer reports to have felt on waking could be seen as a clear reflection of the incestuous overtones of his dream.

Although this psychological perspective appears to make perfect sense, one must also consider the possible "cultural" inspiration and significance of this dream. For example, an ethnographer familiar with Hamtai culture would know that many of the myths of these people draw no distinction between the conjugal bond and relations of siblingship, so that mythical characters such as the Sun and the Moon are represented as being both husband and wife and brother and sister. In addition to this, the equivalence of spouses and siblings has a linguistic dimension that extends well beyond the realm of myth. In particular, in everyday life husband and wife commonly address each other as "my older brother" (*täto*) and "my younger sister" (*näpi*) (Bamford 1997: 130-32)[62] respectively. In light of these ethnographic facts, then, one could say that in this dream the equivalence of the dreamer's sister with the woman who asks him to "marry" her may not be the expression of an incestuous desire and its unconscious repression by means of

[62] Analogous practices and beliefs are also found among other Anga groups. For example, at the time of their betrotheds' menarche Baruya men retire to the depths of the forest to conduct a very secret ritual in which they cry out their fiancé's name and proclaim: "You, X, I am now your elder brother. You no longer belong to your father, but to me" (Godelier 1986: 36-7). Furthermore, in Baruya as in Hamtai myth, the sun and moon are said to be both siblings (both brother and sister and older and younger brother) and spouses (Godelier 1986: 36, 94-5).

displacement, but rather a straightforward reflection of a diffuse mythical and linguistic analogy between sisters and wives.

What is more, the sudden transformation of the female dream figure from known sister to unknown white woman is fully consonant with the indigenous belief that certain spirits encountered in dreams, and most particularly the masalai of the wild, have the power to change their appearance and to impersonate all manners of known and unknown persons. In turn, of course, this means that this conversion, which from a psychological point of view could be seen as an unconscious attempt on the part of the dreamer to mask his incestuous desire for his sister, is itself transformed by indigenous oneirology into the ultimate proof that the dream has actually nothing to do with the inner psychology of the dreamer, or even with the actual disembodied spirit of his sleeping sibling, but has its source in an external, objective interaction between his *hikoäpa* and some powerful "non-human" entity. Combined with the facts that the oneiric encounter takes place in a prospective mining area, and that the dream woman states that she has come to the dreamer because he was clearing that spot for mining, this prompts the dreamer to identify the putative object of his own unconscious desires with the masalai of that place, and to interpret his dream not as a manifestation of his own inner psyche, but as a prophetic and enabling sign that he will soon obtain gold from that particular area.

In turn, of course, this suggests that the symbolism of Hamtai-Anga "gold dreaming" has both an individual- or psychological- dimension, and a broader valence related to the socio-cultural milieu and the material and spiritual environment inhabited by the dreamer. As a further and final proof of this let us turn to the following story, which was related to me by Nakoeo, an established (though unregistered) mine owner with a reputation for oratorical ability and brawling prowess:

Dream 3

At that time my (younger) brother used to work in this place (an area adjacent to a small tributary of the Upper Edie Creek). He worked here for a while and one day the whole place got covered in fog. That day he was standing in the thick fog and he couldn't see anything, but

he heard a noise like this (he rapidly sucks air in through narrowed lips as in a sort of "inverted whistle"). He heard that noise over and over and he got scared because he thought that his wife (whom he had just married) must have possessed sanguma (sorcery) and must have sent it to his workplace to kill him. He walked back home and he confronted her saying: "You have sent your sanguma to kill me!" And then he beat her and beat her until she was almost dead.

All right, then later on I was sleeping in my house when I saw a dream about the same place where my brother had heard that noise. I saw a dream, and in this place the earth is blue, it's the kind of ground where you find was gol (alluvials). I saw a dream about a beautiful young lady... a white lady. She was completely naked and she came to me and kissed me and did all sorts of things to me, and in the dream I had sex with her. When I got up I thought that that dream must have been about gold. I didn't tell my wife about it, nor did I tell my workers or anyone else. I just went down there in the morning and when I reached that place I saw some of the grass move. The wind was moving some of the grass and when I saw that I thought to myself, "Maybe that is the place where my dream will come true." So I took a dish and dug some ground out and when I panned it I saw that it was full of gold. I saw so much gold in the dish that my heart began to beat really fast, and I thought back to my dream and I started to wonder how many thousands of kina I would get from my find. I mined that place for a week, and then another, and then another. For three solid months I worked that same vein, and I made 8,000 kina from it... and this took place in the '80's, so that was a lot of money back then.

Like the previous oneiric narrative, this tale involves an erotic encounter between the dreamer and a beautiful white woman. As suggested in relation to Dream 2, the imagery of Nakoeo's dream could be seen to reflect some conscious or unconscious sexual desire felt by the dreamer. In this light, the characterisation of the dream woman as an "unknown" European could be read as an attempt to mask- to the dreamer himself and others, including, quite naturally, the anthropologist- the more problematic "true" identity of the object of his desires, who may in actual fact have been the wife of a neighbour, the spouse of a "real" or "classificatory" male relative, or even a "real" or "classificatory" female matrikin and patrikin (cf. Stephen 1996). Of course, it goes without saying that this operation of "displacement" could have taken place at a number of different levels, from the very formation of the dream whilst dreaming, to its successive subjective elaborations and recollections during both sleeping and waking life, to its possibly revisited inter-subjective communication in the form of dream narratives.

On the other hand, though, the dream may simply reflect the dreamer's desire to have a sexual liaison with a European woman. Indeed, for a variety of reasons including their "exoticism", their perceived "beauty" and "out of reach" status,[63] and their material and symbolic potential as relational bridges to the opulent world of the white man and all its highly desirable and yet largely unachievable "cargo" of goods and mysterious powers, my Hamtai informants described white women as the ultimate "objects" of desire. In Kaindi and the wider Bulolo District, for instance, many miners confided that their greatest erotic fantasy was to sleep with a white woman, and those few who had had (or claimed to have had) amorous affairs or paid sex with "white" women and prostitutes in PNG or in foreign countries such as Australia or the Philippines[64] reminisced about them with the uttermost pride and longing. When I visited Kaintiba, on the other hand, young Hamtai men told me of a "Canadian University Students Overseas" volunteer who had fallen in love with and married a local PNG woman. Having recounted this story, they commented that the poor fellow must have been a great fool, for he could have had any white woman he wanted, but ended up marrying a local woman instead. In his place, they insisted, they would have chosen the former every day of the week.

Apart from these possible "primary desires", however, the recollection and narration of this dream could also have been affected by the context in which it was elicited and by certain psychological issues that were affecting the narrator at the time. Thus, if we consider that Nakoeo was known to be a "good dreamer" and that he could have probably recollected a number of past experiences of "gold dreaming" at any given time, the question arises as to what prompted him to remember and to recount that particular dream in that particular interview. Now, one of the reasons for this may have been the fact that, as he makes clear at the

---

[63] This "status" is undoubtedly linked to lingering national memories of the racial segregation and hierarchies of the colonial era [see, among others, Bulbeck 1992], but also to the presently small number of white women in PNG and to a diffused idea that only a man whose means far exceeded those of the average Papua New Guinean could afford to "look after" a white woman as she would expect and thus to win her over and retain her as a mistress or a wife.

[64] In addition to Europeans, Chinese, Filipino, and other Asian women were also routinely classified as "white".

end of his narrative, that specific dream had led him to a very significant, and hence particularly memorable, find.

Aside from this, though, there is the fact that in Nakoeo's narrative the dream itself is preceded by a curious anecdote about his younger (or, more precisely, his second younger) brother. To appreciate the significance of this preamble one must consider that, a number of years prior to our interview, Nakoeo had forced its protagonist out of the family holdings (a fate which had already occurred to his first younger brother some years before that), which he had since been exploiting by and for himself.[65] In light of this situation, of which Nakoeo knew I was fully aware, it could be imagined that he had (consciously or unconsciously) chosen to relate that particular narrative because it drew a stark contrast between his younger brother, who, unable to properly read the signs given him by the spirits of the gold, had taken them for evidence of sorcery from his newlywed wife, and himself, who, on the other hand, had been able to "see" more clearly than his sibling in both dreaming and waking life and to benefit from the signs he had received through a gold discovery. In turn, of course, this would have served to prove, to the anthropologist as much as himself, that Nakoeo's ability as a miner and dreamer and his own connection to the land had always been far superior to those of his brother, and thus that he had been fully justified in retaining the family holdings for his own use.

In addition to this, though, one must also consider that, around the time of our interview, Nakoeo was experiencing marital troubles of his own. Indeed, just a few days before he recounted that tale I went to his house in the hope that he would "stori" ("tell stories", or take part in an interview) with me. When I got there, though, I found his wife sitting alone in the shade of their dwelling. After I asked her where I could find Nakoeo, the woman said that he had already left for the mines. Rather than leaving it at that, though, she then launched into a tirade in which she explained that although her husband had asked her to go down to the

---

[65] Despite these past disputes, the three siblings were in relatively good terms at the time of fieldwork. Indeed, on more than one occasion they proved ready to help each other in the face of financial or other need.

mines with him, she had told him that it was too hot that day and that she couldn't be bothered to work in those kinds of conditions.

At the time I didn't think much of this but, not long after our interview, Nakoeo had a major domestic row in which he threw a stone at his wife and nearly took one of her eyes out. Although I never uncovered the reasons behind it, the quarrel made me think that at the time of our interview Nakoeo may have been angry at the "unruly" and "lazy" behaviour of his wife, and/or that he may have suspected her of other wrongdoings such as adultery or sorcery. In turn, this opened my eyes to another possible psychological reason that may have motivated him to recollect and recount that particular story in that particular occasion. Indeed, by remembering how his brother had nearly killed his wife for what turned out to be a foolish suspicion, Nakoeo may have been trying- on a more or less conscious level- to reassure himself about whatever suspicions he may have harboured about his wife, and to seek confirmation that their own marital problems would, in the end, transpire to have been "much ado about nothing".

As was the case in the previous dream, then, here too we discern certain conscious and unconscious desires that may have prompted the dreamer to have this erotic dream. What is more, we can see that the psychological preoccupations the dreamer had at the time of our interview, including a possible desire to show himself to be a particularly "knowledgeable" and "efficacious" miner (especially vis-à-vis his younger brother), and his need to find reassurance about the marital problems he may then have been experiencing, may have influenced his choice of what dream to relate to me and how (i.e. to have it preceded by the anecdote about his brother rather than presenting it on its own). Beyond these more personal aspects, however, Nakoeo's narrative contains certain characteristics that place it firmly within the "genre" (Hacking 2002) of "gold dreaming". For example, there is the fact that the dream is preceded by the "inverted whistle" heard by Nakoeo's brother, and is followed by Nakoeo's own vision of grass being moved as if by the wind. Now, given that these signs can indicate, not just the presence of sorcery, as Nakoeo's "inexperienced" brother wrongly assumed, but also that of the spirits of the mountain, and given that both of them took place in a mining area, the dream

can be easily interpreted as a visitation by some external spiritual entity and as a sign that its dreamer will soon locate gold.

But aside from the signs that accompanied it, it is the very content of the dream that makes it a likely candidate for identification as a "gold dream". Thus, as should already be apparent from the three oneiric experiences presented so far, the presence of women- and particularly of white women- who seek to "marry" the dreamer is one of a number of themes which recur again and again in Hamtai-Anga "gold dreaming". To make matters clear from the start, the existence of such "conventional" symbols does not mean that the Hamtai associate "gold dreaming" with some rigid, unequivocal, or exclusive "symbolic code". Indeed, as is the case in many other world cultures, Hamtai-Anga dream theory works on a combined "textual", "contextual", and "intertextual" level (Tedlock 1999; Poirier 2005; Stephen 1995). In other words, the Hamtai interpret each dream, not only in terms of its individual symbolic content and the various "conventional" meanings associated with it, but also by reference to other dreams which occurred at around the same time that it did or which are thought to be otherwise related to it, and with a view to the personal and social context of the dreamer who dreamt it.

For example, a dream of having intercourse with a known woman is associated with at least four "conventional meanings". To begin with, it could be a sign that the woman in question would like to marry the dreamer. Secondly, it could mean that she would like to have a sexual liaison with him. Thirdly, it could be an omen of hunting success. And finally, it could indicate that the dreamer will soon find some gold. In order to correctly interpret this kind of dream, then, it is not enough to focus exclusively on its imagery. Rather, one must also think whether it bears any particular similarities (such as the dress worn by the woman or the setting of the encounter) with other dreams which were experienced in the past, and which had been indicative of a particular outcome. Furthermore, one must consider the identity and circumstances of the person who dreamt it, and, in this case, those of the person featured in the dream. For example, if the dreamer is a young man who is currently in search of a wife, and the woman of whom he dreamt is a marriageable young girl, then the experience is more likely to be an omen of future marriage. If, on the other hand, the woman is older and already

married, then the dream is more likely to suggest that she would like to carry out an affair with the dreamer. As for the less "literal" interpretations, if the dreamer is a renowned hunter, or if he has recently laid a trap in the bush, then the dream is likely to predict the future catch of a prey. If, on the other hand, he is not a hunter but a gold miner, then the oneiric omen is most likely to forecast some imminent mineral discovery.

Given that the same oneiric symbols can have multiple "conventional meanings", that some lack any such "standardised meaning", and that context is always very important to the exegesis of dreams, Hamtai-Anga dream theory is inherently flexible and leaves plenty of room for "original" or idiosyncratic possibilities of dream interpretation. This notwithstanding, when one compares a number of different "gold dreams", one cannot help notice that they are characterised by a common stock of symbolic imagery, by which I mean not just that they tend to contain a similar set of recurrent symbols, but also that they never include other oneiric images which are nonetheless commonly reported in native dreaming experience. So, for example, if "gold dreams" often contain an erotic encounter between the dreamer and a female figure, not one of them features the dreamer catching and/or killing a wild pig in the bush. Indeed, whilst this kind of dream is fairly common among the miners, none of them ever sees it as a sign that gold will be found in the mines.

In turn, this suggests that the symbols "conventionally" associated with "gold dreams" must hold some meaning that goes beyond the immediate context and the specific psychodynamic forces that shaped each particular dream, and which relates instead to the place that mining and minerals hold in Hamtai culture and society. It is these recurrent symbols that lie at the core of this study. To borrow from Tuzin (1975: 561), therefore, my thesis could be said to constitute an "interpretation of interpretation" that pursues the symbolism and "cultural associations" of "gold dreaming" as a "royal road" (Freud 1994 [1900]) to Hamtai mining cosmology and practice. This being the case, we can now better appreciate why it is not essential to know if all the "dream accounts" (Crapanzano 2001) presented here originated from "actual" dream experiences. Indeed, in order for them to be passed as "credible" and "meaningful" "gold dreams", even those tales

which may have been completely "invented" would have had to be crafted in broad accordance with the symbolic "conventions" associated with this particular oneiric genre, and thus would still reveal as much about the meanings behind them as the improvisation of Jazz does about the contours of its subject matter (Wagner 1975: 88), or as each particular utterance does about the underlying structures of the language in which it is spoken.

In the following sections of this thesis, I will proceed to analyse the symbolism of "gold dreaming" as a window on how the Hamtai of Kaindi conceptualise mining, organise themselves as miners, carry out their extractive operations, and consume the resources which they obtain from them. As will soon become apparent, the symbolic content and cultural associations of these oneiric experiences constitute a set of metaphors that represent minerals and mining in terms of some other object, entity, realm of production, and sphere of social interaction. As should already be clear, this does not mean that the Hamtai interpret all of their dreams metaphorically. For example, it should be recalled that a dream of sexual intercourse with a known woman could be interpreted, "literally", as a sign that the woman in question is willing to have an affair with the dreamer. As far as "gold dreams" are concerned, though, their content is never a "literal" representation of the events they are interpreted to forebode and enable. In other words, even though dreams of this kind must be fairly common, a miner will never report a dream in which he goes to a mine and locates a gold vein or some alluvials as an instance of "gold dreaming". In turn, of course, this suggests that metaphor itself must play an important role in this particular arena of dream interpretation, and possibly in other aspects of indigenous mining culture and practice. In the course of this thesis, we will learn that the meaning of the "gold dreams" presented here and the metaphors they contain can emerge only when they are considered in their totality, as particular instantiations of as a single "system of meaning". In order to initiate this systemic analysis, however, I will first turn to what is perhaps the most dominant individual trope of Hamtai-Anga "gold dreaming"- that is the metaphorical association of gold with food, and most especially garden food.

PART THREE: The Metaphorical Structuring of Hamtai-Anga "Gold Dreaming"

6- Gold as garden food

Of all the "gold dreams"[66] I collected, no less than 66% contain some explicit reference to food (kaikai, or *mitänga*[67]). Although the range of reported foodstuffs includes hunting and gathering produce, cash crops, and trade-store articles such as rice or tinned meat, the majority (67%) of these narratives feature items from the sphere of subsistence gardening. Of all possible cultivars, those explicitly mentioned are sweet potatoes, which appear in over 51% of dreams featuring garden foods; cucumbers and taros, each at 14%; bananas, at over 11%; oranges, at nearly 6%; and then avocados, cabbages, European potatoes,[68] pineapples, pumpkins, red chillies, red tomatoes, and sugarcane, each at just under 3%.[69]

In their simplest form, these dreams entail little more than the static vision of a cultivar or a planted plot (see Figure 5). A good example of this type of oneiric imagery was offered by Toyapo, the junior son of one of the first Hamtai men to have obtained a registered mining lease in Kaindi, who, in the course of an interview, explained:

Dream 4

I saw one of these dreams once. It was a dream about heavy rainfall. I saw a lot of rain fall on a big kaukau (*hope'a*, or sweet potato) garden. Next morning I got up and went to work as usual, but that day I found a very large nugget.

---

[66] That is, the oral accounts of oneiric experiences interpreted as foreboding a future gold find.

[67] The term *mitänga* is the general name for food. Beyond that, cooked food or foodstuffs that need cooking before consumption are called *itä*, while game, fish, and other kinds of animate food are also referred to as *nängo*.

[68] The term "European potatoes" will hereby be used to distinguish the more recently introduced type of tuber from the various kinds of sweet potatoes that were already been cultivated by the Hamtai before contact with Europeans.

[69] Summed together these figures exceed 100% because several dreams mention more than one of these food items at a time.

Figure 5. Drawn by a local Hamtai youth, this picture is an imaginative rendition of an oneiric vision in which a gold deposit appears in the form of a banana tree. In order to make clear that the dream in question is a "gold dream", the artist has placed two laden gold pans at the sides of the tree, which he has represented as bearing pure gold nuggets as well as ripe yellow fruits.

A further illustration of this came from Diyo. A married man in his late twenties, Diyo was the second younger brother of Nakoeo. As should be remembered from the previous section, Diyo had initially mined alongside his eldest brother. As he got older, however, strain had started to build between them until Nakoeo had forced him out of the family land (the second-born brother had already met a similar fate some years earlier). Despite these past disputes, the two siblings were in relatively good terms at the time of fieldwork. Indeed, in more than an occasion they proved ready to help each other in the face of financial or other need.

One rainy afternoon, when we were discussing his earlier life as a miner, Diyo told me of a dream that had led to the greatest find of his mining career:

Dream 5

That night- he said- I saw a dream about sugarcane (suga). I saw some sugarcane bundles... hundreds of them. They were growing in a line, all the way up the side of the mountain. They looked just like a gold vein. When I woke up in the morning I told my boys: "Boys, I saw a dream last night. There must be gold over there, let's go get some." So we went to that place (the head of the cane line he had seen in his dream) and we started to dig. We dug and we dug until we hit a good gold vein. It was very rich, and for the next nine months we carried on working that same spot. We got a lot of gold from that area, but the land wasn't mine. It belonged to my (elder) brother, so he kept all the gold and only paid me a workman's wages.

At the next degree of complexity, the dreamer does not merely set eyes on a cultivated area or a series of gardens, but actually enters them and harvests some of their contents. A good example of this was given by Esta. A Hamtai woman in her early twenties, Esta was married to a young Menyamya man who had no land of his own but worked as a tributer/labourer for various local landowners. Although her habitual occupations were to look after her first-born baby, mind the family home and some small garden plots, and sell small items like fried flour balls, cigarettes and betel nut at the local settlement's market, from time to time Esta would help her husband and affines with alluvial mining and the processing of hard-rock ores (mainly by grinding gold-bearing stones [golston] with mortar and pestle).

In addition to this, whenever she felt the need for extra cash to buy food or cigarettes, play cards or acquire new clothes, or when she simply desired to do something different from her daily routine, she was able to borrow her husband's tools to engage in a spell of independent alluvial mining. On many instances, her decisions to "wok gol" (work gold, mine) by herself were spurred or reinforced by some oneiric omen, and Esta was widely known to be a good dreamer. During an interview about "gold dreaming", the woman recounted a recent experience.

Dream 6

One night- she explained- I fell asleep and dreamt that a large kaukau was growing in a place where I used to mine. (In the dream) I grabbed the top of the sweet potato and pulled very hard. I pulled and pulled until the kaukau came out of the ground, then I saw it was very long. When I woke up I went to my workings and I saw a bird resting and singing on the ground. The bird took off. I walked to the spot where it was sitting and started to dig. Shortly after that I found a gold deposit... I kept digging and I found a gold stone, a very large one, and I made some good money from it.

An analogous account was offered by Filemon. Originally from the Aseki area of Morobe, Filemon had left his village as a young boy to travel to Wau, where he had found employment with an Australian plantation owner, first as a "hausboi" (domestic helper), and then as a coffee tender and picker. Some time later he had moved to Kaindi, where he had spent years working as a labourer for an established Hamtai leaseholder. At the time of fieldwork, his days as a gold miner had come to an end and his main occupation was that of "church worker" for the local Hamtai Nesinol Baibel Sios (Hamtai National Bible Church), a vernacular church born from the efforts of the New Tribe Mission in the Hamtai language area.

In one of the interviews I conducted with him to trace his life history, Filemon narrated the following dream:

Dream 7

One night I saw a dream of cucumber (kukamba, *ipnqa*). (In the dream) I walked to a certain place and saw a cucumber growing from the ground. I picked it up and put it in my bilum (string bag). When I woke up I went to my workplace (the land he was mining at the time). There I dug around for some time and discovered a very large nugget.

In very similar circumstances, Elisa, a young miner of mixed Hamtai and Menya parentage, told me a dream that, just a few months earlier, had led him to a very significant gold find.

Dream 8

That night- he recounted- I saw a dream about kaukau. I was wandering about when I saw a very long kaukau vine resting on the ground. I followed the vine all the way until I found

a kaukau, then I hit the ground with a stick to try to get the tuber out, but instead I missed and the point of my stick hit the potato and broke it in half. After that I woke up. It was still very dark, still the middle of the night, but I immediately left for the place I had seen in my dream. When I got there I started working. I dug and dug until I uncovered a goldstone. I wasn't sure if it really was gold until I broke it in half and saw that it was pure yellow inside. After that I prepared and cooked the gold. Then I sold it, and I made a lot of money from it.

As I heard dozen upon dozen of similar accounts I began to ask myself, firstly, why food as a whole figured so centrally in Anga "gold dreaming", and secondly, why it was garden produce in general and certain crops in particular which most often appeared as oneiric symbols for gold. While food and eating have generally been accorded little attention in mainstream Western dream theory, ethnographers have often found them to be a crucial feature in the oneiric experiences and oneiromantic practices of the people they studied (Tedlock 1992c: 106).

Holmberg (1950, in D'Andrade 1961; also see O'Nell 1976: 54), for example, found food to be a dominant dream-theme among the Siriono, a hunter-gatherer people of the Amazonian interior. In accounting for this, he pointed to two concomitant factors. To begin with, most Siriono days are punctuated by hunger and the difficult search for food, so that, in a Freudian vein (see Freud 1994 [1900]), their dreams about food and eating could be seen to reflect a major concern of the indigenous waking life and to constitute means of fulfilling a basic wish and safeguarding sleep against hunger.

In relation to the mining community of Kaindi and to the Anga more broadly, such a "dietetic" elucidation would not be wholly out of place. As already mentioned in Sections 1 and 2, Kaindi was settled because of its gold deposits rather than for its climate, which is extremely cold and foggy, or the fertility of its soil, which is far from ideal (cf. Gressitt and Nadkarni 1978: 117-18). Most local settlements are situated close to the mines but at considerable distance from cultivable land and virgin forest. In addition, decades of population pressure have led to systematic over-hunting and the indiscriminate clearing of forests, which have in turn resulted in the loss of valuable local subsistence resources. To make matters worse, many miners are now too busy mining (and,

when in luck, spending their windfalls on other "necessities" such as beer, cigarettes, gambling and prostitution) to engage in customarily male agricultural chores such as the cutting of trees, the clearing and burning of forest undergrowth, and the building of fences, or even to help their womenfolk in the planting, tending and harvesting of family gardens.

In turn, this both increases the agricultural workload of women and reduces the output of their subsistence activities, which is further compromised by the fact that women are expected to help with ore processing and alluvial mining from time to time, to look after the children, to take care of daily domestic chores such as the fetching of water and the washing of pots and clothing, and to engage in cash-earning activities such as small trade at the local markets. Finally, this relative lack of garden land, agricultural labour, and potential fodder such as tubers and other crops coupled with concerns about possible theft exacerbates a common feature of the Anga subsistence economy, that is the lack of large scale pig-rearing and the ritual exchange and consumption of pork. In turn, this means that pigs, chickens, and other domestic sources of animal protein are a very rare and expensive commodity within the mining community.

What all this leads to is a somewhat paradoxical situation. Thus fresh garden and forest produce is regularly sold at Kaindi's markets by full-time horticulturalists from outlying settlements such as Ayati and Nemnem or from the Upper Watut. What is more, relatively easy access to Wau, Bulolo and Lae ensures the presence of a variety of industrial items of consumption in Kaindi's trade stores and open markets. As a result, the local mining community has access to a considerable variety of everyday foods and delicacies, many of which are only rarely consumed in more rural environments. Unlike "back in the village" (long ples), however, where most people own enough planted plots to meet their immediate subsistence needs, in Kaindi access to food is largely contingent on cash. In turn, this means that for the miners lack of money, which is a far from uncommon predicament, is effectively synonymous with the prospect of hunger.

For these very reasons, though my informants would often declare their sorrow for their "brothers" back in the village who had no access to oil, sugar, milk, and the other "sweet things" that one found in Kaindi, they equally

frequently lamented that village life was much better than that of the mines because, as they put it, "back in the village one always has food from the garden and never goes hungry". Following this line of reasoning, the frequency of food symbolism in Kaindi dreaming may simply relate to the fact that food is a major concern in the waking life of the miners, and its symbolic association with gold could be easily explained by the fact that, as many of my friends commented during discussions about this widespread oneiric trope, without gold a miner can't feed himself or his family.

In his study of the Siriono, however, Holmberg (1950, in D'Andrade 1961: 310) noted that this people tended to report and debate dreams about food just as frequently during times of alimentary abundance as they did in situations of scarcity. In turn, this led him to argue, firstly, that dreams about food and eating are not just symptomatic of physical hunger, and secondly, that in dreams as in waking life, food and food production, exchange and consumption could "stand for" a wide range of crucial elements of indigenous culture and sociality. As will soon become clear, neither the question of why food is so central to Anga "gold dreaming", nor of why garden-foods in general, and certain crops in particular, should be such regular tropic symbols for gold can be satisfactorily answered without taking these crucial insights into account.

In the Mount Kaindi area, gold is generally found in veins of quartz and manganese oxides that appear as black and white lines running through reddish soil (cf. Lowenstein 1982: 23-6 and Blowers 1988). Hence, the fact that the vast majority of the foods named in "gold dream reports" exist in varieties whose outer skin and/or flesh are orangey-red (in the case of some sweet potatoes, pumpkins, oranges, chillies, and tomatoes), whitish to pale or bright yellow (e.g. some sweet potatoes, bananas, cucumbers, pineapples, potatoes, sugarcane and taro), and black in colour (e.g. sugarcane) might indicate that they are selected as symbols for gold because of their chromatic resemblance to this mineral and the soils that most commonly bear it.

Of course, colour is only one of many possible visual correspondences between gold and specific cultivars. In Dream 5, for example, Diyo not only chose a crop (sugarcane) that can have both a black and a yellowy outer skin (in his

account he used the pidgin word suga to indicate sugarcane, and I did not press to know to which exact variety of it he was actually referring) to represent his future find, but expanded on this basic resemblance by stating that the sugarcane bundles were growing one next to the other, in a long line (lain), thus appearing just like a massive gold vein (gol lain). What is more, an analogical nexus between a cultivar and minerals can rest not solely on appearance, but also on some other concrete or abstract quality.

Thus, if we take European potatoes as an example, not only are their shape and colour somewhat akin to those of gold stones and nuggets, but their name in Hamtai, *pätate*, is reminiscent of the word *päteta*, which is used to indicate ditches, drains, and races, three elements which, as will be considered shortly, are essential to all ASM operations. In addition to this, potatoes and other garden crops share another crucial trait with minerals, that is a chthonic mode of development (cf. Taussig 1980: 147). Thus, when I asked why dreams about gold should so often contain images of garden produce, my informants often responded, as if stating the obvious, that it was because: "gold and garden food are the same; they both grow from the ground".

These recently introduced potatoes remain, nonetheless, a largely subsidiary kind of crop, which may explain why they are only marginal to my informants' accounts of "gold dreaming". Sweet potatoes, on the other hand, which are the traditional staple of the Hamtai and of many other Anga people (cf. Blackwood 1950: 12; 1978: 28), are also the subsistence crop most regularly mentioned within them. In turn, this suggests that sweet potatoes make good oneiric symbols not only because they possess chromatic, morphological, or ontogenetic traits that connect them with gold and the broader realm of mining, but also because, as the most crucial source of Hamtai-Anga subsistence, they stand in a synecdochical relation with garden produce as a whole.

Although particularly marked in the case of sweet potatoes, this multi-layered mode of tropic connection applies just as well to most of the other cultivars of Hamtai "gold dreaming". Indeed, not only do nearly all of them possess a colour, shape, name, or other characteristic that makes them good analogues for gold, but the majority (including those of more recent introduction,

such as chillies and tomatoes) are also some of the most familiar contents of present-day Hamtai gardens. In its turn, this means that they can stand at once for themselves, for all garden produce, and, given how in the Hamtai economy and everyday discourse gardens constitute the ultimate source of subsistence (cf. Bamford 1997: 59; and Blackwood 1978: 28, 41-2), for food as a whole.

7- Mines as gardens

In light of what has just been said, many Hamtai "gold dreams" contain everyday imagery which can be read as expressing the metaphor x cultivar (= garden food = food) = gold (where the sign "=" means both "is like" and "is representative of/subsumes").[70] As argued by Sapir (1977: 23), however, "internal analogies (or metaphors)" of this kind always imply an "external analogy (or metaphor)" which, by means of synecdoche, links the two starting terms with their respective semantic domains and, by extension, the two domains with each other.

Thus, following our starting analogy garden food = gold, we can also postulate that these two separate products (the contained) are synecdochically juxtaposed with gardens and mines (the containers) in the "external analogy" garden food : garden = gold : mine, which in turn entails a metaphorical link between the two distinct productive spaces of the garden and the mine (garden = mine, or vice versa). Indeed, whereas in some accounts, such as in Dreams 5-7, this spatial analogy remains all but implicit, in many others, as is the case in Dream 4, where Toyapo expressly describes an area he has long mined and where he is soon to make a good find as "a garden", it is explicitly drawn. To my informants, the oneiric juxtaposition of garden and mine was not only highly logical but also immediately obvious because, as one of them argued: "with gardens you feed your family when they're hungry, so if you dream about a garden, the dream is telling you, you are not going to be hungry, your family won't be hungry; you have gold here to feed them and yourself".

---

[70] Of course, being grounded in analogy and synecdoche, this same tropic set could also be read right to left.

8- Is mining like gardening?

8a- Mining tools and techniques in the Kaindi area

Yet, if there is little doubt that Hamtai-Anga "gold dreaming" posits a rhetorical link between garden food and minerals and between gardens and mines, does this also mean that, in the Kaindi imaginary and praxis, mining and gardening constitute strictly isomorphic productive and conceptual domains? In order to answer this question, I will first offer a basic outline of artisanal gold mining as it unfolds in the area.[71]

To begin with alluvials, these are often extracted directly from or in the immediate vicinity of existing riverbeds by means of two simple techniques. The most basic of these relies on as little as a shovel and metal gold dish (gol das),[72] which are also the most essential tools for gold prospecting. In this form of extraction, a miner uses the shovel to dig gravel from a riverbed or riverbank, which s/he then places in the gold pan. The dish is then immersed in a body of water- which can be the river itself, a diverted stream, or even some still and muddy puddle or pond- and its contents are stirred by hand, rubbed between the fingers, and shaken. This process eliminates fine mud, clay, sand, and other light debris while the gold particles, being heavy, set at the bottom of the pan (Figure 6).

When this step is complete, the miner carefully removes the larger stones contained in the dish, which are then gently washed and closely checked for traces of gold. If these are found to be plain, they are simply discarded, but if they are

---

[71] The ASM techniques used in the Morobe Goldfields and wider PNG and their relative strengths and weaknesses have been described in a variety of technical papers, manuals and treaties as well as in a number of institutional reports (such as Afenya 1995; Blowers 1983; 1985; 1988; Crispin 2003; Gibungae 1988; Hancock 1991; 1994; PNG Department of Mining 1999a; 1999b; 1999c; 2001a; 2001b; 2001c; 2001d; Stewart 1987; 1989; 1997; Stewart and Blowers 1985). What follows in this and other parts of this thesis is not intended as an exhaustive technical, economic and social commentary on the world of artisanal and small-scale gold mining in Kaindi, let alone Papua New Guinea. Rather, it represents a necessary background against which to draw and explicate the symbolism of Hamtai-Anga "gold dreaming".

[72] In Kaindi, all miners seem to rely on shovels and gold dishes bought in the local trade-stores or in those of the Wau and Bulolo townships or Lae. During my stay in the area I never saw a single home-made timber dish in use. Similarly, the only plastic dishes I found belonged to Edie Creek Mining, the largest of the local mechanised operations.

believed to bear gold, they are put to one side for subsequent processing. After the larger stones are removed, the miner checks the smaller ones and begins to separate the gold particles from the finer and heavier sands in a process that is both long and painstaking. When only a little sand is left, the dish is caringly checked for gold (Figure 7). If the sands are found to be barren, they are thrown away, but if they do contain gold, they are washed in a separate container, usually an empty plastic bottle of oil or soft drink. This whole procedure is then repeated over and over until the miner decides to stop for the day.

If a sufficient amount of gold and sand concentrate is already present in the container, and/or if s/he is in need of quick cash to buy food, betel nut, cigarettes, or some other necessity, the miner may then proceed to processing the gold for sale. Otherwise, the container will be kept and more concentrate added to it over a number of days or weeks.

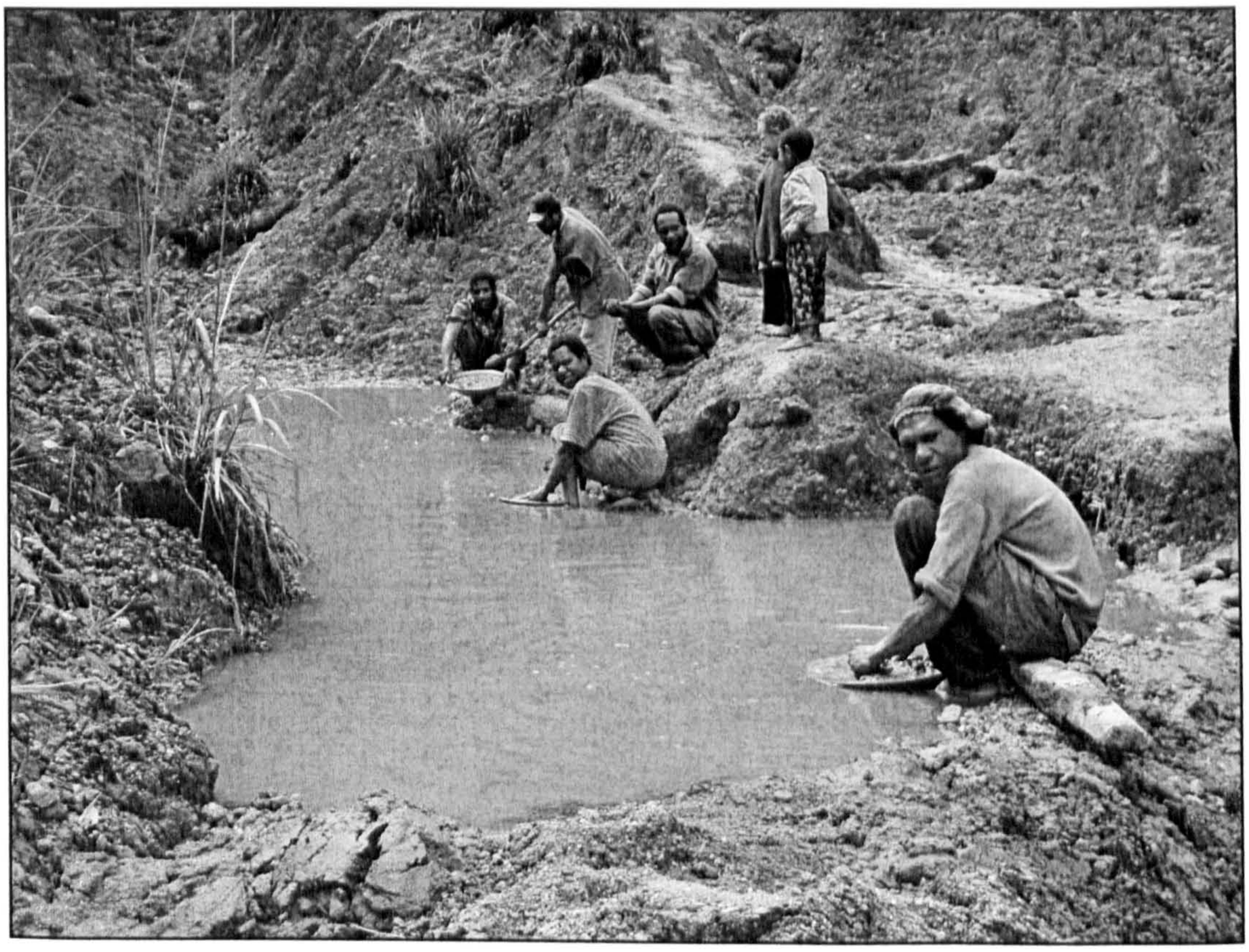

Figure 6. A group of miners panning gold bearing gravels.

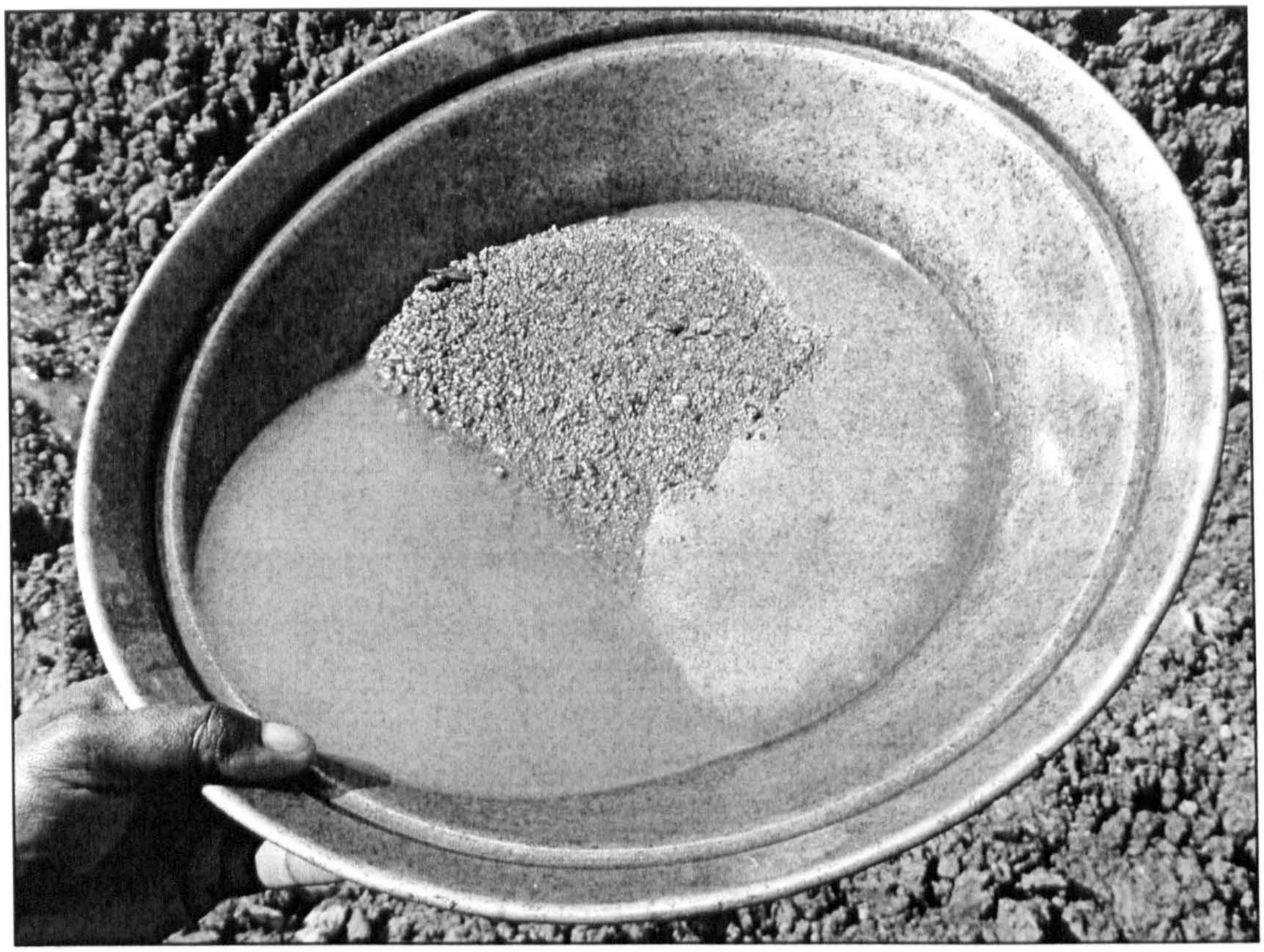

Figure 7. A dish filled with a mixture of gold and heavy sands.

At some point during this time, the gold-bearing stones that were put aside while panning will also be processed. In the vast majority of cases, this is done manually. The stones are placed inside mortars or dolly pots (doli) that are mostly bought from stores or workshops that make them from scrap metal such as the end section of large gas cylinders. The miners then pound the stones with pestles, which are also made from scrap metal like sections of old car axels (Figure 8). If a sieve or other rudimentary screen is available, the pounded stones are passed through it to separate the powder, which is set aside, from the larger pieces, which are put back in the pot for more pounding, and the process is repeated over and over until all that remains is fine dust. This dust is then concentrated through normal panning and either immediately processed or added to existing concentrates for future processing.

When a sufficient amount of concentrate has been obtained, the miner prepares it for amalgamation. In the initial stage of this process, which is locally referred to as tanim or spinim gol (i.e. "turning" or "spinning gold"), the

concentrate is poured in a dish along with some water. Mercury, which the miners call either mekuri or gol marasin (gold medicine), is then added and mixed to the watery gold sands, usually with bare hands though occasionally by means of a stone (Figure 9). As the mercury spreads, it amalgamates the gold metal contained in the dish, separating it from the remaining black sand. Once this is done, the mix is carefully panned until all the sand is eliminated and only the gold amalgam and excess mercury are left in the dish. At this point the amalgam, which looks pretty much like mushy silver, is pressed together by hand until it forms a tight lump. The lump is then wrapped in a piece of cloth or a pierced plastic bag or sheet, which is tightened to eliminate all remaining excess mercury (Figure 10).

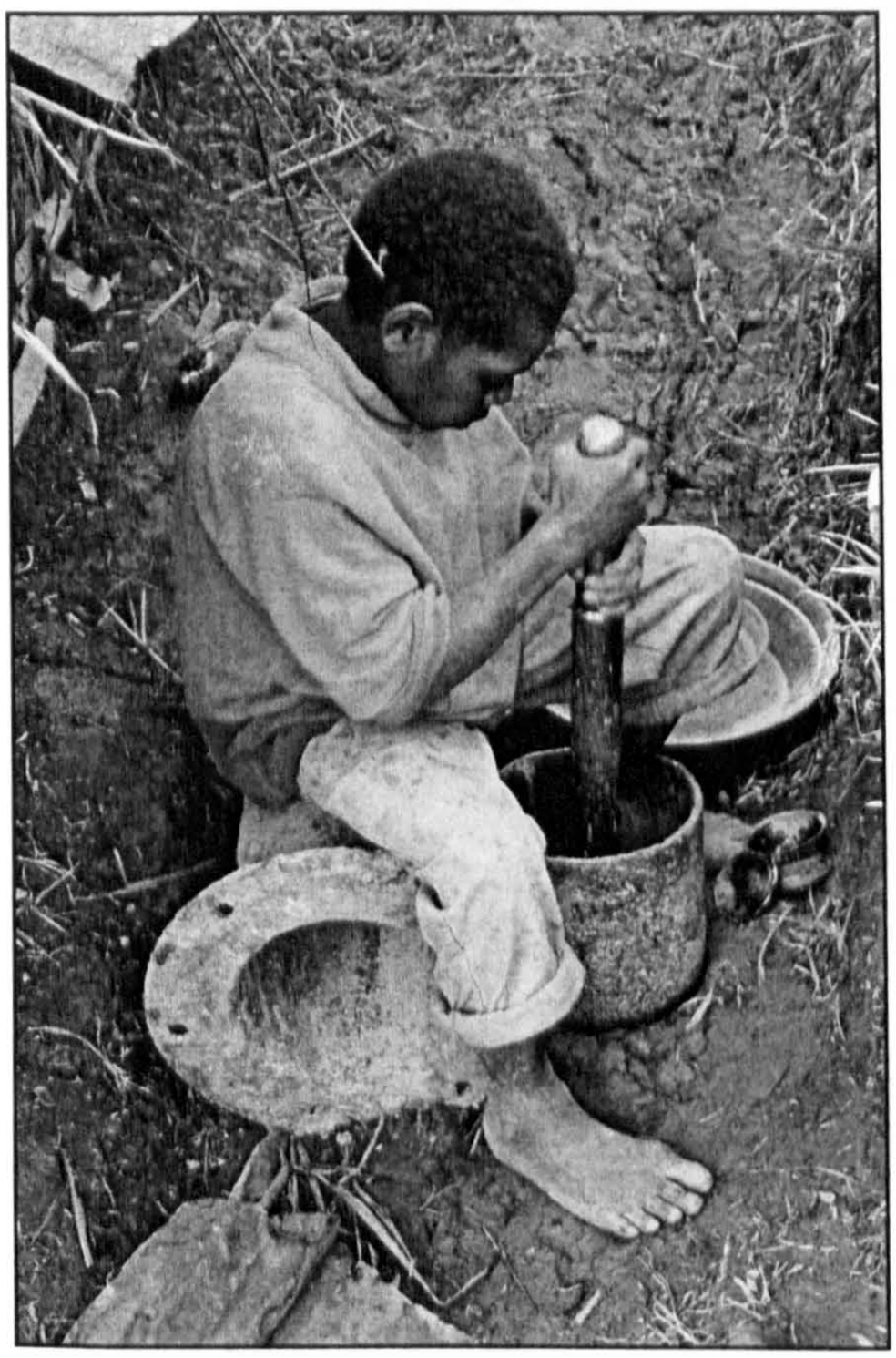

Figure 8. Child crushing gold stones in a dolly pot.

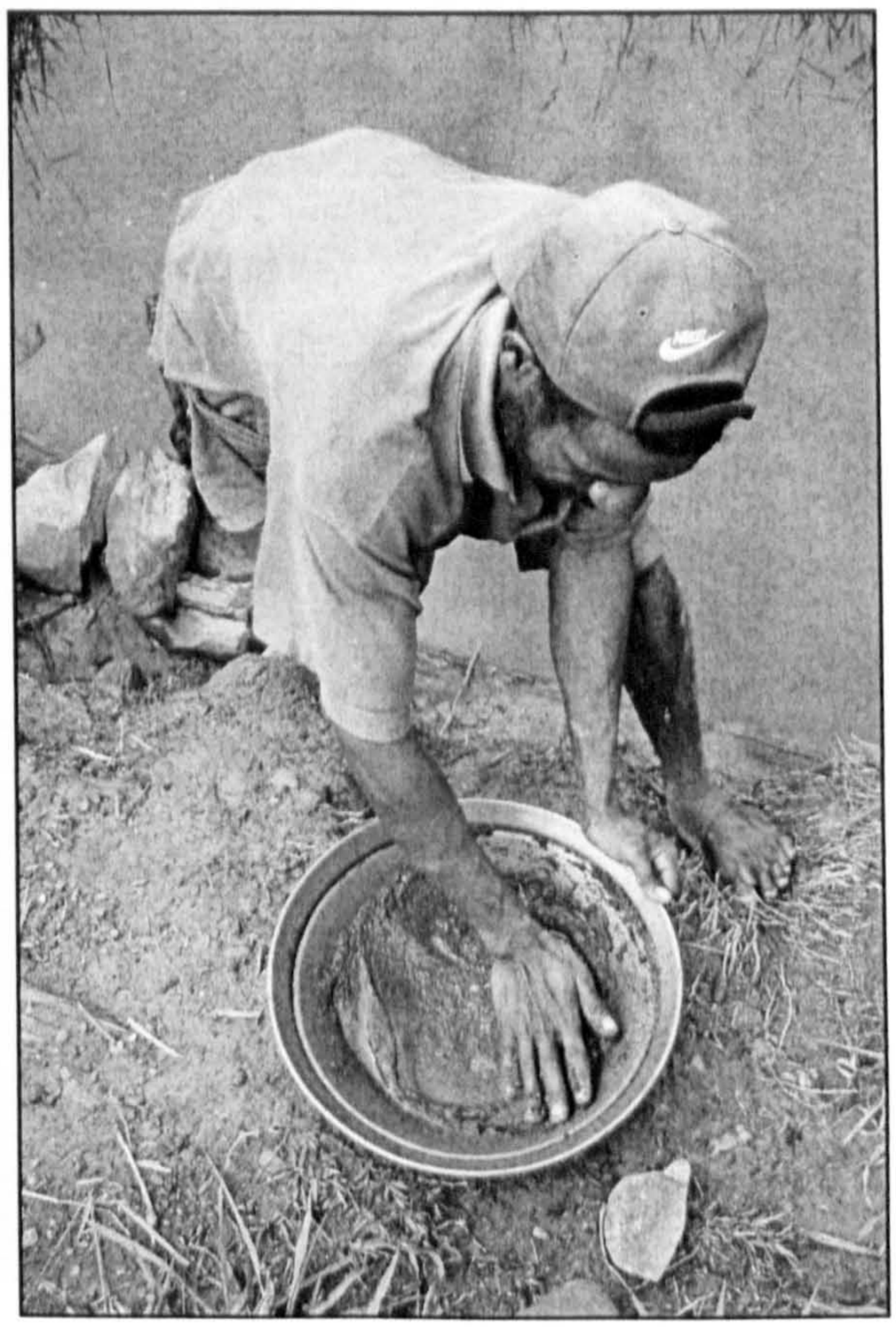

Figure 9. Miner "spinning gold"

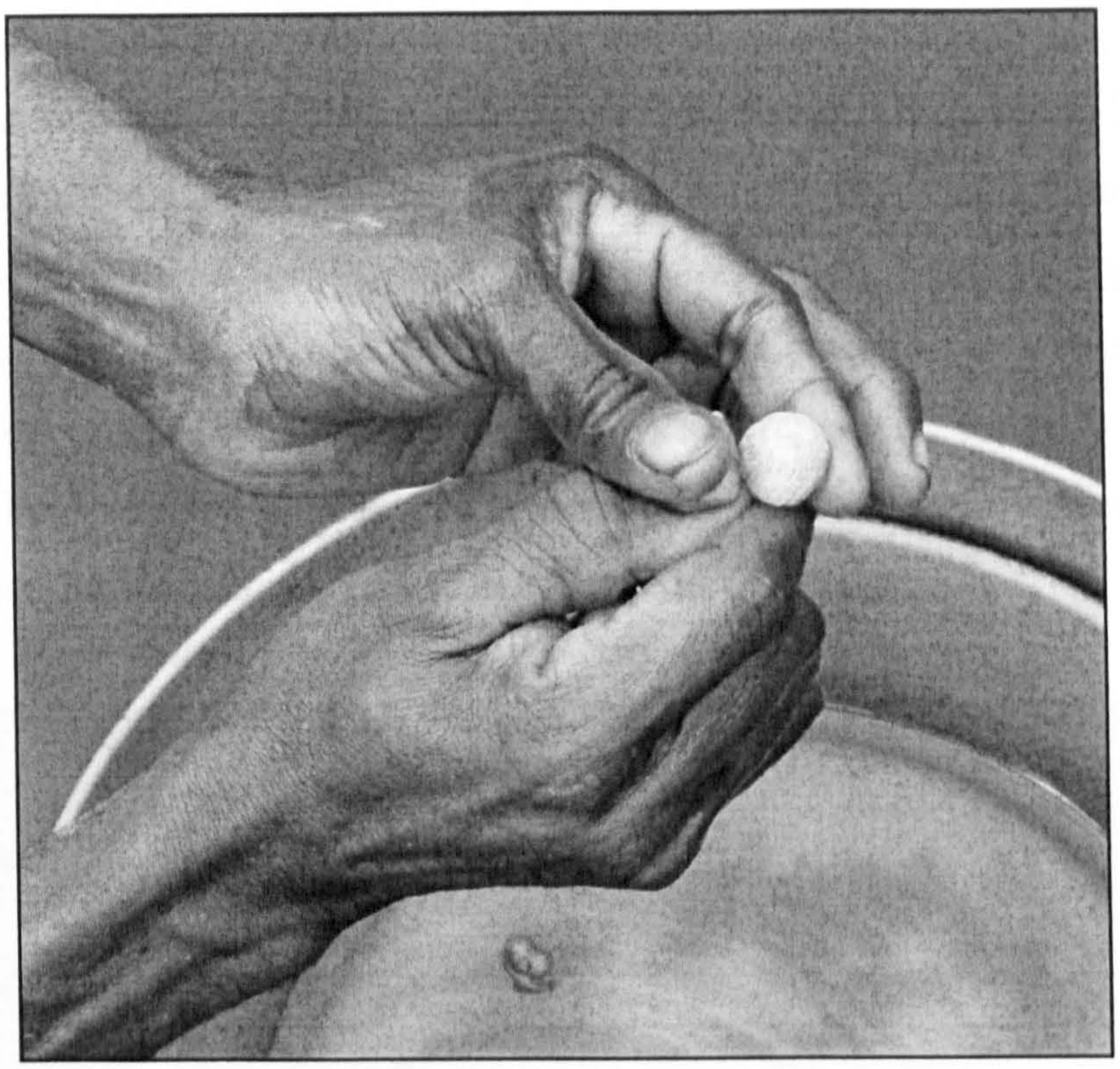

Figure 10. Eliminating excess mercury.

Figure 11. Retorting of gold in an open fire.

When this process is complete, any free mercury is put aside for future use, and the mercury-gold is readied for a second procedure known as "retorting" (or, as the miners call it, kukim gol ["cooking the gold"]). The amalgam is

wrapped in a piece of plastic or in leaves and placed in an open tin (usually an empty meat, fish, oil, or milk tin) or a scrap metal sheet. A fire is then lit, usually in the open air and at some distance from one's house, yet not uncommonly in the midst of one's gardens or even inside one's main habitation or one's haus kuk (a separate kitchen building), and the tin or metal sheet placed in or above it (Figure 11). The heat of the fire burns the amalgam, releasing (toxic) mercury fumes and leaving behind retorted gold that is ready for sale to local gold buyers or to the larger dealers in Wau, Bulolo, and Lae (Figure 12).

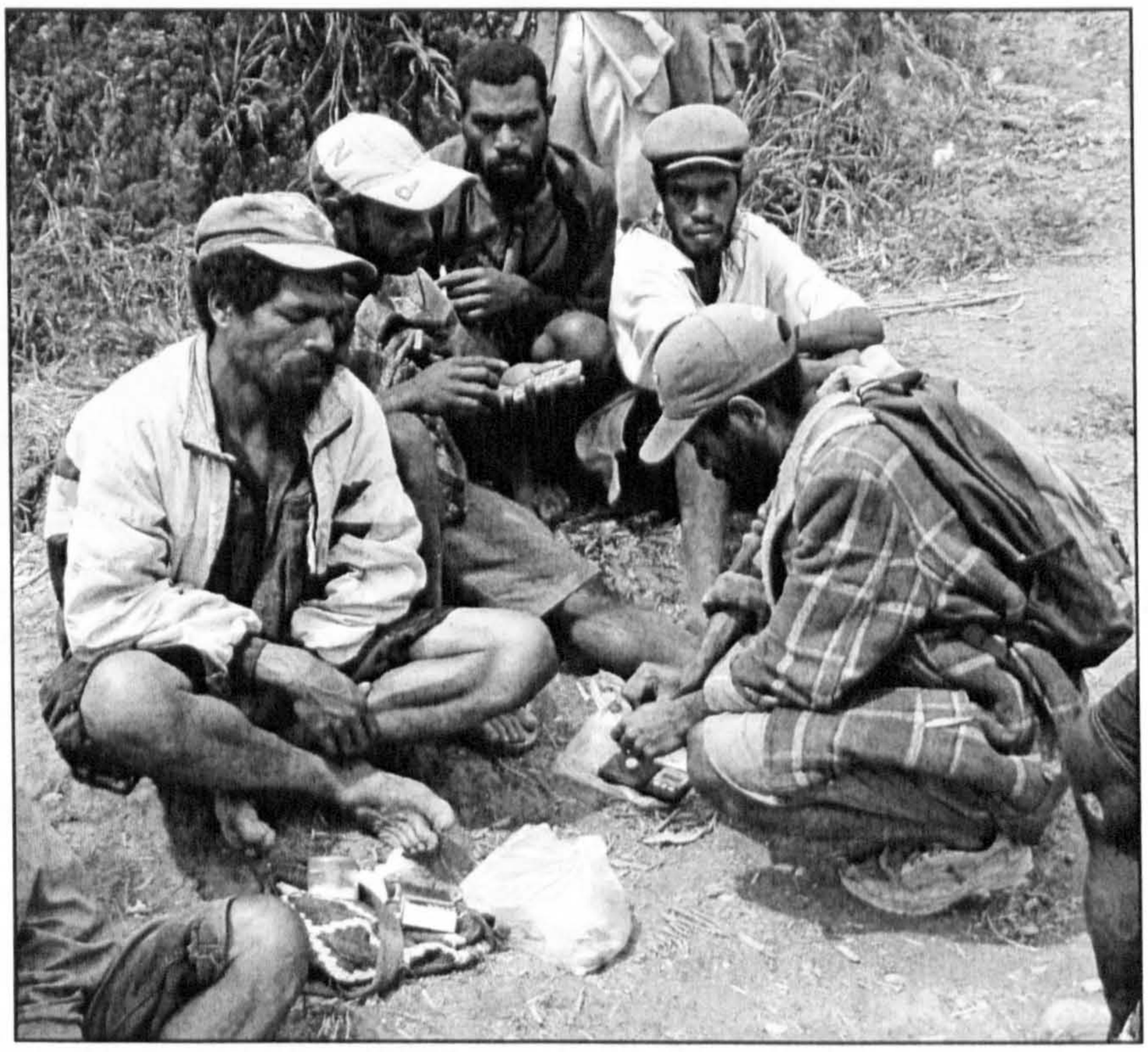

Figure 12. Miner selling gold to local buyers.

A second basic alluvial technique replaces the gold dish with a slightly more complex type of mining tool known as a "sluice box". The sluice boxes (slus bokis or gol bokis) used in Kaindi are long rectangular boxes with the top cover and either one or both of the shorter sides missing. Most of those I saw in use were industrial metal boxes (this type of box is known locally as stil bokis)[73]

[73] According to my informants, the pidgin term stil, "to steal", is here used to indicate the superior capacity of this type of box to "trap" or "steal" alluvials vis-à-vis wooden boxes.

bought from trade-stores or independent traders in Kaindi, Wau, Bulolo or Lae. Some, however, were home made, either from odd bits of scrap metal such as old pipes or oil drums, in which case they would also be called stil bokis, or from wooden planks nailed together, in which case they were called plang bokis (where plang is both an adjective meaning "wooden" and a noun that can be used to indicate a "wooden plank", "wooden board", or a piece of "sawn timber") (see Figure 13).

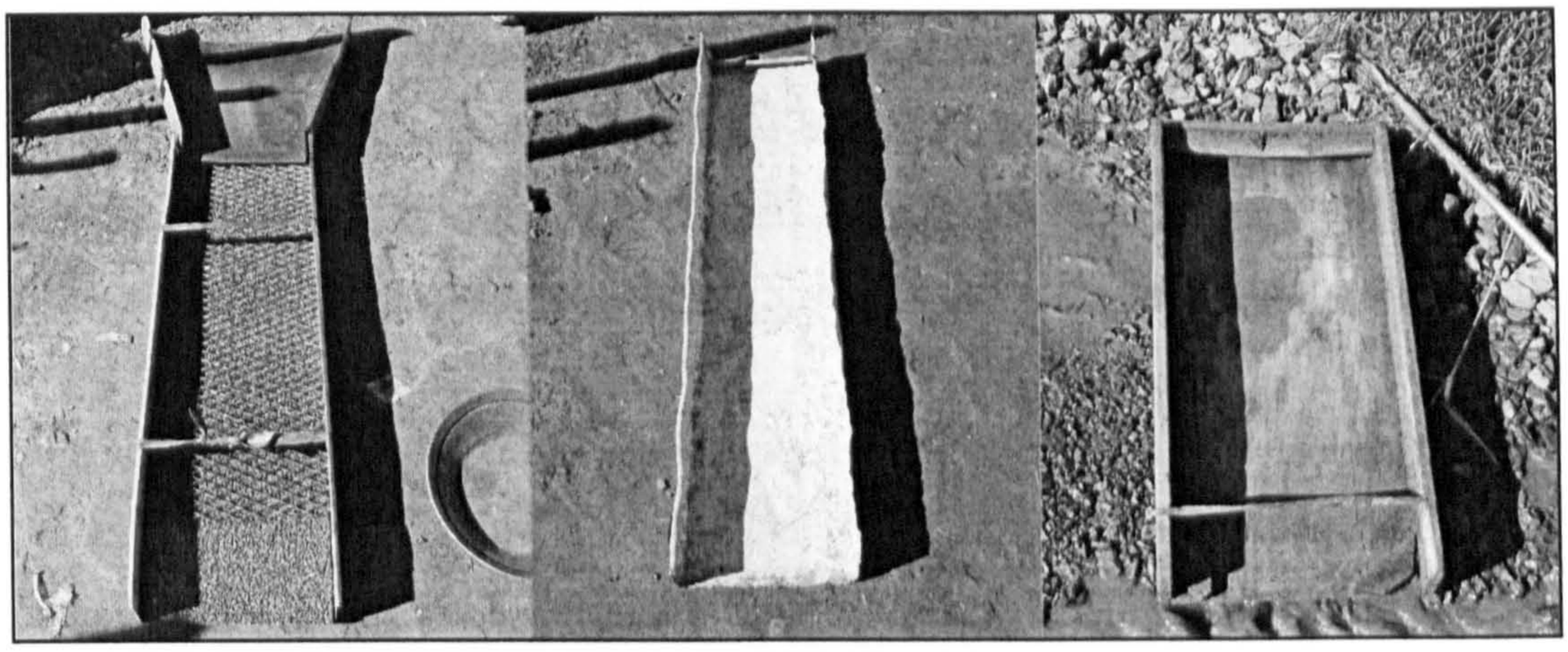

Figure 13. A comparative view of a store-bought stil bokis with detachable head box, metal riffles, and synthetic mat (left); a homemade metal box (centre); and a home made plang bokis (right).

In addition to this main frame, a sluice box can include detachable riffles (ripol), a mat (mat), and a head box (het bokis). Many of the miners I observed in Kaindi did not make use a head box. Those who did had either bought it from the stores or (most commonly) made one from scrap metal. Although some miners did not use any kind of matting, most lined their boxes with anything from store-bought synthetic mats to pieces of old string bags or even twisted leaves and twigs. As with the two previous components, some of the boxes I saw in use had no riffles, but the majority of miners tended to use some. By far the most common kind of riffles, both in stil and plang bokis, were sections of expanded steel mesh obtained from a store or some local workshop. In some cases, and particularly in conjunction with wooden boxes, the miners would resort to pieces of wood which were either positioned in the boxes before use and removed at the time of cleaning or permanently attached to the bottom of the box. Although to optimise recovery a

large number of such wooden riffles should be used in each single box, many had but one in the middle or three or four spread across the whole length of the box.

Regardless of their exact make-up, sluice boxes are operated in similar fashion and for the same basic reason; to process a greater volume of gravel than would be possible with the use of a dish. When working alluvials from or in the vicinity of a riverbed, the sluice box is placed on a gravel bank near the creek where one intends to work. In some cases, the box is set in a stream that flows naturally out of the creek or the river. Otherwise a dam, mostly modelled on those traditionally used for fishing (cf. Blackwood 1978: 36), is used to divert some of the water, which is then supplied to the box via a ditch or a water race (baret). Usually, the box is positioned so that its head is higher up than its end, but in some cases I witnessed miners operating boxes that were so little tilted as to be nearly flat.

After the box is ready and supplied with water, a shovel is used to feed gravel into its top or, if there is one, into the head box. If the gravel is dry and contains clay, it might be wet and broken up by being placed in a pool near the box and stirred around with a shovel or by hand before it is fed into the box. As the gravel lies in the sluice box, the water carries it down the box. The waves formed by the riffles wash the gravel, separating the lighter debris from the heavier sand and gold particles, which sinks through them into the matting or the bottom of the box. The heavier and larger stones, however, collect in the head box or the sluice box itself, and must now and then be cleaned and carefully checked for gold before being either put aside for processing in a dolly or cast away.

At the end of the morning and/or afternoon, the box is cleaned by the miner and either taken back home or reassembled for immediate use (Figure 14). To clean the box, the miner first removes the larger stones, again checking them first for gold traces. Thereafter, the riffles are taken out, and the sand and gold particles are washed out of the bare box or matting and placed into a gold dish (if the riffles are fixed to the box, the gold sand (gol das) trapped between them is carefully removed using the fingers). Once in the gold pan, the sands are concentrated and processed as in the shovel and dish method.

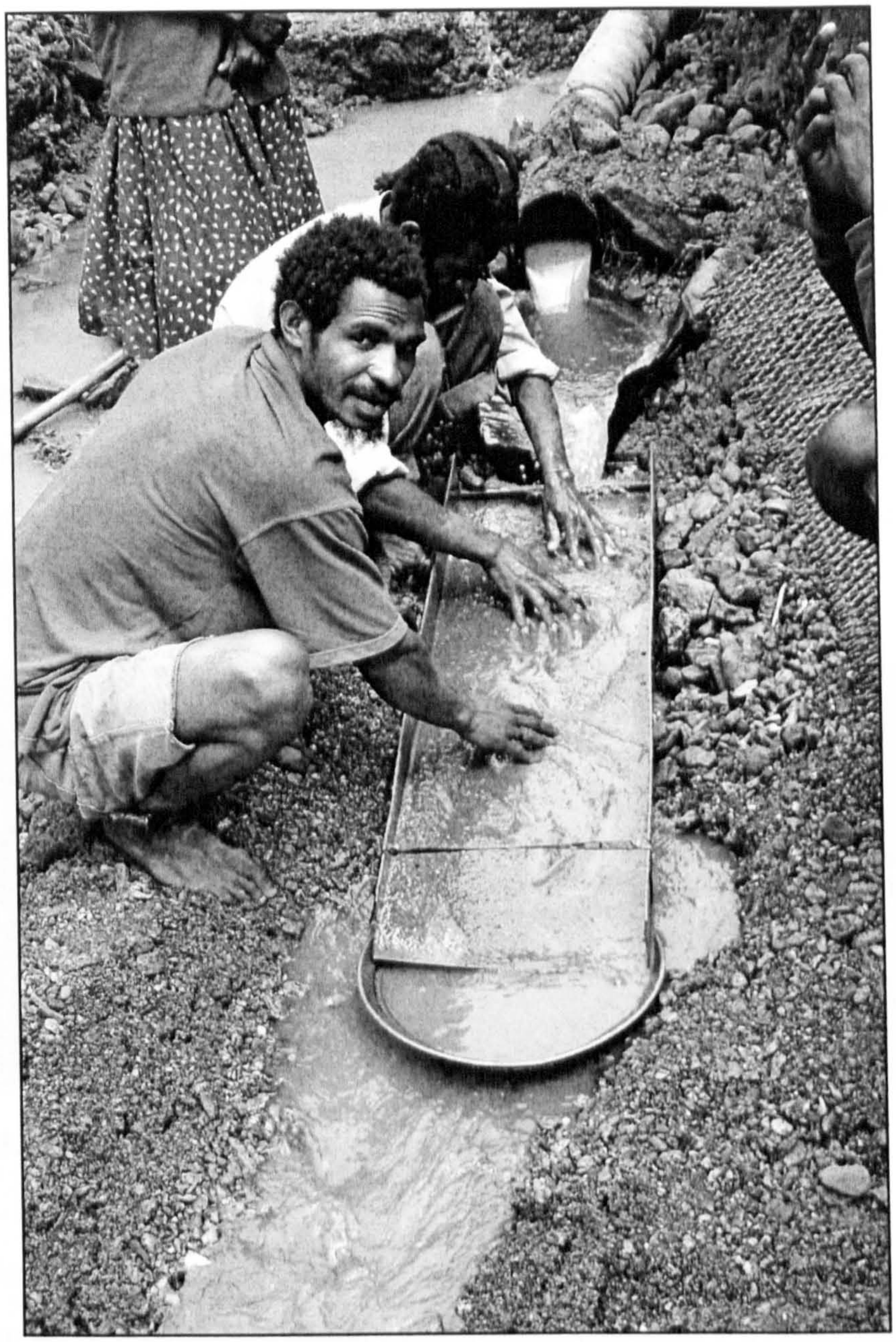

Figure 14. Miners in the process of cleaning a sluice box.

While the miners work alluvials directly from or near existing bodies of water, they also exploit deposits that accumulated overtime in old riverbeds and terraces. In some cases, these can be located at a considerable distance beside or above existing waterways. Furthermore, they may have been covered overtime by landslides and the growth of vegetation such as trees or grass. In addition to these hidden alluvials, Kaindi miners work both eluvial and lode (also known as source, reef, and vein) gold deposits, which are also more often than not far from existing

watercourses and hidden under the surface or even deep underground within areas covered by thick vegetation.

Mining these types of deposits can be financially rewarding but poses a series of serious difficulties. In the first place, they have to be discovered, either by means of careful prospecting, by chance, or with the help of a dream. As work progresses, more and more trees are cut down and stumps and undergrowth fired, so that larger and larger portions of land are gradually claimed from the forest. In addition to this, considerable amounts of soil have to be removed in order to expose the gold bearing ores that nest underneath it. To accomplish this task, the miners rely mostly on hydraulic sluicing and manual digging.

Figure 15. A mining pond (left) with a close-up of its "vertical stakes"-type dam (right).

To begin with, spades will be employed to dig a hole in the ground above the area to be cleared. These diggings, which are known as *e'ä pnga* (puddle, lake, standing water) in vernacular and raunwara ("circular water", lake, pond) in pidgin, can have either a circular or rectangular shape and measure up to a couple of metres deep and several metres across. On one of their sides (or at some point of their circumference if of a circular shape), usually the one immediately above the area to be mined, the ponds are closed by a dam (Figure 15). Like those used to divert watercourses into mining races, my informants maintained that these dams were elaborations of designs traditionally used to dam rivers for fishing and/or to create artificial ponds which were used for a variety of purposes, including: a) to hold water that was released with much fanfare to amuse village

children, b) to attract birds and other animals for hunting (cf. Herdt 1994 [1981]: 349), and c) to prepare certain foods, such as a much sought after type of nut called *qämga*,[74] which had to be macerated before consumption.

In general, these designs fall into two main types. The first consists of vertical stakes of different heights driven into the ground and reinforced by horizontal logs and a mixture of mud and grass, leaves and other vegetal matter. The second is made of logs of progressively greater length rested on top of each other and sustained by a few vertical stakes. Again, the whole structure is cemented with mud mixed to plant debris. If some natural water source, such as a creek or a spring, runs above the area to be worked, the dam is fed from it through a race dug in the ground and reinforced with metal or plastic pipes. Otherwise, a miner must wait for the rain to fill up the pond or, if s/he has one, s/he can use a portable water pump to transfer water to it from some lower source. In some cases, if a dam is located very far from a natural water source, the miners use a series of holes as intermediary steps, pumping water progressively from one pond to the next until it reaches the one above the deposit to be cleared. This process, however, is not only time consuming but also expensive as it relies on a water pump and can require considerable amounts of fuel to be carried out, so it tends not to be used unless totally unavoidable.

Whether fed through a race, a pump, or by rain, when a pond is full of water it is ready for use. At this point, the miners open the dam. In the horizontal log design, this is done by removing the shortest log at the bottom of the pile, which is then replaced when the pond has fully emptied. In the vertical stakes design, a plug made of mud mixed with wood, moss or grass is taken out of the bottom of the palisade and stomped back into place at the end of the sluicing process. When a dam is opened, the water contained in the pool washes down the area to be cleared.

---

[74] The *qämga* is a type of *pangium edule* whose toxic fruits are made edible through maceration in appositely constructed ponds [cf. Burton 2001, Working Paper 8]).

Figure 16. Hydraulic sluicing by means of a masket.

Instead of letting water flow freely from an open dam, the miners can also channel it through a monitor (or masket), which is essentially a flexible pipe with a nozzle or smaller hole at one end (see Figure 16). When sluicing is carried out with this method, one of the ends of the pipe is fixed to the dam blocking a pond,

in which a hole is then opened so that water flows through it at great pressure. On reaching the nozzle, the highly pressurized flow becomes a strong jet that the miner can direct at specific areas of a deposit. As this system relies on the force of gravity to create water pressure, it works best when the feeding pond is located high above the area to be sluiced. Alternatively, the miners can use centrifugal pumps to feed water into the monitor at sufficient pressure. During my stay in Kaindi, however, I didn't see pumps being used like this very often, because even those lucky enough to own a working pump rely as much as possible on gravity-powered sluicing to avoid wasting money on fuel.

Whether flowing freely from a pond or channelled through a monitor, the water wets and sluices layer after layer of the soil, dislodging and dragging away boulders, tree stumps and other vegetation, and turning into a river of mud and debris that rumbles heavily down the mountain. As this happens, the miners either move away or, more often than not, stand precariously in the muddy flood using their crowbars, bare hands and feet to dislodge sections of soil or debris that are washed away by the water.

When the pond has fully emptied the dam is plugged close, then the miners move in and manually dig the newly exposed sections of the deposit. For this they rely mostly on the ba or kroba- a straight metal rod of 1-1.5 metres in length with one pointy end, which is either factory made or produced from scrap metal in local workshops. When working "hard-rock" deposits, the ba is thrust into the ground and twisted to dislodge sections of muddy ground or stones which are then checked for a promising colour and consistency or, even better, for gold traces visible to the naked eye (Figure 17). The most promising rocks and clods are then placed in a gold pan, an empty rice bag, a giant leaf or some other improvised container and taken to the nearest body of water, where they are panned and processed in the usual manner.

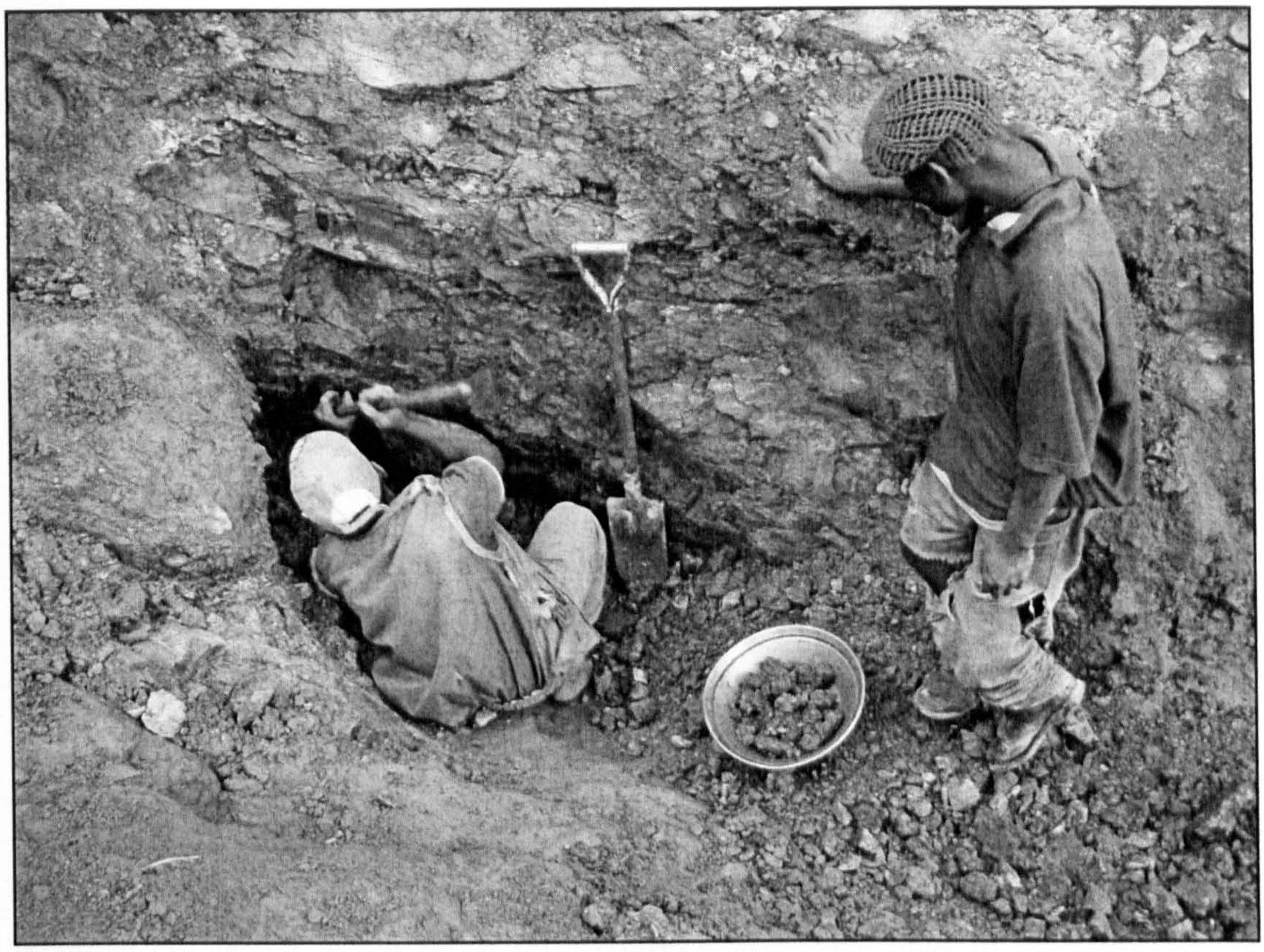

Figure 17. Digging a vein with a kroba.

In addition to exposing covered deposits to be manually dug, hydraulic sluicing can be employed in conjunction with sluice boxes- usually of the same size as those used by individual alluvial miners but occasionally several times larger than that- which can either stand alone or be placed in a series of up to four or five units. In this case, the water is used to break down gold-bearing ground, which is washed into the sluice box(es) and then extracted and processed in pretty much the same way as with standard alluvials.

In certain cases, however, a miner may have no water at his/her disposal with which to work a deposit. In general, this is a common occurrence: a) when a deposit is located away from existing watercourses; and/or b) when it is found in somebody else's land or in unclaimed land, so that one must hurry to extract as much gold as possible before being chased away by a landowner or disturbed by a micro gold rush, and thus cannot risk using a water-pump or an existing pond or wasting time building a new pond or water race; and/or c) when the find is rich enough to be mined but not big enough to be worth the time and effort required to

bring water to it. In these situations, a deposit is dug entirely by hand with the aid of crowbars and shovels, and the gold-bearing soils are transported to the nearest creek or pond by means of dishes, bags, or even wheelbarrows to be either panned or passed through a sluice box and processed as normal.

8b- Gardening, gender, and marital relations

As will be remembered from Section 1, the Hamtai are swidden (slash and burn) agriculturalists. Although primary forest can also be cleared (particularly in situations of population pressure following natural growth and/or immigration), most gardens are cut from secondary forests, which, at the end of a plot's productive cycle, are left fallow to return to secondary growth.[75] When a given area is chosen for gardening, it is first of all cleared of trees. Generally speaking, this is done using steel axes (formerly stone adzes) and/or by digging a hole in the tree trunk, which is then fed with fire[76] (Figure 18). In some cases, not all trees are actually cut down. Even those left standing, however, tend to be killed in the second phase of the clearing process, which entails the firing of the plot to clear away the brushwood and undergrowth.

After this second stage is complete, the area is (often summarily) weeded and the remaining undergrowth collected in stacks.[77] If they are needed, for example in order to keep domestic and wild pigs out, fences are also built around it using logs placed horizontally between rows of stakes.[78] At this point, the garden is planted with a variety of crops. In Kaindi, as in other Hamtai regions, this is done mainly with digging sticks (*qo'ä*), strong poles of around 1-1.5 metres in length that are used to dig holes in which to plant. When the crops are ready for eating they are dug out, also by means of the digging stick, and carefully washed

---

[75] In Kaindi, however, where population pressure has been steadily growing in the last few decades, gardens are opened in any available area, and land is not always left unused for a time sufficient to its complete regeneration.

[76] In Kaindi, some people also make use of chainsaws, which they buy from the town stores or borrow from relatives, neighbours and friends.

[77] In time, these will became nesting grounds for forest rats, which can then be smoked out of their nests and collected by women and children for eating.

[78] All the Kaindi gardens I personally visited, however, were simply left open and lacked any kind of solid fencing.

before being taken back to the house. As the crops are consumed, new ones are replanted until all the "goodness of the soil" (*qoä mtnga*, where *qoä* means earth, soil, and *mtnga* air, breath, life, warmth, steam, vapour, or spirit) is gone and the plot is left fallow (cf. Bamford 1997: 59-60, 64; and Blackwood 1939b; 1978: 28-32).

Figure 18. Firing of a newly cleared garden.

Figure 19. Hamtai woman working her garden with a digging stick.

Even from this summary sketch it is clear that, as a form of production, mining does share some basic similarities with subsistence gardening. In both types of endeavour, the land is cleared of vegetation through slashing and burning. Similarly, both minerals and garden foods are dug out of the ground in which they "grow" and carefully washed and even "cooked" before they can be sold and consumed. Furthermore, one of the most important mining tools used by Kaindi's miners, the kroba, is closely related in both morphology and mode of employment to the digging stick, which is the most crucial of Hamtai gardening implements (cf. Herbert 1998: 151)[79] (compare Figures 17 and 19). Beyond these superficial similarities, however, there are profound differences in the ways gardening and mining are socially organised, and in how each of them is positioned within the wider indigenous economy, society, and culture.

---

[79] Indeed, some of these analogies are clearly drawn in Dream 8, where Elisa breaks a kaukau while unearthing it with a digging stick for consumption (i.e. cooking), just as in the after-dream he unearths a stone, which he then breaks to ensure that it actually contains gold, which he then extracts, cooks and sells for money.

Thus, among the Hamtai-Anga, garden plots tend to be owned and worked by individual nuclear families. When a man dies, his land is not held jointly by all his sons, but is divided more or less equally between them.[80] Faced with a task that cannot be easily carried out by a single person, such as when a large amount of trees need to be cleared to open a garden, a group of brothers may help each other, but this communal work does not correspond to shared ownership, and the cleared land will still belong to just one of the brothers or will be divided in discrete plots to be worked separately by each brother and his nuclear family. Similarly, though it is not uncommon for daughters and mothers, or even for sisters and sisters-in-law (both "real" and "classificatory") to assist each other with some gardening chores, the general rule is that every woman or girl should work by herself in a separate plot, and more or less retain what she produces for her own consumption (Blackwood 1978: 32; Bamford 1997: 59; Burton 2001; Jackson 1988, 2001).

While entailing little cooperation above the household level, Hamtai-Anga subsistence gardening is "structured in such a way that cross-sex relationships are a necessary component of production" (Bamford 1997: 61; 1998b: 33; cf. Bonnemère 1996 and Herdt 2006: 146). Thus men are responsible[81] for the felling

---

[80] According to my informants, this general rule is qualified by a marked tendency to give larger portions of one's land and wealth, or at least greater say over the future uses to which they will be put after one's death, to one's eldest son (cf. Herdt 1987: 84). Indeed, if the land of a man is usually divided between all of his sons for individual use, the eldest brother of a set and, to a lesser degree, his descendants, are attributed a more or less concrete right to "speak for" (i.e. to be consulted in important decisions regarding) all of the land of his father. Of course, as argued in great detail by Bamford (1997), inheritance is not simply a matter of birthright, but something a person must earn overtime by respecting and assisting his father and other kin, who will pass their skills and ancestral stories to him. In turn, this creates a situation of potential competition and conflict between a set of siblings, and even of parallel cousins, and means that at times a younger son, a cousin, a distant relative, or even someone not directly related to a given man can end up inheriting his magic, wealth, and land at the expense of other potential heirs. Furthermore, while landownership was transmitted patrilineally, women maintained residual rights to their fathers' land, which could be used by them, their husbands and their children in cases of need. In addition, the patrilineality of Hamtai-Anga landownership is further qualified by a strong principle according to which maternal kin and affines "must be remembered", which, in other words, means that use-rights to land should be given them in case they should request them (cf. Bamford 1997: 60-61; Burton 2001).

[81] As already briefly discussed, heavy male involvement in gold extraction has led to a readjustment of this established gendered organisation of gardening activities in the Kaindi area, so that women are often required to take on tasks which were traditionally a male prerogative while simultaneously absolving their own customary duties.

of trees, the clearing and firing of the underbrush, the construction of support poles for sugarcane and banana plants, the building of fences, and the planting of cordylines (tangets)[82] and stakes that serve as boundary markers between the gardens. Despite such heavy male involvement in the initial phases of gardening, it is the women who undertake most day-to-day agricultural duties. As a matter of fact, not only do they take care of the planting and daily tending of garden crops, but they are also largely responsible for digging them out of the ground when ready and transporting them back to the home for their family to consume (ibid, and Blackwood 1978: 32).

Given what has just been said, it is clear that, among the Hamtai, the married couple constitutes the most salient productive unit in the field of subsistence gardening.[83] Furthermore, as suggested by Bamford (1997: 62-3; 1998b: 34), the Hamtai garden itself represents an objectification of the marital relation of which it is the product. Hence, just as marriage joins male and female together as husband and wife, so must a garden contain a balanced combination of male and female crops, that is of specific cultivars which, for morphological, mythological, or any other such reason, are deemed to be "like men" or "like women", and to do best under the administration of one or the other of the two genders (ibid, also see Herdt 1994 [1981]: 79-84, 1987: 19). What is more, a well planted and productive garden is in and of itself a visible symbol of a healthy marriage, just as a poor one reflects (and can lead to) conflict and strain between husband and wife (or wives).

In Hamtai as in other Anga cultures, the link between married couples and gardens is so strong that the productive field of subsistence gardening is conceptualised and talked about in terms of human reproduction, and vice versa. Among the Yagwoia, for instance, conception is referred to as an act of "planting"

---

[82] Various kinds of Palm Lilly or *Cordyline Fruticosa*. Found throughout the Pacific, this shrub grows to a height of approximately 4 metres and has a slender stalk and elongated leaves which vary in colour from a yellowish-green to maroon (Bamford 1997: 79, Note 22).

[83] As noted by Bamford (1997: 62, Note 10), a woman could also garden with and for her father, brother, or any other male relative who could obtain no such help from a spouse (for instance because of divorce or death). This, however, tended to be a temporary situation rather than the norm, as widowers or divorcees would almost always remarry, thus reinstating the normal condition in which a heterosexual couple becomes the motor of subsistence production.

by the father into the mother's womb (Mimica 1981: 43, 88, 156, 1991: 83), and sex and gardening are regarded as analogous acts entailing the draining of bodily substance and energy from a man and a woman to produce, in the first instance, a child, and the second, consumable food (Mimica 1981: 42). In a similar vein, my consultants routinely described the male and female owners of a garden as, respectively, the "father" and "mother of the garden" (papa and mama bilong gaden), and referred to the crops it contained as their "children" (pikinini) (cf. Herdt 1994 [1981]: 79).

Nevertheless, while subsistence farming is predicated on cooperation between the sexes, and more specifically between husband and wife, and is generally conceptualised in terms of heterosexual reproduction, gardens are viewed first and foremost as feminine spaces, and gardening remains above all a womanly activity (cf. Bamford 1997: 119; Bonnemère 1996: 196; and Herdt 1994 [1981]; 1987: 18-9; Stolpe 2003). Thus in both everyday discourse and myth, it is women, not men, who are depicted as the ultimate gardeners, and whose responsibility it is to make sure that their husbands never "go hungry".

In effect, this makes the flow of garden food from a wife to a husband essential to, if not outright synonymous with, the conjugal relationship and a woman's role and status within it. Thus, to be known as a "gutpela meri", that is both a "good wife" and, more broadly, a "good woman", a woman must show not just her obedience and dedication to her husband, but also her worth as a gardener and a food provider. Conversely, if a husband is, for whatever reason, unhappy with his wife, he will often make this known by criticising her skills as a gardener[84] (cf. Bamford 1997: 62).

---

[84] Similarly, in the few instances of courtship I had occasion to observe first hand, gifts of garden food represented a common way for a girl to demonstrate her affection for, and commitment to, a certain suitor. Conversely, the receiving youth would often comment on the quality of the given crops and/or the care with which they had been dug out, washed, and transported as a sign that the giver was or was not "good wife material". In turn, this suggests that the strict link between sex/love and food giving that characterises spouse to spouse relations is actually not strictly confined to the sphere of marriage, but is rather intrinsic to all forms of Hamtai-Anga courtship and coupledom.

9- Mining as a male sphere of production

As is the case with gardening, mining land in Kaindi is usually divided between a man's sons and worked independently by each separate brother (and, if he has any, his hired workers, who are often themselves more or less distant agnates, cognates and affines). Even when a group of siblings work a same area, they tend to use separate dishes or boxes and to retain their separate findings. Nevertheless, if the deposit being worked belongs to just one of the brothers, most of the extracted gold will be retained by him, the other siblings receiving but a smaller portion as compensation for their labour. In addition, each brother is generally expected to stick to his own portion of land or, if allowed to work independently in one of his siblings' area, to pay some compensation to his host, with failure (real or suspected) to abide either principle being a common cause of fraternal conflict.

In contrast to gardening, however, mining is not predicated on strict cooperation between the sexes, but is regarded as a quintessentially if not exclusively masculine sphere of production. Of course, this does not mean that women are altogether absent from the mining scene. On the contrary, females of all ages are found mining alluvial and vein gold alike, feeding gravel into sluice boxes, digging and crushing gold stones, and panning, amalgamating, and even retorting and selling the gold they extract. On average, however, much fewer women than men take a direct involvement in alluvial mining, and fewer still in the more financially rewarding but harder and more dangerous world of hard-rock mining. In addition, even when women do mine, they tend to work in conjunction with and, more often than not, in a subordinate position to, their husbands, fathers, brothers or other male relatives rather than to operate independently or with all female relatives and companions.

Elsewhere (see Moretti 2006b) I have discussed in some detail the complex series of economic, social, legal, historical, and ideological reasons behind this imbalance, as well as the ways this has changed over the decades spanning from the arrival of the first Anga labourers in Kaindi to the present. For my present purpose, however, I wish to focus specifically on the main cultural

logics behind the gendering of mining products, spaces and activities, and on how these relate to ideas pertaining to more established modes of human action and production.

To begin with pollution beliefs, in Kaindi as in other parts of PNG and in many other world regions (see, amongst others, Biersack 1999; Clark 1993; Ryan 1991: 52; Hinton, Veiga and Beinhoff 2003; MMSD 2002), women are regarded as dangerous beings whose presence (particularly but not only around and during menstruation) in the mines causes the gold to "hide" deep underground where it cannot be reached, and/or precipitates sudden flooding, landslides, and other potentially fatal accidents. What is more, the threat of female pollution is not confined to the physical presence of women within the mines, but can extend to any male miner who has had recent sexual intercourse with them. In accordance with this, miners known to be inveterate "womanisers" are deemed less likely to find gold and to be at greater risk from mining accidents than those with more regimented sex-lives. Indeed, some of my informants argued that even intercourse with one's own wife was potentially dangerous and that it should be avoided when preparing to locate a new deposit or if one hoped to make a big find in the immediate future. For this same reason, young, "pure", unmarried men are believed to be better at finding and exploiting gold than their older counterparts, who have already been "contaminated" by female pollution.

Apart from pollution beliefs, mining is seen as an intrinsically male activity because of the hardships and dangers that it entails. Hence, in everyday discourse, both men and women argue that, just like customarily male chores such as building fences, erecting houses, and felling or climbing trees to open new gardens or collect nuts and fruits from their top, mining requires a level of strength (*yangamaka*) that women do not possess, and that for this reason it can only be carried out "properly" by the men. Furthermore, like traditional masculine enterprises such as warfare and hunting, in which one had to face the threats of battle, ambushes, and the invisible attacks of enemy sorcerers and of the forest spirits, gold extraction presents the miners with great physical and spiritual dangers- such as, to name a few, falling off the slippery cliffs on which it often takes place, or being buried by a collapsing tunnel or landslide, carried away and

drowned by sudden flooding, or made ill by a local masalai[85]- and as such it is considered a pursuit better left to the men.

In sum, therefore, the Hamtai of Kaindi believe that women should be kept out of mining on the double basis that: a) the mines need to be protected from their polluting effects, and b) the women themselves must be kept safe from the dangers of the mines. When all this is taken into account, the question arises as to why garden foods and gardens, which, as has been argued above, are ultimately female products and spaces belonging to a mode of production predicated upon cooperation between married couples, should be such common oneiric metaphors for gold and the mines, which, on the contrary, are held to be the product and theatres of a quintessentially masculine form of production from which women should ideally be barred.

As we considered above, my informants saw certain basic similarities between gold, garden food, and food more generally on the one hand, and between gardens and mines as sources of sustenance on the other. In addition to this, I myself pointed out some basic correspondences between the main techniques and tools used in these two spheres of production. On this basis, one could simply argue that gardening is *similar enough* to mining to represent a good source domain for it in the dreams of the miners, *despite* the crucial differences that separate them.

As recognised by Sapir (1977; cf. Wagner 1972: 173), though, the power of tropes derives precisely from the fact that they juxtapose things that are at once similar and dissimilar, because the dissonance between metaphorical terms confers new meaning to both of them and reveals just as much, if indeed not more, about their respective natures and overall relationship than do their shared commonalities. In accordance with this view, I will now proceed to demonstrate that garden food, gardens, and gardening make good oneiric symbols for gold, gold mines, and mining not *despite*, but precisely *because* of the contrasting gender identities and relationships which these two sets of products, spaces, and productive fields would at first appear to embody.

---

[85] The word masalai is a pidgin term commonly used to indicate spirits that inhabit rocks, streams, trees, and other such natural features.

10- Expanding the metaphor: mining as conjugal nexus

In the five "gold dream" narratives we have considered so far, the dreamers gaze upon some unattended garden or isolated cultivar to which they help themselves of their own accord. In many other oneiric tales, though, the situation is rather more complex. Thus Hananteo, who was the eldest son of a small leaseholder who had moved to Kaindi from the Upper Watut as a young man, once reported the following dream.

Dream 9

Some time ago I fell asleep and I saw a dream about a woman. She was one of us, a Kukukuku [...]. All right, she came to me and said; "Hananteo, I have plenty of taro, let's go dig some up!" She spoke thus and we went to her garden and cleared some of the weeds and rubbish away, then we dug out some tubers. We took so much food that we filled all our bilum (netbags) and had to carry some in our arms. The two of us carried the food back to my house, then the morning came and my dream came to an end. When I woke up I went straight to the place I had dreamt of and saw that it was full of gold! This gold I saw was not hidden in the ground, no, it was out in the open, and I took it and sold it for a lot of money.

Similarly, Jeremaia, a middle-aged man who, like his father before him, spent much of his life working for one of Kaindi's most established Hamtai leaseholders, told me the following story.

Dream 10

One night I saw a dream about taro. I saw a garden full of taro. There was a white woman there. When she saw me she said, "Look at this taro. I planted and grew it for you, come and take some!" In the morning I woke up very early and made my way to my workings. I was walking at the base of a steep cliff. As I passed underneath a (safety) bench we had cut there a long time ago (when Jeremaia's employer was working jointly with a Wau-based expatriate machine-owner) a snake fell off it and landed very close to my feet. When I saw it I stopped. I wasn't scared of it or anything; I just wanted it to go away. I waited until the snake moved away, and then I picked up my shovel and began to dig the spot where it had landed. After a bit I uncovered a vein. I went back to call the rest of the boys and we mined it together. We filled two and a half drums with gold (concentrate), then we spun and we cooked it and we made a lot of money from it, like a million (kina) or more.

As was the case with Dreams 4-8, in both of these accounts the discovery and appropriation of garden food stands as a metaphor for an imminent gold find. Nevertheless, while in the earlier oneiric imagery a female presence was only implied in the appearance of garden food, which, as we saw in the previous sections, is most closely associated with the work of women, in these two dreams that presence and this cultural association are made fully explicit by the fact that the dreamers are taken to the gardens by the woman who planted and tended them. In addition to this, the two dreams contain certain references to the dominant Hamtai understanding of gardens and garden food as the products of a quasi-reproductive cooperative labour between husbands and wives, and the giving of garden food by a woman to her man as an intrinsic part of marital relations.

Thus, in Dream 9, Hananteo encounters a woman who woos him with the promise of food. Having followed her to a garden, he helps to clear away some of its "rubbish", an act at once reminiscent of the agricultural collaboration a man might offer his wife, and premonitory of the fact that Hananteo will find gold that's not still hidden underground, but already "out in the open". After that and, one might presume, in return for that, he is given some food by the woman, who then follows him back to his house, a scene reminiscent at once of a new bride moving to her spouse's home in accordance with the predominant rule of patri-virilocal residence, and of an established wife digging out crops for her own and her husband's consumption and walking back home with him at the end of a tour of gardening duty. Similarly, in Dream narrative 10, Jeremaia is given food by a woman who states to have planted and grown it for him, just like a wife would plant for and offer food to her husband.

In this type of oneiric imagery, garden food still stands for gold. The dreaming miner himself, however, is no longer cast as an atypical "bachelor gardener", but as one half of a heterosexual productive couple, or, as my informants would put it, as the "father of the garden" to an oneiric "mother of the garden". What is more, the gold itself represents, just like the crops that symbolise it, at once the product of a quasi-sexual cooperative effort between a man and a woman, and an item of conjugal exchange that is given to the miner by his "dream

wife". At this stage, though, one may still wonder whether, on the strict basis of these two dream accounts, we can actually be certain that dreamer and dream woman constitute not just a productive but, as our understanding of Hamtai models of gardening would lead us to expect, also a reproductive heterosexual couple or, to put it plainly, either lovers or spouses.

An opening nod in support of this hypothesis comes from Hamtai-Anga dream theory. Indeed, as many of my informants explained, dreams involving an offer of garden food from a woman can be interpreted both as omens of an imminent gold find, or as signs that the woman in question wants to marry or have a liaison with the dreamer, thus indicating a link between marriage, heterosexual production, reproduction, and mining. What is more, the very content of the "gold dreams" themselves points more or less openly in this direction.

A first example of this came from Aisaia. At the time of fieldwork, Aisaia was in his mid-twenties. The younger son of a long-term Kaindi leaseholder from the Aseki area, he had married a few years before and had a small son and a daughter of his own. With help from his father and elder brother, he had received a better than average education at a religious school in Wau town. When he had completed his studies, he had taken over a small trade-store in his residential settlement, which he still ran with his wife and some occasional assistance from two of his sisters. One sunny afternoon, as he took me around his father's lease for a tour of some tunnels and rusty machinery from the early colonial era, Aisaia told me the following "gold dream", which he had "seen" as a young man, before he got married.

Dream 11

One night I saw a dream about a white lady. She was very beautiful, with long hair and an expensive golden dress. She came to me and said, "Aisaia, I want to marry you because I love you very much." I was very scared... I told her, "No, we can't get married! You are white, you will need a lot of money to live and I don't have any. If you come here to live with me, where will I find all the money you'll want from me?" I explained these things to her but she answered, "No, you don't understand, I don't want to marry you for your money, I want to marry you because I truly love you!" Then I said to her, "Listen, I do not need you as my wife, I cannot marry you; I will not marry you!" She listened to me and then she said, "All right

then, if you don't want to marry me I'll ask my people to plant a big garden for you. Come back to this place in six months and I'll give you all my food, then you will know that I truly love you." Ok, (in the dream) six months went by and I returned to that place. When I got there I saw a very large garden full of food. There were plenty of cucumbers, sweet potatoes, and all sorts of other things. The white lady was also in the garden. She picked so many things from the garden and she gave them to me. I took all this food and went back home, but before I could cook it and eat it I woke up.

In this as in previous dreams, the dreamer is sought by a woman who is in love with him and wants him to be her husband. When he refuses her, the woman declares that, with the help of "her people" (that is her own kin and Aisaia's prospective oneiric affines), she will plant a garden for him, the contents of which she will offer as a substitute for and a proof of her love, presumably in the hope that this may sway him to change his mind and to marry her, as indeed would be the case in an actual situation of courtship (see Note 84).

In this tale, then, we find a close indication that the link Hamtai culture posits between agricultural production and sexual reproduction applies as much to the world of dreams as it does to waking life. In turn, this lends credence to our supposition that previous dreams about gardens and garden food incorporate feminine symbols framed in a broader perspective of heterosexual relations. If this were not convincing enough, though, many other dream narratives go even further, turning the quasi-sexual imagery of productive cooperation and food exchange between dreamers and dream women into an explicitly sexual one. Jop, for example, who was the son of a now deceased Watut leaseholder from a junior non-Anga wife, told me the following narrative:

Dream 12

One night I saw a dream about a young white lady. She came to me and offered to have sex with me... ah, to marry me (embarrassed laugh). When I woke up I went to the place where I had met her (in the dream) and started to mine, and soon I found a big rich gold vein there!

Similarly, Timoti, a middle-aged Hamtai alluvial tributer to a wealthy Watut leaseholder, narrated this story during one of my visits to his riverain tribute:

Dream 13

Once I dreamt about a young woman. She was standing on this very riverbank, and she was stark naked. She was one of our women, but her skin was not black, it was more golden-red. All right, I played (i.e. had sex) with her and when I finished I woke up. Later that morning I went to that place by the river (the one he had dreamt about) and I put down my sluice box. I took my spade, dug the gravel from the water and filled my box with it, over and over again. As I was doing this I noticed something shining inside the water. I searched and I picked the thing out, and it was a very large gold stone, half-hidden in the dirt.

Just like Dreams 9-11, both of these tales feature an encounter between the dreamer and a female figure. Nevertheless, whereas in these previous narratives "intercourse" between the two parties was confined to agricultural cooperation and food giving, in these last two dreams it takes on the same overtly sexual character first found in Dreams 1-3. In turn, this novel oneiric imagery presents us with a new set of metaphors.

Thus, in Dream 13 Timoti describes his oneiric partner as "one of our women", that is a Hamtai woman, but qualifies this remark by saying that she had "golden-red skin". In the Hamtai language, white men (masta or waitman) and women (misis or waitpela meri) are called respectively *hamäto* and *hamäti* or, literally, "red men" and "red women". In this light, it is likely that what Timoti meant to say was that the woman he saw in his dream looked like a Hamtai, but had white skin like a European woman. Indeed, the fact that the women of Dreams 1-3 and Dreams 7-9 were also described as "white" makes this a strong possibility.

Now, the reasons why many of the women dreamt by the miners are described as "European", or "European-looking", are many and complex. As argued in Section 5, there is what Freud (1994 [1900]) defined as "displacement", or the process whereby the deeper, more threatening, or more conflictive desires and feelings of a dream are masked through transferral onto more trivial elements.

In this sense, the frequent characterisation of dreamed women as "unknown" Europeans could be a means of masking the more problematic "true" identity of the object of one's desires. Furthermore, for a variety of reasons already mentioned in Section 5, many Hamtai men consider white women the ultimate "object of sexual desire".

In addition to this, though, the common characterization of "gold dream" figures as Europeans relates to the latter's close connection and identification with the auriferous deposits which are the subject of these oneiric experiences. Thus, as my informants routinely commented, their own ancestors didn't know how to prospect for gold or how to extract it from the ground. If they chanced upon some gold nugget brought to the surface by a river, the rain, or a telluric movement, the tumbuna would be attracted to its shininess and would pick it up so that it could be placed near the hearth, where it would reflect and intensify the light and heat of the fire, or so that it could be displayed by one's person at daybreak, when it would reflect and enhance the reinvigorating warmth of the first sunrays that filtered through the clouds and the thick morning fog. Aside from this, they had no use for this now most precious of metals. Indeed, as I was repeatedly told, it was only the Europeans who truly "knew" the gold and possessed the necessary skills to obtain it and use it. Without them, the Hamtai would still be innocent of gold. What is more, as my consultants duly noted, without the masta they would still have no means of "consuming" gold, which, if it is to be turned into usable money and goods, must still be exchanged all the way to the outside world of the waitman.

Aside from being the first repositories of its knowledge and its ultimate consumers, Europeans are also linked to gold by the general colour of their skins and the "shiny" character that the Hamtai attribute to it. Thus, as we saw in relation to the recurrence of specific crops in Kaindi dreaming, the colours red and white, which, as was mentioned above, are those my informants used to describe a European woman in Tok Ples (vernacular) and Tok Pisin (pidgin), are very important and closely associated with gold-bearing grounds and gold itself in everyday mining discourse and practice. Returning to Dream 13, then, we can now see how, instead of keeping this cutaneous homology between gold and

Europeans implicit, as was the case in Dreams 1-3 and 7-9, Timoti brought it to the fore by stressing that the colour of the woman's skin was "golden red" or, as he put it in pidgin, "ret olsem gol" (lit. "red like gold"). On the basis of this association we can infer that, in these more sexually explicit dreams, gold is cast metaphorically as a woman and, more specifically, as a wife, with whom the husband-miner has sexual intercourse (gold = woman), and that mining itself is viewed as an act of heterosexual and, one may add, conjugal, reproduction (mining = sex/ reproduction). In support of this view, I can state that, in many an interview and casual conversation, my consultants openly expressed the first of these metaphors by asserting that: "gold is like a woman, and it wants a man, *a husband*, to work it" (see Moretti 2006b).

As for the tropic link between mining and reproduction, this is reaffirmed and extended by another type of recurrent "gold dream". Let us consider, for instance, a dream narrated by Martin. In his early thirties at the time of my second fieldwork, Martin was the son of an Aseki migrant and a long-term tributer for Edie Creek Mining. During one of the many nights I spent drinking tea and "telling stories" (stori) with him and his family, the man related a dream in which he had seen a very large sweet potato growing in the ground, and following which he had struck a very rich gold vein. After he had finished this first tale, he continued thus:

Dream 14

All right, another time I saw a dream about a white woman. This white woman came to me. She carried a white baby in her arms. She said, "this is your son, I have come to present him to you." In the morning I woke up and I went to the place where I had seen her (in my dream). There I saw a bird flying around some nearby trees, so I knew that the dream I had seen was a true one.

Very similar to this was a dream from another miner called Jems. The first-born son of one of the first Hamtai to have migrated to Kaindi, the man looked to be in his early forties at the time of fieldwork. Short and powerfully built, Jems sported tattoos acquired during a spell in prison following the

(according to him) accidental death of his first wife[86] in a domestic row. Unlike my most regular informants, Jems resided relatively far from the settlement where I lived. His main house was on the opposite side of Kaindi and the workings where he spent much of his time were located on slippery, heavily forested slopes which, even months into fieldwork, I found very hard to negotiate. As a result, I saw him only sparsely, even though he proved to be an eager, intelligent, and extremely patient interlocutor on each one of our meetings. During one of these rare interviews, Jems narrated the following story.

Dream 15

One night I was asleep in my house when I saw a dream. I saw a white baby lying on a white sheet. The baby was crying and there was no-one around to take care of it. At one point the baby rolled out of the sheet and onto the ground. I walked to where it had come to rest and I picked it up. When it was in my arms I thought, "Alright, this baby is mine now", so I took it inside my house and I gave it to my wife. In the morning I woke up real early and I went to my workings. I didn't tell anything of my dream to my wife or to anyone else. When I arrived to the place where I had been working the day before, I saw that the rain that had fallen through the night had broken the ground and caused a landslide. When I saw that I thought to myself, the white sheet in the dream, it must have been this piece of land, and the baby that rolled off it, it must have been some gold carried away in the landslide. I thought like that and I used my right foot to brush some of the surface ground off the top of the landslide. I moved only a little bit of dirt, but underneath it I saw some very yellow sand. I panned it and found it was full of gold, so I walked back to my house to fetch my tools and my wife, and then I went back there and worked all day long. I worked and worked until I filled four buckets with gold sand. After that I moved down a bit and I cleared some more ground and found another five buckets of gold. And now, now I am still digging in that very place, although I have not found as much gold there as I used to in the early days.

[86] After the death of his first wife Jems had married another woman, with whom he had had more children and with whom he was living at the time of fieldwork.

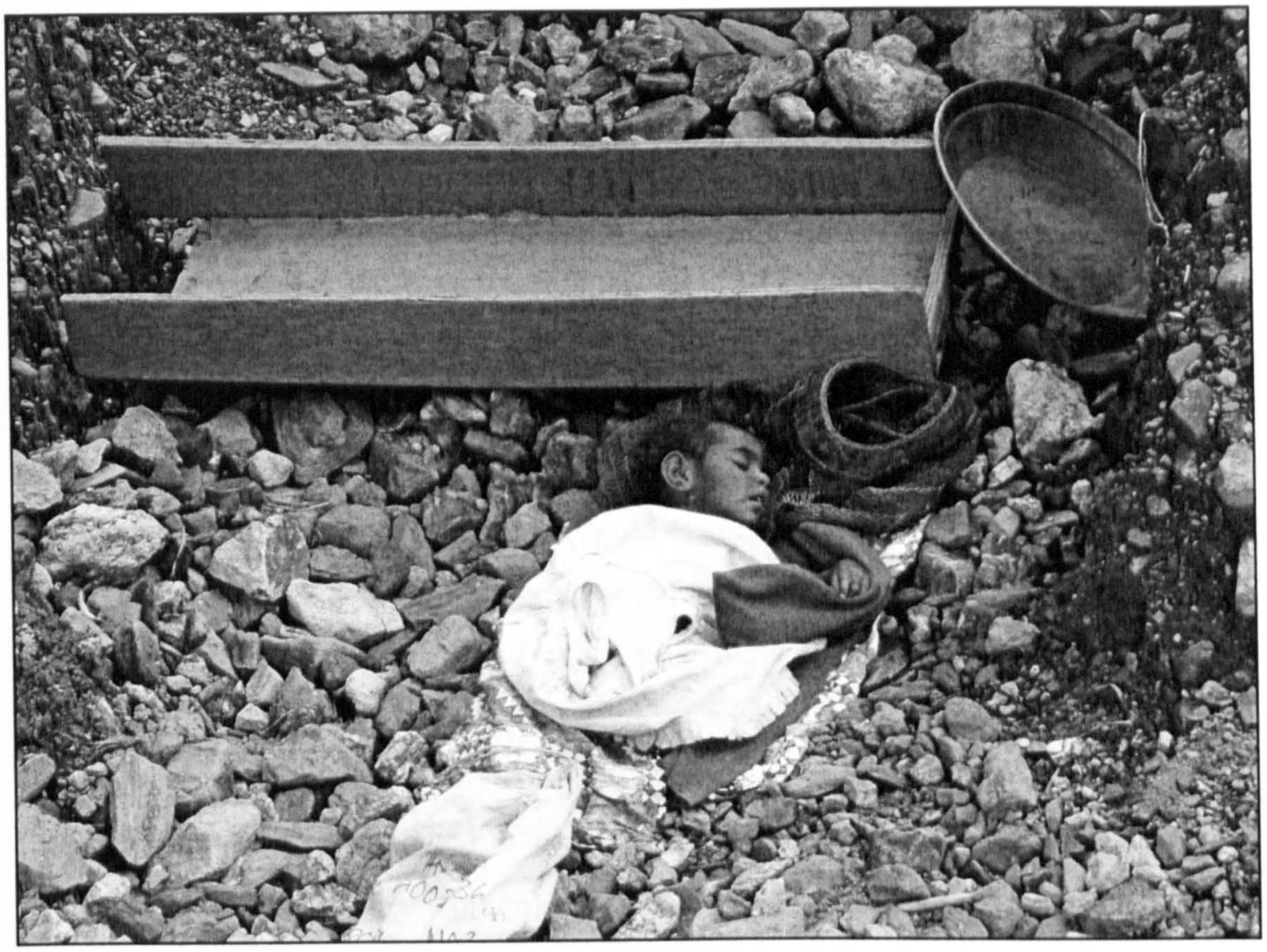

Figure 20. This photo shows a baby that was left to sleep beside a sluice box and a gold pan whilst its mother mined alluvials a few steps away. As well as capturing a reality in which female miners are often forced to take their children along with them to the mines, this image is also evocative of the oneiric analogy between children and minerals that we have just encountered in Dreams 14 and 15.

In these last two accounts, the discovery or the bequest of an infant portends an imminent gold find. In its turn, this implies a metaphorical juxtaposition of gold and babies (gold = human child), which, in both cases, is underlain by the whiteness or "redness" of the babies' skin and, in Dream 15, is drawn even more clearly by Jems' identification of the "rolling infant" with the gold deposit exposed by a landslide. In Dream 14, a female figure offers a son/gold to the dreamer, who she clearly identifies as the baby's father- an image reminiscent of a wife presenting a newborn child to her husband after a secluded birth (cf. Bamford 1997: 150). Thus, if we consider children to be, among others, the objectification of sexual relations between men and women, this type of imagery gives further validation to our earlier suggestion that Hamtai "gold dreaming" posits a metaphorical association between mining and reproduction

(mining = sex/reproduction). In the second narrative, on the other hand, the dreamer finds a baby left unattended and uncared for in the forest, which he decides to pick up and "adopt" as his own child. Immediately after it is found, though, the child is taken home and given to the dreamer's wife, so that even in this case the symbolic figure of the infant/gold is firmly placed in the context of a productive and reproductive conjugal bond.

Taken as a whole, then, Dreams 1-15 contain a complex network of interrelated tropes. To begin with gold itself, the mineral is likened to garden crops, women, and/or human children (gold = garden food = women = children). Thus gold is akin to garden food (gold = garden food) in appearance, both grow from the ground and are extracted with similar tools and techniques, they can be, and indeed, in Kaindi, must be, exchanged for each other, and they are the object of similar desires because, as my friends often asserted, the "hunger" a miner feels for gold is like that a famished man suffers for food. Conversely, garden food is like women (garden food = women) because it is first and foremost the product of female work, and because it constitutes a quintessentially female contribution to the household economy.

At the same time, gold is like a woman (gold = woman) because, in the world of the miners, the one is essential to "capturing" and retaining the other. Thus, in Hamtai custom, most marriages required the payment of bridewealth (*hiyanqa*), which would often stretch over prolonged periods of time (cf. Bamford 1997: 66-7; 117; 1998b; Blackwood 1978: 74-6; 111-12; and, for other Anga groups, Bonnemère 1993; 1996: 80-3; 103-17; Herdt 1981: 39-43; 175-77; 1987: 32-3; 163; Mimica 1988: 21-2). Before contact, the objects given in marriage payments included the meat of domestic and wild pigs, cassowary, wallaby, possum, and other animals; various produce from the garden; pandanus nuts from the forest; parcels of vegetable salt;[87] stone adzes (both of the kind used in everyday labour and a more refined, "ceremonial" variety that was usually kept

[87] Like other Anga linguistic groups, the Hamtai produce to this day a "traditional" kind of salt (*häka* or tumbuna sol) from the ashes of a variety of different plants. For more information on this product, its manufacturing techniques, and its uses see, among others, Bamford (1997); Blackwood (1939b; 1978: 40-41); Bjerre (1958 [1956]: 91-4); Burton (2001, Working Paper 8); Fetchko (1972); Godelier (1969, 1986); Lemonnier (1990); and Mimica (1981, 1991).

wrapped up in leaves as a valuable); bark capes; and a series of valuables such as animal and human teeth and bones, small cowries (*Cypraea annulus*), and large shells (*Amphiperas [Ovula] ovum*). Later on, additional items such as rice, tinned meat, tinned fish, western clothes, steel tools, and even cash were added to this list (cf. Bamford [1997: 66-7] and Blackwood [1950: 20-21, 54; 1978: 50-51, 74-5, 111]).

As for present-day Kaindi, my census of the three residential areas within the camp where I resided indicated that only 38% of marriages had actually involved the payment of bridewealth. Nevertheless, all of these marriages had entailed the transfer of money and/or store-bought items that could be obtained only through cash. In turn, as most of the payers had won the cash they had needed for these transactions from mining, this means that gold is a very important element in the process of obtaining a wife.

Beside the narrow issue of bridewealth, gold is essential to the forging of both casual and enduring relations with women in many other ways. In the crudest of these, (married as well as celibate) miners can, and not uncommonly do, use their gold earnings to obtain sexual services from willing women in Kaindi, Wau and Bulolo, or Lae. Although in some cases these are "professional" prostitutes who make a living from the trading of sex, in many others they are simply "normal" women in search of a good night at a disco, a bar, a gambling den, or a hotel room, and/or won over by a gift of cash, clothes, or food. In more general terms, gold offers the means to court women through gifts, making one more attractive as a prospective husband.

Even after marriage, gold enables one to buy the materials needed to build a house,[88] to secure the tools necessary for married life, and to provide for the needs of one's wife and children. In its turn, this means that in Kaindi being a good miner is as essential to a man's masculinity and his ability to win and retain a wife as being a good hunter was in more "traditional" settings (cf. Herdt 2006 for a similar argument about money and masculinity). Apart from the fact that the

---

[88] As already mentioned in Note 42, in Kaindi even "bush houses" tend to be built from items that must be purchased through cash, such as timber, corrugated iron, nails, and kunai grass, which must be acquired and transported from the lower altitudes of the Wau valley.

one is exchangeable for the other, however, there is another crucial similarity between women and gold. Indeed, as a friend once poignantly put it:

> This thing (gold) is no good to us when it comes out of the ground. When we hold this gold in our hands, what use is it to us? We can't eat it ourselves, and what good is it to keep? We have no use for it. It is only when we sell it that we get food and all the other things that we need.

In a sense, then, gold and women are similar because to hold on to the one is "mad and unproductive", just as keeping one's close female relatives to oneself either blocks reproduction or, worse still, results in incestuous relations (or, as my consultants disparagingly put it: "eating one's own blood" [*nta hinge'ä aqaväka qani*]) which, according to my informants, will inevitably lead to the madness, illness, and even death of those involved and their progeny.

In addition, gold is said to be like a woman and women like gold due to the deep desires of which both are said to be the objects and the subjects (cf. Clark 1993). In fact, as an old man said while explaining the meanings of the imagery of one of his own "gold dreams": "men love gold, just like they love a woman; this thing they feel for the one and the other is one and the same." In a similar vein, gold, garden food, and women (gold = garden food = women) are linked to each other in a threefold manner; that is: firstly, as we have already seen, gold can be exchanged both for food and for women; secondly, when employed to acquire and sustain a wife, gold will also provide female labour and thus, indirectly, food; and thirdly, gold, food, and women prompt similar longings in the minds and bodies of men or, to quote one of my informants: "gold... this desire we feel for it... when a man sees gold it is like the hunger you feel for food, or like the love that you feel for a woman."[89]

---

[89] The close association that Hamtai and wider Anga culture posits between eating, sex, and eroticism has already been hinted by the role we found food-giving to play in marital relations and courtship, and has been considered in greater detail in the works of Bamford (1997: 193), Herdt (1994 [1981]: 82, 353; Herdt and Stoller 1990: 60) and Mimica (1988: 98). To offer just one example, Herdt (1994 [1981]: 353) reports that, in Sambia discourse, "'being able to fornicate women' is likened to 'penis food'".

Finally, garden crops and children (garden crops = children) are alike because, among others, both are the objectification of heterosexual productive and reproductive efforts, and, from a male perspective, both are obtained from women. In turn, this means that, as an essential resource in securing the productive and sexual services of women, gold is also strictly related to both crops and children. Thus, as we've already seen, in the markets of Kaindi, Wau, Bulolo, and Lae, money derived from this mineral can be directly exchanged for garden food. What is more, even within mining households with land and spare labour to invest in subsistence gardening, gold constitutes a largely male contribution to the domestic economy, and, as such, it represents (just as game did and continues to do in less monetized Hamtai and wider Anga settings [cf. Bamford 1997: 118-19; Godelier 1986: 12-13; and Herdt 1994 [1981]: 74, 138-39) a substance directly complementary and equivalent to garden food within the sphere of conjugal production, exchange and consumption.

As for the tropic equation of children with gold (children = gold), in Hamtai custom the payment of bridewealth to a wife to be and her relatives was traditionally regarded not so much as "compensation" for a woman's already existent reproductive ability but, rather, as a necessary precondition to the activation of this capacity (cf. Bamford 1997: 118-22, 1998a, 1998b). In effect, this means that the game and traditional wealth given in marriage transactions were not only means of acquiring a woman and, through her, children, but, in a sense, were themselves both "like" fertile women and "like" the children which, through the female bodies that had consumed them and which they had helped to make fecund, they would effectively become. In turn, in present-day Kaindi where, as we have already explained, miners obtain their bridewealth from gold, this means that this mineral itself is, just like the game and traditional wealth of which it is the substitute, both "like" a reproductively able woman (gold = woman) and "like" a child.

What is more, in Hamtai custom, the father of a newborn baby had to hunt for game such as tree kangaroos, opossums, rats, or cockatoos to give to his wife and her sisters (Blackwood 1978: 115). This was done for two purposes; that is, firstly, to replenish the bodily substance and strength that the baby had sapped

from the mother during gestation and birth, and, secondly, to give her body sufficient strength to sustain the child's post-natal development. Beyond this, children of both genders were believed to grow and develop as a result of, among others, the food they were fed by their parents. In this sense, being a good hunter and food provider was an essential component of fatherhood because the food, and in particular the game meat, that one provided was crucial in growing healthy and strong children.[90]

In Kaindi, on the other hand, it is success as a miner that allows a man to be a good father and take proper care of his children. With gold, a man can buy nutritious foods such as meat, fish, and condensed or fresh milk to give to his pregnant wife and his children, pay hospital fees and buy medicines when they are sick, and meet the school fees necessary to provide his children with a good education. As a result, this means that, like game and customary valuables did and continue to do in less monetised areas, in this setting gold constitutes a crucial resource that is embodied by and becomes constitutive of, and thus interchangeable with, both women and (both directly by means of food, medicine, etc; and indirectly by means of their mothers' bodies and bodily substances) children (gold = women = children).

In addition to this, there is a final reason for the dual metaphoric equation of gold with both women and children (gold = women = children); that is the identity which Hamtai culture and sociality posits between small children and mothers (women = children). Indeed, as argued by Bamford (1997; 1998a; 2004), the Hamtai do not see birth as a final "detachment" of mother and children into two separate entities. Rather, both male and female children are considered to be contained within, and thus, in a way, to be one and the same with, their mothers for a number of years after this event, and it is only through initiation for boys, and the gradual consumption of bridewealth for girls, that children are finally "detached" from their mothers and given a separate (though still related) identity

---

[90] For example, an informant who had grown in an isolated village in the Aseki area expressed this link by commenting: "My father was a very good hunter, one of the best in my place. Everyday he would go out and come back with something. We all had a lot of meat, and that is why all of my father's children are so big and strong. Look at me, I am tall and strong, and so are all of my brothers and sisters. If your father is a good hunter, you will grow fast and strong, but if he is a rubbish hunter, you will stay little or get sick and die!"

and potential for agency. In a way, this equivalence of mothers and children is even reflected in the Hamtai kinship terminology. In fact, though a man distinguishes between his wife (*qäpai*) and his children (*ime'ä*), his own mother and father will use the same kinship terms normally used in a reciprocal fashion between alternate generations (G+1 and G-1) (i.e. *äto* if male and *äti* if female) to indicate both his children and his wife, just as his wife will call her father and mother-in-law with these reciprocal terms, thus indicating that, from the perspective of the HF and HM, a woman is effectively assimilated to her children, and vice versa (cf. Bamford 1997).

If we now move to the spatial realm of the mines, we find that, as productive and reproductive spaces and entities, these are also metaphorically juxtaposed to gardens, women and children (mines = gardens = women = children). Thus mines are like gardens (mines = gardens) because they are worked in similar manners, and are akin to each other and to women because, like women, they both provide sustenance to the miners. Similarly, gardens are associated with women, firstly, because they are quintessentially female spaces; secondly, because, as Herdt (2006: 146) put it for the Sambia, "a man without a woman is a man without a garden"; and finally, because both gardens and women are envisioned as cool and damp "containers" which, with the assistance of masculine productive and reproductive inputs, will generate offspring, intended both as crops and as children (cf. Herdt 1994 [1981]: 78-9, 195). What is more, gardens are not only theatres of quasi-reproductive modes of production but can also be "actual" erotic and reproductive spaces because, among the Hamtai as with the Sambia:[91] "a proverbial fantasy- temptation- among men is to find and ravish a woman willing and alone in an isolated garden" (Herdt 1994 [1981]: 344). Finally, gardens and children (gardens = children) are alike because, as already seen in relation to garden crops, both are the objectification of the productive and reproductive endeavours of married couples conceptualised as husbands and wives and "fathers" and "mothers of the gardens".

---

[91] And indeed in other parts of PNG (see, for instance, Wardlow 2004: 56).

As for the activity itself, mining is likened to gardening- a separate, quasi-sexual form of production dependent on the draining joint labour of men and women and, more specifically, of reproductively linked couples- and to sexual intercourse, particularly of the protracted[92] and "cannibalistically"[93] productive type that occurs within the conjugal bond (mining = gardening = heterosexual reproduction).

When we consider this "oneirotropic network" in its totality, therefore, we realise that the recurrence of garden foods and gardens- i.e. of primarily feminine products and spaces associated with a quintessentially heterosexual mode of production- is not an isolated oddity of Hamtai-Anga "gold dreaming". Rather, it constitutes a fitting element within a broader *system* of symbolic associations and transformations centred on a single, overarching model of mining as a set of "collaborative, procreative, and nurturing" (cf. Stewart and Strathern, A. 1999) relations akin to those subsisting in marriage, within which the miner himself assumes the mutually constitutive roles of husband, co-worker, lover, and father (intended both as "father of the garden" and genitor of human children).

11- Dream women as forest spirits

In light of the conclusions reached in the previous section of this thesis, one may well wonder why, if Hamtai culture considers mining and the mines to be quintessentially male modes and spaces of production from which women should be ideally excluded, it nonetheless models resource extraction on relations of conjugality. In order to answer this question, one must begin by considering the

---

[92] As noted by Bamford (1997: 110), the Hamtai hold that repeated acts of sexual intercourse are needed to produce a child. Similarly, my informants maintained that newcomers to the mines will not find gold immediately, because one has to work hard for a long time before the gold will show itself to him.

[93] Beyond conception, the Hamtai view gestation as a cannibalistic act of "eating", because the foetus is said to grow by feeding on the blood and milk of its mother through the umbilical cord (Bamford 1997: 128, 193; also see Bonnemère 1993, 1996: 227, 1998a, 2001; and Mimica 1981: 102-07, 1991: 81). In addition, as we have already mentioned, sex, work and intra-uterine growth are seen as similar processes in which energy and substance are drained and transferred from a body to another or from a body to the land in order to create and grow new persons and food (cf., for instance, Mimica 1981: 42).

true identity of the "oneiric wives" who haunt the dreams of the miners, wooing them with the promise of food, sex, children, and gold.

Now, as we commented in our general introduction to Hamtai-Anga dream theory, the "human" and "non-human" figures "seen" in dreams are believed to be the spiritual entities one's "disembodied spirit" (*hikoäpa*) encounters and interacts with as it wanders about during sleep. Although in other kinds of dreams- and most especially those predicting an imminent marriage or affair- one can have social and/or sexual intercourse with the *hikoäpa* of a "real", even actually known, woman, my informants maintained that the female figures seen in "gold dreaming" are never those of "actual women" (trupela meri). At times, they could *appear* as known women, but even then they were actually "non-human" spirits who had "taken the visage" (kisim pes) of familiar persons (cf. Herdt 1994 [1981]: 143). As for what kind of entities they actually were, my informants had little doubts; they were the masalai, "the people of the forest" who "look after" Kaindi's gold.[94] Keeping in mind the "real" identity of the women dreamed by the miners, we are now able to grasp the true significance of certain other recurrent features of Hamtai-Anga "gold dreaming".

To begin with, we can see a further reason for the frequent characterisation of the figures dreamed by the miners as "Europeans". As is the case in other Anga cultures and many other parts of New Guinea,[95] the forest spirits and spirit familiars that populate Hamtai dreams, waking visions, and myths are often described as having the "white (or red) skin" and the general appearance of Europeans. One of the reasons for this analogy is the fact that, thanks to what I revealed elsewhere (see Moretti 2005) to be viewed alternatively as a free gift or a treacherous and yet unredeemed theft from Akheänqa (the original "culture hero") at the time of creation, the whites are believed to possess a degree of knowledge,

---

[94] In pidgin, my informants commonly described these spirits as "masalai" and as "ol man bilong bus" (the people of the bush), "ol man i sa lukautim gol" (the people who look after the gold), or "ol man i sa lukautim dispela graun" (the people who look after this ground).

[95] See, among others, Clark (1993; 1995); Dundon (2004); Kempf and Hermann (2003); Lattas (1993); Lohmann (2000; 2003c); Mimica (2006); Nihill (1999); Schieffelin and Crittenden (1991); Stephen (1995; 1996); Stewart and Strathern, A. (2002); and Wardlow (2004).

wealth, and material and mystical power that mirrors and rivals that of the ancestors and forest spirits.

At the same time, relationships with the masta (Europeans) are characterised by the same fundamental ambivalence that, as we shall see more fully in future sections of this thesis, also colours those with the masalai of the mines. Indeed, both can yield valuable knowledge, power, and wealth but, if improperly handled, can also result in the endangerment or utter ruin of those who enter them either willingly or unwittingly. So, for example, many of my informants asserted that, in the first years of the colonial encounter, their ancestors (tumbuna, *ätosenko*) had used their powerful magic (i.e. *pä'ä* and *phänga* [Moretti 2006a]) to kill "hundreds" of Europeans and to thwart their advances into their homelands. Eventually, however, the tumbuna had become irresistibly attracted to the wonderful wealth and power of the white men, and this desire had led them to open their country to them in an attempt to establish positive relations of exchange with them. Rather than yielding the cargo they had longed for, however, the Europeans had simply taken advantage of their powers to dominate the Anga and to misappropriate their land and resources (less negative Hamtai discourses about the colonial encounter have been related and analysed in Moretti 2005). In the post-colonial present, this fundamental ambivalence about the masta survives unabated. Thus, on the one hand, local Anga miners are often keen to find white expatriates with capital, machinery, know-how, and profitable gold export licences with whom they can strike "joint mining ventures", from whom they can obtain financing, and/or to whom they can sell their minerals at higher than averages prices. On the other hand, though, they are also wary of such relationships (which, if my own observations are anything to go by, tend to have but a very brief lifespan and to end up in disaster and mutual resentment) because they are always afraid that the masta (Europeans) will deploy their resources and "superior" save (knowledge) to con them thoroughly and unashamedly out of all of their profits. On a larger scale, this fundamental ambivalence is replicated in a rich tapestry of indigenous discourses which, on the one hand, condemn the waitman (white men) for the primordial theft of the power and cargo the "culture hero" had singled out for the Anga, or at least for refusing to share them with their

Anga "brothers", as well as for having failed to develop Papua New Guinea and having stolen her resources in the colonial era, whilst on the other, claim that positive and mutually advantageous relationships with Europeans are not only possible, but necessary, and anticipate the return of the masta in the guise of "generous brothers", allies, developers, and guardians (see Moretti 2005).

Aside from their great powers and ambivalent nature, however, the Europeans also possess a "shiny" white (or red) skin that is seen by the Hamtai to have a certain intrinsic "glow" to it (cf. Allen and Frankel 1991: 101). In turn, this renders them physically akin to the forest spirits and the hunting, shamanic, and other spirit familiars[96] whose appearance in dreams as in waking life is customarily announced, accompanied, and followed by a powerful, lighting-like light, and whose figures are also said to have a generally "glowing" and "shiny" aspect to them (cf. Herdt 1989a: 115; 121, Note 7; and Mimica 2006).

Moving on to another issue, we can now also account for the common presence of water within the dreamscape of the miners. In Dream 4, for example, we encountered water in the form of rain falling over a giant tuber. In many other oneiric reports, on the other hand, water is found in the shape of rivers or creeks, particularly in association with visions of gardens and garden crops. So Aiyendapo, an old miner from the Aseki region whose house stood but a few metres above mine, related the following narrative.

Dream 16

One night I saw a dream about a place down by the river. This place I saw was full of kaukau, and the water of the river was flowing all over the sweet potatoes, washing them. In my dream I walked in the bush until I got to this place, then I saw the water washing the kaukau, which were all erect so that they were partially out of the water. All right, I saw this dream then I went down to my usual workplace and worked there for a bit. In the afternoon I decided to go to the place I had seen in my dream for a bit of prospecting. As I was digging and panning around I found a small gold vein. I dug some dirt from it and I panned it and got some gold dust, then I continued to work like that, deeper and deeper down the line, until I hit a part of it that was full of nuggets. I worked and worked that bit of ground until evening fell and it got very dark, then I went back to my house. All right, next morning I took all of my

[96] As we shall see later on, forest spirits and spirit familiars are often rather indistinct categories.

family to work there. We dug and dug together until the whole line had been cleared, and we all got our share. I got some 4,000 kina worth of gold from that vein, but others got even more, some even 16,000 or 17,000 kina in total. It is always like that, when I see dreams of kaukau, I always find gold!

Apart from their close connection with garden food, rivers and creeks are, alongside the garden, the *loci classici* of social and sexual intercourse between the miners and their dream women. In Dream 14, for example, we saw Timoti have sex with a naked young woman he encountered by a creek. A further instance of this kind of imagery came from Äimandao. A young and yet unmarried man, Äimandao was the son of a former Hamtai policeman from the Upper Watut. One day, as I stood outside my house consuming a lunch of granitic beef biscuits, I saw the youth walk down past the village on the main road to Edie Creek Mining. At my greeting, he gestured for me to get closer. When I reached him, he opened his hand to reveal a very shiny nugget he had found that very morning. Then, after a small crowd of curious onlookers had gathered around us, he related the following story:

Dream 17

Yesterday I saw a dream of a white woman... a masalai. She was sleeping by a creek and she was wearing a cloak and yellow ornaments (i.e. customary Hamtai-Anga female dressings). She talked to me and said, "I am here, tomorrow come and I will give you some gold." So this morning I went to my workplace and, when I got there, I saw a bird flying above me. I began to dig around and not long after that I found this nugget, so now I am going down to Wau to sell it.

In addition to rain, rivers and creeks, which figured in several of the accounts I collected, Jeri, a young married miner from HK3, mentioned another kind of water feature as a recurrent theme in his personal experience of "gold dreaming". During one of our interviews, I asked him if he had ever experienced a dream about gold, to which he answered:

Dream 18

Yes, I have seen many dreams about gold. Usually I see a large pool of water (*e'ä pnga*, or raunwara). I see one of these pools, and they are very deep and full of still and clear water. Then I look inside, and I see things… like something shining, and after that I find gold.

Now, whether envisioned as roaring rainfall, a running stream, or a tranquil pond, the water dreamed by the miners embodies several concomitant meanings. On one level, the rain or streams washing over gardens and garden crops recall the importance of water in the growth of subsistence cultivars, a fact painfully driven home to the Hamtai people of the Bulolo District, Menyamya, and the Gulf Province by the catastrophic El Niño draught of 1997-1998 (an event which had impressed itself deeply in the minds of my informants and to which they referred in a number of different contexts during the course of my fieldwork) (cf. Herdt 1994 [1981]: 349; and Mimica 2003: 262).

In addition to that, the symbolic value of water in Hamtai-Anga "gold dreaming" relates to the crucial role that this substance plays in mining. Hence, the rain of Dream 4 could be read as a symbol of the precipitations that dislodged the nugget found by the dreamer from its mother lode and transported it to the area of its eventual recovery. Furthermore, it could also be a symbolic reminder of how crucial rainwater is to the miners because, without rainfall, some of the creeks from which alluvials are extracted and whose water is used, amongst others, to power sluice boxes and to sluice hidden deposits would run dry, as would the storage ponds described in Section 8a of this thesis. In the same fashion, the oneiric rivers and creeks of Dreams 13, 16, and 17 constitute symbolic representations of the material waterways around which gold is transported (my informants were fully aware of, and often commented upon, the role played by weathering in the creation of alluvials from mother lodes), and from and through which the precious mineral is extracted, just as the "round pools" dreamed by Jeri (Dream 18) undoubtedly "stand for" those on which he and other miners rely for the sluicing of certain deposits.

Apart from their "material" significance in agricultural and extractive production, however, there are two further factors that make heavy rainfall,

running water, and water pools crucial elements of Hamtai-Anga "gold dreaming". To begin with, there is their close cultural association with the spirits of the forest. In relation to rainfall, for instance, my informants considered moderate rain (*piya*) a wholly mundane phenomenon but believed heavy and sustained precipitation (*piya tätvanga*) to be caused either by the masalai or by a type of cannibal familiar possessed by (mostly) evil (but see Moretti 2006a) sorcerers known as *phänga*.[97]

In cases of *phänga*, rain is said to be sent mostly in order to make people fall from steep gardens and mountain paths or to cause fatal landslides and rock falls. When connected with the forest spirits, this atmospheric phenomenon can have retributive purposes, such as causing accidental death or injury to a person or persons who angered the masalai, for example by cutting down trees within their land or killing too many animals. At times, though, *piya tätvanga* is not unleashed with negative intent, but constitutes a simple manifestation of the presence of the masalai. What is more, in yet other contexts it is actually regarded as a form of aid offered by the masalai at the request of those shamans (*hingo' wanga* ["eye clear/light", "seer"], or *hingo hivä'u* ["eye two", or "second sight"])[98] who have the power to perceive and communicate with them through special magic words (which my informants called either *pä'ä* or *pmäpane'a* [lit. "secret speech"]), most commonly in order to end a period of draught or to deter, slow down, or harm incoming war parties or designated raid targets in contexts of conflict (cf. Bonnemère 1996: 316, Note 16).

---

[97] The label *phänga* indicates a particular type of mystical aggression in which a person uses a powerful spirit familiar that can travel afar and assume the form of monstrous humanoids, animals, and even modern machinery (like aeroplanes or cars) to steal the spirit and cannibalise the flesh of another person. Only a few people are believed to possess such powers, which are passed on from parent to child. Although a few of my informants stated that people can possess and use *phänga* without being actually conscious of it, thus making it akin to what is conventionally described as "witchcraft", most Hamtai I met maintained that it was used deliberately, and for this reason I have here glossed it as "sorcery" (cf. Stephen 1987).

[98] In Tok Pisin, these persons were referred to as "ai klia" ["clear eye", or "clear sighted"], "ai glas" ["field- or spy- glass eye"] or "manmeri i gat tupela ai" ["people who have two eyes"].

In addition to heavy rain, Hamtai culture posits a very close link between the masalai[99] and running water. Indeed, not only are rivers and creeks thought to be one of the most common places of residence of the spirits of the forest but, according to certain myths and to common stories, the masalai are said to be in control, if not at the very origins, of all sources of running water.[100] Similarly, as is the case with other Anga cultures (see, for instance, Herdt 1994 [1981]: 143, 171, 349), the myths and everyday discourses of the Hamtai are populated by images of ponds (also called *e'ä pnga*) like those of Jeri's dreams. According to my consultants, these meres contain great mineral wealth. Their riches, however, are accessible only to those who have the blessing of their resident masalai, chief amongst which is a type of creature known as the *wampisa*, a sort of "mermaid" with the lower body of a fish or eel and the upper body and long hair of a woman. Indeed, whenever unwelcome guests stumble too close to the *e'ä pnga*, their waters are believed to boil ominously and to surge forward in order to snatch, submerge, and consume the careless trespassers.

Beside its links with the spirits of the forest, water has close linguistic and mythological connections with human fertility and procreation.[101] Thus the pidgin

---

[99] When talking about the forest spirits, my informants tended to use the pidgin term masalai. When I asked for the vernacular name of this category of spirits, people usually spoke of *hikoäpa*, which is also the label used to class all disembodied spirits, such as the wandering spirits of sleepers or the ghosts of the dead. In a few cases, they also mentioned the term *haiyewa*, but no one was able to tell me the exact meaning of this second term. In the Upper Watut, Blackwood (1978: 144-45) found the term *haiyewa* to indicate various spiritual entities resembling those which in pidgin would be classed as masalai. Like me, however, she was unable to clearly pinpoint the characteristics of the different spirits to which the two terms referred. In a Hamtai-speaking area of the Gulf Province, Bamford (personal communication) found *haiyewa* to be the name of a type of spirit similar to the bush masalai, but which was found mostly in settled areas, such as in the vicinity of hamlets or villages, and which was capable of causing cracks and fissures in the ground. In addition, she encountered the term *iahaiwa*, which indicated spirits that inhabited pools of water. More generally, her informants used the pidgin masalai to indicate a whole class of different spirits who lived in rocky layers and in the bush.

[100] Blackwood (1978: 145), for instance, claims that some of her Upper Watut informants credited the masalai with creating and maintaining all rivers and creeks through the flow of their urines. Although I didn't encounter a similarly overarching idea during fieldwork, I did hear several stories about particular waterways and springs created and controlled by specific masalai. Indeed, during a trip to the Kaintiba region of the Gulf Province I was taken to an opening in a giant rock from which water was said to spring forth at regular intervals under the control of a married couple of powerful forest spirits.

[101] This same association is also common to other parts of the New Guinea Highlands (see, for instance, Strathern, A. and Stewart 2004: 134).

and vernacular words wara and *e'ä* (water) were also employed by my informants to describe semen and vaginal fluids, the two main substances involved in conception (cf. Bamford 1997: 98, 110). Furthermore, the term *hinge'ä*, which indicates blood (of both the ordinary and menstrual variety [cf. Bonnemère 1996: 245]), an essential element for the formation and growth of children, would also appear to incorporate the word *e'ä* (*hing- e'ä*), thus being conceptually linked to water. When considered through the lenses of myth, the interchangeability of water and procreative substance emerges even more clearly. As an example of this let us turn to the following rendition[102] of the Hamtai origin myth, which I obtained from Yawiaio, an old initiated man who belonged to the first generation of miners to have come to Kaindi from the Aseki interior:

> In the beginning there was a first man called Akheänqa. He had two wives, from the first of whom he had a daughter. People had no knowledge back then, so he didn't know how to build a good house. In his first effort, he built a round house with a conical roof that came down almost to the ground (one of the two traditional styles of Anga housing [Blackwood 1939b; 1950]). One day, when his wives were out, he started a fire to cook himself some food. Soon the house caught fire, and because of how the house was built Akheänqa had no quick way to escape, so the fire caught him and killed him.
>
> When his wives came back they discovered what had occurred. They searched the ashes and the rubble of the house until they found their husband's bones. They took these bones, carried them to a nearby pond (*e'ä pnga*), and left them in the water. These women were *Aphe'ä* (the name of Yawiaio's ancestral line]),[103] and held power over the rain. They used their *pä'ä* (magic words) to make the rain fall and fill the pond, then they went away for a week. When they returned to the pond, they looked into the water and saw that their husband's bones had turned into tadpoles (*ämamango*). They knew that the bones were changing into human beings, so they went away and made some traditional male and female dresses to give them. They prepared many grass skirts, grass sporrans, bark cloaks and yellow ornaments, then

---

[102] Other versions of this myth are available in Moretti (2005).

[103] According to my informants, each of the twelve Hamtai ancestral lines possesses their own magic formulas and medicinal plants. Furthermore, people belonging to certain ancestral lineages were supposed to share specific characters and even physical traits. For example, the *Nä'othi'ya* were claimed to be stocky and short, and to be naturally calmer than others and better suited for diplomacy. The *Titha'ma*, on the other hand, were said to be tall and thin and of an extremely fiery temper. In addition to this, each one of the five main Hamtai clans was believed to have its own origins, history, and traditional societal roles. In the case of the *Aphe'ä*, this was said to be that of "food givers" to all the other clans, a role wholly consonant with Yawiaio's identification of the first ancestor's wives as *Aphe'ä*.

they returned to the pool. This time they saw men and women in the water, shouting and playing. They smiled at the men and women, and these little people smiled back to them.

The women gave them the ornaments and the dressings and told them how to wear them, then they went away to cook some food for them. When they came back with the food, the other men and women were no longer in the pond. The two women searched until they found footprints departing from the edge of the water. They followed the tracks to a very large tree that stood close by, but there was no one there. The two women kept calling to the hidden people and looked for them that way (points to his right), then they went like that (left), and then like that (south), and then up there (north). They didn't see them anywhere, and every time they called out, they heard some voices coming from the tree. So they took their stone adzes and cut a door into the tree, and then another, and then another, and millions of people came out of them. First came the *Aphe'ä*, then the *Nä'othi'ya*, *Titha'ma*, *Ängamthi'ya*, and the *Equ'ta* (the other four major Hamtai ancestral lines). After these peoples came the Europeans, and then the Asians and all the other black people in Papua and in the rest of the world.

In this account of creation, we learn that all human beings originated from the bones of a first mythical ancestor killed and consumed by a raging fire. It was only through the regenerative and procreative action of water that his charred remains were turned into tadpoles, then small men and women, and, finally, within the hollow trunk of a giant tree, into fully grown humans. In this rendition of the myth, the liquid takes the form of a round pool (*e'ä pnga*) fed by rainwater summoned by the magic words of the ancestor's spouses. In a few other versions, the bones are instead placed within a small stream (cf. Blackwood 1939a: 214-15, 1978: 156-60) or an *e'ä aitapa*, a small kind of pond found in the crevices of cracked or dented boulders, or within the split trunks or the roots of trees.

Whatever its precise form, Hamtai creation stories endow water with crucial procreative powers, a theme which is equally evident in another category of legends linking the origins of fire with what Herdt (1994 [1981]: 294, 352-53) defined as "Amazon myths", and Bonnemère (1996: 316) as the "*mythes des femmes seules*". Thus Blackwood reported the following story from the Upper Watut:

Once the people of the Watut had no fire. They cooked their food at their women's genitals. They did not understand sexual intercourse. Then a man came from Langimar, and went walking about the mountains. His name was Angatia (this is the name of one of the

Kukukuku groups).[104] He saw no smoke coming up, although there were a great many people there. When he came up he found a man putting sweet potatoes at the genitals of his wife as she lay down, and cooking them that way. He fetched a bamboo full of water and poured it over the woman's genitals. Ashes came out. He put out the fire that was there. Then he had intercourse with the woman. He said: "You two don't know anything, if you cook your food that way." Then he took a piece of wood and a bamboo thong, he laid some dry grass on the ground and put the piece of wood on the top of it, and called all the people together. All the men and women came and sat down. Then he stood up in the middle and worked with the bamboo, pulled, tightened it, pulled it and pulled it, smoke came up, he pulled it and pulled it, the grass caught fire. "Now you do it just like this." So he gave them the piece of bamboo and the piece of wood. Now everyone knows how to make fire and cook their food. The man's wife became pregnant and she bore a girl child. Another woman had a man child and those two were married (Blackwood 1939a: 218; 1978: 161-62).

From this particular legend, versions of which are also current among other Angans (see Bonnemère 1996: 314-15), we learn that primordial women were not "cool" and "fertile" like those of today, but "hot", (even more) dangerous, and barren. It was only after the men managed to quench the fire of female genitals (here by pouring water from a bamboo, elsewhere by plunging the fiery women in a stream or through the intervention of rainwater [Bonnemère 1996: 314-17]) that heterosexual intercourse became possible and humans were able to reproduce.

Even though I was not told a similar tale on the origins of fire, I heard numerous stories about an isolated place in the wilderness beyond Kanabea (possibly near the Ivori River) where women are still supposed to hold fire in their genitals and their anuses. These "fiery" creatures, which are called *ita yakemänga* (lit. "cooked food-who-squat-on") because of their habit of cooking their food by squatting over it, are believed to live in an all-female community encircled by rivers. According to my informants, these beautiful maidens are willing to mate with and marry any man who ventures among them. Unfortunately, however, sexual contact with them is deadly on account of their fiery genitals. The only

---

[104] As we learnt from the previous myth (and from Note 18), *Ängamthi'ya* is one of the five main Hamtai ancestral lines. In the characterisations of some of my informants, this ancestral line was said to possess particular power over heat and fire, a trait upheld by this story's claim that the knowledge of "proper" fire originated from a man belonging to it.

way to obviate this problem is for a prospective husband to build a flimsy bridge over one of the rivers that flows around the community and, having crossed it himself and tricked his chosen bride into stepping over it, to capsize it, thus plunging the woman in the river to extinguish her sexual heat and make her able to procreate.

Alongside the myths about the discovery of fire and those tracing the origins of humanity, these "food squatters" narratives indicate the existence of a diffuse association between water, human sexuality and procreation in the Anga imaginary. In turn, this suggests that the frequent presence of streams, rivers, rain, and water pools in the dreams of the miners is not only related to the fact that these are believed to originate from, and to constitute a communion with, the masalai of the mines, but is also a reaffirmation of the procreative dimension we already found to be central to Hamtai "gold dreaming". Looked upon from this perspective, the rain and streams falling upon and flowing over gardens and garden crops in Dreams 4 and 17 could represent symbols of the seminal and menstrual flows which, according to Hamtai conception theory (see Bamford 1997: 110), must accumulate and mix in the womb (garden) in order to generate and grow foetuses (crops), whereas the pool of Dream 18 would symbolise a womb filled with procreative substance and impregnated with minerals (cf. Freud 1994 [1900]: 272-73; and Mimica 2006).

Moving on from the theme of water, the identity of the women seen in "gold dreaming" with the spirits of the forest is compounded by the frequency with which bush life is mentioned in dream accounts and the roles that these animals play within them (cf. Herbert 1998: 151). Hence in Dreams 6, 14, and 17, Esta, Martin, and Äimandao reported how, the day after their oneiric experiences, they saw birds resting on the ground or flying over the areas about which they had dreamed and where they were soon destined to find gold. Similarly, in Dream 10, Jeremaia told of his close encounter with a snake on his way to the deposit of which he had dreamed in the previous nights.

As with most Anga cultures, the Hamtai posit a close connection between the creatures of the forest and the masalai (cf. Bamford 1997; Blackwood 1978; Bonnemère 1996; Godelier 1986; Herdt 1994 [1981]; and Mimica 1981; 2003).

Indeed, my informants maintained that any beast could actually be a disguised forest spirit. Beyond that, each and every animal was said to be the "child" (pikinini) and, as such, the protégé of the masalai. In accordance with these beliefs, animals encountered after a "gold dream" were considered to be manifestations of the very same spirits behind the oneiric experience, and their appearance was regarded, not only as confirmation of the veracity of the dream, but also as a clear indication of the exact place where the promised gold was located (see, in particular, Dreams 10 and 14).[105]

Apart from experiencing them as wildlife during waking life, the miners would occasionally dream of the masalai in animal form, and most especially as females laying eggs and/or watching over a nest. A woman called Miriam (see Note 105), for example, told me the following narrative:

Dream 19

One night I dreamt about a place where a snake was lying all coiled up. It was sleeping and it had two eggs by its side. They were beautiful eggs, like chicken eggs. I picked one for myself [to eat it] and left the other one there. Alright, the next morning I woke up and walked all the way to the place I had seen in my dream. When I found it I looked around and I panned a bit. I searched and searched and I came upon a very big gold vein. I started to dig it and I got a lot of gold, but soon other people saw what I was up to and came over to dig alongside me. I tried to tell them to leave it alone, that it was meant for me, but they kept on working. They disturbed the masalai... the mother of the place, so the snake took the gold away and the vein was exhausted immediately.[106]

---

[105] Although in the vast majority of cases the masalai would appear to the miners, first, in a dream, and only then, as material animal guides, in some instances animals would alert people to the presence of gold without any prior oneiric omen. Thus Miriam, the wife of an established Hamtai leaseholder and a mother of several grown and young children, recounted:

"One day I was walking in the bush around our lease. At one point I saw a lizard cross the path in front of me. It darted past me and went to hide somewhere on a slope by the side of the path. I stopped in my tracks and waited for it to reappear. I waited a while but it didn't come back, so I walked over the place where it had disappeared to see if I could find it. I searched that spot to see if there were any holes in the ground where it could have gone hiding, but I couldn't see anything... it was as if it had disappeared into the earth itself! I just couldn't understand where that lizard had gone, but then I started to think that that might have been a sign that there was gold in that area, so I took some tools and started digging and panning, and sure enough, I soon found a rich gold vein running through that spot!"

[106] For an analogous representation of local spirits as a python who sits on/protects minerals as it would its eggs see Stewart and Strathern, A. (2002: 162; 165; 167).

A similar tale was offered by Niyatai. A very articulate, jovial, and strong-minded woman in her late thirties, Niyatai was the eldest daughter of Tobias, one of the first Upper Watut to have obtained a mining lease in Kaindi. Unlike most of her siblings and half-siblings (from Tobias' second and third marriages), Niyatai had received but the most basic of educations. According to her, she had always lived close to her father, looking after him in his old age. Thanks to the trust she had won through decades of care and devotion, her late father had done something almost unheard of in the mining community; he had named her- and not any of his sons as custom demanded- the legal guardian of his Kaindi leases and his coffee plantation near Wau. For the most part, Niyatai occupied herself with the Wau plantation, leaving the day to day running of the family leases to three of her younger half-brothers. Once every few weeks, though, she would journey up the mountain to check the state of mining operations and demand her due from her siblings. During one such occasion, I spent several hours interviewing the woman about her family life and her early years in Kaindi. In the course of this interview, she narrated the following story:

Dream 20

Many years ago I saw one of these dreams [...] I saw a dream about the road down below, the one that runs by the river (i.e. the main road from Kaindi to Wau, which at that point runs alongside the Meri Creek, a historical mining river which is still a very important source of alluvials for local miners). All right, in this dream I saw a big bush fowl (buspaul, *äma*) lay eggs (*mnga*) on the road. It wasn't just one or two eggs, there were so many of them! They went all the way up the road; there must have been hundreds of them! So I walked down there and I picked some of these eggs up. In the morning I told the other women (in her family) about that dream, and they said that it must have been about gold. When I heard that I went down to the place I had seen in my dream. There I noticed that a piece of the road had been broken and washed away by the rain. I saw that and I started digging in that spot, and soon I found a big heap of was gol (alluvials).

In both of these dreams, the spirits of the mountain appear not as humans, as was the case in previous oneiric experiences, but as animals, the form they most commonly take when they manifest themselves to the miners in waking life. What is of particular significance, however, is that, if translated from the world of

animals to that of humans, these accounts contain some of the same basic imagery of the preceding narratives. Thus, in both dreams the masalai appear as females and, most specifically, as "mothers" laying and guarding eggs (cf. Mimica 2006), some of which they allow the dreamers to take for their own consumption. In turn, this resonates with the basic themes of reproduction ("animal mothers" = human mothers; laying eggs = "giving birth"; eggs = gold[107] = human children[108]), nurturance (eggs = food), and "pseudo-conjugal" exchange between spirits and humans (eggs = children/food gifted by the spirits to the dreamers) that ran through the previous dream narratives.

What is more, although these two oneiric experiences do not, as was the case with those involving miners and dream women, openly "sexualise" the interactions between spirit animals and human dreamers, other dreams about animals could be regarded as doing so. Towards the end of December 2004, for example, I spent several hours observing a group of alluvial miners at work. Among them was a young Hamtai woman named Rebeka. From what I gathered in a long interview, Rebeka did not mine that often. In part, this was because she found it a wearing and tedious activity. In addition, her gardening, marketing (she used to sell betel nut, cigarettes, and other small trade at the local market), and household duties took up much of her day-to-day labour, leaving her little time to "work gold" (wok gol). Finally, her husband was not always happy to let her work in the family tribute (or to keep the majority of what she found when she did so), so that gold extraction remained for her but an occasional pursuit. On that particular day, though, her husband had asked her to go work with him and, as she was keen to get a little money for the New Year celebrations, the woman had gladly accepted. When I asked if she had ever discovered gold on the basis of dreams, Rebeka told me the following story:

---

[107] Incidentally, like the garden produce most commonly cited in "gold dreams", eggs are both "white" and "yellow-red", two colours highly reminiscent of gold.

[108] For another example of metaphoric association between eggs and human children and between hatching and birth in Anga culture see Bonnemère (2004b: 68-9).

Dream 21

One night I saw a dream about a snake. This snake was hidden in a narrow hole. Its whole body was inside the hole but the head stood out, staring at me. It was a big, diamond shaped head, all black with bright yellow marks. I saw this dream, and then I woke up and I went straight to the place where I had seen the hole in the dream. I cut down some pitpit to clear the spot and then I began to dig. I dug and dug until I uncovered a very big vein full of nuggets. After I found this gold I went straight back home and I took all my family to it. We worked together for days and we made so much money that we all bought corrugated iron sheets to roof our houses. Oh, yes, and we bought a water pump too. But after a while the hole started to flood and after a big rainstorm a landslide covered it altogether. It wasn't a small landslide, it was very big, so we never got round to clearing it up. The gold is still there, I am sure, but we have no machines to work with and the landslide was too massive to clear up by hand, so we have no means to dig it up.

In this account, Rebeka claims to have dreamt a particular type of python known as *hauyi* (Boelen's python, or *Morelia boeleni*), which lives only in the mid-montane tropical forests of Papua New Guinea and Irian Jaya. In PNG, this reptile has, despite a relatively broad diffusion, a highly protected status comparable to that of the bird of paradise. Occasionally found on tree branches, but most commonly on the ground and between rocks, this snake can reach a reported length of around 2.5 metres. In terms of physical appearance, the *hauyi* has a moderately stocky body, a broad and thickset head, a fairly long tail, big eyes with vertical pupils, and large heat sensing pits along the upper lip. The upper surfaces of its body are a striking deep black with purple-blue iridescence broken by a series of irregular forward-facing yellow and white diagonal "finger markings", while the underbelly is of a white or yellow coloration.[109]

Like many other New Guineans, the Hamtai associate all manners of snakes (*smtita*) with the spirits of the forest. More than any other serpent, however, the *hauyi* constitutes the quintessential manifestation of the masalai, and its appearance in dreams as in waking life is regarded as a most consequential sign (cf. Mimica 2003: 285, Note 34). In relation to mining, for instance, my

---

[109] This information derives from O'Shea (1996: 78) and the Houston Zoo website (http://www.houstonzoo.org/Animal/viewAnimalDetail.asp?scriptaction=showanimal&Animal_Preview_Flag=0&animal_ID=44 [accessed 05/11/1005]).

informants insisted that the *hauyi* are the ultimate guardians of Kaindi's minerals, and that the majority of the "gold dreams" and other mining omens the miners experience originate from them.[110]

When we consider both the behaviour of the Boelen's python, which likes to rest between rocks and in fissures in the ground, and its close association with the masalai, who are also thought to live underground and in rocks, cracks, and caves, it is not hard to imagine why the python in Rebeka's dream should appear to her hidden in a hole. Furthermore, if we think of the snake itself as a symbol for gold- an association compounded by the characteristic coloration of the animal- the head of the python seen by Rebeka could be understood to represent the nuggets that lay nearest to the surface, while its long body would symbolise the remainder of the underground vein which, due to flooding and a landslide, she wasn't able to reach.

In addition to this, though, the imagery of this dream could also be said to bear markedly sexual connotations. Ethnographers working in other Anga groups have, on the basis of myth and broader cultural associations, confirmed the local validity of the Freudian (Freud 1994 [1900]) association of snakes with (among others) masculinity and the male sexual organ (Bonnemère 1996: 321-22; Mimica 1981: 331-32; also see Wagner 1978: 151). In this light, the image of the long and large python hidden in a hole, whose broad head sticks out, staring at the dreamer, could be interpreted as a phallic symbol, with the head of the snake representing an uncovered glans, and the hidden body suggesting at once the hidden penile tract within the male body, a phallus ready to "emerge" in an erection, and, particularly in relation to the aforementioned association between women and the earth, a penis "buried into" a female body. In turn, following the conceptualisation

[110] The symbolic association of snakes with minerals appears to be common to other parts of PNG (see, among others, Biersack 1995; 1999; Clark 1993; 1995; Rumsey and Weiner 2004; Ryan 1991; and Stewart and Strathern, A. 2002). For the purposes of this thesis, I explain this link in terms of the historical Hamtai association between these reptiles and the masalai, which are in turn believed to be the "guardians" of the gold. In future works, however, I intend to expand on this to explore further links between snakes, ancestral spirits, Europeans, masalai, and minerals. Linked to these broader connections is the fact that, as noted by Biersack (1995): the ability of snakes to "die, shed their skins, and be 'reborn' anew" makes them perfect symbolic analogues for minerals, whose cyclical pattern of discovery, depletion, and rediscovery at both the local and national level suggests a similar regenerative or "renewable" capacity.

of foetuses as "penises growing inside women" that Mimica (1981: 100, 1991: 44, 102) found in Yagwoia-Anga culture (also see Weiner 1995: 89-90), the buried snake/penis could hint at once at a penetrative sexual act and at the image of a child gestating in the womb, thus reiterating the metaphorical association between mineral extraction and reproduction and between gold and children current in previous instances of "gold dreaming" (gold = snake = masalai = penis = child).

12- Framing the metaphor: mining as marriage and affinity with the spirits of the mountain

In accounting for the origins and dynamics of "gold dreaming", my informants explained that the *nkota wata* "is like a spirit that gives you gold". According to some, this power came directly from the masalai. For others, it was a "gift" (presen, *yänga*) God (God, Papa God, *Nkoto*)[111] gave to the faithful to enable communication with the forest spirits, who were the "angels" (ensel or *änsota*) He had entrusted with "looking after" (lukautim) nature and the land[112] (cf. Lohmann 2003b for similar beliefs among the Asabano of Sandaun Province). Either way, many conceived of the ability to "dream gold" as a sort of "spirit familiar", in the sense that the "good dreamer" (*amä'ä qeta ti* or *amä'ä kayata ti*, "the good person") was held to possess enduring (though, as we shall see, far from unbreakable) relationships with one or more bush spirits which, taking on different guises from dream to dream, mediated their *hikoäpa*'s oneiric interactions with the other masalai and allowed him or her to obtain gold from them.[113]

---

[111] Another vernacular name for "God" was *Hä'äsomngo'o*, which literally meant "the one above". The name Akheänqa, normally used as a generic appellation for the first ancestor or ancestors, was also employed by some miners to refer to the Christian God.

[112] Those who held this view noted that there was nothing extraordinary about the premonitory nature of "gold dreaming", as the Bible offered numerous examples of God using dreams to deliver messages to the faithful (cf., among others, Eves 2000; Lohmann 2000; 2003c; Robbins 2003; Stephen 1982; 1995; Stewart and Strathern, A. 2003; and Tonkinson 2003).

[113] Similarly, among the Sambia, Yagwoia and Ankave, the familiars and "travelling spirits" of shamans are thought to derive from the forest spirits who "look after" game (Herdt 1989a: 109; Lemonnier 1992: 90; Mimica 1981; 2006). What is more, for the Sambia and Yagwoia, as for my informants, one's "spirit familiars" are at once something internal and integral to one's person and external to it (Herdt 1989a: 107; Mimica 1981; 2006).

As for the acquisition of these "familiars", I was told that they were attracted to those with "good blood" (gutpela blut in pidgin, *hinge'ä awa ti* in Hamtai). Though I unearthed no clearly defined theory of what having "good blood" actually entailed, most related this to the concept of "following one's father's blood" (*qänmqo sä'a hinge'ä qamea'i*). Hence people said "good blood" was inherited from the parents and, as it applied to mining, from the father in particular. On one level, this related to the notions that, in the procreative process, some of the positive physical and personality traits of parents, grandparents and other ancestors were passed on to the children, enabling them to attract certain kinds of forest spirits and to turn them into spirit familiars,[114] or even that these were directly transmitted from parents to children during conception (cf. Herdt 1977; 1982a; 1984; 1989a; 1994 [1981]; 1999; 2006; and Mimica 1981).

Most importantly, however, "following one's father's blood" meant to show filial respect and to accompany and assist one's father in his daily activities. Through this devoted contact, a child endeavoured to "become like" his father, mastering the history of the land and learning how to fight, hunt, mine, take care of his family, and respect the laws of the ancestors and of the Bible (cf. Bamford 1997; 1998b). In so doing, he apprehended the magic words (*pä'ä*) needed to communicate with the masalai and became intimate with the land and its resident spirits. In turn, this allowed him to attract some of them as his own spirit familiars. Furthermore, having obeyed and devotedly served his father and older male agnates during his life, he gained the right to inherit their familiars after their death (Moretti 2006b; also see Herdt 1977; 1982a; 1987; 1989; 1994 [1981]; 1999; 2006; Lemonnier 1992; and Mimica 1981: 126-30).

Whether they ascribed their power to dream to God or directly to the masalai, however, my informants would often speak of the entities they saw in their "gold dreams" as if of "spouses". Thus Niapaini, a young, unmarried Hamtai woman, said in the course of an interview:

---

[114] For those who believed God to be at the origins of "gold dreaming", on the other hand, children could inherit the good or sinful nature of their parents or other ancestors, hence being more or less likely to follow the teachings of Christianity and to win assistance from the masalai.

> My father had five wives... five wives from the forest. They were white women, and they lived in different parts of [his] land. They used to go to him in his dreams, to give him gold.

Similarly, Nensi, the young wife of Jut, one of Kaindi's most prolific "gold dreamers", once asserted matter-of-factly:

> My husband has a first wife, another woman- a white woman. She lives in his workplace... she was with him before I married him. She's his first wife. I, who am the real woman, am only his second wife.

This other wife, she went on to explain, was a masalai, and it was she who visited Aisaia in his sleep, guiding his *hikoäpa* (disembodied spirit) to gold. Later on, Jut himself told me of some of his "gold dreams", which he claimed had been given him by his "bush wife" (dispela meri bilong mi I sa stap long bus)- an expression I heard used quite regularly in similar contexts.[115]

In addition to this, just as the miners routinely equated their longing for gold with the love men harbour for women, so did they endow gold, or, more precisely, the spirits who controlled and were embodied within it, with the same kind of feelings and inclinations that they attributed to women. Thus the old man I previously reported as claiming that: "men love gold, just like they love a woman [...]", continued this statement by adding: "and gold, gold loves those men who work it, *just like a woman feels love for her husband*"- a proposition closely reminiscent of a second aforementioned statement that: "gold is like a woman, and it wants a man, *a husband*, to work it."

In line with this mode of thinking, the process of enticing a forest spirit into giving up some of their gold was conceptualised as a form of "seduction". So, for example, it was often remarked to me that the magic words (*pä'ä*) used to communicate with the masalai and to attract gold to one's land or sluice boxes were the same as those employed by concupiscent men to induce desire in their

---

[115] The conceptualisation of one's spirit familiars as one's spouses would also appear to be present in other Anga culture groups (see Herdt [1982a; 1989a: 117; 1989b: 350]; Mbaginta'o 1971; and Mimica 2006).

beloved.[116] Furthermore, my informants tended to think of the women and even the animals they saw in their "gold dreams" as forest spirits who, having *fallen in love* with them, were seeking to "marry" them and to gift them with minerals.

On the basis of all these facts, one might assume that the imagery of the "gold dreams" considered so far relates specifically to the bond between the miners and their "spirit familiars", which it recasts metaphorically in terms of the productive and reproductive cooperation and nurturance (ideally) constitutive of Hamtai-Anga courtship and marriage. In this sense, a stereotypical "gold dream" would work at once to reflect and, through the vivid power of oneiric experience, to confirm and sustain the belief that success in mining rests upon the establishment of conjugal-like relations with one or more local masalai.[117] And indeed, in dream after dream we have seen these "spirit spouses" put their productive and reproductive powers at the disposal of the miners so that their communal efforts could create and procreate minerals, just like those of wholly human couples produce and conceive gardens and children in waking life. In addition to this, we have found them acting as mediators between the miners and the wider masalai community, sustaining bonds of affinity through which the former could expect to receive gold and assistance from the latter.

Hence, in Dream 11 we saw how Aisaia's would be oneiric wife told him that, as a sign of her love, she would "ask her people"- i.e. her own masalai kin- to plant a big garden for him. In that same oneiric experience, six months went past and the dreamer returned to find a luxuriant garden full of fully grown crops, which he interpreted as a symbol for the gold his aspirant lover/familiar had obtained on his behalf from, or at least with the help of, his prospective masalai

---

[116] The rhetorical conceptualisation of mining as a "procreative" process was also present in another belief regarding some of the magic techniques used to attract gold. According to some informants, one (widely frowned upon) way of attracting gold to one's sluice box was to procure the umbilical cord of a newborn human baby, utter some magic words over it, then twist it and place it under the box. In a sense, this technique suggests the idea that the cord will "grow" gold into the box by feeding it the nurturing substance of the earth, just as it previously "grew" a human foetus within the maternal womb, by feeding it the blood of its mother.

[117] As Mimica (2003: 283, Note 13) found for the Yagwoia, my informants would speak of their familiars as if they were at once singular, and plural, one, and many. For a more general discussion of the structural "sameness" of singular and plural in Anga and wider Melanesian culture see in particular Mimica (1988); Strathern, M. (1988); Godelier and Strathern, M. (1991); and Wagner (2001).

affines. A similar example was offered by Matyu. In his early thirties at the time of fieldwork, Matyu was married to a young Hamtai woman with whom he had three small children. Son to Jekop, the first matrilateral cross cousin (*ntawä'o*) and *frère de lait* of my "landlord" and sponsor Nisimas, Matyu had been a miner for as long as he could remember. One of my closest neighbours and favourite informants, he was a very generous and pleasant man with whom I used to exchange a few words and a soggy cigarette in the early mornings, and whose warm home and company I sought with pleasure in the cold dampness of Kaindi nights. During one of our conversations, Matyu confided the following "gold dream".

Dream 22

One night I dreamt about a young white lady. She was very beautiful, with long white hair that came down to her backside. In the dream we got married; then her parents drove me up to their house in a large white car. It was a very big house, perched on top of a mountain. When we got off, the father told me, "you married my daughter, so now you must clean our house". After that I woke up very suddenly.

I left my house in the early morning and walked to the place where the house had stood in my dream. I started to clear the ground to search for signs of gold. I was moving some stones when I saw a snake creep towards me. It came my way and it passed me by. I didn't hit it or try to stop it. I let it pass and then I followed it from behind. I followed the snake all the way to a little hole in the ground. The snake went inside this hole. It defecated near the entrance and then crawled deeper into the ground. When I saw it disappear in the tunnel I put my hand inside the hole and I checked the snake's droppings. I don't know why I did that, I really don't, but when I lifted some of these droppings I saw that they weren't shit but gold nuggets! I was really surprised and very happy when I saw that. I took the nuggets home with me, then I crushed them and took the gold out and sold it, and I made a lot of money from it, some 16,000 kina or so.

In this particular narrative, the dreamer gets married to a forest spirit. Thereafter, he is asked by his new masalai in-laws to clean their large home. However, before he can meet this request the dream comes to an end. The following morning, the dreamer follows a snake- one of the most common guises assumed by the forest spirits in waking life- to a small hole in the ground, which, given the aforementioned association of the masalai with caves and earth fissures,

can be regarded to stand metaphorically for the "house" of his dream. There, Matyu brushes off (i.e. "cleans") some of the snake's droppings (dirt) from the entrance, thus metaphorically complying with his in-laws' demands. In the end, though, it turns out that the "dirt" he cleans out is not worthless faeces, but valuable nuggets. Just as in Dream 11, therefore, here too we find a clear depiction of the relationship between the miners and the masalai as one of affinity resting on marriage with a particular "spirit wife" or "familiar". What is more, as in that prior example, this narrative would appear to suggest that the gold nuggets recovered by Matyu were not so much, or at least not solely, a gift from his newly wed wife, but also a present his affines had offered for marrying their daughter and for performing the task they had requested of him.

In conclusion, when we first noted that Hamtai-Anga "gold dreaming" posits a metaphoric connection between garden food and gold, we questioned why subsistence gardening, a form of quasi-sexual production predicated on cooperation between the genders, and more specifically between married couples, which is nevertheless regarded first and foremost as a feminine enterprise, should constitute a fitting metaphor for mining, which is instead considered an all male activity from which women should be ideally excluded. In order to answer this question, we considered whether gardening was simply *sufficiently similar* to mining to represent a good analogical "source domain" for it, *despite* the crucial differences in the gendered organisation of labour that separate these two fields of production. As we proceeded with our dream analysis, however, we realised that the recurrence of garden foods and gardens as symbols for minerals and the mines was in fact part of a systemic symbolic modelling of mining in terms of the "collaborative, procreative, and nurturing" (cf. Stewart and Strathern, A. 1999) interactions that are constitutive of conjugal relations. In the last two sections of this thesis, we then revealed that the people and animals that appear in "gold dreams" are none other than the spirits of the mountain. Furthermore, we demonstrated that these entities must be "seduced" by the miners into becoming their spirit familiars- or "oneiric wives"- in order to create connections of affinity through which they can obtain minerals from the wider masalai community.

Looked upon from this perspective, therefore, each individual trope or, to borrow from Wagner (1986), every "point metaphor" found in the various "gold dreams" presented thus far- such as a specific garden crop, a garden, a woman, a sexual encounter, a newborn baby, or a father or mother-in-law- constitutes a particular "point of reference" within a much broader "frame metaphor" (ibid.) or "oneirotropic network". In its turn, this "expanded metaphor" (ibid.) constitutes what Wagner (1986; 2001) has defined as a "holography of meaning"- that is a symbolic structure that "replicates its figuration [...] through all changes of scale" (Wagner 1991: 166) so that each of its parts is in a relation of equivalence with the whole, and vice versa. Indeed, if it is true that the single tropes found in each specific "gold dream" are mere fractions of the wider "frame metaphor" articulated in Hamtai-Anga "gold dreaming", and that the full meaning of each of them can be grasped only in relation to their position within this "oneirotropic" totality (cf. Wagner 1986), it is nevertheless also the case that, to the "knowledgeable" dreamer and dream interpreter, each of these individual tropes encompasses, implies, and anticipates the entire structure of meaning contained in its wider "frame of reference". And thus, whereas this thesis had to bring together, compare, and contrast a large number of dreams and dream symbols before it could make sense of their overarching, relational meaning, to the "competent" Hamtai person even a partial trope contained in the shortest of dreams, such as our opening static visions of a single cultivar, would more or less implicitly "bring to mind" the wider meaning of the "frame metaphor" of which it forms a part.

As for the actual meaning of this broader "frame metaphor", we can now see that it is to "structure"- or to "bring into coordinate action"- certain conventionally distinct domains of experience in order to achieve enhanced efficacy and power (Wagner 1972). In Hamtai-Anga "gold dreaming", therefore, the power of the spirit world- and in particular of the masalai/familiars- is brought into relation with, and to bear upon, the realm of resource extraction in order to turn humans into efficacious gold miners. This power-producing exercise, however, is in its turn accomplished by means of a second mediative device. Indeed, the crucial tropic structuring of the world of spirits and that of humans

that is effected by "gold dreaming" is itself modelled on those relational conventions that mediate between men and women and between affines.

In the next part of this thesis, we will proceed to show that this achievement of efficacy through the relational engagement of male and female is not peculiar to Hamtai-Anga "gold dreaming", but is a common symbolic artifice of wider Anga culture and sociality. What is more, we will demonstrate that the "metaphorical structuring" of mining in terms of conjugality and affinity with the masalai of the mountain has many profound implications, not only for how the miners conduct themselves vis-à-vis the spirits of the mines, but also in terms of the gendered organisation of resource extraction and of the way in which the men and women of Kaindi act, and/or imagine that they should act, in relation to each other (cf. Wagner 1972: 67).

PART FOUR: The Gender of the Gold- Mining and the "Moral Holography" of Conjugality and Affinity

13- Mining and the "fractality" of gender

In the previous part of this thesis we demonstrated that, at the symbolic level, the mines that dominant Hamtai discourse declares to be quintessentially male spaces are actually populated by powerful female spirits, and the extraction of minerals, similarly defined as a male preserve, is in fact predicated on the complementary interaction of (ideally) male miners with the feminine productive and procreative powers of the masalai. Far from being peculiar to mining or to the Hamtai ethnographic milieu, though, this apparent symbolic "paradox" is actually common to many other "masculine" spheres of the wider Anga economy, culture, and society.

Thus, in the realm of Baruya shamanism, the most powerful shamans are invariably male, and yet the healing and offensive powers of this category of "great men" (*amä'ä no'o* [sing.] and *amä'ä na'a aqoä* [pl.] in the Hamtai vernacular)[118] are said to derive from Venus, the morning and evening star, which myth reveals to be female (Godelier 1986: 124-26, 208). Similarly, in his analysis of Sambia shamanism Herdt (1987: 194-96) argues that, to be efficacious, a shaman must always embody, draw upon, reconcile, and manifest personality traits and powers that are normally distinctive of *either* men *or* women. Thus, whether male or female, a respected shaman must possess at once the manly bravery and aggressiveness needed to confront and defeat the dangers of the spirit world (and, in the case of male shamans at least, of physical enemies), and the feminine nurturing empathy necessary to care for their patients and to struggle to nurse them through their afflictions.

Similarly, if we think of cassowary hunting among the Sambia or the Baruya, we find not only that the cassowaries are regarded as "women" and are closely associated with the feminine world, but also that the most important spirit

---

[118] For a full account of the political forms that fall under this label, and their relations to other Melanesian configurations of power, see in particular Godelier (1982; 1986); Godelier and Strathern, M. (1991); Lemonnier (1990; 1993; 1996; 1997; 1999); and Strathern, A. (1993; 1994).

familiar on which the hunter relies to successfully capture these powerful animals is itself conceived as a *female* entity (see Godelier 1982: 25-6; 1986: 126-30; Herdt 1994 [1981]: 86, 132-34, 140). What is more, judging from the fact that, among the Sambia, a cassowary hunter takes a "wet dream" (*wunjaalyu*) in which he copulates with a woman as a strong indication that a cassowary has been ensnared in his trap (Herdt 1987; 1992; 1994 [1981]), or that Baruya initiation masters carefully inspect the initiates' bedding for traces of sperm as a sign that the boys might be future cassowary hunters (Godelier 1986: 129-30), it is clear that this type of activity is, just like Kaindi mining, conceptualised as a sexual encounter between the male and the female.

As for hunting more generally, Upper Watut, Ankave, and Baruya myths recount that the tools of the hunter were actually "invented" by women (Blackwood 1939a: 221; 1978: 161; Bonnemère 1996: 333-36; Godelier 1986), thus implying that this male activity par excellence would be all but impossible without the creative powers of femininity. What is more, my informants insisted that the magic words (*pä'ä*) they used to win minerals from the masalai were the same employed in love magic *and* in luring game from its hiding places in the forest, which suggests that, like gold, game is secured by the men through a form of "seduction" (cf. Bamford 1997: 65).

Turning to the field of male initiation, the sacred flutes of the Baruya and the Sambia are said to have originated from, and are symbolically associated with, women, just as the most efficacious ritual objects used to "grow" "androgynous" boys into men are actually held to be imbued with feminine powers (Godelier 1986: 69-71, 94; 1998; Herdt 1982a; 1987: 145-55, 193; 1994 [1981]: 230). Similarly, the sacred ceremonial objects of the Ankave incorporate quintessentially female elements (Lemonnier 2004: 149), just as the implements used to beat and to pierce and plug the noses of initiates during male initiations are made from the awl bones and quills of the cassowary, an animal closely associated with women and femininity (Bonnemère 1996: 325-28, 345-47; 1998a;

2001; Lemonnier 2004: 149). Furthermore, the red pandanus,[119] which constitutes the central ritual substance of southern Anga male initiation rituals (but is also present in the northern Anga initiatory complexes), is a clear symbol for blood, an eminently female reproductive substance (Bonnemère 1996; 1998a; 1998b; 2001). Finally, and in rather more general terms, it has been argued that the broader ritual structure of both southern and northern Anga male initiations constitutes a symbolic re-enactment of female reproductive processes including menstruation, pregnancy, intra-uterine growth, birth, and post-natal maternal fostering (Bonnemère 1996: 344-52, 377, 380-81; 1998a; 1998b; 2001; 2004b; Herdt 1984; 1987: 193; Lemonnier 2004: 141).

Building on the notion of "sexual antagonism" which had dominated the anthropology of the New Guinea Highlands since the 1950s (Strathern, M. 1988; Stewart and Strathern, A. 1999), the first seminal ethnographies of northern Anga groups like the Baruya (Godelier 1982; 1986; 1998) and the Sambia (Herdt 1987; 1994 [1981]) portrayed these Eastern Highlands societies as containing distinct and mutually hostile male and female social, spatial, and symbolic "universes". Hence, while fully acknowledging the fundamental coexistence and apparent ambivalence of male and female symbols in indigenous myth, ritual, and everyday discourse, these early studies explained them as a reflection and perpetuating mechanism of a social and ideological system centred on gender inequality and male domination.

In Herdt's (1987; 1994 [1981]) work, this perspective was given a psychological foundation, so that Sambia myth and male ritual were interpreted to express the "sex envy" that the men felt for women, whose "natural" creative powers they endeavoured to imitate and control through cultural creations, and the insecurity they harboured about their own identity as "other-than-female" (Herdt 1987: 193; 1994 [1981]). In Godelier's (1982; 1986) case, on the other hand, the model was framed in the neo-Marxist terms of the violent ideological appropriation of female powers and agency by the men, who then used them to

---

[119] The *Pandanus conoideus*. In Tok Pisin, the fruit of this plant is known as marita. In the Hamtai language, the fruit is know as *hamänga*, a term which, according to some of my informants, was a composite of *amä'ä* (person, people), and *hinge'ä* (blood), thus also meaning something akin to "human blood" (cf. Bamford 1997; 2004; Bonnemère 1998b: 116).

sustain their own social and economic domination over women (cf. Stewart and Strathern, A. 1999: 346).

Either way, this masculine "appropriation" of the female was seen to involve a number of apparently contradictory and yet interrelated and mutually reinforcing mechanisms. Thus, on one level, Sambia and Baruya men were found to denigrate women and femininity (Godelier 1986; 1998; Herdt 1987; 1994 [1981]). For example, in the realm of physiology, sexuality, and reproduction, the bodies of women were said to be "weaker" than those of the men, while their sexual organs and reproductive substances (such as menstrual blood) were considered to be intrinsically dangerous and polluting. In this light, male initiations served to "separate" young boys from the female world and make them "fully male" by eliminating nefarious feminine substances from their bodies and replenishing them with male substances through practices such as "nose-bleeding" and "ritual insemination" (Herdt 1987; 1994 [1981]).

At the same time, though, the creative and procreative powers of women could also be minimised, or denied altogether, through the claim that they actually derived from the male. Again in the realm of physiology and procreation, an instance of this was the Baruya and Sambia dogma that breast milk was simply the transformed sperm men "fed" women in heterosexual fellatio, which was also believed to precipitate a woman's menarche and fertility (Godelier 1986: 57; Herdt 1982a; 1984; 1989b; 1994 [1981]: 178-80), or the Baruya belief that a child was first and foremost conceived by the men through the injection of "nourishing" sperm in repeated acts of coition (Godelier 1982; 1986: 51; 1998). In relation to myth, analogous examples were the "reactionary" (Herdt 1994 [1981]: 261) Sambia legend of male parthenogenesis, according to which all of the first ancestors were male, and women developed from men by means of oral insemination, or the Baruya creeds that the sexual organs of men and women were first opened (and thus made fertile) by the Sun, a quintessentially male figure, and that the Moon, the celestial power which causes women to menstruate and enables them to conceive, is in actual fact male, not female (Godelier 1982; 1986: 64-9; 1998).

On a final plane, men would acknowledge the powers of femininity, but only to "usurp" and control them to perpetuate their own ideological and material domination over women. Thus, according to Baruya myth, the sacred flutes of male initiation and crucial tools of war like the bow and arrow were initially female possessions. Eventually, however, the men had "taken them away" from women, using their powers to "grow" and arm new generations of males willing and able to maintain their female counterparts subjugated (Godelier 1982; 1986: 70-71; 1998).

Through this explanatory framework, the ambiguous character of gender attributes and identities and the nearly ubiquitous incorporation of female substances, objects, processes, symbols, and "actual" and "fictional" characters within what appear at first to be exclusively male social, economic, and ritual activities, were found to demonstrate, firstly, that men achieved and sustained their domination over women by fusing the powers they held qua men with those they had usurped from women, and secondly, that their "superiority" rested on a Dumontian (Dumont 1980 [1966]) style hierarchy in which femaleness was encompassed by, and thus subordinated to, maleness.

In *The Gender of the Gift* (1988; also see Strathern, M. 1991), Marilyn Strathern offered a seminal critique of this theoretical perspective. Suggesting that: "we must [...] stop thinking that an opposition between male and female *must be* about the control of men and women over each other" (1988: 15, my emphasis), Strathern proposed that each person or gender can be conceived as much as a "dividual"- or, in Wagner's (1991) subsequent phrasing, "fractal" (in the sense of composite, multiple, and repeatedly patterned in its entirety and progressive subdivisions)- entity, as it can as a single or "individual" one. In Melanesian culture, there are no intrinsic and exclusively "male" or "female" substances, identities and capacities, both genders can be conceptualised as androgynous composites, and both men and women are able to encompass one another. In this condition, what is most crucial is that the male can only emerge in relation to the female, and vice versa, so that the mutually elicitive interaction of the genders (which can, of course, be predicated upon various levels of coercion) becomes an essential condition for both identity and agency.

In line with this fresh perspective, some recent analyses of Anga gender relations (by both Anga and non-Anga ethnographers)[120] have moved away from the earlier emphasis on antagonism, segregation and domination. Fully aware that complementarity is not coterminous with equality, these works have nevertheless suggested that male-female relations in these prototypical "great-men societies" could be less inimical and more complementary- even "cooperative"- than previously assumed.

As argued by Lemonnier (2004), this shift in perspective reflects "actual" socio-cultural differences between the northern-Anga groups of the earlier ethnographies and the southern and south-western ones that have been the focus of more recent studies. Equally, the change relates to a series of historical developments that occurred throughout Angaland and wider Papua New Guinea since the times of the earlier studies, which had begun shortly after "pacification" and colonial encroachment (ibid, and Herdt 2004). In addition to this, though, the adjustment is directly connected to the aforementioned analytical and theoretical turn in the anthropology of gender (cf. Lemonnier 2004), as demonstrated by the fact that even some of the material from the first "pioneering" northern Anga ethnographies has now been subjected to novel interpretations.

To illustrate this last point, I could relate numerous examples developed by others. Instead, though, I shall offer one of my own. In his Baruya ethnography, Godelier (1986: 127) suggests that, at the symbolic level, "cassowary hunting [...] acquires the significance of a struggle with the feminine world". For the Baruya, the cassowary "is a savage woman, familiar with the forest spirits and supernatural powers [...], who lies in wait in the forest to provoke a man into making love to her, or lies in wait for young initiates and married men to *steal* [my emphasis] some of their sperm". This rapacious woman, however, "is *defeated* [my emphasis] by the powers of a man, who captures her spirit and bends it to his law" (ibid: 129). The cassowary hunters, therefore, are heroes of masculinity, and "each of the hunters' victories provides further evidence of men's superiority over women, exalting and strengthening

---

[120] See, in particular, Bamford (1997; 1998a; 2004), Bonnemère (1996; 2004a; 2004b), Lemonnier (2004), Strathern, M. (1991); Strathern, A. and Stewart (2004).

men's solidarity in the face of the dangers and pollution of the feminine world" (ibid: 129).

For his part, Herdt (1994 [1981]) offers an equally "antagonistic" portrayal of Sambia cassowary hunting. There, cassowaries are said by some to be the wives of the forest spirits, who are the "souls" of deceased great men, and by others to be the children of these and the hamlet spirits, who are the ghosts of bygone prominent women (Herdt 1987: 43; 1994 [1981]: 86, 132-33; 153). Either way, just as they represent "wild" and "rapacious" women for the Baruya, cassowaries are "temperamental, wild, masculinised females" to the Sambia (Herdt 1994 [1981]: 154).

As already mentioned above, one of the clearest omens that a cassowary has been ensnared in a trap is the "wet dream" (*wunjaalyu*) in which a hunter copulates with a woman, who is in fact his female hamlet familiar, or one of a multiplicity of such spirit familiars (Herdt 1987; 1994 [1981]). In *Guardians of the Flutes* (1994 [1981]), Herdt develops a case study based on a number of dreams related to him by a single informant called Nilutwo. A married man in his early thirties, Nilutwo was an only child "whose father (toward the last, acting crazy and violent) had died young". Brought up single-handedly by his mother, a strong, thrice married widow, the man had grown into "an accomplished cassowary hunter" and a "prolific dreamer". In his teens, he had suffered "mild bouts of crazy behaviour" which Herdt (ibid: 142) identifies as a "psychotic break". As for his marital history, that had been rather disastrous from the very start. Scorned by his promised wife, Nilutwo was eventually married through the abduction of a woman from another village at the hands of his brothers and age-mates. Besides his spouse, relations with the opposite gender were also fraught, and "women generally disparaged him as a "weak" man who was, nonetheless, constantly in trouble for his ill-fated attempts at adultery" (ibid.).

Following a fascinating analysis of Nilutwo's dreams and their relation to cassowary trapping, Herdt (1994 [1981]: 144) reports that:

> Soon after "the Dream," Nilutwo walks to a hidden spot, away from all human habitation. From a distance the spring-loaded stick is visible, but it is down, sprung. He comes

> across this dead carcass, the elusive cassowary stilled by his snare, literally strangled by its own attempt to free itself [...]. Or this female creature may be still alive, struggling, trapped. It is dangerous, it hisses, it stamps around; and it may even charge. Yet it is trapped, there is no escape. So he knows he must kill it. *It is he who triumphs* [my emphasis].

Later on, at the end of a thorough description of the secret ceremonial feast that follows the trapping of a cassowary, in which the men segregate themselves from women to incorporate the femaleness of this animal's substance, Herdt (1994 [1981]: 154) concludes that:

> The psychological experience of the feast thus enables men to *triumph over* [my emphasis] the aggressive female cassowaries, and their women, who are temporarily bypassed. There is a tension here. Yet the sense of distance separating men from women and cassowaries is kept intact and comfortable.

In a manner reminiscent of Godelier (1982; 1986), therefore, Herdt (1994 [1981]: 138-54) suggests that, in the "wet dreams" of the cassowary hunter, coitus and ejaculation come to be associated with theft, loss, and violence. Nevertheless, through the killing and eating of the dreamt cassowary, the "anxiety" and "trauma" which often accompanies them is transformed into a "triumph" for masculinity, intended both as the personal affirmation, perhaps even "revenge", of a particular man whose past was signed by the early loss of a father and by dependence on a "strong" mother, and whose present was troubled by a generally negative relationship with women, and as a victory of the collective of men insecure about their masculine identity and envious of the "natural" creative powers of women.

What is of greatest interest to me though, not least because it is fully germane to my own experience of Hamtai-Anga "gold dreaming", is Herdt's description of the prototypical "wet dream" Nilutwo views as a sign of hunting success, which seems to leave the door open to a different interpretation. According to Herdt (2004 [1981]: 142), "there are many cassowary-related dreams but really only one dream, 'the Dream': an image of 'copulating with a woman I know, or have seen before, sometimes my brother's wife, or a different woman.'" While stating that this type of oneiric experience is often accompanied

by anxiety, to the point of equating it with a "nightmare", Herdt (ibid: 143-44) proceeds to comment that:

> Sometimes Nilutwo is chased by evil ghosts, pursued by giant snakes, or nearly overwhelmed by a great surge of water before he awakens, visibly frightened. Yet when he experiences a familiar woman in a dream, when they flirt and engage in coitus, and when all the elements of a "good dream" come together, producing a final ejaculation without frightening images, Nilutwo is ecstatic. He may lament the loss of semen, "water gone for nothing"; he may even deride the spirits for that; but he does so visibly composed, with a smile, soon ready near dawn to set off to examine his cassowary traps. "I saw a spirit, we played [had coitus] together; it was a wet dream. My *moyu*[121] stick must be sprung.... I want to examine it- have I caught one [cassowary] or not?"

Though far from bringing into question the whole idea that trapping and killing a cassowary constitutes a personal and communal male "triumph" over femininity, this description of, as Herdt puts it, a prototypical "good" cassowary hunting dream suggests at least that the symbolic relationship between hunter and cassowary, and thus between male and female, does not necessarily have to be coloured by theft, anxiety, violence and domination. Just like the "good" mining dream, then, the "good" cassowary dream is an oneiric encounter in which a hunter and female spirit have a teasing and "pleasing" sexual relation that ends in the exchange of semen, following (and possibly because of) which the familiar leads another female hamlet spirit (hamlet spirit = cassowary), offers another such spirit's (if not her very own) child (cassowary = child of the hamlet spirits and the spirits of the forest), or even immolates herself (hamlet spirit = cassowary = spirit familiar) into the hunter's trap.[122] In this sense, the dreams of the Anga cassowary hunter might not, or at least not just, express the violent overcoming of femininity by a specific man or by the male gender as a whole, in so much as the desire for,

---

[121] This word refers at once to the male sexual organs and to the spring-loaded sticks in snares used to hunt cassowaries, pigs and marsupials (Herdt 1994 [1981]: 38).

[122] At this point, it is interesting to note that, among the Baruya, one of the greatest signs of love is for a woman to kill herself, usually by hanging, at the death of her husband (Godelier 1986: 159). If the same also held for the Sambia, this would be an additional hint that the cassowary's falling into a trap and "strangling itself to death" could be construed as a powerful proof of the "love" the familiar-spouse harbours for the hunter, or at least as proof of the latter's irresistible seductive powers.

and proof of, the capacity of a gendered person or gender to enter into relations with another gender or gendered person(s), and to elicit certain desired effects within and from them, in a fashion which can be envisioned and experienced as much in terms of "seduction" and "conjugal-like cooperation" (Strathern, A. and Stewart 2004: 136),[123] as in those of violent appropriation and coercion.

Beyond the thorny issue of "cooperation" versus "domination", however, there stands the fact that the most recent symbolic, social, and economic studies of Anga gender have succeeded in placing a renewed emphasis on the principle that relating is at the core of both being and doing. And it is precisely in this light that our oneiric material acquires its underlying significance. Thus, in the dream experiences considered so far, gardening emerges as a common metaphor for mining. Beyond the imagery of "gold dreaming", the analogic link between these two realms of production and social reproduction is intrinsic to the Hamtai language. Thus the vernacular for "gold mining" (wok gol in Tok Pisin) is "*nkota wamnga*" (where "*nkota*" means "gold", and "*wamnga*" signifies "garden" and, with the addition of the verb stem "*–i-*" ["to do"], "to garden"), which can be literally translated as "gold gardening". In more general terms, though, the word "*wamnga*" is also synonymous with the broader concept of "work", and "*wamnga + –i-*" means not simply "to garden" but also, more widely, "to work" (cf. Herdt 2006: 146).

While this linguistic conflation of "gardening" and "work" might simply reflect the fact that, in pre-contact times as in most present-day contexts, gardening constituted and continues to be the main source of subsistence and the primary daily activity for this people (cf. Herdt 2006: 146), our "relational" analysis of Hamtai "gold dreaming" and of the nearly ubiquitous presence of complementary gender imagery in a variety of Anga social, economic, ritual, and discursive spheres, points to an additional interpretation- that is the possibility that, whether in the camp of sexual reproduction (sex is also referred to as "work" [cf. Bamford 1998b: 39; 2004: 43; Herdt 1984: 176; 1999; 2006; Herdt and Stoller 1990: 60; and Weiner 1995]), of shamanic healing, of the "making of great men"

---

[123] And see Herdt (1989a: 117) for a similar image of a "perfect" marital union with a spirit familiar from the field of shamanism.

(Godelier 1986) through male initiation, of the hunting of cassowaries, of the extraction of minerals, or indeed of any other meaningful "(re)productive" endeavour, Hamtai culture predicates efficacy upon the kind of relational complementarity and "mutually inscriptive" interaction with the material and mystical landscape (Weiner 2004) that are intrinsic to subsistence gardening.

If this interpretation were indeed correct, then the metaphoric conceptualisation of mining in terms of "conjugality" and "affinity" with the spirits of the forest that we highlighted in Hamtai-Anga "gold dreaming" would constitute a particular instantiation of a more general symbolic mechanism in which the miners "generate" and "make evident" a specific kind of (re)productive efficacy through women, by means of their capacity to make their female familiars "fall in love" and have sexual intercourse with them, "procreate" minerals like women procreate children, procure gold as wives provide garden food, and link the miners to the other masalai as women link men to their affines.

In view of this eminently "relational" logic of agency, which, as Marilyn Strathern (1988; 1992) has convincingly argued, is a common characteristic of Melanesian culture, we can now better appreciate another defining feature of Hamtai-Anga "gold dreaming". Thus, in many of our previous "gold dreams" (see in particular Dreams 3, 9, 10, 12, 14, and 17) we have seen the miners take on a strikingly "static" and "passive" role vis-à-vis their masalai familiars, who pursued them relentlessly, and, particularly in Dreams 1, 2, and 11, almost "aggressively" as sexual and marriage partners or as parties to other kinds of interactions and of transactions. If these same dreams are seen from the perspective of Melanesian sociality, however, this apparent "passivity" emerges as the very affirmation and confirmation of the miners' own agency, because it is their own powerful attractiveness that "causes" the masalai/familiars to act in the way they do (ibid.).

Far from being "unconditional" and "innate", though, this "elicitive power" depends on the miners entering into, and then sustaining, certain kinds of metaphoric relationships with the spirits of the gold, which in turn requires them to (re)act (to)wards them in accordance with what is actually normative for that class of relations. Therefore, in line with Lakoff and Johnson's (2003 [1980]; cf.

Fernandez 1977: 113) insight that conceptual metaphors do not only entail the understanding and experiencing of one thing in terms of another, but represent operative patterns which orientate behaviour towards the one in terms of that normative for the other (or, to put it in a now classic anthropological formulation, that they constitute at once "models of" a given reality, and "models for" acting within and towards it (Geertz 1993 [1973])), we will now proceed to demonstrate that the metaphoric framing of mining as conjugality and affinity is not just a way of assigning meaning, and transferring power, to a particular domain of experience by bringing it into relation with one or more others, but it is also a recipe for action imbued with its own intrinsic morality (cf. Crocker 1977).[124] As could be expected from Melanesia, moreover, this morality has an exquisitely "holographic" modality, which, as we shall presently demonstrate, unfolds at both a "macrocosmic" and a "microcosmic" "level".

14- Mining and the "macrocosmic" morality of affinity

14a- On the ambivalence of minerals, spirits, women and affines

Like many historical and contemporary world cultures (see, among others, Clark 1993; Eliade 1978 [1956]; Herbert 1998; MacMillan 1995; Stewart and Strathern, A. 2002; Taussig 1980; Rumsey and Weiner 2004), the Hamtai of Kaindi see gold, not as inert, but rather much "alive" and mobile. In the hunt for this elusive substance, the dream familiars stand as the miners' foremost allies. Just like gold and the masalai who "look after it", however, these spirits are endowed of their own volition. In turn, this means that the miners have to work hard to "attract" them to themselves, and, thereafter, must treat them with due care in order to retain them (cf. Herdt 1989a: 107).

In addition to being "shifty", gold and the spirits of the forest are also potentially dangerous. So, for example, I was repeatedly told that gold can make miners crazy (longlong, *wanawa'na*) with desire, blinding their eyes with greed

---

[124] This notion has also been advanced by Wagner (1978), who noted that the "invention" of meaning always foregrounds the "conventional" context against which it emerges, so that the "innovation" of metaphor has the intrinsic effect of making "the moral" apparent.

and tempting them to work recklessly until they're hurt or killed by sudden flooding, landslides, falling rocks, or some other such accident (cf. Clark 1993). Similarly, the spirits of the wild can hide their gold from, inflict illnesses upon, or cause fatal accidents to, those who anger them by, among others, killing excessive quantities of game (cf. Herdt 1977: 165; 1994 [1981]: 87) and/or clearing too much of the virgin forest they inhabit to collect fire-wood and building materials, open up new gardens, or in the wanton pursuit of minerals.[125]

Given both their high desirability and elusive and ambivalent nature, the metaphoric conceptualisation of gold, masalai, and mining familiars as women and affines is highly meaningful in both descriptive and prescriptive terms. Thus, as seen in the previous sections of this thesis, women constitute primary objects of desire and constitute valuable sources of work, nurturance, and sexual and personal companionship, as well as crucial means of securing children and expanding one's social networks through connections of affinity.

In addition to this, though, women are also viewed as "elusive" entities that must be "won over" with seductive skills and the expenditure of wealth in marriage payments and to buy presents in courtship. In fact, as already mentioned in Section 10, historical Hamtai culture regarded the payment of bridewealth and the regular gifting of food to a prospective bride as a necessary precondition for the activation of the latter's reproductive capacities (cf. Bamford 1997: 118-22, 1998a, 1998b). Similarly, whenever a woman gave birth to a child, her husband was required to present her with game and other valued foodstuffs, so that she could "strengthen" herself up and recover some of the substance and energy she had spent during gestation and parturition (cf. Blackwood 1978; Bonnemère 1996; Godelier 1986; 1998; Herdt 1994 [1981]: 41; Mimica 1981; 1991). Without these gifts, the mother would be too weak to "look after" her progeny, and might even become ill and die. In a sense, therefore, a man's investment of wealth in the form

---

[125] During my stay in Kaindi, I witnessed a number of healing sessions in which a healer (usually referred to as *qota ya'a aqo* ["whistler"] or *pu'wa ta'a aqo* ["blower"] if male, and *qota ya'a i* or *pu'wa ta'a i* if female) cured people of diseases acquired in the course of these types of activities. In all instances, the practice involved the healers massaging the bodies of the victims with leaves, pieces of perfumed bark, and with their bare hands, moving them as if to grab and extract something from the inside of the body, while blowing (an action called *pu'wa*) and whistling (*qota*) secret words (*pä'ä* or *pmäpane'a*) over them.

of food and other valuables given to his wife and affines both before and after marriage was not only a means of "capturing" and "holding on to" a woman, but also a necessary condition to enable her to "function as", or to become and remain, a nurturing, productive, and reproductively capable wife.

As well as being valuable and elusive, women are also similar to gold and the spirits of the forest in that they are potential sources of pollution, illness, and danger. So, for example, men consider coitus to be a pleasurable act and a positive and necessary means of securing progeny that will "take their place" and "carry their name" after death. At the same time, though, they also view sex as risky "hard work" which exposes them to the threat of disease and pollution and drains away their strength and bodily substance (cf. Blackwood 1978; Bamford 1997; Bjerre 1958: 79; Bonnemère 1996; Godelier 1986; Herdt 1987; 1994 [1981]; 1999; Mimica 1981; 1991). Because of this, one should ideally refrain from having intercourse too often or too promiscuously. And yet, men recognise that, just like gold can tempt a miner to work in dangerous conditions, so can women drive men crazy with desire, inducing them to fornicate frequently and indiscriminately, thus exposing themselves to the threats of pollution, venereal disease, physical consumption, and/or retribution from jealous husbands (cf. Clark 1993).

Furthermore, if cheated on or otherwise mistreated, women can stop behaving as nurturing wives, life-givers, and caring mothers. Instead, they can become obstinate, lazy, rebellious, and adulterous, or they can abandon their spouses altogether for other men or to return to their parents and brothers. Worse still, a scorned woman can retaliate with physical violence, poison magic (*ayäwa*, poisin), or sorcery (*phänga*, sanguma) against her husband, or she can punish him indirectly by causing harm to his (and her own) progeny. In some cases, this is done through the conscious use of sorcery or poison (cf. Godelier 1986; and Herdt 1999; 2006). In addition to this, though, it is believed that the very "anger" of a mistreated woman can, without any conscious desire on her part, result in illnesses or accidents befalling on her children.

A tragic illustration of this occurred during a gambling session in a local mining settlement. Despite being actively discouraged by the police, gambling

was very popular in Kaindi. On this particular occasion, a large group of miners gathered to play a game of cards. As was commonly the case, the session went on for a considerable time, with people joining or leaving as spaces became available and players ran out of money. Amongst the gamblers was a young man who resided in a nearby hamlet with his wife, a small child, and a newborn baby. He had been one of the first to enter the session. After losing a few hands, his luck had turned and he had carried on playing for a while, winning more and more money in every game.

Eventually, his wife came looking for him. As is common among the Hamtai (cf. Blackwood 1978: 116), she was carrying her sleeping baby in a string bag (*qä*, or bilum) suspended from her forehead. According to what I heard, the woman was angry with her husband for taking all their money away to gamble. She shouted that their first-born child was alone in the house, crying because he was hungry and there was nothing to eat. She asked her husband to give her money to buy some food for herself and their child, but he refused her and turned her away. Sometime later, the woman returned to him. "You have won enough"- she pleaded- "now stop playing and come back to the house, or at least give me some cash so I can feed myself and the children." Once again, the man refused her and, shouting abuse, ordered her back to the house.

The woman ran off. Blinded by anger and shame, she picked up a kitchen knife from her dwelling and, still carrying her newborn, charged back to the circle of gamblers. As she approached, someone noticed the blade and screamed. In a flash, the woman sprung on her husband. Whether she truly intended to stab him is unclear. At any rate, the man dodged the blow and escaped unharmed. In the momentum of the attack, though, the woman's bilum flung aside and came unhinged. The baby fell to the ground, hit its head on a stone, and died.

Reflecting on the event, people claimed to be sympathetic to the woman, who had only acted out of desperation for the uncaring and selfish behaviour of her husband. This notwithstanding, some didn't believe the death of the child to be wholly accidental. Instead, they suggested it had been "caused" by the anger of its mother. In saying this, some could have implied that the woman had *phänga*, a type of power commonly used to slay and cannibalise other people. While many

consider *phänga* to be a conscious form of aggression, thus making it akin to what is traditionally glossed as "sorcery" (Stephen 1987), some believe that certain people can hold and deploy it against others without being fully conscious of it, thus making it more like what is conventionally described as "witchcraft" (ibid, and see Moretti 2006a). In this sense, the woman's hatred of her husband could well have caused her *phänga* to kill their child without her actively wanting it. For many, however, the death of the child wasn't the result of either "sorcery" or "witchcraft". Instead, the fact was simply that, just as the nurturing love of a mother can secure the well-being of her progeny, so can her anger and bad feeling "naturally" "cause" them to be harmed.

Far from being peculiar to the mother-child bond, this idea relates to a broader notion that the "natural" and "supernatural"[126] forces of the cosmos "feel" and respond to human emotions and the positive or negative energy of social relations (further expressions of this theory are the beliefs that, if two brothers have a disagreement over the ownership of some piece of land, the ground in question will stop being productive, ceasing to yield gold or healthy crops [cf. Herdt 1992: 71], or that, if one fails to look after and respect his/her father and mother, "the cosmos" [i.e. God, the ancestors, the masalai, or some other undefined "cosmic force"] will punish him or her by making his or her gardens, business, mining, or hunting expeditions unproductive, and/or by inflicting illnesses and accidents on him/her and his/her progeny).

As is the case with women in general, and wives in particular, moreover, the broader category of "affines" (tambu, which also means "taboo", "forbidden") has certain ambivalent connotations that make it a fitting symbolic analogue for gold and the spirits of the forest. On the positive side of the equation, affines provide men with women, and, through them, children, thus enabling their own "names" and their families, lineages, and broader communities to "grow" in number and strength and to propagate through time. Furthermore, in situations of conflict, in-laws can act as valuable allies, offering military aid and, were one to

---

[126] These two terms are used for the benefit of the reader, but do not reflect an emic distinction between the realm of the "natural" and "supernatural", which are regarded by the Hamtai as essentially one and the same (cf. Bamford 1997; Godelier 1986; Herdt 1987: 41; Mimica 1981).

lose his homeland to an enemy, some of their own land to settle. Similarly, they can furnish particular persons, ancestral lines, or territorial units who have plenty of land, but insufficient numbers and strength to defend it, with potential "recruits" who will settle with them and act as political and military "supporters" against both internal and external threats. Even in times of peace, moreover, in-laws supply each other with valuable resources (e.g. rare minerals, specific trade items, or foodstuffs that grow only in certain climates, altitudes, or soils), which, due to specific geographic, economic, environmental, and/or political conditions, would otherwise be unavailable to them (cf. Bamford 1997; Bonnemère 1996; Burton 2001; Godelier 1986; Herdt 1999; 2006).

And yet, if they can be precious providers of women, material resources, and political-military support, affines can also represent potential sources of conflict and strife. Thus, like most other Angans, the Hamtai follow the general principle that one's tambu "must be remembered". Broadly speaking, this means one should always strive to provide land and support to those affines who need them (cf. Bamford 1997; Bonnemère 1996; Bonnemère and Lemonnier 1992; Burton 2001; Godelier 1986). As seen above, this provides a crucial "safety net" in the face of war, displacement, isolation, and material need. At the same time, though, it also signifies that "needy" affines can become a burdensome drain on one's most crucial resources. At the extreme, this principle can even result in displaced or enterprising in-laws coming to settle with their affines (often with the open blessing and invitation of one or more landowners keen to recruit a pool of political supporters), only to rapidly grow in number and strength until they are able to absorb or overcome their hosts and take over their land (cf. Bonnemère and Lemonnier 1992: 141; Godelier 1985; 1986; 1989).

In addition to this, though, "remembering" one's affines means first and foremost to acknowledge and front the debts incurred for receiving a woman in marriage. Giving birth to a girl and looking after her until she is ready to marry calls for hard work and the expenditure of considerable resources on the part of her parents. The exchange of pre-nuptial gifts and the payment of bridewealth are seen as a way of repaying one's affines for the efforts invested in the procreation and nurturance of one's spouse. As a matter of fact, it is only by means of these

marriage payments that a man can make absolutely sure that his prospective in-laws will give their daughter away "freely" and "without anger" (cf. Bamford 1997).

After marriage and the birth of his children, moreover, a man should still offer respect and general assistance to his affines, and ought to make continued prestations to them to ensure their "good will" and the good health of his wife and progeny. Indeed, if dissatisfied with the bridewealth or child-growth payments they received, or if otherwise displeased with the behaviour of their tambu, his affines can use magic spells (*pä'ä*) to render his wife infertile and/or make her (and his) children ill, thus effectively "retracting" the crucial gifts they provided when they gave their daughter in marriage (cf. Bamford 1997: 66, 117-120; 1998a; 1998b; also see Bonnemère 1996; Lemonnier 1992; Mimica 1981; 1991). Similarly, they can resort to poison magic or sorcery (*ayäwa* and *phänga*) against him and his agnates. Moreover, as already seen in relation to women, even without any conscious or unconscious recourse to magic or sorcery on their part, the "anger" felt by wronged in-laws is deemed capable of precipitating some form of "cosmic" punishment (such as disease, accidents, or lack of success in a range of productive activities) on the offending affine and his family. Finally, if a man fails to meet his affinal obligations, his tambu might simply refuse to provide him with material, political, or military assistance in times of real need, and, should he be residing with them, they may even resort to chasing him and his family out of their land.

A telling example of what can befall those who take advantage of their tambu is the story of Pol. In the 1980's, Nisimas' eldest daughter was married to Pol, a non-Hamtai man who had once held a position as an accountant for an important, nationwide business. When his employment was terminated (allegedly due to embezzlement), the man asked his *näinko* (a reciprocal term meaning both "father-in-law" and "son-in-law") to hire him as his personal accountant and operations manager. Nisimas, who had little formal education, was impressed by Pol's qualifications and experience. Believing his son-in-law could help him transform his then burgeoning mining enterprise into a fully mechanised operation and to diversify his business interests, the old man assented to his tambu's

request. For a time all went well. Gradually, however, Pol started to settle scores of his own relatives and wantok (friends and "compatriots" from his same language area) on Nisimas' leases. As his confidence grew, the man attempted to wrestle more and more control of the operations away from his *näinko* and, allegedly, began to steal money from his accounts. Eventually, Nisimas became wary of Pol and, in his own words, was compelled to rally his own agnates and workmen and chase his son-in-law and all "his people" out of his land. As he evicted him, Nisimas harangued his affine thus:

> I have given you my daughter, but you have come to live with me and tried to take away my land and money as well. You are a tambu; you have no right to sit on my land. I have given you a woman, now take this woman and go back to your place.

And leave Pol did, though not with his wife, who was abandoned to the care of her father.

The first time I heard this story was in the course of a discussion between Nisimas and some other family members about the more recent misdeeds of a second troublesome tambu. Anton, husband to Nisimas' third daughter Julia, was a clever and charismatic young man from the Aseki area of Menyamya. After marrying Julia, Anton had settled with his wife's family. Just like Pol before him, though, the man had attracted a steady influx of relatives and wantok (friends and unrelated people) from his native village, which he had settled on his tambu's land. Sometime later, Anton was said to have initiated an affair with a local woman, whom he had planned to take as a second wife. When Julia became aware of the rumours, she assaulted and maimed her husband's alleged lover. As a result of the aggression, Nisimas' daughter was taken to court and jailed. During my stay in Kaindi, Julia was still in prison. Anton, however, had consistently denied the affair and, claiming he wanted to stay close to, and to support, his spouse's family at least until her release, had refused to move out of his *näinko*'s land to return to Aseki.

As a matter of fact, far from being weakened by his marital misfortune, Anton had consolidated his position in Kaindi by settling still more of "his people" on Nisimas' land, as well as through his election to office as a local

government representative. According to Nisimas, Anton had used his influence to take control of a part of his leases, which he had allowed his own relatives to mine without his consent, and without ever turning a portion of the gold they won over to him. Worse still, the "usurper" had apparently "poached" some of Nisima's labourers for himself and, when one of them had got hurt in a mining accident and filed for compensation, he had refused to pay him any money. Instead, he had claimed that, as the official leaseholder for that area, it was Nisimas' duty to compensate his injured worker.

In addition to this already impressive series of malfeasances, Anton was also accused of having borrowed some 18,000 kina in Nisimas's name from a number of people in Kaindi, Wau and Bulolo, who were now seeking repayment from his father-in-law. Furthermore, he was suspected of using magic to drain all the gold of his *näinko*'s leases into his own workings. Nisimas' son Elaija, for instance, claimed to have once visited Anton's working area and caught some of his relatives and labourers planting sticks in the ground and uttering magic words. When he had asked for an explanation for this suspect behaviour, the men had said that the previous night they'd had intercourse with their wives and lovers. Because of this, they had decided to "plant" some sticks and use magic words to "fix" the gold to the ground and make sure that it would not "run away" from their polluted persons. Elaija, however, had not been persuaded by this account and, even though he'd failed to recognise the spells chanted by his tambu, remained convinced that their true purpose had been to attract all the minerals in his father's leases to Anton's workings.

In the context of a familial discussion about Anton, Pol's tale emerged as a fitting moral commentary on the mutual respect and reciprocity that should govern relations of affinity, and on the consequences that are likely to befall those who fail to observe it. When a man receives a woman in marriage, he should be grateful for it. Ideally, he should take her back to his own land and relations, from which he should obtain food and wealth to offer his affines as bridewealth and child-growth payments. If, on the other hand, he decides and is allowed to settle with his tambu, the man should behave as their loyal "supporter", pledging his

skills and some of his labour to them, and giving them a fair share of the resources he wins from their land.

Just like Pol before him, though, Anton had abused his affinal connections by settling more and more of his people on the land of his father-in-law, attempting to carve a position of political prominence for himself, and conniving to "usurp" his *näinko*'s leases, "steal" his money, and "misappropriate" his resources through fraud and magic. In the same way as Pol, then, Anton had failed to reciprocate his in-laws' generosity. As a result, he now faced the prospect of a fate similar to that of his predecessor- that is the effective dissolution of his affinal ties with Nisimas and his family, and the loss of all that he had gained from them, including access to the latter's land and resources.

14b- Mining and the centrality of "hard work" to conjugality and affinity

Now, in the various "gold dreams" encountered so far, the miners experienced a close encounter with, and/or received a vision from, their dream familiars and the masalai, which presaged the imminent discovery of a valuable gold specimen or a larger mineral deposit. By means of a detailed symbolic analysis, we have already concluded that these oneiric experiences contain a repertoire of metaphors which conceptualise dream familiars and spirits of the forest as spouses and affines, and characterise the gifts of gold these offer the miners in terms of the material resources, productive and procreative capacities, and general nurturance and support men can expect to receive from "good spouses" and "affines".

In these systemic tropic juxtapositions, Hamtai-Anga "gold dreaming" draws upon, makes apparent, and, through the vivid power of oneiric experience, confirms a series of structural similarities between dream familiars and masalai on the one hand, and wives and affines on the other, chief amongst which are their intrinsic "desirability", "elusiveness", and "ambivalence". In addition to this, though, these "oneirotropic" networks embody and promulgate the notion that, if gold and the spirits who "look after it" are as elusive and potentially dangerous as women and affines, then one should endeavour to attract the ones by the same means employed to "win over" the others, and to retain the former and induce

them to (continue to) behave as "nurturing wives" and "generous affines" through the same moral doctrine of respect, restraint, cooperation, and reciprocal exchange which regulates marriage and affinity.

Looked upon from this perspective, it is now clear why the Hamtai miners of Kaindi employ the same magic formulae (*pä'ä*) used in love magic to lure gold to their land and their workings, and to entice the masalai to become their oneiric spouses and familiars (see Section 12). Similarly, we can now better appreciate why they maintain that gold and the masalai (which, as we have seen in the course of our discussion, are seen both as separate entities interconnected by bonds of guardianship [i.e. spirits of the forest = guardians of the gold] and as embodiments of each other) are attracted to them by the same general qualities which women find seductive in men. Indeed, a specific example of this is the belief that the "uncontaminated" manly vitality of mature but unmarried youths allows them to "seduce" the masalai and "draw" gold more easily than is possible to older and less "virile" miners. A second case in point is the diffuse idea that, if one wishes to attract gold and the masalai to oneself, one must first of all demonstrate his capacity and willingness to work hard, because, as an informant put it: "if you work very hard all the time, the masalai will get to know you and they will love you; but if you are always idle, then they will not know you and will not give you any of their gold".

From what was already mentioned in Section 12, it should be recalled that working the land is an essential condition for learning about, and becoming part of, its history. In addition to this, though, "working hard" represents an important means of demonstrating to the masalai one's worth as a man and a potential "husband" and "affine". In Hamtai culture and society, those unable or unwilling to work will be scorned as a "rubbish man" (*wampisä*, rabisman, or pipiaman) by fellow men and women alike. A hard working person, on the other hand, will be praised as a "good man", and will be more likely to impress women and potential affines with his capacity to contribute to an essentially complementary domestic economy, and to meet his various obligations as an in-law. As a matter of fact, in some of the "gold dreams" I collected, the link between "working hard" and attracting oneiric spouses and affines is drawn quite explicitly. Let us consider, for

instance, the following tale, which was given to me by a young Hamtai miner named Taitas:

Dream 23

Once I saw a dream about a workplace down below. In the night I saw a dream about two women... two young white women with long hair that fell all the way down their backs. They carried bilum (string bags) full of cucumbers, bananas and sweet potatoes. The two of them came to that workplace and approached me, saying: "You always work hard to find gold, so now we have come to give you ours". I took their food and thanked them, and they told me: "Tomorrow morning you must come". When I woke up in the early morning I walked to that place I had seen in the dream. When I reached it I saw a lizard, it was one of those long, thin ones with four legs. This lizard didn't move; it just lay there waving its tail. I moved closer to it and it ran away, and as soon as it went I began digging the spot where it had been lying. I dug and dug until I found a gold vein. I mined that same vein all day long and I got more than 550 kina from it.

In this particular narrative, two white women approach the dreamer with an offer of food, which later translates into the discovery of a gold vein. Although this oneiric encounter does not appear to have an explicitly sexual dimension, our systemic analysis of analogous "gold dreams" showed that this type of imagery holds implicit connotations of "courtship" and of marital communion. On this basis, the female characters of this story could be seen either as potential "lovers/betrothed brides" "courting" Taitas with the gift of food and the implicit promise of sex, or as established spouses engaged in relations of marital exchange and nurturance with their husband.

Either way, what's most significant is that the maidens justify their gift of food/gold in terms of the "hard work" he always puts into mining. Thus, if we see these two figures as Taitas' oneiric "wives", the moral of the dream appears to be that, if you always work hard, the masalai will admire and reward you with gold, just like a woman will respect and be grateful to an industrious husband, repaying his "hard work" (whether in the preparation of garden land, hunting, house building, or any other gender specific or cooperative enterprise) with her assistance and the sharing of the fruits of her own work (her garden). Of course, the "flip side" of this moral message is that, to remain efficacious and productive,

a miner can never cease this hard toil because, should he do so, the masalai will stop "loving" and offering their gold to him, just like a wife will lose respect for, become reluctant to share her labour and resources with, and perhaps forsake altogether, a husband who is idle and refuses to "work hard" for the survival of their household.

Alternatively, if we interpret the female figures of Taitas' dream as his spiritual "lovers" or "betrotheds", this oneiric experience acquires a slightly different, and yet closely related and complementary, meaning. In this case, its main message would be that the two women were attracted to the dreamer because of his capacity for "hard work", which in turn evidenced his value as a "good man", a potential husband, and an able provider. In this specific interpretive context, Taitas' "hard work" would itself come to represent a symbolic allusion to an impending marital union between himself and the female masalai of his dream.

Indeed, as Bamford (1998b: 34) wrote with specific reference to the Hamtai speaking Kamea:

> The most definitive sign that [a marriage is] imminent occurs when a young man begins to clear a garden of his own for the first time. Once the land has been tilled and is ready for planting, the parents of the girl will bring their daughter to their husband to be. By this act, the couple is wed (Bamford 1998b: 34).

In accordance with this, it should be noted that Dream 23 begins with Taitas standing (apparently by himself) in a certain mining location. Given that the area is described as "a workplace", it is not unreasonable to presume that, at the time of, if not even within, this oneiric experience, Taitas was prospecting around it, and might have cleared parts of it in preparation for mining. It is in this very "workplace" that the two women approach him, claiming that they have been compelled to visit and offer him food/gold because of all his past "hard work." As a result, and particularly when we remember that the vernacular term the miners use to refer to their "workplaces" is *wamnga*, which also means both "work" and "garden", this image is suggestive of a "wedding," with Taitas' "hard work" in the mine being analogous to a young man's preparation of his first marital garden,

which is followed by the arrival of his bride (or, in this case, brides) and the beginning of their conjugal union.

Finally, if we see Taitas' dream as a metaphoric representation of a "wedding" with the spirits of the forest, then the explicit reference that his "brides to be" make to his "hard work" as a miner carries an additional and very important significance. Writing about the Upper Watut of the early period of colonial contact (1930s), Blackwood (1978: 111, Note 39) argued that the payment of bridewealth was only a relatively recent local development, and that the more ancient native custom involved a form of bride service in which the groom went to live with his future affines and hunted for them until they were satisfied with the amount of game he had procured them.

Whether or not this observation is correct remains open to question. For a start, it is not clear if this comment referred both to the Angaatiha/Susuami and the Hamtai communities of the Upper Watut. Furthermore, the deep significance and essential character that bridewealth has been reported to have in other Hamtai and wider Anga groups (see, for instance, Bamford 1997; 1998a; 1998b; Bonnemère 1993; 1996; Herdt 1994 [1981]; 1987; Mimica 1988) casts significant doubts on the notion of a recent past in which "bride service" was the dominant form of Hamtai-Anga marriage. Nevertheless, though they always constituted a rather marginal and less prestigious practice, marriages based on some direct or indirect form of "bride service" have been reported among a number of different Anga peoples (see, for instance, Godelier 1986; Herdt 1987; 1994 [1981]). Consequently, it is not altogether impossible that, at some point in time, the provision of labour by a son-in-law may have held a much greater role in Hamtai marriage prestations than it does in the present.

Be that as it may, even in a contemporary regime where marriage depends on the making of recurrent betrothal payments and on the giving of bridewealth, the provision of labour by Hamtai sons-in-law continues to play a significant role in securing a bride and in the establishment of positive affinal relations. Indeed, as Bamford (1997: 117, Note 11) commented in relation to the Kamea: "in addition to making gifts, most youths attempt to ingratiate themselves with the parents of

their future bride by offering assistance in a range of household tasks including building fences, making gardens, collecting firewood, and the like".

Now, our previous analysis of Hamtai-Anga dream theory and of the symbolism of "gold dreaming" suggests that Taitas' oneiric "brides" are none other than spirits of the forest. If this were indeed the case, then the "hard work" these adduce as the reason for their coming would subsume all the draining and inscriptive labour the dreamer had invested over the years in the land of their parents and his "future in-laws"; i.e. the masalai of the mines, who are regarded by the miners as the "guardians" and ultimate papagraun ("owners") of the mountain and its riches. In this light, one of the messages of the dream would be that the "hard work" that Kaindi's miners put into prospecting, clearing, and mining the land is akin to the valuable "bride service" a young man performs in the land of his affines to ingratiate himself to them, demonstrate his potential as a son-in-law, and entice them to give their daughter(s) in marriage to him.

As a matter of fact, this conceptual analogy is made even more apparent in other instances of Hamtai-Anga "gold dreaming". Let us return, for example, to Dream 22. In that particular narrative, Matyu married a beautiful misis (white woman). Following this oneiric "wedding", the parents of the bride took him to a large dwelling perched high up on a mountain.[127] There, the dreamer's masalai *näinko* (WF) addressed him as follows: "you married my daughter, so now you must clean our house." Thereafter, the dream had come to an end. The following morning, Matyu went to the place of his dream in search of gold. As he was clearing the ground of stones and rubble, the man noticed a snake, which he followed to a small hole in the ground. As it disappeared down this fissure, the snake defecated by its entrance. For reasons he could not clearly explain, Matyu felt compelled to "check out" these droppings, which, in his hands, turned out to be, not worthless excrement, but valuable nuggets.[128]

---

[127] Just like rivers, lakes, ponds, bogs, and caves, high mountain slopes and peaks mantled in fog (sno, or *qawa* [which also means "cloud"]) are believed to be prime locations of residence for the masalai (cf., amongst others, Mbaginta'o 1972).

[128] The symbolic association of excreta with money, gold, and other valuable minerals in dreams, myth, and folklore has been widely reported in Papua New Guinea and in many contemporary and historical world cultures (for PNG see in particular Biersack 1995, Note 16; 1999, Note 16; Ernst

2004; Wardlow 2004; and Weiner 1994; 1995; for broader cross-cultural and historical exemplars see, among others, D'Andrade 1961; Freud 1994 [1900]; Freud and Oppenheim 1958; Kuper 1989; Lincoln 1935; Lévi-Strauss 1982; and Seligman 1932).

According to Freud (1994 [1900]; 1959 [1908]: 174; and Freud and Oppenheim 1958), this "typical" association can be explained in two ways. To begin with, the ultimate "worthlessness" they hold for "normal" adults makes faeces the symbolic opposite of all manners of desirable "wealth". In turn, this means that the "archaic logic" of dreams, myth, and folklore, which he sees to hold an innate tendency to conflate antithesis and to symbolise an object or desire by means of their very opposite, is "naturally" inclined to use the one as a substitute for, or in close association with, the other. Effecting a nice "inversion" of his own, though, Freud also draws on his theory of the "psychosexual development" of children to suggest that, at a particular stage of human development (of which certain dreams and myths may be an expression) and permanently in certain "fixated personalities", defecation is associated with the specific pleasure of their release. In turn, this makes excrement a good symbolic analogue for gold and other kinds of wealth which, like shit, constitute ambivalent sources of both pleasure and satisfaction and "filth" and decadence (Freud 1994 [1900]; 1959 [1908]; and Freud and Oppenheim 1958). On a more general level, Freud (1994 [1900]; 1959 [1908]; and Freud and Oppenheim 1958) also argues for the existence of a broader symbolic link between defecation, giving, and withholding, and thus between faeces and the "moral economy" of wealth exchange and consumption.

It is this latter link that has been most influential in anthropology. In what is one of the earliest and arguably most detailed comparative anthropological study of dreams, for instance, Lincoln (1935: 107) drew attention to the Arabic explanation of the oneiric interchangeability of gold and faeces as a reflection of the fact that the former is "a thing which easily departs or is soon lost or spent". In the specific PNG context, moreover, Weiner's (1994; 1995) analysis of Foi myths about the origins of petroleum at Lake Kutubu makes sense of the links these draw between a gold coin (i.e. money), oil, and the diarrhoea of a legendary white man in two ways. In the first place, it sees them as a metacommentary on the Western economy, which is still isolated and self-contained vis-à-vis the local indigenous economy, and in which wealth is always perceived to be privately consumed and "shitted away" before it can acquire an inscriptive character. In addition to this, the connection is said to highlight the "lack of control" the Foi have on cash, the quintessential Western wealth item, which is always circulated too quickly, and over their own petroleum, which is haemorrhaged out of their hands to the benefit of outsiders and for some future returns whose exact value is not yet clear.

In a similar vein, Wardlow (2004) accounts for the Huli and wider PNG link between gold and shit in terms of the symbolic association between excrement and retained (i.e. non-circulated) and self-consumed wealth, and thus between gold and the social anomie and greed it so often engenders. At the same time, she (ibid.) also highlights the fact that in Huli myth shit is given a positive character by way of its frequent association with hidden wealth, rebirth, and regeneration. An analogous argument is made by Biersack (1999, Note 16), who writes that, far from regarding the excreta of the mythical python which local discourse associates with gold as a "polluting" substance, her Mt. Kare informants commented that snake shit is not at all disgusting but actually "smells sweet". In this light, the association of gold and faeces mirrors that between minerals and other powerful and yet ambivalent bodily substances such as menstrual blood which, if properly controlled, can have valuable inscriptive functions and engender life and growth, but if let free to flow wildly, can result in pollution and social and material disease and disorder (see Biersack 1995; 1999; Clark 1993; 1995; and Weiner 1994; 1995; 2004).

In the following interpretation of Dream 22, I bring to the fore both the negative and positive attributes of excreta and their association with gold. Hence, on the one hand, I link the image of shit with the "hard", "draining", and potentially "polluting" work entailed in child-rearing, "brideservice", and mining. On the other, I see it as a symbol of the valued outcomes of such (re)productive and nurturing labours, i.e. children and minerals. While my data also indicate that the local rhetoric conceptualisation of gold as shit does indeed serve as a metacommentary on the white man's economy and its relationship to indigenous sociality, a detailed analysis of this role cannot be undertaken within the limits of this thesis and will have to be postponed for future works.

As is the case with other Anga groups, one of the main ceremonial substances of the Hamtai is a type of yellowish clay used to colour the skin for all manners of rituals (generally referred to as *äpa* or singsing) (Figure 21). When I asked my informants in Kaindi, Wau, and the Kaintiba Sub-District about the significance of this matter, I was told that it is something related to strength, well-being, beauty, and, crucially, wealth. Beyond these general connotations, yellow mud is also closely connected with procreation and post-natal growth, as demonstrated by the fact that it is customarily smeared on the bodies of infants and mothers following birth, and again on young boys at the end of first-stage initiations (cf. Bamford 1997; also see Godelier 1986; Herdt 1994 [1981]; Mimica 1981).

In addition to this, though, evidence from other Anga locales indicates that this substance is symbolically related to excrement (see, for instance, Herdt 1994 [1981]), and particularly to the faeces of newborn babies and children. Among the Baruya, for instance, men must participate in a special ceremony every time their wives give birth to a child (the ritual is particularly important at the birth of a man's first child). As part of this rite, the new father is presented with a packet of

---

To conclude, though, I would like to mention three further factors that may account for the close symbolic association of gold and faeces in this and other narratives. To begin with, the Hamtai (and other Papua New Guineans) may hold a more or less implicit understanding of minerals as the "dejecta" of the ground/earth, and thus also of the spirits of the mountain (cf. Lévi-Strauss 1982). To strengthen this hypothesis is the fact that, in many a sense, Hamtai culture represents the masalai and other spirits as "inverted humans" (cf. Mimica 2003). So, for example, the spirits of the mountain are said to live in what (to humans) appears to be wilderness. In most everyday experiences, they take the form of animals, not humans. Furthermore, they are said to prefer to travel and work at night rather than during the day, which is the "normal" period of human activity. In this sense, it would not be unreasonable to suppose that what may appear as "wealth" to humans, i.e. gold, may "actually" be "shit" (i.e. valueless) for, or even the shit of, the masalai/familiars (for an analogous observation relating to Europeans v. indigenous perspectives see M. Strathern's comments in Weiner (1995: 189, Note 9). Similarly, if many dreams conceptualise gold as the "food" of the spirits of the mountain (gold = garden crops), others may well reveal that what humans perceive to be the food of the masalai is in actual fact their shit, if not that the very nourishment of these spirits is itself excrement to humans (gold = food = faeces). As a matter of fact, this hypothesis is given strength by Mimica's (2003) find that, among the Yagwoia, the spirits of the dead and the forest spirits are associated with the anus and, in several ritual contexts, are presented, not with one's face, but with one's exposed buttocks. Finally, in the Hamtai language the word *iya*, or "faeces", is distinguished only by accent from the noun *iya*, which means "dawn" and is used to indicate the first morning light, whose own association with gold has already been mentioned in Section 11 of this thesis.

yellow mud, at which point a ritual specialist launches himself into the following harangue:

> What is this? Mud to paint yourself with, to make yourself handsome? No, it's shit from the baby that has just been born. As long as this shit has not hardened, you shall refrain from making love. You have been with women; now we take you back; we put you back in the men's house. Think of this child; think to prepare gardens for him and his mother. When your son learns to walk and play with a child's bow, when your daughter can carry a small string bag on her head, then you can stick your cock out again (Godelier 1986: 38).

Figure 21. A Hamtai woman from the Kaintiba area painted with yellow mud.

On the basis of these ethnographic facts, yellow mud and shit would appear to stand at once for that which is beautiful and highly valued, such as powerful rituals, ceremonial wealth, and children, and that which is dangerous and polluting, including partum and the filthy excreta of babies. In turn, the yellow faeces of children would appear to act as a condensed signifier for all the hardships and sacrifices that fathers and mothers have to endure in their role of nurturing parents. Thus, as is the case in other parts of New Guinea, the Hamtai often explain the need to pay bridewealth by reference to how parents are forced to come into contact with, and remove, the "polluting" excreta of their daughters. Bamford (1997: 117), for instance, reports that, on being asked about the rationale behind marriage prestations, an informant commented:

> I give these things because it was hard work to care for my wife. As she was growing up, she shit and pissed all over her mother. It is hard work for the mother to remove the child's shit. That is why we give these things.

Considering this close symbolic association between yellow mud and excreta, parturition, parental nurturance, and bridewealth, and given what we know from previous instances of "gold dreaming", the structure and symbolism of Dream 22 could be interpreted as follows: the snake encountered by Matyu is none other than the physical manifestation of his oneiric parents-in-law. In the dream that precedes this encounter, Matyu's masalai *näinko* asks him to clean his "house" as an apparent "payment" for having married his daughter. The following morning, the dreamer goes to the area where the dwelling stood in the dream. There, he removes some rubble from the ground, thus metaphorically absolving his tambu's request to "clean up" his home. Furthermore, when the snake disappears down a hole in the ground and defecates by its entrance, Matyu uses his bare hands to remove some of this excrement. Given that "shit" is a shorthand for all manners of "dirt", and that, as we saw in relation to Dream 21 and Note 99, holes and other ground fissures are archetypal places of residence for the spirits of the forest, this gesture can again be interpreted as a metaphorical answer to the masalai's injunction that Matyu "clean up" their home.

As they turn out to be gold, moreover, it is only logical to assume that the excreta of the snake were of the "yellowish variety" associated with children and bridewealth, and with the clay used after parturition and in other important private and public rituals. In turn, this makes Matyu's handling and removal of this "shit" the most "symmetrical" form of "brideservice" with which to reciprocate the sacrifices his masalai in-laws endured in the bringing up of his new bride/familiar, which in everyday discourse can be metonymically subsumed in their duty to come into close personal contact with, and "clean away", the polluting faeces she expelled as a child.

In view of all these facts, the excreta of the snake can be seen to stand as a "condensed" (Freud 1994 [1900]) or "polytropic"[129] (Ohnuki-Tierney 1991) symbol representing at once the "dirt" Matyu was asked to clean from the house of his masalai parents-in-law (i.e. the hole in the ground), the faeces that these had to wipe from his new familiar/spouse as she grew into a marriageable woman (an analogy that rests not just on a parallel between the yellow droppings of the snake and the yellow excreta of children, but also between the fissure in the ground and the anus), *and* the alluring masalai bride herself. Indeed, this last association becomes more obvious when we consider that: *a)* as already mentioned in relation to Dreams 20 and 21, eggs are considered to be the "children" of reptiles and birds (snake's egg = masalai child = oneiric spouse); and *b)* in everyday discourse, eggs are compared to the fertilising excrement of these animals (snake's shit = snake's egg = snake's child), which are believed to give birth through their anuses (cf. Herdt 1994 [1981] and Wagner 1978).

As is also the case in the myths and social practices of other parts of New Guinea (see, for instance, Wagner 1978), therefore, the logic of this dream appears to be that, just as the need to pay bridewealth can be explained by

---

[129] Here I build on Ohnuki-Tierney's (1991: 160) definition of "polytropic symbols" as "polysemic symbols whose multiple meanings in various contexts function as different types of tropes". In my usage, however, a "polytropic symbol" is not only a symbol that can be read as, or which combines, different "kinds" of tropes, such as metonymy, synecdoche, or metaphor, in different contexts, but also one which has the potential to embody a series of diverse or interrelated metaphoric, metonymic, or synechdochical meanings within the same context. As suggested by Wagner (1986: 29), however, it is worthy to note that every metaphor entails a degree of "condensation" and is thus open to an array of different associations.

reference to the more disagreeable obligations involved in the parenting of a bride, so does marriage constitute an apt reward for the absolution of one or more unpleasant and hard tasks on behalf of one's prospective in-laws and/or of one's bride to be. Just like Dream 23, therefore, Matyu's narrative appears to equate the arduous, dangerous, and draining labour of the miners to the "brideservice" young men are expected to perform for their prospective affines. What is more, it also seems to imply that it is only by means of this "hard work" that the men of Kaindi can win the admiration and assistance of the spirits of the forest, induce them to give them women in marriage, and (in accordance with the "oneirotropic" series: women = familiars = wives = gold that we uncovered in prior instances of "gold dreaming") succeed in transforming what appears to be worthless gravel ("shit") into valuable minerals.

As was again true for Dream 23, the structure and symbolism of this account is nevertheless sufficiently ambivalent to be open to several alternative readings. For instance, in the dream itself, Matyu first "marries" the masalai maiden (*scene a*). It is only after this "wedding" has taken place that he is led to the house of his oneiric in-laws (*scene b*), which he is demanded to clean (*scene c*).[130] The events that follow the dream, on the other hand, could be viewed as a classic structuralist succession of re-combinations and partial inversions of the progression of its main constituent units, with the addition of a final outcome that's not explicitly mentioned in the dream itself (see Lévi-Strauss 1966; 1968; 1982; and, for a specific application of the insights of structuralism to the analysis of dreams, Kuper 1979; 1983; 1986).

So, the morning after the dream, Matyu goes to the rocky slope where the house of the masalai had stood in his dream (*scene b*). There, he clears away some rubble (*scene c*), after which he is approached by a snake. In our first interpretative effort, we took this reptile to be the physical manifestation of Matyu's masalai in-laws. A second possibility, however, is that it actually represents his new spirit familiar and oneiric wife. In this case, the encounter between Matyu and the snake would mirror the "wedding" that opened his

---

[130] Note, however, that this scene is intimated, but never actually actualised, in the dream itself.

original dream sequence (*scene a*). After this "marriage", the dreamer is led to a hole in the ground, down which the snake disappears, defecating near the entrance. Thereafter, Matyu clears up some excreta, which turn out to be gold.

As in our previous analysis, we can view this as a repetition of *scene b*, in which the dreamer reaches the "door" into the home of the masalai, and *scene c*, where he "cleans" some dirt from the dwelling of his tambu. Nevertheless, the outcome of this last series, or the transformation of the snake's faeces into gold, appears not to be a repetition of *scene a* (i.e. Matyu's "marriage" to his spirit bride). Rather, in accordance with the analogies or straightforward identities we found to exist between yellow shit and the mud associated with parturition and growth, these two substances and the excreta of children, the anuses and faeces of reptiles and their vaginas and eggs, and the eggs of snakes with their "children", it can be read as a metaphor for parturition. Indeed, in it Matyu's snake-wife gives birth to (i.e. "defecates") a child, or a multitude of children (shit = eggs = children), which, in agreement with the tropic representation of minerals and children common to Hamtai-Anga "gold dreaming" (minerals = children), are actually gold. In conclusion, therefore, the total sequence of the dream and the "after dream" of Dream 22 would look something like this: *a*, *b*, *c* → *b*, *c*, *a* → *b*, *c*, *d*;[131] where *d* stands at once as a substitute for, and a logical outcome of, and conclusion to, our initial *scene a*, in so far as it represents the actualisation of the intrinsic reproductive and procreative purposes of marriage.

This, however, does not yet exhaust all the possible interpretations of the "polytropic" symbolism of this narrative. Indeed, as seen in relation to Dream 21, the snake encountered by Matyu could also represent a metaphor for the phallus, and its entry into the hole in the earth as an act of sexual penetration. Now, given that it appears only after the dreamer has started to prospect for minerals by removing stones from the ground, and that, by leading him to a gold vein, it effectively acts as a "speeded up" vector of this explorative efforts, the reptile could also be taken to be a symbolic representation of Matyu's extractive labours.

---

[131] As explained in the Table of Symbols at the beginning of this thesis, sequences like "*a*, *b*, *c*" indicate a series of events that follow each other, whereas the symbol "→" indicates the transformation of one series of events into another such series (cf. Lévi-Strauss 1968; 1970; and Kuper 1979; 1986).

In this sense, the miner's "hard work" would be metaphorically equated to a penis that penetrates and fertilises the earth itself, inducing it to excrete, or give birth to, valuable minerals (a trope which, as we shall see in more detail later on, subsumes and builds upon an implicit analogy between, on the one hand, mining tools like the ba or the spade and the phallus, and on the other, the thrusting of this object in the ground to remove gold-bearing ores and penetrative intercourse).

Far from being mutually contradictory or incompatible, the different interpretations of Dreams 22 and 23 actually complement and reinforce each other. Read in conjunction, their combined message reveals that the "hard work" involved in resource extraction is conceptualised as an essentially "procreative" medium and mode of exchange between the miners, the land, and the spiritual forces that inhabit it, who are themselves seen as the "fathers" and "mothers" of the gold, and the spouses and affines of the miners. That this should be so, on the other hand, makes absolute sense in terms of the cultural logics of Hamtai-Anga society. Indeed, the daily labours of the miners constitute a demanding, draining, and potentially dangerous enterprise. In turn, this makes them similar to the protracted nurturing efforts that parents have to invest in the care of their children- which, as we already know, include not only unpleasant tasks like the removal of excrement, but also the expenditure of one's vitality and bodily substances to feed one's progeny through one's own blood, flesh, milk, and then later through gardening, hunting, gathering, and other such forms of tiresome "hard work". Similarly, mining is analogous to the "brideservice" young men are expected to offer their in-laws over a number of years, which also includes all manners of hard and potentially dangerous tasks such as hunting, the clearing of gardens, and construction work. Finally, just as sexual reproduction rests on the transference of vitality and bodily substance between men, women, and forming foetuses, so does mining entail the transmission of vital energy between the miners, the land, and the gold found within it.

Thus, as we have seen by reference to subsistence gardening (see Section 8b), the Hamtai mirror other Anga and PNG peoples in their understanding of "working the land" as a "quasi-sexual" act. More specifically, this means that, just as they perceive human reproduction and post-natal growth to entail the

"cannibalisation" of parental substance on the part of the growing foetus and child, so do they view agricultural labour to effect the growth of crops by means of the "fertilising" and nourishing transferral of corporeal fluids and energy (i.e. fat, sweat, and strength) from the gardeners to the earth they work. In turn, of course, the food produced from the land serves to feed the adults and children who live on it, thus enabling their bodies to grow and sustain themselves, and to replenish their strength for future productive and procreative activities (cf. Bamford 1997; and Mimica 1981).

For these reasons, it could be said that the Hamtai consider gardening an important component in a continuous cycle of reciprocal exchange of vital energy (at this point, it is useful to remind ourselves that, as first mentioned in Section 8b, the Hamtai use the term *mtnga* to refer both to the breath, warmth, and spiritual force of living humans, and the "goodness" which makes the soil fecund and productive) and bodily substance between themselves, their gardens, and the "body cosmos" (Mimica 1981; 1988; 1991; 2003; cf. Bamford 1997; 1998b; Bonnemère 2001). Far from being confined to agriculture, however, this notion extends to all sorts of productive and ritual activities that hold important inscriptive qualities vis-à-vis the land and the environment, including, at least in Kaindi, the realm of mining.

And so it is that, through their daily labours, the miners believe they transfer a part of their own vitality to the land and the supernatural forces that inhabit it, thus replenishing the "goodness of the soil" that allows the formation of minerals (gold = garden crops), "impregnating" their spirit spouses and "feeding" the mineral embryos these gestate for them ([spirits of the land = spirit familiars = spouses = mothers] ∪ [gold = children]),[132] and compensating their masalai in-laws for the vitality and resources they depleted in the procreation and nurturance of their spouses/familiars and the precious metals they embody ([masalai = parents-in-law] ∪ [masalai = spirit familiars = spouses = gold]).

As a result, "working hard" is for them a vital condition for the establishment and fosterage of good "marital" and "affinal" relations between

---

[132] As seen in the Table of Symbols at the beginning of this thesis, the symbol "∪" indicates a combination of two distinct metaphoric sets.

themselves and the masalai, serving at once as a form of "brideservice", a mode of courtship and conjugal nurturance, a fertilising form of "quasi-sexual" intercourse, and an analogue of the gifts of meat a husband was expected to give his wife every time she gave birth to a child (which, amongst other things, served to replenish part of the strength and substance she had expended during gestation) and the protracted prestations of food and valuables men had to make to their in-laws to secure the growth and well-being of their progeny.

14c- Mining offerings as bridewealth to the spirits of the mines

Crucial as it undoubtedly is, though, "hard work" alone is not sufficient to ensure the continued success of one's extractive ventures. To achieve this, the miners must also recur to the ritual offering of food, money, and other valuables to the spirits of the mountain. Nuyianko, for instance, was one of Nisimas' adopted sons. In his early teens his father had died from illness and Nisimas, who was from his same village, had adopted him and taken him to Kaindi. As he grew up, the youth worked with his adoptive father and learned the miner's trade. Eventually, he had a very good dream about a place not too distant from his stepfather's leases. Following this oneiric omen, he discovered a rich mineral deposit and, with Nisimas' blessing, took possession of the area, where he continues to live and work with his two wives, children, and grandchildren. One day, as he reminisced about these events, Nuyianko explained to me:

> When I had my first good dream and found a lot of gold, I took a 10 kina note and changed it into small coins. Then I scattered the coins all over the gold vein and I told the spirits of the place; "you have been good to me. Thank you for giving me gold; now this money I'm giving, this money belongs to you."
>
> After that, whenever he struck a big find, or if he failed to find gold for a prolonged period of time, Nuyianko would make a similar offering of cash and/or food to the masalai of his land.

Referring to the old days when Nisimas extracted "millions" from the land (see Section 2), Matyu painted a very similar picture:

When the old man (lapun man)[133] used to get lots of gold- he explained- we used to cook chicken, lamb, beef, tinned meat, rice, kaukau, greens, and all other sorts of food like that, which we then left in the bush for the masalai. We would also take a ten or twenty kina note, change it into ten or twenty toea[134] coins, and scatter the lot around the place. We used to do this at six or so in the evening, when it starts to get dark, because that is the time when the masalai come out. Then in the night we would hear voices... babies crying, dogs barking, and the sound of people eating, playing, and laughing, and then we knew that the masalai had found our offerings. After that, we would always find more gold.

Far from being peculiar to Nisimas' social circle, these ritual offerings (which had no specific name but were simply referred to as "givim samting lo' ol masalai" ["offering something to the spirits of the mountain"]) were practised throughout the Anga mining community. As for their purpose, Esekiel, an old miner who had been one of the first Hamtai men to come to the Bulolo District from the Kaintiba region of Papua, offered the following explanation:

> We (Anga) can find good (meaning plentiful) gold only if the masalai give it to us. If we don't see any dreams, or if we can't find any gold through them, then we must go to our workings, call out the names of the masalai (cf. Herdt 1977: 162) and give them cooked food and some money. If they are happy with what they are offered, they will grant us more good dreams and gold.

In other words then, the miners perform these rites in order to "thank" the spirits of the mountain for providing them with a particularly good dream and rich mineral find, to ensure that they continue to offer such gifts and assistance in the future, and/or to entice them to reappear in one's dreams and relinquish their gold after a dry spell of mining. As far as I was able to reconstruct from interviewing and first hand observation,[135] these oblations are generally officiated by the miner

---

[133] Although the terms lapun man and *qoeänga* (i.e. "old man") or lapun meri and *äpiyänga* (i.e. "old woman") can be used in a derogatory sense to indicate someone whose body and mental faculties have been eroded by old age (i.e. an "old fool"), these labels are most commonly employed as an indication of respect as old men and women are generally regarded as wise and full of powerful (and highly desirable) secret knowledge.

[134] For a definition of "toea" see Note 10.

[135] Because of suspicion that jealous sorcerers and rival miners may disrupt their efficacy, misappropriate the riches they generate, or steal the magic formulae and secret ancestral and masalai names uttered during their performance, and/or due to fear that they may be mistaken for dark acts of sorcery by suspicious outsiders, the occurrence of this type of rites is not usually

who has received, or who wishes to be granted, a propitious dream, and/or, if this is a different person, by the landowner of the area where the mineral discovery has occurred or is wanted to take place. Ideally, the officiator should be a "seer", or at least someone who knows the secret names of the spirits of that land and the magic language needed to communicate with them.

If this is not the case, then a close (and usually older) relative, a trusted fellow worker, or even an outside seer may be asked to lead the ritual. In so far as possible, however, this is avoided for fear that these officiators may, despite close bonds of kinship and/or workmanship with the ritual sponsor, be moved by greed or jealousy to miss-perform the rites in order to "spoil" his relationship with the spirits of the mines, dry all minerals from his land, and/or to redirect these to their own workings.

Whatever the case may be, the offerings commonly open with the officiator/sponsor (and possibly a few close relatives and associates) walking to the area where the mineral discovery has occurred, or is wanted to take place, and uttering special incantations and secret names to "summon" (the pidgin terms my informants used to describe this process was "singoutim", which means "to call, call for, send for, demand, or invite someone") the masalai who inhabit and "look after" it. If the ceremony follows a good dream and/or a mineral find, the officiator/sponsor will then thank the spirits of the mountain and invite them to accept the food and valuables on offer as a partial repayment for their generosity. If, on the other hand, the ritual takes place to break a spell of unsuccessful mining, then the officiator/sponsor will apologise to the masalai for whatever offence he may have caused them and will urge them to accept his gifts as a sign of goodwill, thus hoping that they will return to his dreams and make their gold available to him once again.

---

broadcasted beyond the close kinship circle and/or residential and working unit of the landowner(s) who intend(s) to conduct them. As a result, I found it hard to directly observe one of these masalai offerings. In September 2004, however, Nisimas' eldest son Elaija and Matyu's father Jekop, who, as we saw earlier on, was Nisimas' first matrilateral cross cousin (*ntawä'o*) and junior (adoptive) brother (*nkoä'o*), conducted one of these propitiatory rituals on Nisimas' land (at the time, Nisimas was detained in Wau by illness and thus unable to officiate the ceremony himself), so that I was finally able to prove their existence and observe their unfolding first hand.

As we shall see in more detail later on, these opening speeches often include a section simply referred to as "givim toksave lo' ol masalai" and/or "givim (or makim) haus lo' ol masalai" (i.e. "to give warning" and/or "to give or assign a home to the masalai"), where the officiator/sponsor declares his intention to mine in the area where the rite is performed, asks for permission to do so from the spirits of the place, and warns them that, as he may have to cut down trees, move debris, and dig the ground, they might want to "relocate" to an adjacent area (which he clearly "marks" for them) in order to avoid any damage occurring to themselves, their dwellings, and their possessions. Generally speaking, this practice appears to be particularly important when the area to be mined is still virgin forest, when it has not been worked for some time, or when it has never been mined by that particular ritual sponsor. In any case, all of these magical dialogues can also be preceded, accompanied, or followed by a standard or especially tailored rendition of a Christian prayer, such as "the Lord's Prayer" (for the reason behind this, refer back to the opening of Section 12).

After the opening speeches and prayers have been concluded, the bulk of the gifts will be taken to the mine and left on the ground or a purposely-built platform of logs, leaves and moss, while the sponsor/officiator and any other person who may have accompanied him/them to the offering site will retreat to their hamlet with a portion of the cooked food to be consumed by themselves, their families, and their neighbours and fellow workers. On some occasions, however, cash and, more rarely, cigarettes and buai (or *panga*, meaning betel nut) will be taken down to the workings and left there for the masalai, while the entirety of the food will stay in the sponsoring hamlet, to which the spirits of the mountain will be invited in order to partake in a communal feast with its human residents.

In either case, most of the preparatory work and valuables necessary for the ceremony will come from the ritual sponsor's household or his immediate extended family, although more distant relatives and affines, hamlet residents, employees, and tributers can also contribute some labour and material resources to the oblation. Whatever its exact source may be, all offered food will be cooked beforehand (so that it belongs to the *itä* alimentary category [see Note 67]), most

commonly by the spouse(s) and (mostly) female relatives, affines and co-residents of the sponsor, and will consist of a mixture of subsistence and store-bought items such as sweet potatoes, taros, plantains, rice, pitpit (or *ko*),[136] various kinds of kumu (greens), tinned fish, tinned meat, and fresh or frozen chicken, pork, lamb, or beef obtained from local farmers or from retailers in Kaindi, Wau, Bulolo, or Lae. In addition to this, the miners can also present desirable consumables such as cigarettes or buai, and, most crucially, should offer a variable amount of money, usually broken up into as many small notes and shiny metal coins as possible.

Indeed, the inclusion of money and store-bought valuables and consumables amongst the items of exchange appears to be a *sine qua non* of these ritual prestations, and all the miners I interviewed stressed that the giving of food should always be accompanied by the gifting of cash. In the only oblation I witnessed directly, no money was actually scattered around the mine for the benefit of the masalai. The reason for this was that, some weeks prior to the ceremony, the ritual sponsor had already made a cash offering to the spirits of the land, whose "boss" had paid a nightly visit to his home in the form of a large snake, and that this early gift was already deemed sufficient in conjunction with the food offered on the day. As already mentioned, moreover, the cash economy enters the oblations, not just in the form of banknotes and coins, but also in the shape of items of consumption which can only be obtained through the expenditure of money. What is more, as was the case with cash, the inclusion of these kinds of items would seem to be indispensable rather than optional. For example, during the preparatory stages of the ceremony I directly observed, lapun Jekop (the officiator) insisted repeatedly to the ritual sponsor (Elija) and the women and young boys charged with the cooking of the feast that they should procure and prepare as much meat and rice as they could, because the considerable amount of subsistence crops that had already been amassed was in itself but a "pipia samting" ("a pile of rubbish") unfit for this special occasion.

Without a doubt, this mandatory mixing of subsistence crops, meat, and store-bought items and money reflects the principle of, if not strictly quantitative,

---

[136] "A type of wild sugarcane, (*Saccharum spontaneum*) with edible fruit resembling an unripe ear of maize" (Mihalic 1971: 156).

then at least qualitative "equivalence" in the continuous cycle of exchange that links the miners to the masalai of the mines (cf. Strathern, M. 1992). Hence, given that in the dreams and discourses of the miners gold is metaphorically conceptualised as "the sweet potato of the forest spirits,"[137] it makes perfect sense that they should be able to exchange their own subsistence crops for the mineral "staples" of the masalai. At the same time though, gold also represents an extremely valued resource and, as is made especially clear in the imagery of "gold dreaming", the very essence and embodiment of the spirits of the mountain (gold = masalai = masalai's children). As a result, it is only fitting that a past or future gift of this precious metal should be reciprocated or "solicited" through an offering of meat, and particularly of domestic or store-bought meat, which, due to its nature and origins within the sphere of human domesticity and trade, is at once analogous, opposed, and complementary to another highly valued item of traditional consumption and ceremonial exchange, i.e. game meat, which, as already hinted in Sections 11, 12, and 13, is likewise regarded as the corporeal equivalent of the spirits of the forest (wild animals = masalai = progeny/protégés of the masalai). Finally, gold also constitutes the main medium through which the miners gain access to money and are enabled to take part in the cash economy linking their mountain settlements to the wider district, provincial, national, and international networks of production, exchange, and consumption. As a result of this it is clear that, if they are to be truly "balanced", the oblations offered to the masalai in return (or advance) for their gold ought to include a certain quantity of cash and/or a sample of the kinds of market goods the miners are able to obtain through its circulation within that complex "glocal" economy.

Beyond this general principle of "qualitative equivalence", however, there lies an underlying analogy between the kinds of valuables and consumables the miners offer the mountain spirits, and those that men should provide their wives and in-laws in the course of their lives. Thus, as we saw in Sections 10 and 14, even in the more "isolated" rural areas of the Hamtai region, the objects given in

---

[137] When discussing the relationship between minerals and mountain spirits, my informants would often comment: "gol em olsem kaukau bilong ol masalai" (i.e. "gold is like the sweet potato of the masalai").

the protracted cycle of marriage (including both regular betrothal gifts and bridewealth proper) and child-birth payments include, not only game and the wild produce of the forest, but also the meat of domesticated pigs and various kinds of garden crops, more often than not cooked and wrapped-up in bark; and not just customary wealth items such as vegetable salt, bark capes, animal teeth and bones, small cowries (*Cypraea annulus*), and large shells (*Amphiperas [Ovula] ovum*), but also cash and a wide range of store-bought items like rice, tinned meat, tinned fish, western clothes, and steel tools (cf. Bamford 1997: 66-7). As for Kaindi, where the market economy is rampant and domestic animals a rarity, garden land sparse, and wild forest produce and game ever harder to obtain, these types of payments contain a far lower ratio of subsistence resources and traditional wealth- which are in any case regarded as little more than "rubbish" if unaccompanied by cash and/or store-bought foodstuffs and durables- and thus resemble even more closely the mining offerings to the spirits of the mountain.

Given that our analysis of Hamtai-Anga "gold dreaming" has already revealed that the miners conceptualise their dream familiars and the spirits of the forest as spouses and affines, and that they see the gifts of gold these offer them as analogous to the material resources, productive and procreative capacities, and general nurturance and support that men can expect to receive from "good spouses" and "affines", it is hardly surprising that many of the most important items routinely given in marriage and child-growth prestations should also figure centrally in these mining oblations. Nevertheless, I would go one step further to suggest that the analogy between these two kinds of exchange is not limited to the "formal" dimension, but extends all the way to their "functional" logics.

As is the case in other Anga language groups, "traditional" Hamtai culture regarded betrothal and bridewealth payments as essential to conjugal life, to the point that these were required even in cases of marriage by "sister exchange" (Bamford 1997; cf. Mimica 1988). This was so not just because these forms of wealth exchange were necessary to "detach" a bride from her natal family and land (cf. Bamford 1998b: 38), but also because it was held, firstly, that this flow of gifts enabled women to mature more quickly and become reproductively and productively capable, and secondly, that, if unhappy with the bridewealth or child-

growth payments they received, one's affines could use special magic words to render one's wife infertile or make her children seriously or even terminally ill (cf. Bamford 1997; 1998a; 1998b; Bonnemère 1996; Lemonnier 1992; Mimica 1981; 1991). In turn, this meant that acting as appropriate affines was indispensable, not only to obtain a woman in marriage, but also to ensure that she would become and remain an efficacious mother and wife (Bamford 1997; 1998a: 166-67; 1998b: 37-8).

In this light, we can see that the miners' offerings are "functionally" analogous to marriage and child-growth payments because: a) they entice the masalai to give spirit familiars and gold "in marriage" to the miners (masalai = spirit familiars = spouses = gold), and to do so "freely" and "without anger" (cf. Bamford 1997: 66, Note 15); b) they ensure the goodwill, growth, and (re)productive efficacy of one's spirit familiars and the mineral deposits that embody them (spirit familiars = spouses = gold); and c) they make sure that the masalai don't act as "angry affines", employing their powers to make one's familiar(s) "infertile"- that is unable to procreate metals as women procreate children (spirit familiar = spouse = "mother of the gold")- or to compromise the "growth" and "health" (i.e. the presence and quantity) of their mineral progeny (gold = children of the masalai and the miners).

14d- Mining and the reciprocal morality of conjugal-affinal care and respect

In addition to "working hard" and offering oblations, however, the miners must also show a high degree of "conjugal and affinal respect" to their masalai spouses and in-laws if they are to retain harmonious and productive relationships with them. In the first place, this means that they should refrain from having frequent sexual intercourse with women while working the mines, or from spending what they earn from them on prostitution and/or to procure themselves a large number of wives. As already mentioned in Section 9, this relates to the notion that human females are polluting beings whose presence in the mines "offends" the mountain spirits and has the potential to make all gold disappear or even to cause serious mining disasters, and whose polluting "smell" can "rub on" the men through

sexual intercourse, making their bodies just as "offensive" and "repulsive" to gold and the masalai as those of women (Moretti 2006b).

Pollution beliefs are, nonetheless, only part of the explanation. Indeed, according to an old miner named Aiyendapo, gold is like a woman, and like a woman it is attracted to men. But if they want gold to "stay with them"- or, in other words, to remain plentiful throughout their career- the miners must also ensure that they "*stay faithful to it*". In using these words, Aiyendapo was drawing upon and deploying the now familiar metaphor equating the relationship between miners, gold, familiars, and masalai to a marriage between men and women. In more particular terms, though, he was also suggesting that, as is the case between human spouses, spirit familiars and forest spirits are "jealous" of their human "husbands" and can feel "angry" when these have sexual relationships with other "women". In Aiyendapo's mind, this jealousy extended even to sexual intercourse between a miner and his human spouse(s), to the point that he claimed that gold will "lose interest" in a miner after he gets married to a human wife, and that if one has frequent sexual intercourse, even if just with one's own spouse, then one will cease to be a good dreamer and shall not win as much gold as a celibate or at least a more "restrained" man.

The majority of miners, by contrast, held a less "extreme" view. A typical example of this was given by an old man called Yatapo, who, while also stating that "gold is like a woman, and you must be *faithful* to it", qualified this remark by adding that:

> If you marry a woman, that's alright, gold will still go on loving you; but if you sleep around with lots of women and prostitutes, or if you marry a large number of wives, then gold will stop loving you and it will leave you and hide from you. Maybe you'll find a little dust every now and then, but you will never find as much gold as before.

In other words, then, all Hamtai miners concurred that, in order to be harmonious and productive, their relationships with the spirits of the mines should be modelled on a restrained and "faithful" marriage. For a few, this meant an almost "exclusive" or "monogamous" bond between themselves and their masalai/familiars, which could be successful only at the almost total expense of

intimate conjugal relations with their human spouses. For many more, though, the "ideal" marriage could be one that linked themselves to both masalai spouses and one or two human wives. As is the case with "all-human" polygamous marriages, however, even these mixed human-spirit relations had to be governed by "restraint", "respect", and "faithfulness" if they were not to degenerate into jealousy, anger, and eventual abandonment from the masalai/familiars. Thus, just as a polygamist should divide his "sexual" attentions, assistance, and resources equally between all of his wives to avoid jealousy and disaccord (cf. Godelier 1986: 15-16), so must a miner observe restraint in his sexual contact with his human spouses if he is to have regular oneiric intercourse with his "spirit wives" and to invest sufficient amounts of procreative energy in his daily extractive labours. At the same time, of course, the more (human) wives and extra-marital affairs a man has, the less likely he will be to observe the sexual restraint necessary to maintain his (re)productive commitments to his masalai spouses- and hence the logic that unmarried men, or men with only one or two wives and who do not engage in frequent affairs, will be the most prolific dreamers and gold extractors.[138]

In addition to this sexual restraint and "marital fidelity", the miners must also show great care and respect in the way they manage and work the land and its

---

[138] Although my data can only prove the existence of a link between the metaphor of "jealousy" attributed to the "marital" relations between the miners and their masalai/familiars and the sexual taboos that regulate this particular sphere of production, it is not inconceivable that this same trope may also inform the gender taboos regulating other Anga cultural and social fields. In Baruya and Sambia cassowary hunting, for example, where both the cassowary and the most powerful spirit familiar of the hunter are female, it is believed that sexual abstinence is a precondition for being a good cassowary dreamer and hunter. As "good cassowary hunting dreams" often feature sex with the cassowary spirit familiar, there would seem to be a direct and mutually competitive link between waking intercourse with one's human spouse(s) and oneiric intercourse with one's familiar/prey. Similarly, in Baruya and Sambia male initiations, it is believed that the initiates can acquire the necessary "marital-like" bond with the cassowary spirits of the initiation flutes only if they abstain from heterosexual intercourse and if women are kept away from the initiations grounds. In both of these contexts, sexual abstinence and female exclusion are explained, firstly, by reference to the belief that the "powers" of the initiates and cassowary hunters are dangerous to human females, and secondly, through the idea that the cassowary spirit familiars are "masculinised females" who are naturally inimical to human women (Bonnemère 2004: 73; Godelier 1982; 1986; Herdt 1994 [1981]). As is the case with mining taboos, this natural "enmity" felt by the spirit familiars towards human women is justified by reference to the latter's intrinsically polluting nature. In line with what we have just learnt about mining taboos, however, it might also be possible that the abstinence of cassowary hunters and initiates could be partly explained by reference to the "jealousy" that their female familiars feel towards their human rivals.

metal resources if they are to avoid the displeasure and retribution of the masalai. In accordance with what we've discovered so far, even the canons which regulate these mutually inscriptive interactions between miners, land, and minerals are metaphorically assimilated to those that structure conjugal and affinal relations. A middle-aged miner called Tiwato, for instance, described the ideal way of mining lodes in the following terms:

> If you see a dream and then mine gold with your spade or crowbar, you shouldn't use these tools on the gold vein itself, because if you do so you will cut the face of the gold. Instead, you must dig at the sides of the vein, and you must do it with great care. If gold likes you and gives itself to you but you work it roughly, it's like... it's like when a woman falls in love with you and marries you but you don't take good care of her and instead treat her badly; sooner or later she will run away from you. With gold it's just the same... if you work roughly and push your spade or your bar directly into the vein the gold will stop liking you, but if you work carefully and well, then it will carry on loving you. If you treat a vein roughly, the gold will get up and say, "You don't really care for me; you have ruined me!" And after that it will leave you.

In Tiwato's words, the gentle care miners should put into their daily labour is equated to the kindness a man should demonstrate to his wife. To mine roughly and treat the land carelessly, on the other hand, is compared to a direct physical assault on the gold itself and the spiritual entities who "look after it" and who are embodied by it. In turn, this kind of "domestic violence" and "neglect" is condemned as a dangerous affront to the spirit familiars and the masalai, who, if subjected to it, are only likely to react like an abused wife and to "pack up and leave", thus taking their nurturing, productive, and procreative capacities (and therefore also the gold that at once is them [gold = women], is produced by them [gold = garden crops], and is procreated through them [gold = children]) away from their uncaring miner "husbands". Similarly, the mistreated mountain spirits and familiars could, just like scorned human wives, retaliate directly and indirectly against the offending miners, either by "killing" or taking away the gold they had already helped them discover (a destiny similar to that of the aforementioned gambler who, having enraged his wife with his lack of care and

respect, ended up losing his own progeny to her "anger" [gold = children]), or by causing them potentially fatal accidents such as sudden flooding or landslides.

In other instances, however, the attentions the miners ought to place in their extractive efforts are justified, not so much by reference to the conjugal care that husbands must demonstrate to their wives, but in the broader terms of the affinal respect men must show towards the land, property, and persons of their in-laws. Let's consider, for instance, a miner called Jut, whom the reader should remember from other sections of this thesis (see p. 142). Even before this man was born, his father Naimas used to mine for Taipango, an Upper Watut man who was amongst the very first native miners to work independently of whites and to develop a highly profitable mining operation, which he then expanded into all manners of alternative business, from coffee growing and buying to commercial transport and retailing. As a young boy, Jut himself had worked under Taipango and, following his premature death, had continued to be employed by his family, first under Taipango's first-born son, who also died a very early death, and then for his second-born Sibeon, whom he continued to serve as a mining bosman (chief worker, overseer) at the time of fieldwork.

For a number of months of my stay in Kaindi, Sibeon's operations failed to produce any substantial amount of gold. As time went by, the leaseholder became increasingly frustrated by this lack of success. Although he claimed to know the location of a very rich vein, that deposit was said to run too deep underground to be workable without bulldozers and excavators. As he had no machinery of his own,[139] Sibeon was keen to strike a joint venture with any small-mining interest (such as ECM or a small number of machine owning individuals operating in the district) willing to work on his land for a cut of the winnings.[140] After being turned down by a couple of potential partners, the man made a deal

---

[139] As was sadly the case with the vast majority of the early indigenous mining "magnates" (also see Moretti 2005; 2006b), lack of education, poor finance and management skills, reliance on dishonest expatriate and national managers, and social pressure and family politics had lost Taipango and his sons almost all of their capital and assets. As a result, Sibeon was left with a plantation and housing property in Wau and with one of the largest mining leases in Kaindi, which he had nevertheless no complex machinery to exploit to the full.

[140] For some information on this kind of joint-ventures in the Bulolo District and wider Papua New Guinea see, among others, Afenya (1995); Hancock (1991; 1994); and Lole (2005).

with a Wau-based European expatriate. As a large bulldozer and excavator were brought up from the valley and his land was cleared of trees and of debris in preparation for mining, Sibeon grew increasingly excited in anticipation of the imminent discovery of some great mineral fortune.

His chief miner Jut, on the other hand, was far less optimistic, and during a private interview he explained to me why:

> Before- he said- this place (the Edie Creek basin-area of Kaindi) was all covered in thick forest. When people wanted to cut down some trees and clear some ground for mining, they used to warn the masalai first. It's like this, Taipango; he was one of these men with two eyes ("seers"). When we mined a new area, he would talk to the masalai and we would cook some food for them. We wouldn't cook just a little bit of food; no, we would prepare a big mumu (earth oven) and fill it with kaukau, kumu, lamb-flaps, and all sorts of stuff like that, then we would clear a space in the bush to leave this food there. Then Taipango would call all the masalai, and after that we would hear many noises, and so we knew they were coming [...]. The next morning, when we went back to the place, we would see that all the food had gone. After that the masalai would be happy and they would give us lots and lots of gold! [...] You see, when you mine in one area, you must let them know first and ask them to move to another place. Later, if you want to move to that other area, you have to ask them to move again. Before, people used to do this all the time, but now they no longer do it. They've destroyed all the forest... all of their houses, so we don't think of the hidden people anymore.
>
> When we made a deal with ECM,[141] for example, we used machines to clear up a large vein. We didn't give food to the masalai and let them know we would work there. No, Sibeon just took the machines there, cut down all the trees, and started clearing the vein. After that, many masalai appeared to us workers. They came in our dreams and told us that we had hurt them. I myself saw so many of these dreams. The masalai came to me; some had broken legs, some broken arms, some of the children had been hit by the falling trees and were all bruised and their stomachs swollen with blood! They were all buggered up like that, my woman too! I saw her in my dreams, and she had a broken arm and a broken leg, and she told me, "You hurt us and destroyed our homes and our gardens, so now we're taking all our money and cargo away!" And after that they left and we never found any more gold in that place. I told Sibeon to give them some food and money, but he didn't do anything and all the gold's disappeared. We should have warned them that we wanted to mine there. We should have asked their permission and should have given them some food and money before we started to work. If we had done that, everything would have been fine; but we didn't, and so they left and

---

[141] This deal was allegedly made over the Christmas period immediately preceding my second period of fieldwork.

> all the gold disappeared. [...] Because of this, the masalai are angry with us and won't give us any gold. If we want to get some more gold, we must apologize to them (tok sori long ol) and must give them some food and money. If we do that, then they might forgive us and might come back, and then we'll find gold once again.

Contrary to his employer's expectations, Jut didn't think that the new joint-venture would win great riches from Sibeon's lease. In more particular terms, he felt that this likely failure related to the disregard that his boss had recently shown towards his land and the spirits who inhabited and "looked after" it. In a broader sense, though, Sibeon's greedy "breach of etiquette" was considered by Jut to be a single instance of a more general trend common throughout present-day Kaindi. Thus, according to him, in the "old days" when the whole of Kaindi was still covered in dense forest, the first indigenous miners (such as Sibeon's own father) were much more alert and attentive to the spirits of the mountain. Back then, people were fully aware that, before clearing and mining a given area, they had to "ask permission" from the masalai who inhabited and "looked after" it. As already mentioned above this signified, firstly, to warn them of one's intention to mine their land; secondly, to ask their consent to proceed with these operations; and thirdly, to invite them to "relocate" to an adjacent area demarcated by the ritual sponsor so that their persons, dwellings and properties would not suffer in the upcoming clearing and mining work.

As we have already discussed, the oblations the miners give to the spirits of the land are "formally" and "functionally" akin to both marriage and child-growth payments, in the sense that they feature the same general kind of gifts, and that their purpose is to entice the masalai to give their "women/metals" "in marriage" to the miners, or to repay them for having done so in the recent or distant past, to guarantee the "fertility/abundance" of this spirit familiars/mineral deposits, and to ensure the "growth/good health/enduring plenty" of the mineral progeny that they procreate with, and for, the miners. This, however, is not all there is to the rites.

As will be recalled from the outset of this thesis section, the Hamtai regard the spirits of the forest as powerful, ambivalent, and potentially dangerous beings. Because of this, it had always been the case that those about to cut virgin forest to

open new gardens or establish a new settlement, or who were doing the same in an area of long-term secondary growth, would cast magic spells or hire the services of a "seer" or "exorcist" (*hikoäpa na'iyatakhiuna*) to banish any evil masalai who may reside there (a process not entirely dissimilar to that used to cure certain illnesses said to be caused by possession from ill-intentioned forest spirits [cf. Herdt 1977]). In general terms, this procedure involved the use of special herbs and magic charms, the chewing and spitting of ginger and other powerful plants as well as the blowing of water over the area, and the uttering of magic words by means of which the performer explained to the masalai his intentions to work (i.e. clear, burn, plant) that area, and ordered them to move out of its perimeter, which was then marked with the planting of particular kinds of cordylines and vines capable of barring the movement of the masalai and other perilous spirits. Nevertheless, as far as I was able to gather from my interviews, this "forced resettlement" of potentially dangerous local spirits differed significantly from the "warning" and "marking of a new home" that occurs in mining oblations in that it never involved the offering of consumable or durable wealth to its designated targets.[142]

On the other hand, though, my informants did mention a kind of ritual offering that was historically made to certain classes of local spirits.[143] According to them, the whole Hamtai country was dotted by various *pnga* (pools, bogs, marshes) inhabited by powerful masalai (such as the aforementioned *wampisa*) who, when angered, could make their watery homes boil and overflow, thus flooding and drowning whoever lay too close to their shores, or even rise upwards to capture, drag down, and crush helicopters and planes. Now, the "traditional" way to placate such spirits required those "seers" who knew their secret names and the magic language necessary to commune with them to apologise for

---

[142] Contrary to that concerning the mining offerings, which I had the opportunity to witness firsthand, all information regarding this "customary" form of "land exorcism" was derived only from interviews and not corroborated by direct observation. What is more, not all of the people I interviewed were aware of the existence of this kind of "traditional" practice. In light of a recognised degree of variation in certain aspects of social organisation, ritual, and food taboos between different Hamtai sub-groups (cf. Bamford 1997: 51-2), this might simply indicate the fact that these rituals were, and might still be, common in some Hamtai areas, but not in others.

[143] All that was said in Note 142 regarding the "traditional" exorcism of potentially dangerous spirits from newly opened land also stands for this historical form of masalai offerings.

whatever offence may have been done to them, and to assemble quantities of food, traditional salt, perfumed plants, ginger, and valuables such as stone axes and shells to be thrown in the water as a conciliatory oblation.

In this light, those mining oblations which incorporate a "toksave" ("warning") to the masalai and a request that they move out of the area to be mined could be seen to combine and expand upon the two aforementioned ritual forms and their respective rationales; that is to appropriate a tract of land for one's own (at least temporary) use, while at the same time "compensating" the forest spirits for this inconvenience, thus ensuring that they won't be angered by it and that they will continue to provide the gift-giving miners with their support and riches. As a result, the miner's offerings to the spirits of the mountain constitute, not just a kind of "marriage and child growth payments" to compensate them for the valuable familiars/progeny/minerals that they have provided in one's oneiric and waking life, but also a means to acknowledge their ultimate "guardianship/ownership" over the mines, and to repay them for allowing their human affines to "move into" and mine their land.

As we considered in Subsection 14a, Hamtai custom dictates that those affines who, for one reason or another (such as population pressure, warfare, intestine disputes, epidemics, natural disasters, etc.), are forced to flee their own land or find themselves unable to subsist on it should be allowed to settle with their in-laws, who should also provide them with ground to use for their own needs. In many cases, this temporary situation can turn into a permanent reality, and successive generations of "refugee" affines can end up living and working alongside the "original" landowning patrilines of a given area.

It is but very seldom, however, that the Hamtai "incorporate" such resident in-laws and cognates within the landowning lineages by means of adoption, the "rewriting" of genealogies, or other such methods so common in other parts of the Highlands (cf. Burton 1997). As a result, unless they grow to outnumber their "hosts" and become strong enough to take over the latter's territory and to rewrite its history, even after several generations of residence this category of people will hold but secondary "use rights" to the land that they inhabit. More often than not, this means that they must constantly negotiate access to particular plots from their

"landowning" affines and cognates. After obtaining permission to work a given area, the petitioners will be able to clear it and plant it. Nevertheless, when the "goodness of the soil" is gone and the area is left to fallow, all use-rights will revert to its original owners, and the landless affines and cognates will have to renegotiate a new deal afresh with the same or other landowners (cf. Bamford 1997; 1998b).

In certain cases, affines and cognates (or even unrelated refugees and supporters) can be freely granted more enduring rights over land, or can "acquire" them with the payment of variable quantities of valuables like shells, stone adzes, or necklaces of human or animal teeth and bones (cf. Mimica 1988 for similar kinds of "land payments" among the Yagwoia). Even then, though, these "acquired" rights are far from absolute, and their holders are still expected to consult with, and defer to, the original landowners about important decisions regarding the grounds they were given, such as whether they can allow large numbers of their own relatives, wantok, and allies to settle and work them, if they can plant them with long-lived cash crops like coffee, or if they can make any of them available to a third party for developments such as mining, logging, or the building of public and private infrastructure (e.g. airstrips, roads, shops, schools, churches, housing, etc.). Similarly, the original owners and their descendants always reserve the right to demand additional payments in services and goods for land which they have already "given" to others, and, if they have the political and military power to do so, to repossess it in case these were not forthcoming or satisfactory. Finally, obtaining "use rights" over a certain tract of land belonging to a particular member of a landowning lineage does not entitle one to occupy or appropriate other parts of the territory of this same individual, let alone that of other members of his extended family, lineage, or other landowning lineages, and non "as ples" (i.e. autochthonous) people must be especially careful in their dealings with the land in order to avoid the impression that they are trying to "take over" the homeland of their hosts and benefactors.

In accordance with this, it could be said that the structure and tone of mining oblations suggest that the miners regard themselves to be in a position akin to that of "resident affines" vis-à-vis the masalai of the mountain, who are

the de facto "true" "owners" and guardians of the land they mine. In this sense, then, by taking ECM's machines to his lease without a prior warning to, and permission from, the spirits of the forest, and by refusing to offer them any compensation for the ensuing disruption, Sibeon had effectively acted as the prototypical "treacherous affine" who, having been given gold and been welcomed in the land of his masalai in-laws, repays their kindness with disrespect and the violent destruction and misappropriation of their land, gardens, and resources. Because of this act of "negative reciprocity", the spirits of the mountain had manifested themselves in the dreams of Sibeon and his workers, no more as nurturing wives and affines, but as wounded and vanquished enemies, and, having reproached the greedy miners for their behaviour, had relocated to some other place with all their coveted mineral riches.

Far from being confined to this particular incident, the characterisation of the wanton appropriation and exploitation of the mountain forests as a form of negative or "inverted" affinal reciprocity towards the masalai was advanced at one point or other by a number of my consultants. As a matter of fact, in other accounts of the reasons behind the protracted lack of success of certain extractive operations, this analogy was drawn even more clearly and more completely. This was the case, for instance, in Matyu's narrative about an incident said to have taken place in the 1990s.

At the time of the event, Nisimas' workers were winning substantial amounts of gold from a hard-rock deposit that was estimated to run all the way down a steep mountain ridge. According to Matyu, when all the gold had been extracted from the first section of the vein, it was decided to clear an adjacent tract of virgin forest under which the deposit was believed to continue. At that point, it would have been wise to warn the local masalai of this intention, to ask them to vacate the tract of land to be cleared, and to offer them some food and money as "compensation". Because of the eagerness to carry on mining, however, the forest was quickly felled down and set on fire without any communication with its hidden denizens.

When all the land had been cleared, the miners proceeded to mine it. Contrary to their expectations, they soon realised that the vein from which they

had extracted so many riches did not actually extend into this newly opened area. As a matter of fact, despite the thorough and protracted prospecting of the entire area, not a single gold specimen was located within it. As consummate miners, Nisimas' workers were fully aware that gold veins are often broken and discontinuous, yet in this case they felt that the total absence of metals from the newly opened area was not what Euro-Americans would define as a "random" or "natural" occurrence, but a sign that the local masalai had "withdrawn" all their gold in response to some kind of offence that they must have committed against them.

In response to this general feeling, some of the older miners with the necessary ritual knowledge to communicate with the masalai proceeded to investigate the cause of the problem. According to Matyu, these men learnt that:

> When we had cut down all the trees and set fire to the bush, we had burnt down the house of the local masalai. The wife and children of this man (spirit) were trapped in the house and were killed by the fire, so now he has taken all of his cargo (gold) and left to look for a new wife. If we want to win more gold from that land we must apologise to him and we must offer him money and food. If we give these things to him, and if he finds a new wife, the masalai will come back and will give us more of his gold. But if we don't say sorry and don't give him these things, the man will stay angry with us and will keep on searching for a new family, and we shan't win any gold in that particular area.

Despite its apparent simplicity and contingency, this imaginative explanation carries a clear and powerful moral message. If only the miners had approached the local masalai in a respectful manner, asking him to make his land and minerals available to them and offering an adequate amount of valuables in return, the spirit would have heeded their request, welcoming them into his home, opening his gardens/mines to them, offering them his daughters (i.e. spirit familiars/gold) in marriage, and enabling them to procreate/ produce an abundance of children/garden crops/minerals. Instead of behaving as respectful suitors and appropriate in-laws, however, the miners had acted as the ultimate "anti-affines": invading, burning, and wrecking the homes and gardens of that potential "father-in-law" who, if treated appropriately, would have opened them to them; murdering the wife of the spirit who would have given them his own

daughters in marriage (masalai = spirit familiars = women = wives = gold); and killing the children of the masalai who would have provided them with means to "procreate" their own mineral "progeny" (children = gold).

Because of this act of aggression, the offended spirit had gathered his gold and fled in search of a new wife and new family. As a result, unless the miners apologised to him and offered a sufficient amount of food and money in reparation- a payment which, as one may infer from Matyu's claim that the spirit would return only after finding himself a new wife, would serve not just to compensate him for his material losses, but also to help him meet the prestations necessary to contract a new marriage and to re-establish his own position as a husband, father, and affine- the misappropriated land would remain but a barren testament to the "pyrrhic victory" of their greed and their incapacity to foster a positive relationship with the natural and supernatural landscape that they inhabited.

In conclusion, therefore, we can now see that the symbolism of Hamtai-Anga "gold dreaming" is a central part of a wider cultural system of metaphors which characterise gold, mountain spirits, and spirit familiars as "spouses" and "affines", and which link mining to the salient social realms of marital and affinal relations. As well as drawing upon and making apparent a series of structural analogies between these different entities and conceptual domains, these systemic rhetorical juxtapositions hold very important prescriptive implications. Indeed, by projecting the characteristic sociality of all-human, or "microcosmic" relations of conjugality and affinity onto the "macrocosmic" plane of interaction between humans and their "natural" and "supernatural" environment, this metaphoric system promotes the notion that the latter should be conducted by the same means, and according to the same morality of mutual respect and reciprocity that regulates the former.

Thus, just as men resort to magic to seduce women into becoming their wives and mistresses, so do the miners use "love spells" to attract familiars and gold from the spirits of the mountain. Similarly, just as aspiring grooms and married men "work hard" to impress their prospective and actual spouses and in-laws, and to meet their obligations as husbands, fathers, and affines, so must the

miners toil endlessly and dangerously to secure themselves oneiric spouses and children (i.e. minerals), as well as the respect and assistance of their masalai in-laws. Crucial as it undoubtedly is though, this "hard work" must be supplemented by the offering of food, cash, and other valuables to the masalai of the mines. Just like the long cycle of marriage and child-growth payments men must make to their affines, these mining oblations serve to secure spirit brides/children/minerals for the miners, and to ensure the goodwill and assistance of the spirits of the mountain.

In addition to this, the miners must show great "conjugal" and "affinal" care and respect in their dealings with the land, its mineral riches, and the spiritual forces that "look after them". Thus, just as husbands must remain "true" to their wives to retain their "love" and cooperation, so must the miners be "faithful" to the masalai and refrain from too frequent and promiscuous intercourse with human women (including their own wives) if they are to keep receiving "good dreams" and minerals from them. Similarly, just as men can mistreat and abuse their wives only at the risk of abandonment and/or physical and mystical retaliation against themselves, their agnates, and their progeny, so must the miners show great care in their daily extractive efforts, lest the "mishandled minerals" leave them for someone else who truly "loves" them, or punish them with landslides and other potentially deadly accidents.

What is more, before clearing a new piece of land for mining, or when resuming work after a long pause, the miners must give advance warning of their plans to the masalai of the mountain, obtain their permission to proceed with their operations, and provide these guardian spirits with food and money in "compensation" for the exploitation of "their" land. In this sense, the morality of Hamtai mining calls for miners to behave like good "resident affines" vis-à-vis the masalai papagraun (the spirit guardians/owners of the land), continuously negotiating "use rights" to the land and resources of Kaindi and repaying their "hosts'" generosity with hard work, respect, and prestations of food, cash, and other such valuables.

Contravening any of these moral obligations makes the miners akin to uncaring and abusive husbands and/or to "treacherous" affines who "steal" their

brides without paying any brideprice, refuse to compensate their in-laws for the wellbeing and growth of their progeny, and settle among them only to betray their trust and misappropriate their land and resources. And from our three opening "parables" of Pol, Anton, and the "greedy gambler", we know full well what dark fates await those who stray too far from the reciprocal principles of affinity and of conjugal interdependencies.

15- Mining, gender, and the "microcosmic" morality of affinity

15a- The "androcentric" perspective

In the previous sections of this thesis, we demonstrated that the tropic symbolism of Hamtai-Anga "gold dreaming" forms part of a wider rhetorical system that translates and expands the reciprocal sociality and morality of marriage and affinity from the "microcosmic" plane of purely human relations to the "macrocosmic" "level" of extractive exchange between humans and "non-humans" (by which is meant the entirety of the lived and living environment, and all the natural and supernatural forces that are believed to inhabit it). The problems I now turn to investigate, on the other hand, are the implications that this particular metaphorical conceptualisation and moralisation of resource extraction holds for the gendered organisation of indigenous ASM.

As will be remembered from other parts of this thesis (and see Moretti 2006b), even though women make up nearly half (44.56% according to the 2000 National Census) of Kaindi's population, the vast majority of mining is undertaken by men. As should be evident from our previous encounters with the likes of Esta (Dream 6), Miriam (Dream 19 and Note 105), Niyatai (Dream 20), and Rebeka (Dream 21), this does not mean that women are altogether absent from the local extractive scene. On the contrary, females of all ages are found mining alluvials and lode gold alike, feeding gravel into sluice boxes, digging and crushing gold stones, and panning, amalgamating, retorting, and selling the gold they extract. On average, however, women form but a minor portion of mining teams, particularly in the case of hard-rock extraction, and tend to work alongside,

and in subordination to, their husbands, fathers, brothers, or other male relatives rather than independently or in all female teams.

As I learnt during fieldwork, both genders consider mining a demanding and dangerous activity, and many of the women I interviewed explained their involvement in it as a matter of necessity rather than choice. Nevertheless, this relatively limited degree of direct female engagement in resource extraction is not only a matter of personal preference. Elsewhere (Moretti 2006b) I have discussed in some detail a series of present and historical dynamics and local, national, and international factors affecting female participation in the ASM sector. To briefly mention a few, heavy male involvement in resource extraction means that women are still expected to absolve "traditional" female tasks like childminding, washing clothes and pots in, and fetching water from, often faraway creeks, and the daily tending of garden crops, while they are also left to perform an increasing share of what used to be "masculine" undertakings such as felling trees and clearing and fencing agricultural plots. In its turn, this means that they are left with very little time to engage in gold mining.

In addition to this, the male bias of the colonial indentured system, of past and present national and international mining law and practice, and of historical Hamtai principles of land tenure signify that indigenous men have long been, and continue to be, better placed than women to acquire the necessary mining skills and to secure formal and informal rights over most local mining land, which remains to this day under male ownership and control and continues to be transmitted patrilineally.

Apart from their stranglehold on the land, which represents the most crucial "means of production" of indigenous ASM, men also dominate the public spheres of politics and institutional representation, as well as most household level decision making. Because of this, women find it hard to mine independently and, when they manage to do so, struggle to hold on to the fruits of their labour, which they are often compelled to hand over to their male relations or to reinvest according to the latter's own interests and wishes (cf. Crispin 2004). As a result of this, women have less of an incentive to mine because they are generally unable to benefit from it to the same extent as the men. Furthermore, their relative lack of

control over mining resources means that they find it harder to acquire and maintain tools like metal bars, dishes, boxes, shovels, or to procure mercury or water pumps, without which they are unable to mine as "easily" and productively as their male counterparts.

In its turn, the relatively minor involvement of women in everyday resource extraction has important implications for what could be termed "the mystical ecology and economy" of indigenous ASM. As seen in Sections 12 and 14 of this thesis (and see Moretti 2006b), the Hamtai maintain that the masalai of Kaindi only "love" and "help" those they "know"- or, in other words, those who have already invested considerable amounts of time and "hard work" in the lands they inhabit. Thus, whether male or female, a newcomer to the mines is not expected to receive many "gold dreams" and minerals until, after several weeks, months, or even years of living and mining in a specific area, s/he will have finally won the trust of the local masalai.

According to this same logic, the women of Kaindi are reported and report to experience fewer "gold dreams" and to win less gold than the men because, as many informants commented along the lines of the old dictum "*canis panem somniat, piscator pisces*" (Jung 2002: 96): "if you hunt you'll have dreams about hunting, if you garden you'll have dreams about gardening, and if you mine you'll get dreams about gold". Being less involved in mining due to competing responsibilities, women are deemed unable to develop as close a relationship with the spirits of the mines as their male counterparts. Consequently, this sustains the notion that they should leave all mineral extraction to the men, who, thanks to their deeper oneiric and "spiritual" connection with the gold, can mine it more productively and with lesser risk to themselves and the living environment.

Aside from this singular catch-22, the dominant rhetoric of Hamtai mining insists that gold is first and foremost "like a woman". In turn, this central tenet of male ideology supports the claim that this metal wants above all a man, or "a husband", to work it- or, in other words, that men alone possess the relational efficacy necessary to elicit the cooperation of the female spirits of the mines, and to "entice" these to "fall in love" and have intercourse with them, procreate minerals like women procreate children, procure gold as wives provide garden

food, and link the miners to the other masalai as women link men to their affines. Nevertheless, more than simply not being as "available" to women as they are to men, Kaindi's gold and the masalai who "look after" it are actually said to be- just like the cassowary spirits and the spirits of the flutes of the Sambia and the Baruya (see Section 13 and Note 138)- "misogynous" female entities who are not only naturally drawn to men, but also actively "inimical" to human women (Bonnemère 2004: 73; Godelier 1982; 1986; Herdt 1994 [1981]).

As we have seen in the course of this thesis, a much cited reason for this intrinsic "enmity" between masalai and human women appeals to the latter's supposedly "polluting nature". According to this perspective, the physiology of human women is intrinsically "offensive" to the spirits of the mines. During menses in particular, female miners can inadvertently spill menstrual blood on the ground, thus polluting entire workings and causing the local masalai to flee with their gold, and/or to precipitate potentially deadly accidents like floods or landslides. Beyond the specific danger of menstruation, it is also said that the everyday "odour" of female bodies, which can easily rub on those men who have sexual or otherwise close contact with them, causes all gold to "run away" and "hide". As a result, many miners insist that women should not be allowed in the mines, but should confine themselves to gardening, marketing, and domestic duties (cf. Biersack 1999; Childs 1998; Clark 1993; Eliade 1978 [1956]; Ryan 1991: 52; Herbert 1998; Hinton, Veiga and Beinhoff 2003; MMSD 2002).[144]

In addition to the "polluting" nature of their physiology, there is a second motive why women should abstain from too much contact with the mines. As has been argued throughout this thesis, Kaindi's miners predicate their efficacy qua resource extractors on their capacity to contract and sustain conjugal-like relations

---

[144] For others still, while it is permissible for them to "gather" alluvials from the rivers or from old deposits, particularly if they do so alongside their husbands or their male relatives (cf. Herbert 1998: 149-50), women should categorically keep away from the more valuable and yet dangerous hard-rock ores, because their interference with these kinds of deposits would anger the masalai beyond measure and surely result in the loss of great riches and very possibly of human lives also. In this sense, the gendered organisation of resource extraction mirrors that subsisting in the equally "prestigious" realm of hunting, where men hold a strict monopoly over the pursuit of more highly valued game such as cassowaries, wild pigs, marsupials, and so on, whereas women (and, as is again the case with alluvials, children of both genders) are free to go after smaller and more "mundane" prey like rats or lizards, whose procurement resembles more a form of "gathering" than of "hunting" proper.

with powerful and yet potentially dangerous female masalai familiars and, by means of them, with the wider community of the spirits of the mountain. In Kaindi, however, the spectre of jealousy applies as much to the partly "spiritual" as to the purely flesh-and-blood "triangle", and the spirit "spouses" of the miners are held to withhold their bounty from, or even to cause illnesses or accidents to, those unfaithful men who "betray them" by marrying and/or sleeping too frequently with too many (human) women. In light of this belief, it could be argued that the "jealous" female masalai/familiars are averse to human women, not only as a result of the latter's "offensive" physiology, but also because they see them as challenging mistresses or, at best, rival "co-wives" competing for the nurturing, productive, and procreative substances, energies and capacities of the same men.

Whether due to "pollution" or because of "jealousy" the fact remains that, according to the prevalent ideology of Hamtai mining, the presence of human women in the mines interferes with the productive "macrocosmic" "conjugal" and "affinal" relations between miners, "familiar spouses", and the masalai of the mountain. As a result, most male miners- and more than a few Kaindi women- profess that, as far as humans are concerned, the mines ought to remain wholly male spaces and mining an exclusively male pursuit. Failing that, male discourse proclaims that women should at least confine themselves to the "gathering" of alluvials (cf. Herbert 1998: 149-50; and see Note 144), leaving the more valuable and valued hard-rock veins to be worked exclusively by the men, and that in any event they should mine only in the company and under the supervision of their husbands or other male relations.

As will be immediately apparent to the reader, this brings us back to the issue of "gender inequality" that was first addressed in Section 13. There we recognised how, at the symbolic level, the mines which dominant Hamtai discourse declares to be quintessentially male spaces are actually populated by powerful female spirits, and the extraction of minerals, similarly defined as a male preserve, is in fact predicated on the interaction between (ideally) male miners and the feminine productive and procreative powers of the masalai. Following that, we also noted how, rather than being peculiar to mining or to the Hamtai

ethnographic milieu, this apparent "paradox" is common to many other "masculine" spheres of the wider Anga economy, culture, and society, including the crucial fields of shamanism, male initiation, and the hunting of cassowaries and other game.

In accounting for this situation, we started from the notion of "sexual antagonism", which, in one form or other, had long informed the anthropology of the New Guinea Highlands, including the first seminal ethnographies of northern Anga groups like the Sambia and the Baruya. According to this perspective, the fundamental coexistence and apparent ambivalence of male and female symbols in indigenous myth, ritual, and everyday discourse and practice are a direct reflection and a perpetuating mechanism of a social and ideological system centred on "gender inequality" and "male domination". In Godelier's (1982; 1986) studies of the Baruya, this model was specifically framed in the neo-Marxist terms of the violent ideological appropriation of female powers and agency by the men, who then used them to sustain their social and economic domination over women (cf. Stewart and Strathern, A. 1999: 346).

Drawing on M. Strathern's (1988) critique of this explanatory framework, we argued that the symbolic opposition of male and female needs not necessarily be about the control of men and women over each other. Rather, its fundamentality and ubiquity are first and foremost the expression of a Melanesian sociality in which the mutually elicitive interaction of the two genders- which can be predicated as much on "cooperation" and "complementarity" as on "coercion" and "exploitation"- forms an essential precondition for both identity and agency. In accordance with this, we re-examined the "ultra-masculine" realm of cassowary hunting among the Sambia and the Baruya, which both Herdt (1987; 1994 [1981]) and Godelier (1986) had identified as a fierce symbolic struggle between the masculine and feminine worlds. In so doing, we showed that the symbolic relationship between hunter and cassowary/familiar, and thus between the male and the female, can be interpreted in terms of "seduction", "love", and "marital cooperation" as well as by way of "theft", "anxiety", "violence" and "domination".

Moving on from Northern Anga cassowary hunting, we proceeded to demonstrate that, at the symbolic level, Hamtai-Anga resource extraction is itself conceived, not in terms of a violent struggle between miners and spirits of the gold, but of the "cooperative complementarity" between male and female, which, as was fully explored in the previous part of this thesis, rests on the same morality of mutual respect and reciprocity which should regulate successful relations of marriage and of affinity. Having said this, what would appear to emerge from our present discussion of female involvement in ASM is that, to put it in Godelier's (1986) neo-Marxist terms, whilst itself built on a symbolic "complementarity" and "cooperation" between the genders, the metaphoric conceptualisation of gold (and the spiritual forces attached to it) as a "misogynous" woman that craves only a man, or a husband, to work it, remains the fulcrum of a "patriarchal ideology" which, as far as mining is concerned, promotes the exclusion of women from an important economic sphere, or at least the subordination of their labour to the control of their husbands and wider male kin.

15b- The "gynocentric" perspective

As a matter of fact, that very feeling was expressed by several of my female informants who, mostly in private but also in the presence of their men, claimed that the notions that gold was averse to female physiology and that it only wanted men to work it were- like other taboos about secret knowledge or powerful ritual objects- just "lies" (tok giaman) that the men used to keep "all" "important" activities and "valuable" things, including mining and minerals, to themselves (Moretti 2006b). According to these female "dissenters", the spirits of the gold cared not a bit about one's gender. For many of them, what mattered instead was the use one made of the gold s/he won from the mines. If one used it wisely to support his or her mining venture and family, s/he could expect to receive more good dreams and gold, but if s/he spent it all on "bad things" (pasin nogut) like gambling, drinking, or promiscuous sex, then the masalai would stop appearing in his/her dreams and cease to give their minerals to him/her.

For others still, it was not gender as such but "good blood" (*hinge'ä kayata ti*) that the masalai responded to. In actual fact, even the men accepted that, if on average women received far fewer "gold dreams" than themselves, certain "good women" (*äpaqa qeta ti*, or *äpaqa kayata ti*) with "good blood" - or, in other words, those who had inherited their fathers' familiars or their capacity to attract such familiars at birth and/or in the course of their lives (see Section 12)- were able to get as many if not more of these oneiric omens than the average male miner. In addition to this, some women were said to hold the quite distinct power of "clear sight" and/or the magic words necessary to communicate with and influence the masalai, which in turn enabled them to mine as freely and successfully as the men.

Rather than being unique to the realm of resource extraction, the existence of a relatively smaller number of powerful female figures in what are largely male dominated fields of action is a common characteristic of Hamtai (and indeed wider Anga)[145] culture. For example, women were always found among the ranks of indigenous "seers", healers, exorcists, and sorcerers. What is more, certain women appear to have held an important role even in the hyper-masculine sphere of warfare. Indeed, my informants talked of a rare but highly respected category of female warriors known as *yi utäki'ya i'yoä*, or, literally, "arrow-catch-those-women", whose "second sight" and reflexes enabled them to predict the trajectory of enemy arrows and deflect them with their digging sticks before they could take down their fellow male warriors.

What we have considered so far, though, are all cases where particular women claim or are believed to hold certain kinds of acquired or inborn[146] characteristics, such as "good character", "good blood", "second sight", or secret magic formulae, which render them efficacious vis-à-vis the spirits of the gold *in spite of* their specific gender identity. My ethnographic data, on the other hand,

---

[145] Broadly speaking, however, the degree of independence and "equality" of men and women in important spheres of agency such as shamanism appears to be higher in Southern rather than Northern Anga societies (see in particular Bonnemère 1996; Descola and Lory 1982; Godelier 1982; 1986; Herdt 1977; 1987; Lemonnier 1992; 1998b).

[146] As seen in other parts of this thesis, the difference between the two is often far from clear-cut if not altogether absent.

points to the existence of a much more radical challenge to the hegemonic characterisation of gold as "a woman who desires only a man, or a husband, to mine it". To understand what I mean by this, let us return for a moment to Dream 6, where we learnt that the discovery of a sizeable nugget by a Hamtai woman called Esta was presaged by her oneiric unearthing of a large sweet potato. On the surface, the setting (a garden), object (a kaukau), and central action (harvesting garden crops) of that narrative all appeared to have an unequivocally feminine character. After explaining how she had located the tuber, however, Esta described her own actions thus: "I pulled and pulled until the kaukau came out of the ground, [and] then I saw it was very long". Now, if we consider that in Tok Pisin, the language used to relate this particular dream, the verb pulim ("to pull") can also signify "to seduce" or "to entice" a lover, the "long sweet potato" Esta obtained through her "pulling" efforts could also be viewed as a Freudian (1994 [1900]) substitute for the phallus, an interpretation further compounded by a certain similarity between the Hamtai words for long (*qhouka*) and for man/male (*qoka*). In its turn, this would make the apparently "ultra feminine" symbolism of that dream rather more ambiguous, hinting to the possibility that, behind its apparent depiction of a womanly task carried out by a female dreamer in a female space, its imagery actually frames the exchange between human and spirit world which precipitates Esta's discovery of gold in terms of an erotically elicitive encounter between the feminine and the masculine.

An equivalent point can be made in relation to Miriam's vision (Dream 19) of a sleeping snake coiled up by two beautiful eggs. In her dream, Miriam picked up just one of the eggs, which she desired to consume, leaving the other one behind. The following morning, she prospected the area where the reptile had nested in her dream and located a very rich gold vein. Unfortunately, a group of strangers caught wind of her strike and, without the benefit of a dream and without asking permission, began to mine alongside her. This disrespectful behaviour, which stood in direct contrast to the consideration Miriam showed by taking just one of its eggs, led the masalai to withdraw its minerals from the greedy usurpers and, by necessity, from the dreamer herself.

As we argued in Section 11, this oneiric representation of the local masalai as a "mother snake" and of the gold as its eggs/progeny is broadly consistent with the metaphoric conceptualisation of the masalai/familiars as female, and with the "procreative" character that mining is attributed in "gold dreaming" as in many other areas of indigenous discourse and practice. This notwithstanding, if we consider that here the dreamer is herself female, another common characteristic of Hamtai-Anga "gold dreaming" and mining culture- that is the rhetoric linkage of mining success to often sexualised elicitive interactions between oppositely gendered miners and masalai/familiars- would at first appear to be totally lacking from this particular narrative. Nevertheless, once we remind ourselves of the phallic connotations which, as first mentioned in Section 11 of this thesis, Hamtai and wider Anga (and Melanesian) culture attribute to the snake, the possibility arises that the animal dreamt by Miriam is in actual fact a "bi-gendered" symbol of, to elaborate on Weiner (1995) and Mimica (1981; 1991), a "phallic uterus" or a "uterine phallus" whose penetrative and procreative capacities can indeed conjoin with, and be elicited by, the dreamer's own femininity.

As a matter of fact, the masculine attributes of the serpent are reprised and brought to the fore in the oneiric narrative of a third Hamtai woman we know as Rebeka (Dream 21). There, the dreamer came face to face with the gazing head of a *hauyi* python, whose long thick body lay hidden in a hole. In our original interpretation of this oneiric imagery, we found it to hold strongly sexualised connotations. In particular, we proposed that the large reptile constituted a phallic symbol, with its head standing for an uncovered glans, and the buried body suggesting at once the hidden penile tract within the male body, a phallus ready to "emerge" in an erection, a penis "buried into" a female body, and a penile child gestating itself in a woman's womb. As we argued then, this particular tropic chain (gold = snake = masalai = penis = child) fits rather perfectly with the systemic tropic association of mineral extraction with reproduction and conjugality current in all other instances of "gold dreaming". What is more striking now, though, is that, even more so than our two previous dreams, it effects an overt reversal of the dominant male representation of gold and the masalai/ familiars, for in it these are not cast as prospective affines and spouses in

search of a son-in-law/husband, or as the progeny of female spirits and the erotic dreams, "hard work", and offerings of male miners, but as male lovers/husbands and foetuses attracted to and procreated by the dreamer, not in spite, but precisely as a result of, her own feminine identity.

Nevertheless, given that the oneiric encounter in question did not contain any explicit reference to sexual intercourse between Rebeka and the masalai python, one may legitimately wonder whether we have not "made too much" of the phallic character of its symbolism. In other words, it is not yet fully proven that this dream purports a procreative interaction between a masculine mountain spirit and a female dreamer/miner, and not simply an image of a kind of serpent that Hamtai culture associates with the masalai and with minerals (see Section 11). In support of the former hypothesis, I can point to two separate bodies of evidence. The first, of an ethnographically broader order, is that the myths and dreams of other Anga and PNG peoples are replete with much more overt images of snakes which marry and/or have sexual intercourse with female heroines and dreamers (see, for instance, Bonnemère 1996; Clark 1995; Mimica 2006; Godelier 1986; Stephen 1996; Wagner 1972; 1978; 1986; and Wardlow 2004). Even more poignant, however, is the fact that some other "gold dreams" I collected contained much more explicit characterisations of the masalai/familiars as male, and of the interactions between these and the dreamer which lead to the discovery or "gift" of minerals as seductive and procreative acts. As an example of this let me refer to the following story, which was narrated to me by a young Hamtai woman named Resel:

Dream 24

Once I saw a dream about our (hers and her husband's) workings. I walked towards that place and I ran into a white man sitting on a log. I tried to get him out of my way but he told me, "I am not letting you through, I have come here to marry you!" So I said, "Why do you want to marry me? I already have a husband!" But he just replied, "Oh, don't you worry about your husband! You can still be with him, but I want to marry you anyway!" When I heard that I told him again to get out of my way, and this time he took off. Before he went though, he gave me a plane. He showed me this big army plane and said, "This is for you, you can fly it wherever you like". So I got into it and I took off to the sky. I flew around and around

until I hit a tree and the plane crashed to the ground. After that I woke up. It was still dark but I gathered my tools and I went to the place I had seen in the dream. I worked for a bit and then I found some gold, and when I sold it I made a lot from it.

In this particular oneiric narrative, the dreamer encounters an unknown European who sits on a fallen log, obstructing her path to work. When the dreamer asks him to let her pass, the stranger refuses to budge and instead declares his intention to "marry" her- i.e. to have sexual intercourse with, and possibly become a more permanent familiar to, her. Retorting that she is already married, Resel refuses the advances. Instead of letting her go, though, the man declares himself unconcerned by her marital status and insists that she proceeds to "marry" him all the same.

As should be remembered from other parts of this thesis, the European identity of this oneiric personage can be explained in a number of ways. In the first place, it undoubtedly stands as a symbolic marker of his identity as a masalai/familiar and a guardian of the gold. In addition to this, it could equally constitute a form of conscious or unconscious "displacement" aimed at masking (from herself and/or others, including the ethnographer to whom she related this tale) the true identity of the person Resel may have dreamed about and towards whom she might have harboured a more or less repressed sexual desire. Finally, it might actually reflect Resel's wish to have a sexual liaison and/or a long-term relationship with a European. Indeed, as is the case in other parts of PNG (see, for example, Wardlow 2004), Europeans tended to be viewed by local women as highly desirable lovers and even better "marriage material". In the main, this had to do, firstly, with the higher degree of wealth attributed to the whites, and thus the conviction that they would be better placed to provide for their mistresses and wives than the average local man; and secondly- and this despite the best efforts of certain expatriates- with a perception that Europeans were more caring and kinder towards women than most native men.

Whatever its precise source, this sexually charged dream would appear to contain two further levels of "repressive" displacement. To begin with, the whole scene is set in terms of a locally not uncommon kind of "sexual encounter" which Westerners would almost certainly read as "rape". Thus, in the dream, Resel does

not actively seek an affair, but is "ambushed" while travelling alone- not to a gambling spot, a friend's house, or any other such "suspect" location, mind you, but to her place of work- by an unknown man who "demands" that she submits to his, not her own, sexual desires. Nevertheless, given a historical and, to a point, still current indigenous mentality that women who travel alone in the bush or other secluded environs are actually "asking for it"- or, in other words, that they are fully conscious that they may be subjected to a sexual act by a known man or a stranger and are possibly seeking for this to happen- the "victim" of this type of encounter is not necessarily viewed as such from a masculine and, to a degree, even a feminine emic perspective, but can be fully or partly blamed for the event that befell her (cf. Banks, C. 2000; Borrey 2000; and Wardlow 2004). For this same reason, the framing of her oneiric encounter as a preamble to a sexual "assault" may still not be in itself a sufficiently strong means of "displacing" the dreamer's repressed desires.

Uncharacteristically for this type of encounter, however, the white stranger does not force himself onto Resel. In the end, he yields to her remonstrations and leaves, but not before having given her his "big army plane", which he encourages her to "fly" wherever fancy may take her. In *The Interpretation of Dreams* (1994 [1900]: 170-71, 265-67), Freud proposed that in dreams all manners of complex machinery- including "airships"- are common symbolic analogues for the sexual organs, and particularly the phallus. What is more, he suggested that dreams of flying are frequently associated with sexual arousal and carnal pleasure and that, at least in women, dreams of falling down can symbolise giving way to erotic temptation.

If we take our cue from these Freudian insights, the second section of Resel's dream could be read as a further attempt to mask its underlying erotic content. In this case, the "big plane"- whose masculine character is accentuated by its identification as a military aircraft- would come to symbolise the white man/masalai's member, which "flies up" to its Priapic heights, and to whose lure and/or violent aggression the dreamer eventually succumbs. Alternatively, the "take off" and "flight" could also stand for the sexual act itself, and the final "crash down" as its natural conclusion. Either way, as a metaphoric representation

of mining as an erotic-procreative relationship between the miners and the masalai/ familiars, this possible "latent" meaning of a "manifestly" bizarre oneiric narrative would be wholly consistent with the content of many of our previous "gold dreams".

As we've had the cause to appreciate in the unfolding of this thesis, however, dreams are often highly "polysemic" constructs that harbour a multitude of complementary symbolic meanings- and Resel's dream is no exception to the rule. Thus, as well as an allusion to the consummation of a sexual act, the plane she is given by the white man could also be interpreted as a gift of the kind expected from a husband, a lover, or a wooing suitor. Granted, the nature of this present does not immediately conform to that of the offerings found in prior examples of "gold dreaming". Nevertheless, it fits in rather perfectly with a number of other "gold dreams" I collected featuring gifts of (mostly extractive) machinery and western goods given by European looking masalai/familiars to the miners.[147]

As a matter of fact, perhaps more than any other western item the airplane stands as the ultimate symbol of the alluring universe of the waitman. Whenever a plane was heard above Kaindi, people turned their eyes to the sky, wondering aloud whether it was one of the larger Air Niugini jets and if it was just flying to Moresby or Lae, or perhaps going all the way to Australia. Similarly, men and women alike confided how, should they ever be so lucky to make a big find, they would use their gold to fly to the mysterious countries of the white man. As for the few who had actually flown to foreign lands, they counted this amongst their most significant life experiences, seeing it as something that set them apart from their fellow Hamtai. In addition to this, aircrafts in general and military planes especially were considered among the fastest and most capacious deliverers of the white men's "cargo". In light of all these facts, the gift of a plane stands at once as a figurative enablement to transcend the constraints of the local and to "become one" with the world of the Europeans, and as a symbolic container and conveyor

---

[147] The underlying significance of these dreams, which I intend to examine more fully in future works, relates to the long "history" of "primordial", colonial, and post-colonial relations between the Hamtai and the masta to which I have cursively referred in other sections of this work, and which I have considered in greater detail elsewhere (see Moretti 2005).

of the most desirable objects associated with that universe (cf. Stephen 1995: cf. 117-118). In its turn, this makes the airplane a fitting analogue for gold, which similarly enables one to connect with the flow of resources and relationships that unite New Guinea to the cosmos of the white man. And yet alas, as my own informants often observed, a miner's power to join and sap this current is always temporary because, sooner or later, one's hard won gold will run out and then, like a broken aircraft, one will succumb again to the constraining gravity of the local.

In addition to this more oblique analogy, moreover, planes are also directly linked to gold by the long history of colonial extraction of the Bulolo District (see in particular, Clune 1951; Healy 1967; 1972; Idriess 1933; Nelson 1976; Sinclair 1978; 1998). Quite aside from their central role in delivering the massive dredges and other mining machinery used in the "development" of the Goldfields, my consultants knew that planes had been largely responsible for the transportation of locally extracted minerals to the outside world of the masta, in exchange for which they returned laden with the vast volumes of supplies and building materials consumed by its voracious mining enclave. In connection with this latter function, I heard numerous tales of a mysterious aircraft which, some said during the evacuation of the Goldfields in the wake of the Japanese invasion of New Guinea, others much earlier than that, crashed with an immense cargo of pure gold that still lies hidden somewhere between Wau and Lae. In light of this legend, which might elaborate on the memory of historical jungle crashes like that of the Lae-bound NGG Handley Page Hampstead in 1931 (Sinclair 1998), the closing image of Resel's dream furnishes a clear omen that she will soon find a mineral deposit as rich as the cargo of that mythical lost plane.

Because of this close symbolic association with gold, the cash economy, and the material culture of the waitman, the gift of an aircraft is an apt representation of both the mineral endowments the miners dream (literally and figuratively) of receiving from their masalai/familiars, and of the kinds of gifts PNG women would hope to secure from a white lover or husband. In turn, this suggests that, in "gold dreams" featuring European-like masalai/familiars, the gifting of western machinery and other imported goods to the dreamer can have a

meaning analogous to that held by the endowment of more or less "traditional" subsistence items in the more common examples of "gold dreaming" encountered so far. Indeed, both kinds of exchanges draw upon and make apparent that "complementary relationality" between "opposites" which, as argued in Section 13, Hamtai culture considers essential to all manners of procreative, productive, ritual, social, and economic efficacy, with the added dimension that, in the former case, the salient "axes of otherness"- which Hamtai dreaming, myth, and broader sociocultural discourse and practice are perpetually redrawing, reconnecting, and collapsing- around which the interactions articulate include, not only those of "human" v. "forest spirits" and "masculine" versus "feminine", but also those of "indigenous" v. "European" and "local" versus "global".

Still in relation to the local historical imaginary about the airplane, moreover, my informants also commented that their ancestors had initially taken the white men's aircrafts for living beings, and more specifically for giant birds (cf. McCarthy 1963; and Simpson 1953). Apart from this actual or imagined historical connection, this symbolic link between airplanes and birds is intrinsic to Tok Pisin, where the word "balus" can signify both "aeroplane" and "pigeon", which is an established prey of the Hamtai-Anga hunter (cf. Blackwood 1978). In consideration of these facts, the incorporation of an aeroplane in Resel's dream could be seen to fulfil two further functions. Thus, in the first place, it would replicate the kind of animal symbolism common to many of our previous "gold dreams"- which, as will be remembered from Section 11, is itself indicative of their aetiological association with the wild spirits of the mountain. In addition to this, though, the interchangeability of plane and bird would render the white man's offering of an aircraft to the female dreamer symbolically equivalent to the gifts of game that were a crucial component of "customary" marriage, child birth, and child growth prestations and which, in terms of the historical indigenous division of labour between the genders, constituted perhaps the most valued male contribution to the complementary and cooperative conjugal exchanges which lay at the heart of the Hamtai household economy and socio-cultural survival (cf. Bamford 1997).

In turn, of course, this would make Resel's dream the perfect "gynocentric" inversion of the dominant "androcentric" rhetoric of Hamtai-Anga "gold dreaming", because in it we would still find the metaphoric conceptualisation of mining as a conjugal-like (re)productive relationship between miners and masalai/familiars, but with the crucial difference that the latter would no longer be depicted as female, but male, and that the typically female offer of garden crops common to male mining dreams would be substituted by its complementary opposite: the quintessentially masculine gift of game. Looked upon from this perspective, moreover, the "aggressive" insistence with which the mysterious white man pursues the dreamer acquires a poignant new meaning. Indeed, as already argued in Section 13 by reference to a number of male dreams, this can now be seen not only as a reflection of a social and ideological environment where male sexual aggression against women is not infrequent and at least partly accepted, and/or as a possible "displacing mechanism" whereby Rebeka seeks to mask her own sexual desires by making herself their "passive" object rather than subject, but also as the very proof of Rebeka's "irresistible power" to seduce and attract gold and the spirits who "look after" it- or, in other words, of her own feminine agency as a resource extractor.

To conclude, then, what Dreams 6, 19, 21, and 23 would appear to confirm is the fact that, as M. Strathern (1988) convincingly argued in *The Gender of the Gift*, in Melanesian culture there are no exclusively "male" or "female" substances, identities, or patterns of efficacy; rather, every possible gender trait is intrinsically divisible, detachable, transactable, and reversible, so that each sex can potentially lay claim to the same kind of re(productive) capacities. In the specific context of Hamtai-Anga gold mining, this Melanesian logic of gender sustains the feminine counterclaim that, contrary to the central tenet of male mining rhetoric, gold and the spirits who "look after it" are not always "like women who want only a man, or a husband, to engage with them", but can equally be "like men who seek a woman, or a wife, to give themselves to". As a matter of fact, this very notion was clearly spelled out to me during a spot of participant observation with a mixed group of alluvial miners. On that particular occasion, a young woman stood up after panning her gold dish and called out to

me. When I approached her, she excitedly pointed to three shiny specimens in her gold pan and said:

> Look! My husband came here to work yesterday. He dug this same spot and got nothing. But look here, look what I found! This gold must be a man, and he only wants women to marry him. You see, sometimes the boss of the gold is a woman, and she loves only men. She wants to marry them, so she gives them gold. But other times it is a man, and he wants to marry a woman. If a man tries to get his gold, he'll get nothing and will walk away empty-handed. But if it's a woman who digs, she'll find gold... he'll give it to her.

In the eyes of that young informant, her own discovery of gold in an area her husband had unsuccessfully mined just a day earlier was a clear indication that the gold masalai/familiars could be both female and male. Conversely, this moved her to affirm that women at large can be just as efficacious miners as the men, and this not despite, but precisely as an effect of, their gender identity. Indeed, so her argument went, if female miners are able to win minerals where their male counterparts never could it is because of their feminine capacities, which, in their turn, are constituted and made apparent precisely by means of their demonstrated ability to elicit gold from these otherwise unresponsive male masalai/familiars (cf. Strathern, M. 1988).

15c- Mining and the "moral holography" of conjugality and affinity

While the majority of Kaindi men contested this female counter-rhetoric of mining and maintained that the mines are no places for women (with the possible exception of those few "good blooded women" who, thanks to their incorporation of certain familiars or magic knowledge which, in the context of mining, are more often than not regarded as having being inherited from their fathers, can be seen as partial or "honorary" males), many of them had come to accept that, over the previous three decades, female involvement in mining had grown too much to be easily reversed.

As I have discussed more extensively elsewhere (Moretti 2006b), both male and female informants related that historical trend (which unfortunately I found no reliable archival sources to either confirm or dismiss) to a number of

concomitant factors. To begin with, at independence Papua New Guinea had enshrined the goal of gender equity in its national law and constitution, and prominent national and local figures and politicians had given public support to the rights of female citizens to participate fully and equally in the economic, political, and social life of the country. Although these discourses had not resulted in the complete eradication of established patterns of discrimination, many felt that they had at least served to make people aware that women also had "rights", and that they had encouraged women to challenge established male monopolies in a variety of economic sectors, including mining. Of course, this process was facilitated by a series of other contemporary developments such as the abandonment of male initiations, the incorporation of men and women in a single and more "equal" ritual community under the aegis of Christianity, relatively greater access to education for both genders, which is itself largely conducted in mixed sex schools, the weakening of pollution beliefs, exposure to alternative, often Western inspired models of sexuality and gender interaction, and the collapse of parental control over marriage, which, as has been the case in other Anga areas, have collectively led to a relatively greater level of "equality" between the genders than was "traditionally" the case (see, for instance, Godelier 1986: 220-24; Herdt 1987; 2006; and Stolpe 2003).

A second boost to female involvement in ASM came from the process of sectorial deregulation of the late 1980s and 1990s. Before those changes had taken place, only Miner ID holders were allowed to mine and to legally sell gold. As the vast majority of permit holders were male, women had little incentive to mine because they were effectively unable to sell gold without passing through their husbands, kinsmen, or male employers. Today, on the other hand, miner IDs no longer exist and intra-national gold transactions are fully deregulated. Consequently, women have a greater incentive to mine because they can retain a greater portion of what they get, either by mining in secret or on unregistered land, or, if they have to work with a husband or male relative or for a leaseholder who will appropriate most of their declared finds, by hiding part of the gold they produce to sell of their own accord either locally or in Wau and Bulolo.

In addition to this, the recent relaxation of mining legislation and regulations and the progressive decrease in the levels of supervision and control of local mining operations by understaffed Department of Mines (DOM) officials also made it easier for new migrants to move to Kaindi to open virgin land or to "squat" on existing leases and "customary holdings". As international mineral prices rose in the face of a more general stagnation of the local and national economy, ASM became an increasingly attractive proposition to both the District's unemployed and migrants from other areas with little cash earning opportunities and/or with growing land pressure problems (precisely like the Menyamya District and the Kerema Sub-District of the Gulf [see Hanson et al. 2001]). In turn, this led to a manifold increase in the number of people living and working on Mount Kaindi. As had been the case in the original gold rush of the 1920s, however, this resulted in growing numbers of miners having to compete for increasingly scarce resources and getting lower and lower returns for their labour. In turn, this meant that many miners soon found it difficult to provide for themselves and their families without some occasional or full time help from their wives or female relations, and so the "historical" reluctance of Anga men to allow their women to mine was gradually eroded by sheer economic necessity.

But if more women became directly involved in mining as a result of their men no longer being able to win enough gold on their own, many others were forced to do so because their partners had proven unwilling to contribute their fair share of resources to the survival of their households. And this leads us to a most crucial point of "holographic articulation" between what I have here heuristically distinguished as the "microcosmic" and "macrocosmic" moralities of Hamtai mining; that is the issue of the distribution, exchange, and consumption of minerals as products of what are defined first and foremost as cross-sex, affinal-like interactions between the miners and the environment along cross-sex relationships of conjugality between the miners and their human spouses.

Thus, according to the "microcosmic" morality of Kaindi mining, a man should always give a fair proportion of his mining proceeds to his wife (or wives) (cf. Godelier 1986: 15-16), who is then expected to use it to procure food, livestock, clothes, medicines, school fees, household goods, and other necessities

for herself and their children, and/or to finance some alternative economic activity of her own, such as the sale of cigarettes, betel nut, clothes, or cooked foods like boiled eggs, chicken and rice, or fried flour doughnuts within the hamlet or at the main Kaindi markets, all of which are considered "appropriate" forms of "women's work". Anyone who shirks this moral obligation exposes himself to criticism as a "greedy" husband/father who does not truly care about the well being of his family, and/or as a "rubbish man" who is too "selfish", "lazy", or "inept" to reciprocate his wife's (or wives') contributions of subsistence items and/or cash to the economy of their household. As a matter of fact, so intrinsic is the exchange and nurturing flow of food and other material resources to indigenous notions of marriage and of relatedness (cf. Bamford 1997; 1998a; 1998b; Bonnemère 1996; Mimica 1981; 1988; 1991)[148] that such lack of marital and paternal concern can bring into question one's very "right" to call himself a "father" or a "husband".

In its turn, as should be remembered from the previous section of this thesis, failure to behave as a nurturing father and husband can have several negative effects. To begin with, a neglected or abused wife can refuse to work hard, or to share the fruits of her labour with her partner. Worse still, she can run away with another man or return to live with her kin (at least until she finds a new partner), often taking some or all of her younger children away with her. In addition to this, the woman might resort to physical violence against her spouse. That very fate, for instance, was met by one of my closest male informants. Just before my second period of fieldwork, Martin had made a sizeable gold find. Seeking a higher price for his gold, he immediately left for Lae. During five days in the coastal city and a further two in Wau, the man had managed to spend nearly 10,000 kina on beer, gambling, and "womanising". According to his own nephew and co-worker, when Martin came home empty-handed:

> His wife was really angry. She picked up one of his crowbars and hit him on the nose and on the head! And he didn't fight back either! He knew he was in the wrong, so he didn't fight

---

[148] To quote Mimica's (1981: 93) poignant comment about Yagwoia kinship: "one's stomach doesn't get full if one only hears: 'Oh, I am your *noye* (ZCh), brother, or sister, or mother'. Such relatedness is insubstantial. Only gifts of food and valuables make relatedness substantial".

back; he just took to it all meekly! He just looked at her and tried to fend off her worst blows; but the next day he still walked around with a bandage round his head! When I saw him I asked him about it and he said, "Oh, you know, the woman's angry with me because I drank all my money, and so she hit me with my crowbar".

On top of the threat of physical violence, a scorned woman can resort to poison magic, sorcery, or witchcraft against her husband and/or her progeny. Furthermore, even without such direct mystical intervention on her part, the very failings of an uncaring man could prompt the "cosmos" to inflict diseases, accidents, or other such misfortunes upon him and/or his children. Finally, in addition to these more generic punishments, the failure to share gold with one's own spouse(s) and offspring can cost a man his very efficacy as a miner.

In the first instance, this can result from a conscious or unconscious retributive act on the part of the offended wife. If neglected or mistreated by her husband, a woman with "second sight" and/or the magic formulae necessary communicate with the masalai can influence the mountain spirits into withholding minerals from him. In a similar vein, those who have the power of *phänga* can "hide" all gold from the workings of those who incur their wrath, including their spouses. An example of this kind of female reprisal was reported by an informant, who, referring to his own leaseholder and employer, narrated the following story:

One night the old man got really drunk. He stood there butt-naked, raving like a lunatic; then he gathered his bush knife and chased after the old woman (his first and now sole remaining wife). They shouted at each other, and he attacked her with the machete and got real close to killing her. The old woman was furious! She screamed at him, "You think you can get drunk and beat me like this, and that the next day all will be just like before? You mark my words; from now on, you shall find no more gold! You think you are such a great man, but let me tell you; there'll be no more gold for you, and from now on we will be rubbish people, we'll be the poorest of the poor!"

That's what the old woman told her old man, and since that night, we have found only little bits of gold- never as much as we used to before. This woman, she must have a way to talk to the masalai. I am not sure how she did what she did... I heard she put some gold dust in a bottle of fresh water, and that she did something to it, I am not sure what. But whatever it was, it must have worked, because we haven't found much gold since then! In my opinion, the old man should apologise to her, and if she knows how, she will undo what she did and we will find gold again.

In this particular incident, the old woman's revenge was precipitated by her husband's physically abusive behaviour rather than an unwillingness to share gold with her (which may, however, have been a contributing factor, particularly when we consider that, as I had opportunity to learn during fieldwork, when a miner enters a drinking spree he rarely sets any of his gold earnings aside for his family, but more often than not carries on buying beer for himself and others until all his winnings have been dispensed with). Nevertheless, this same kind of "mining curse" can be used by women to punish selfish and greedy husbands as well as violently abusive partners.

Furthermore, should his neglected wife be unwilling or unable to interfere with his extractive activities, the miner who fails to meet his obligations as a husband and a father will still run the risk of losing the support of the masalai of the mines. As already mentioned above, the spirits of the gold are said to "love" only those who use their mining earnings wisely. In particular, this was interpreted to mean that, if a miner employed his gold money to "look after" his operations and the well-being of his family, then the masalai/familiars would continue to provide him with good dreams and precious metals; but if he spent it all selfishly, and particularly on "bad things" like gambling, drinking, or promiscuous sex, then the spirits would withdraw their support from him and he would henceforth be unable to win much gold.

When I asked why this was so, many simply responded that this had always been the "law" (lo or *kukngo* [lit. "restraint"]), or the "custom/behaviour" (lo, pasin, kastam, or, in vernacular, *ha'a*, which literally means "like that") of these spirits. Other informants, however, elaborated further that, being themselves "angels", or, at any rate, "servants" of the Lord, the masalai could only help those who acted as "good Christians" and caring patresfamilias. As a matter of fact, some went so far as suggesting that the increasingly "uncaring" and "sinful" behaviour of so many miners had caused many spirits to flee the mountain and had made local mineral resources much smaller and harder to mine than they had even been before (cf. Biersack 1999; Clark 1993; Ryan 1991).

Having said this, even those who didn't believe in a direct link between "the Christian ethic and the spirits of minerals" still recognised an indirect

association between the selfish behaviour displayed by a majority of miners and the progressive depletion of Kaindi's metal deposits. As we saw earlier on, all my consultants maintained that the past three decades had witnessed a steady growth in direct female engagement in ASM. According to the men, this increased "polluting" female presence had caused the masalai to leave the mines and to hide their minerals from them. While many women denied altogether the veracity of this claim, others didn't refute it but were still quick to point out that, in a present situation where so many male miners refused to provide for their families, they had simply been left with no choice but to take up mining themselves. As a result of this, they concluded, the men should bear this shame in silence instead of preventing them from doing whatever they could to meet their own and their children's needs (Moretti 2006b). As a matter of fact, the majority of men appeared to agree with this criticism and admitted that their own selfishness had indeed "forced" growing numbers of women to take part in resource extraction.

Now, as mentioned above and in other sections of this thesis, it is a common feature of Anga culture that the performance of the most crucial masculine endeavours is predicated upon the "encompassing" use of symbolic objects, techniques, powers, and procreative processes that are closely associated with women. In the earlier "antagonistic" models of Highlands gender relations, this male "incorporation" of the female was interpreted in terms of the primordial "theft" of female powers and agency by the men, who employed them (in conjunction with "their own") to sustain their social and economic "domination" over women (Strathern, M. 1988; Stewart and Strathern, A. 1999: 346).

In her poignant critique of this line of interpretation, Marilyn Strathern (1988) observed that the apparently widespread Eastern Highlands notion that men hold power now because, in an often mythical past, they managed to "steal it away" from women is highly problematic because it can easily be misrepresented in terms of an ethnocentric, Euro-American concept of power and agency as "alienable properties" which, once legitimately or illegitimately acquired, are held by their acquirers/captors on a permanent and exclusive basis. The impression derived from the regional ethnography, on the other hand, is that efficacy is always a temporary, potentially reversible, and inherently relational "enablement"

which must be continually reproduced through renewed acts of (more or less cooperative or coercive) elicitive engagement (Strathern, M. 1988). As a matter of fact, Godelier (1998:15) himself argued along somewhat similar lines when he noted that:

> ... pour les Baruya la suprématie des hommes n'est jamais totalement acquise, car les pouvoirs des femmes n'ont *pas* été détruits par les actes de violence commis dans les temps originaires. Même s'ils sont entre les mains des hommes ces pouvoirs n'oint point cessé d'exister. C'est pourquoi le chaos surgirait de nouveau si les hommes venaient à relâcher leur emprise. Leur lutte contre les femmes est donc sans cesse à recommencer. L'ordre de la société (et celui de l'univers [...]) pour être conservé, doit être en quelque sorte recréé à chaque generation.
>
> [... for the Baruya male supremacy is never totally acquired, because the powers of women have not been destroyed by the violent acts committed in primordial times. Even if they are under male control, these powers have not ceased to exist. That is why chaos would return again if the men were to abandon their hold. Their struggle against women is thus to be eternally renewed. For if the order of society (and that of the cosmos [...]) is to be maintained, it has to be recreated, in a way, at every generation (my translation)].

To understand the full meaning of this quote, it is necessary to refer back to *The Making of Great Men* (1986), where Godelier assigned myth a vital role in ensuring that Baruya men maintained control of the feminine powers they needed to sustain their material and ideological "domination" over women. Although Godelier's analysis built upon several Baruya myths regarding the feminine origins of such diverse things as the bow and arrows, the sacred flutes of male initiation, garden crops, the canes used to make "traditional" salt, and even the male sexual organs, space allows me to outline only the first of these many sagas, which should nonetheless prove sufficient to illustrate the ethnographic basis of his argument.

According to that particular myth, then, it was the first women who one day invented the bow and arrows. Not knowing how to handle it properly, however, they held the weapon back to front, as a result of which they ended up killing too much game in a wanton fashion. In the end, the men were forced to intervene. They took hold of the bow and turned it the right way around. Since

those days, men have taken care to kill only the game they need, and have banned women from ever using the bow again (Godelier 1986: 71). On the basis of this and similar tales, Godelier (1986: 73-4) concluded that:

> What the Baruya myths reveal to us [...] is not evidence of their forgotten origins, memories of an age when women dominated men, for them a now vanished golden age of matriarchy. Nor do they reveal to us an attempt to compensate in some imaginary world for the condition that is imposed on them in real life, a manner of acknowledging women's superiority (in the world of ideas) even though everything in practice denies and negates any such superiority. The lesson of these myths is quite different. By showing that woman was the source of disorder when still in possession of her powers, by showing that the fact of stripping her of these powers was beneficial to everyone, women included, these myths are a means of convincing all concerned, men and women alike, that things are now as they ought to be, that the order now reigning is the correct one, and that it legitimately, necessarily, implies the exercise of some violence by the men against the women. Indeed, what sensible woman, having heard these myths and the description of the disorders attendant upon women's former powers, could want all this to happen all over again? Surely the lesson of these myths is that it would be better for them to abandon all thought and all hope- supposing these should ever manifest themselves- of taking back from the men the powers stolen from them, that it would be better for them to cooperate as willingly as possible in the production and preservation of male domination, and that the best course is to be a good wife, faithful, hard working, and fertile.

In sum, then, for Godelier Baruya myth embodies and sustains a "hegemonic" (in the Gramscian sense [see Gramsci 1997]) moral doctrine which justifies the original "theft" of female powers and their continuous "re-appropriation" by successive generations of men, and which attempts to promote cross-gender "consensus" by convincing women that this repeated "seizure" and "subordination" is necessary to the very survival of the cosmos and ultimately beneficial to society as a whole (Godelier 1986: 71; 1998). When faced with such powerful "truths", asks the anthropologist, what woman would think of reclaiming powers which, in her own hands, could lead to her own and the world's ultimate demise?

In the different ethnographic context of Hamtai mining we have found, I believe, an answer to this question. There too we have seen how, to succeed in

their extracting efforts, the miners depend on the productive, procreative, and mediating powers of masalai/familiars, who are themselves conceptualised first and foremost as female "spouses" or "lovers". In addition to this, we have noted how dominant male discourse maintains that female engagement in ASM is "offensive" to these spirits of the gold and is bound to result in the heightened occurrence of dangerous mining accidents and the rapid depletion of mineral deposits- or, in other words, in increased physical risk and poverty for all, including women.

In order to avoid this fate, which is reminiscent of the "cosmic chaos" Baruya myth attaches to other forms of unbridled feminine agency, it is argued that women must be excluded from the mines and from interfering in any way with the feminine powers of the masalai/familiars. Yet if this rhetoric is, to follow Godelier (1986), a form of "ideological" or "symbolic violence" against women, it is nevertheless one founded on the use of a double-edged moral weapon. Just like Baruya myth, Hamtai mining discourse justifies the symbolic and material "appropriation" of female powers and substances and the "exclusion", or at least the "subordination", of women by the men on the grounds that it serves to protect the well-being of both genders and of the universe at large. Having said this, what the aforementioned female discourses about the "selfishness" of modern male miners and their widespread acceptance even among the men would appear to suggest is that both sexes acknowledge that the "legitimacy" of the "status quo" depends on men using the female "enablements" and resources they are able to elicit and control through their masculinity in the interest of women as well as their own.

And indeed, this very same logic would appear to be present in other Anga societies. In a recent essay aimed at re-evaluating the role of the female in Sambia male initiations, for instance, Herdt (2004) describes what he defines as "the moral pedagogy of women in public ceremonies"; a phenomenon that he suggests may be common throughout the PNG Eastern Highlands. During the first stage of the Sambia male initiation cycle, there is a point when the women dance around a huge fire and then proceed to line up and lecture the initiates. In these often violent displays, the women exhort the young boys to work hard and to be

responsible in the absolution of their economic duties, and most particularly of hunting and the collection of firewood for their mothers and later wives, all the while chastising the adult men for their own shortcomings in this direction. These most public reprimands, whose anti-male content reaches heights of rhetorical and theatrical venomousness normally inexpressible by Sambia women, are observed almost approvingly by the men until the very end, when the sting of the women's words finally drives them to threaten retaliation and to force an ending to their invectives.

According to Herdt (2004), this institutionalised female nagging can be explained in two ways. The first is that Sambia ritual ideology and subjectivity always move from the negation of femininity to the affirmation of masculinity. In this sense, the presence of women "instigates a process of substitution in which the 'female' element is displaced by a 'male' one (Strathern, M. 1988)" (ibid, 30). The second rationale is that Sambia culture idealises the male as the primary object of desire and of attraction. Hence, by introducing the physical presence of women at this early stage of male initiation as highly critical and negative, the men leave an impression of female authority as punitive and destructive in the minds of the boys, thus making them readier to resocialise their desire (including, for most of the duration of the initiation cycle, sexual desire) away from women and towards their fellow men (ibid, 30-31).

While I do not wish to contest the fundamental validity of these interpretations, I would nevertheless suggest that these institutionalised female discourses may also bring to the fore the "reverse side" of that "hegemonic morality" Godelier (1986; 1998) found in Baruya myth. In other words, then, one of their effects may be to remind the initiates and the male community at large that with the female powers elicited and exercised during initiation and other male ritual, economic, and political activities comes the responsibility to work for the benefit of "society as a whole", including women- or, to sum it further, that every claim comes already pregnant with a counterclaim. In effect, of course, this proves that if in Melanesian culture and sociality the masculine can define itself and become effective only through its emergence from, and embracement of, the feminine (and vice versa) (Strathern, M. 1988; 1991), it is also often the case that

it can maintain its identity and efficacy only if it is then re-entered into a transactional relationship with the female. Thus, in the sphere of male initiation, Anga boys emerge as men through the use of feminine ritual objects, symbols, and powers. Thereafter, however, they can remain "true" men only if they give themselves in marriage to a woman and use their masculine efficacy to engender children and to provide for and protect their families (cf. Biersack 2004). Similarly, hunting emerges as a masculine activity because it originated with the female invention of the bow and arrows, yet for it to remain a male enterprise its products (i.e. game) must be continually exchanged for and with women (and children) along lines of conjugality and affinity.

As for the realm of Hamtai mining, we have seen that indigenous rhetoric links what I defined as the "microcosmic" and the "macrocosmic" morality of affinity by claiming that, whether because the masalai/familiars themselves do not like selfish miners, or because they dislike the women who flock to the mines as a result of these miners' selfishness, an interruption in the "microcosmic" exchange of minerals between the miners and their human spouses effects an analogous suspension in the "macrocosmic" flow of dreams and gold between the miners and their female masalai/familiars, thus causing precisely that kind of "cosmic chaos" whose negative repercussions are felt by men and women alike, and by both humans and the environment.

In its turn, of course, this means that, even as they claim that mining must be an exclusively male activity because they alone have the capacity to elicit and control the "macrocosmic", (pro)creative female powers necessary to its performance, and to do so in a way that is beneficial to both "humans" and "non-humans", men are fully aware that it has the right to remain so only in so far as its products (i.e. minerals) find their way to their human womenfolk and children alongside complementary, cooperative, and nurturing relationships of affinity and patrifiliation. To block this cross-gender flow of resources in name of their own selfish desires makes men just as "irresponsible" and "chaotic" as the mythical Anga women of yesteryears, and thus also just as "unworthy" of, and unlikely to entice and retain, those female "enablements" on which they depend for the extraction of gold from the mines of Kaindi.

This being the case, then, we can now conclude that what we have hereunto delineated as the "macrocosmic" and "microcosmic" moralities of Hamtai-Anga mining stand in an exquisitely "holographic" relation to one another, and that this is so: firstly, because they are founded on the application of analogous normative principles to two different "orders" of scale- i.e. the plane of purely human conjugal-affinal relations and the "level" of extractive exchanges between "humans" and "non-humans"; and secondly, because these two "orders" of fractal morality do not merely mirror each other, but are also intrinsically interconnected as part of a single whole, so much so that a rupture in one of them will inevitably cause an analogous breakage within the other.

CONCLUSION

For many historical and contemporary cultures, dreaming constitutes a window into a normally hidden and yet tremendously meaningful plane of existence. Thought to transcend the boundaries of space and time and to act as predictors, facilitators, or even precipitators of future waking events, dreams can influence the way people make sense of, and orientate themselves within and towards, their social, spiritual, and material environs.[149] Given this centrality of dreaming to all manner of human experience, it is hardly surprising that throughout Papua New Guinea as in other world regions dreams should be reported to play a role in how people conceptualise, carry out, and/or behave towards the extraction of minerals from the land.[150] By and large, though, these reports have remained anecdotal in nature and limited in scope. In the course of this thesis, by contrast, dreams have been brought to the fore as "the royal road" (Freud 1994 [1900]) to understanding Hamtai mining cosmology and practice, thus demonstrating that the "anthropology of resource extraction" has much to gain from investigating dreams with the same systematic attention it has long offered to myth or ritual.

As it was made clear at the opening of this thesis, the Hamtai-Anga do not interpret all dreams metaphorically. Nevertheless, the contents of those oneiric experiences that are glossed as "gold dreams"- i.e. those which are understood to predict an imminent gold find or to be otherwise related to mining- stand in an overwhelmingly figurative relationship to the events they are believed to forebode

---

[149] For an overview of the importance of dreams in a variety of historical and contemporary world cultures see, among others, D'Andrade (1961); Freud (1994 [1900]); Lincoln (1935); O'Nell (1976); Rivers (1923); and Von Grunebaum (1966). For specific examples of the significance of dreaming in the Pacific, see Trompf (1991) for Melanesia in general; Burridge (1956; 1969; 1995 [1960]), Epstein (1998), Lattas (1993), Lohmann (2000; 2003a), McArthur (1971), Poirier (1994a); Stephen (1982; 1995; 1996), Tedlock (1992a), Tuzin (1975), Wagner (1972), Weiner (1986), and Williams (1936) for Papua New Guinea; Herr (1981) for Fiji; Lohmann (2003a) for Vanuatu; Firth (1934; 2001) for Tikopia; Stewart (2004a) for American Samoa; and Lohmann (2003a) and Poirier (1994a; 2005) for Australia. As for other world areas, see Descola (1989), Devereux (1969), Eggan (1949), Gregor (1981; 2001), Kracke (1981), Mannheim (1992), Poirier (2004a), Stewart (2004a), and Tedlock (1992a; 1999) for the Americas; Ewing (1994); Hollan (1989; 1995), Lohmann (2003a), Poirier (1994a), Stewart (2004a), and Tedlock (1992b) for Asia; and Chaplin (1958), Driberg (1927), Hodgson (1926), Jedrej and Shaw (1992a), Kilborne (1978), and Tedlock (1992a) for Africa.

[150] For PNG see in particular Burton (2001); Clark (1993; 1999); Jorgensen (2004); and Wardlow (2004). For other regions see, among others, Larreta (2002: 174).

and facilitate (cf. Gregor 2001; Herdt 1992: 64; Poirier 2005; Stephen 1982; 1995; 1996; Wagner 1972: 69; Weiner 1986). For this reason, our analysis of "gold dreaming" has followed what I defined as a "structural-metaphorical approach" to the study of dreams (see Section 4). Thus, starting from the most frequent rhetorical association of Hamtai-Anga "gold dreaming"- that is the double link between minerals and garden crops and between mines and gardens- we argued that the meaningfulness and power of this oneiric metaphor derives, not only from the analogies it sustains between the normally separate terms that it brings into relation, but also from the contrasts between them which it succeeds in "obviating" (Wagner 1978)- or, in other words, in both making apparent and overcoming (cf. Sapir 1977 and Wagner 1972: 173).

Hence, in relation to mining and gardening we saw that the Hamtai recognise certain basic analogies between gold, garden food, and food more generally on the one hand, and between gardens and mines as sources of sustenance on the other. In addition to this, I highlighted some correspondences between the main techniques and tools used in these two spheres of production. Looked upon from this perspective, therefore, gardening would appear to be sufficiently similar to mining to represent a good oneiric analogue for it. At the same time, though, we also noted that indigenous ideology draws a clear contrast between mining, which it considers a quintessentially masculine productive domain from which women should ideally be excluded, and gardening, which is regarded instead as a mode of production at once predicated upon cooperation between married couples and yet quintessentially feminine.

Nevertheless, as we proceeded with our symbolic study of Hamtai-Anga gold dreaming, we discovered that the rhetorical juxtaposition of mining and gardening is part of a wider network of tropic associations and transformations- or, to borrow from Wagner (1986), a "frame metaphor" or "expanded trope"- that constitute what Wagner (1986; 2001) described as a "holography of meaning"; that is a symbolic structure that retains the power of trope throughout and which is characterised by a systemic part-whole homology. Rather than being an oddity, therefore, the metaphorical contrast between these two realms of production is consistent with a broad conceptualisation of mining in terms of a set of

"collaborative, procreative, and nurturing" (cf. Stewart and Strathern, A. 1999) relations akin to those subsisting in marriage, within which the miner comes to assume the mutually constitutive roles of husband, co-worker, lover, and father.

In making sense of this rhetorical system, we observed that it relates specifically to the bond between the miners and their masalai familiars, which it recasts metaphorically in terms of the productive and reproductive exchanges constitutive of Hamtai courtship and marriage, and to that linking the miners to the wider masalai community, which it describes as analogous to the reciprocal relationships characteristic of affinity. This being the case, then, we concluded that, at the symbolic level, the mines which dominant Hamtai discourse depicts as quintessentially male spaces are actually populated by powerful female spirits, and that the extraction of minerals, which is similarly regarded as a male preserve, is in fact predicated on the complementary cooperation between the miners and the quintessentially feminine (re)productive powers of the masalai.

What follows from this, we argued, is that "gold dreaming" (intended both as the act of dreaming and of interpreting "gold dreams") constitutes a symbolic system- or, more precisely, a subsystem within an even wider cultural framework that also includes mining magic and ritual- which relies on the analogic and contrastive power of metaphor to "bring into coordinate action"- or to "structure"- certain conventionally distinct domains of experience in order to generate enhanced efficacy and power within (at least) one of them (Wagner 1972). More specifically, Hamtai-Anga "gold dreaming" brings the power of the spirit world- and in particular that of the masalai/familiars- into relation with, and to bear upon, the material realm of resource extraction in order to turn humans into efficacious gold miners. This power-producing exercise, however, is itself predicated on a second "obviative" device that brings the feminine into "coordinate action" with the masculine, and which relates the extractive efficacy of male miners to their capacity to "appropriate" the feminine powers of the masalai/familiars.

As we discussed in Section 13, this achievement of efficacy through the symbolic engagement of male and female is not peculiar to Hamtai "gold dreaming" or to the realm of mining. On the contrary, it is found in all Anga cultures, where it defines many important spheres of action, from shamanism and

male initiation to the hunting of cassowaries. According to the once dominant theorem of "sexual antagonism", this nearly ubiquitous incorporation of female substances, objects, processes, symbols, and "actual" and "fictional" characters within what are held to be quintessentially male social, economic, and ritual activities demonstrated: firstly, that men achieved and sustained their domination over women by fusing the powers they held qua men with those they usurped from women; and secondly, that their own "superiority" rested on a Dumontian (Dumont 1980 [1966]) style hierarchy in which femaleness was encompassed by, and thus subordinated to, maleness.

In agreement with Marilyn Strathern's (1988; 1991) critique of this theoretical outlook, I proposed instead that the symbolic opposition and coordination of male and female does not necessarily have to be about the control of men and women over each other. On the contrary, in Melanesian sociality- where there are no intrinsic and exclusively "male" or "female" substances, identities and capacities, both genders can be conceptualised as androgynous composites, and both men and women are able to encompass one another- what is most important is that the male can emerge only in relation to the female, and vice versa, so that the mutually elicitive interaction of the genders (which can, of course, be predicated upon various levels of coercion) is an essential condition for both identity and agency.

In accordance with this perspective, the metaphoric framing of mining in terms of "conjugality" and "affinity" with the spirits of the mountain can be seen as a symbolic system through which the miners are able to "generate", "exercise", and "make apparent" their (re)productive efficacy on and through women, by means of their capacity to make their female familiars "fall in love" and have sexual intercourse with them, "procreate" minerals like women procreate children, procure gold as wives provide garden food, and link the miners to the other masalai as women link men to their affines. Rather than entailing the "violent appropriation" of femininity by the male, though, this symbolic rhetoric frames male efficacy as the ability to relate to the female and to "entice" it to produce a desired effect. What is more, it makes clear that this capacity is conditional on the miners "becoming" and "remaining" "good spouses and affines" to the spirits of

the mountain, which in turn means that they must actually "behave as such" in everyday practice (cf. Wagner 1972: 170).

In turn, of course, this implies that the metaphoric conceptualisation of mining as conjugality and affinity is not only a way of assigning meaning and of transferring power to a particular domain of experience by bringing it into relation with one or more others, but also a model for action imbued with its own intrinsic morality (cf. Crocker 1977; Fernandez 1977: 113; Lakoff and Johnson 2003 [1980]; and Wagner 1978). Thus, if they want to win gold and secure the goodwill of the masalai/familiars, the miners must invest appropriate amounts of "hard work" in the mines, which in turn acts as a form of "brideservice", a mode of courtship and conjugal nurturance, a fertilising form of "quasi-sexual" intercourse, and an analogue of the protracted child payments that men were supposed to make to their spouses and affines. Furthermore, they must also engage in the ritual offering of food, money, and other valuables to the spirits of the mountain, which takes an analogous "form" and has analogous "functions" to both marriage prestations and child-growth payments.

In addition to "working hard" and to offering oblations, the miners must also avoid, or at least reduce, sexual intercourse with women while working the mines, must not spend their gold earnings on prostitution, and must refrain from using mineral wealth to acquire a large number of wives. In part, this is because too much contact with women "pollutes" the miners and makes them "offensive" and "repulsive" to the spirits of the mines. In addition to this, though, the miners explain the need to limit their contact with (human) women with the analogy of "marital fidelity". In this sense, the masalai familiars are conceptualised as "jealous spouses" who will withdraw their "love" and "support" from their miner "husbands" if these invest too much attention and energy on human women, who are in turn conceptualised as rival "mistresses" or "co-wives".

Furthermore, the miners have to ensure that they do not clear away too much forest and that they mine local deposits with gentle care and attention. In turn, this necessity is metaphorically equated to the need for a man to be considerate towards his wife and respectful of his affines and of their property. Hence, to dig a vein roughly is deemed analogous to a form of "domestic

violence" and "neglect", while the wanton destruction of local forests is understood metaphorically as a physical assault- or even a treacherous "war of conquest"- conducted against one's in-laws and patrons. Looked upon from this perspective, mining oblations therefore emerge, not only as something analogous to bridewealth and child growth payments, but also as a means of showing "affinal gratitude and respect" towards the masalai of the mountain by acknowledging their ultimate "guardianship/ownership" of the mines and repaying them for acting as "generous in-laws" and allowing the miners to "move into" their land and to exploit its resources.

Should they contravene any of these obligations, the miners would lose the support of their familiars and the wider masalai community and would compromise their own efficacy qua resource extractors. What is worse, given their powerful and ambivalent nature (which is in many a sense analogous to that of "real" women and affines), those who fail to "behave like" good husbands and in-laws to the spirits of the mountain put themselves at risk of retribution in the form of loss of income, debilitating or fatal illnesses, and mining-related injuries and deadly accidents. From this it follows that the metaphorical alignment of mining with the domain of the masalai is both a source of constructive power and a potential cause of danger and of destruction (cf. Wagner 1972), and that the path to managing this ambivalence rests in the "holographic" projection of the same kind of cooperative and reciprocal morality that (ideally) defines the "microcosmic" realm of human marriage and of affinity onto the "macrocosmic" plane of "human/non-human" relations.

As well as being "holographic" because it replicates the same normative structure at different "levels" of scale, though, the morality of Hamtai mining is such also because the two "orders" at which it unfolds form part of a single whole and have significant implications for one another. Thus, as we saw in Section 15 of this thesis, dominant Hamtai discourse marries the metaphorical characterisation of mining as conjugality and affinity with the notion that gold is first and foremost "like a woman" who wants a man, or "a husband", to work it. What is more, it suggests that the masalai who "look after it" are "misogynous" female entities who- both as a result of the threat posed by their "polluting"

physiologies, and because they see them as potential "love rivals"- are also actively "inimical" to human women. In turn, of course, this means that most male miners- and not a few female residents- maintain that women lack the relational efficacy needed to elicit the cooperation of the spirits of the mines, and indeed that their presence poses a direct threat to the viability of local deposits and to the well being of the environment and the mining community as a whole. As a result of this, male ideology insists that women should be kept out of the mines and that mining ought to remain an exclusively (or at least predominantly) male pursuit.

As should be immediately clear, this raises once more the problems of "sexual antagonism" and of "male domination". Indeed, if at the symbolic level Hamtai-Anga resource extraction is not conceived as a violent struggle between the masculine (i.e. the miners) and the feminine (i.e. the spirits of the gold), but as a form of "cooperative" and "mutually beneficial interaction" between these two genders, at the material level this same "cooperative symbolism" promotes the exclusion of women from what is undoubtedly an important economic sphere, or at least sustains the subordination of their mining labour and the fruits of this work to the control of their husbands and their male kin.

Having said this, though, this dominant ideology of resource extraction is not wholly accepted by local women or even by all local men. Thus, for some female "dissenters" (and for a number of men), the capacity to win gold from the masalai of the mines has less to do with one's gender than the possession of certain kinds of inherited and/or acquired characteristics such as a good "moral character", "good blood", "clear sight", and appropriate magic formulae. In addition to this, though, many women claim that, pace the principal dogma of "patriarchal" mining rhetoric, gold and the spirits who "look after it" are not always "like women who want only a man, or a husband, to engage with them", but can equally be "like men who seek a woman, or a wife, to give themselves to". In other words, then, while many women accept the idea that efficacy in mining is somehow related to gender identity, they nonetheless contrast the "androcentric" perspective of dominant Hamtai discourse with an alternative "gynocentric" viewpoint according to which gold and the masalai/familiars can be both "male" or "female" and women can be just as efficacious resource extractors

as the men- and this not despite, but precisely thanks to, their feminine identity. In turn, of course, this confirms Marilyn Strathern's (1988) observation that in Melanesian sociality every possible gender trait is intrinsically partible, detachable, transactable, and reversible, so that each gender can potentially lay claim to the same kinds of (re)productive capacities.

What is more, though a majority of men would deny the validity of this "androcentric" counter-discourse, they would nevertheless accept that the "microcosmic" morality of mining demands that a man should "invest" a fair amount of the wealth he wins from the mines on the sustenance and general well being of his wife (or wives) and children. Furthermore, they would also acknowledge that failure to comply with these "microcosmic" moral principles has an effect on their "macrocosmic" relationship with the spirits of the mines. At least in part, this is due to the fact that a neglected wife can resort to various forms of magic to punish her husband by taking minerals away from his land. In addition to this, though, the mountain spirits themselves are believed to withdraw their support and riches from those who use wealth selfishly and who fail to adequately provide for their families. Finally, even those who do not believe in a direct link between taking care of one's family and winning gold in the mines still recognise that, the more men fail in their duties as husbands and fathers, the more women will be forced to mine in order to provide for themselves and their children, and that the more women there are in the mines, the angrier the masalai will become and the less gold will they make available to the whole mining community.

Thus, even as they claim that mining ought to be an exclusively male activity because they alone have the capacity to elicit and to control the "macrocosmic", "(pro)creative" powers necessary to its effective performance, men are fully aware that it has the right to remain so only in so far as they continue to exchange its products with their (human) womenfolk and children alongside complementary, cooperative, and nurturing relationships of affinity and patrifiliation. To block off this "microcosmic" flow of resources has the disastrous effect of suspending the "macrocosmic" flow of dreams and minerals from the masalai of the mines. Even worse, it can directly or indirectly endanger the very

survival of Kaindi's mining community and the well being of its material and spiritual environs. In a neat reversal of Godelier's (1986: 73) question (see Section 15c), therefore, we could conclude this thesis by asking what sensible man, knowing what disasters would attend upon it, could fail to answer his "macrocosmic" and "microcosmic" duties as a "good husband" and "affine" in the wanton pursuit of minerals for his own selfish desires. But of course, the power of the ideal- whether regarded as "ideology" or as a form of "morality"- should neither be overlooked, nor overestimated.

BIBLIOGRAPHY

Afenya, P.M. (Ed.) (1995) *Proceedings of the Huon Seminar '94 Workshop on Small Scale Gold Mining Held in Lae, Papua New Guinea*. Lae, Papua New Guinea: The Papua New Guinea University of Technology.

Allen, B. and Frankel, F. (1991) 'Across the Tari Furoro'. In Schieffelin, E.L. and Crittenden, R. (Eds) *Like People You See in a Dream: First Contact in Six Papuan Societies*. Stanford: Stanford University Press.

Ballard, C. (1996) 'It's the land, stupid! The moral economy of resource ownership in Papua New Guinea'. In Larmour, P. (Ed.) *The Governance of Common Property in the Pacific Region*. Canberra: Australian National University.

Ballard, C. and Banks, G. (2003) 'Resource wars: the anthropology of mining'. *Annual Review of Anthropology* 32: 287-313.

Bamford, S. (1997) *The Containment of Gender: Embodied Sociality among a South Angan People*. PhD Thesis, The University of Virginia.

— (1998a) 'To eat for another: taboo and the elicitation of bodily form among the Kamea of Papua New Guinea'. In Lambek, M. and Strathern, A. (Eds) *Bodies and Persons: Comparative Perspectives from Africa and Melanesia*. Cambridge: Cambridge University Press.

— (1998b) 'Humanised landscapes, embodied worlds: land and the construction of intergenerational continuity among the Kamea of Papua New Guinea'. *Social Analysis* 42 (3): 28-54.

— (2004) 'Embodiments of detachment: engendering agency in the Highlands of Papua New Guinea'. In Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

Banks, G. (2000) 'Contextualising sexual violence: rape and carnal knowledge in Papua New Guinea'. In Dinnen, S. and Ley, A. (Eds) *Reflections on Violence in Melanesia*. Canberra: The Asia Pacific Press.

— (2000a) 'Marginality and environment in Papua New Guinea'. *Asia Pacific Viewpoint* 41 (3): 217-230.

Banks, G. (2000b) 'Razor wire and riots: violence and the mining industry in Papua New Guinea'. In Dinnen, S. and Ley, A. (Eds) *Reflections on Violence in Melanesia*. Canberra: The Asia Pacific Press.

— (2001) *Baseline Study for Papua New Guinea*. London: Mining, Minerals and Development Project, International Institute for Environment and Development.

Basso, E.B. (1992) 'The implications of a progressive theory of dreaming'. In Tedlock, B. (Ed.) *Dreaming: Anthropological and Psychological Interpretations*. Santa Fe, New Mexico: The School of American Research Press.

Biersack, A. (1995) 'Introduction: the Huli, Duna, and Ipili peoples yesterday and today'. In Biersack, A. (Ed.) *Papuan Borderlands: Huli, Duna, and Ipili Perspectives on the Papua New Guinea Highlands*. Ann Arbor: the University of Michigan Press.

— (1999) 'The Mount Kare python and his gold: totemism and ecology in the Papua New Guinea Highlands'. *American Anthropologist* 101 (1): 68-87.

— (2004) 'The bachelors and the spirit wife: interpreting the Omatsia ritual of Porgera and Paiela'. In *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

Bjerre, J. (1958 [1956]) *The Last Cannibals*. London: Pan Books.

Blackwood, B. (1939a) 'Folk-stories of a stone age people in New Guinea'. *Folklore* 50: 209-242.

— (1939b) 'Life on the Upper Watut'. *The Geographical Journal* XCIV (1): 11-28.

— (1950) *The Technology of a Stone Age People in New Guinea*. Oxford: Oxford University Press.

— (1978) *The Kukukuku of the Upper Watut*. Oxford: Oxford University Press.

Blowers, M. (Ed.) (1983). *Proceedings of the Conference on Small Scale Mining*

in Papua New Guinea Held at the University of Technology, Lae, 4th-8th June 1983. Lae, Papua New Guinea: Department of Chemical Technology, The Papua New Guinea University of Technology.

Blowers, M. (1985). 'Small-scale mining in Papua New Guinea'. Paper presented to 'Asia Mining' in Manila, February 1985.

— (1988) *Handbook of Small Scale Gold Mining for Papua New Guinea.* Christchurch, New Zealand: Pacific Resource Publications.

— (2000) *A Field Survey of Small-Scale Mining Operations along the Bulolo and Watut Rivers*. Study undertaken for Morobe Consolidated Goldfields (MCG).

Bonnell, S. (1997) 'The impact of compensation and relocation on marriage in Porgera. In Toft, S. (Ed.) *Compensation for Resource Development in Papua New Guinea*. Port Moresby: The Law Reform Commission.

Bonnemère, P. (1993) 'Maternal nurturing substance and paternal spirit: the making of a Southern Anga sociality'. *Oceania* 64: 159-186.

— (1996) *Le Pandanus Rouge: Corps, Différence des Sexes et Parenté chez les Ankave-Anga (Papouasie-Nouvelle-Guinée)*. Paris: Éditions de la Maison des Sciences de l'Homme.

— (1998a) 'Quand les hommes répliquent une gestation: une analyse des representations et des rites de la croissance et de la maturation des garcons chez les Ankave-Anga (Papouasie-Nouvelle-Guinée)'. In Godelier, M. and Panoff, M. (Eds) *La Production du Corps*. Amsterdam: OPA.

— (1998b) 'Trees and people: some vital links. Tree products and other agents in the life cycle of the Ankave-Anga of Papua New Guinea'. In Rival, L. (Ed.) *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. Oxford: Berg.

— (2001) 'Two forms of masculine ritualised rebirth: the Melanesian body and the Amazonian cosmos'. In Gregor, T.A. and Tuzin, D. (Eds) *Gender in Amazonia and Melanesia*. London: The University of California Press.

— (2004a) 'Introduction' In Bonnemère, P. (Ed.) *Women as Unseen*

Characters: Male Ritual in Papua New Guinea. Philadelphia: The University of Pennsylvania Press.

Bonnemère, P. (2004b) 'When women enter the picture: looking at Anga initiations from the mothers' angle'. In Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

Bonnemère, P. and Lemonnier, P. (1992) 'Terre et échanges chez les Anga (Papouasie-Nouvelle-Guinée)' *Études Rurales* (127-128): 133-158.

Booth, D.R. (1924) *Mountains, Gold and Cannibals*. London: Cecil Palmer.

Borrey, A. (2000) 'Sexual violence in perspective: the case of Papua New Guinea'. In Dinnen, S. and Ley, A. (Eds) *Reflections on Violence in Melanesia*. Canberra: The Asia Pacific Press.

Bourguignon, E. (1972) 'Dreams and altered states of consciousness in anthropological research'. In Hsu, F.L.K. (Ed.) *Psychological Anthropology*. Cambridge, Massachusetts: Schenkman.

Brown, P. and Ploeg, A. (1997) 'Introduction'. *Anthropological Forum* 7 (4): 507-527.

Brutti, L. (2000) 'Afek's last son: integrating change in a Papua New Guinea cosmology' *Ethnohistory* 47 (1): 101-111.

Bulbeck, C. (1992) *Australian Women in Papua New Guinea*. Cambridge: Cambridge University Press.

Bulkeley, K. (Ed.) (2001) *Dreams: A Reader on the Religious, cultural, and Psychological Dimensions of Dreaming*. Basingstoke, UK: Palgrave.

Bulolo District Administration (2003) *Bulolo Open Electorate District Development Plan, 2003-2007*. Bulolo, Morobe Province, PNG: Bulolo District Administration.

Burkhard, S. (Ed.) (2001) *Hundert Jahre "Die Traumdeutung": Kulturwissenschaftliche Perspektiven in der Traumforschung*. Köln: Rüdiger Köppe Verlog Köln.

Burridge, K.O.L. (1956) 'A note on Tangu dreams'. *Man* 56: 121-122.

— (1969) *Tangu Traditions: A Study of the Way of Life, Mythology, and*

Developing Experience of a New Guinea People. Oxford: Clarendon Press.

Burridge, K.O.L. (1995 [1960]) *Mambu: A Melanesian Millennium*. Princeton, New Jersey: Princeton University Press.

Burton, J. (1997) 'C'est qui, le patron? Kinship and the rentier leader in the Upper Watut'. Working Paper 1997/1, Resource Management in Asia-Pacific Programme, The Australian National University.

— (1998) 'Mining and maladministration in Papua New Guinea'. In Larmour, P. (Ed.) *Governance and Reform in the South Pacific*. Canberra: The Australian National University.

— (2001) *Morobe Gold and Silver Project: Socio-Economic Impact Study (Vol. I-III)*. Port Moresby: Morobe Goldfields Consolidated Limited.

Byford, J. (2002). 'One day rich: community perceptions of the impact of the Placer Dome Gold Mine, Misima Island, Papua New Guinea. In Macdonald, I. and Rowland, C. (Eds) *Tunnel Vision: Women, Mining and Communities*. Fitzroy, Victoria, Australia: Oxfam Community Aid Abroad.

Cannon, J. (2003) *Men at Work: Expatriation in the International Mining Industry*. PhD Thesis, Monash University, Melbourne.

Chaplin, J.H. (1958) 'A note on Central African dream concepts' *Man* 58: 90-92.

Charuty, G. (Ed.) (1996a) *Rêver*. Special Issue of *Terrain* 26 (Mars1996).

— (1996b) 'Destines anthropologiques du rêve'. *Terrain* 26 (mars 1996): 5-18.

Childs, T.S. (1998) '"Find the ekijunjumira"': iron mine discovery, ownership and power among the Toro of Uganda'. In Knapp, B.A., Pigott, V.C. and Herbert, E.W. (Eds) *Social Approaches to an Industrial Past: The Archaeology and Anthropology of Mining*. London: Routledge.

Chowing, A. (1979) 'Leadership in Melanesia'. *The Journal of Pacific History* 14 (2): 66-84.

Clark, J. (1993) Gold, sex, and pollution: male illness and myth at Mount Kare, Papua New Guinea. *American Ethnologist* 20: 742-757.

Clark, J. (1995) 'Highlands of history: images of deviance and desire'. In Biersack, A. (Ed.) *Papuan Borderlands: Huli, Duna, and Ipili Perspectives on the Papua New Guinea Highlands*. Ann Arbor: The University of Michigan Press.

Clune, F. (1951) *Somewhere in New Guinea: A Companion to Prowling and Politics in the Pacific Islands*. London: Angus and Robertson.

Connell, J. (1992). '"Logic is a capitalist cover-up": compensation and crisis in Bougainville, Papua New Guinea. In Henningham, S., May, R.J. and Turner, L. (Eds) *Resources, Development and Politics in the Pacific Islands*. Bathurst, Australia: Crawford House Press.

Connell, J. and Howitt, R. (Eds) (1991) *Mining and Indigenous Peoples in Australasia*. Sydney: Sydney University Press.

Conservation International (1998) *A Biological Assessment of the Lakekamu Basin, Papua New Guinea*. Washington, DC: Rapid Assessment Program Working Papers, Conservation International, Department of Conservation Biology.

Crapanzano, V. (2001) 'The betwixt and between of the dream'. In Burkhard, S. (Ed.) (2001) *Hundert Jahre "Die Traumdeutung": Kulturwissenschaftliche Perspektiven in der Traumforschung*. Köln: Rüdiger Köppe Verlog Köln.

Crispin, G. (2003) 'Environmental management in small-scale mining in PNG'. *Journal of Cleaner Production* 11: 175-183.

— (2004)'Women in mining in Papua New Guinea'. Paper presented at the Workshop: 'Pit Women and Others: Women Miners in the Asia-Pacific Region' held at the Australian National University, Canberra, on July 2nd 2004.

Crocker, C.J. (Ed.) (1977) *The Social Use of Metaphor: Essays on the Anthropology of Rhetoric*. Philadelphia: The University of Pennsylvania Press.

D'Andrade, R.G. (1961) 'Anthropological studies of dreams'. In Hsu, F.L.K. (Ed.) *Psychological Anthropology: Approaches to Culture and Personality*. Homewood, Illinois: Dorsey Press.

Demaitre, E. (1936) *New Guinea Gold: Cannibals and Gold-Seekers in New Guinea*. London: Geoffrey Bles,

Descola, P. (1989) 'Head shrinkers versus shrinks: Jivaroan dream analysis. *Man* 24 (3): 439-450.

Descola, P. and Lory, J-L. (1982) 'Les guerriers de l'invisible: sociologie comparative de l'aggression chamanique en Papouasie Nouvelle-Guinée (Baruya) et en Haute-Amazonie (Achuar). *L'Ethnographie* 87-88: 96-111.

Detzner, H. (1935) *Moeurs et Coutumes des Papous: 4 Ans chez les Cannibales de Nouvelle-Guinée, 1914-1918*. Paris: Payot.

Devereux, G. (1969) *Reality and Dream: Psychotherapy of a Plains Indian*. New York: Anchor Books.

Dinnen, S. (2001) *Law and Order in a Weak State: Crime and Politics in Papua New Guinea*. Adelaide: Crawford House.

Douglas, B. (1979) 'Rank, power, authority: a reassessment of traditional leadership in South Pacific societies'. *The Journal of Pacific History* 14 (1): 2-27.

Driberg, J.H. (1927) 'Notes on dreams among the Lango and the Didinga of the South-Eastern Sudan'. *Man* 27: 141-143.

Dumont, L. (1980 [1966]) *Homo Hierarchicus: The Caste System and its Implications*. London: The University of Chicago Press.

Dundon, A. (2004) 'Tea and tinned fish: Christianity, consumption and the nation in Papua New Guinea'. *Oceania* 75 (2): 73-88.

Durkheim, E. (1995) *The Elementary Forms of the Religious Life*. London: The Free Press.

Edgar, I. (1994) 'Dream imagery becomes social experience: the cultural elucidation of dream interpretation'. In Heald, S. and Delur, A. (Eds) *Anthropology and Psychoanalysis: An Encounter Through Culture*. London: Routledge.

— (2004) *Guide to Image Work: Imagination-Based Research Methods*. London: Routledge.

Eggan, D. (1949) 'The significance of dreams for anthropological research'. *American Anthropologist* 51: 177-198.

Eggan, D. (1952) 'The manifest content of dreams: a challenge to social science'. *American Anthropologist* 54: 469-485.

— (1955) 'The personal use of myth in dreams'. *The Journal of American Folklore* 68 (270): 453-554.

Eliade, M. (1978 [1956]) *The Forge and the Crucible: The Origins and Structure of Alchemy*. London: The University of Chicago Press.

Epstein, A.L. (1998) 'Strange encounters: dreams and nightmares of high school students in Papua New Guinea'. *Oceania* 68 (3): 200-212.

Ernst, T.M. (2004) 'Land, stories and resources: some impacts of large-scale resource exploitation on Onabasulu lifeworlds'. In Rumsey, A. and Weiner, J. (Eds) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Evans-Pritchard, E.E. (1965) *Theories of Primitive Religion*. Oxford: Clarendon Press.

— (1976) *Witchcraft, Oracles and Magic among the Azande*. Oxford: Clarendon Press.

Eves, R. (2000) 'Waiting for the day: globalisation and apocalypticism in central New Ireland, Papua New Guinea. *Oceania* 71: 73-91.

Ewing, K.P. (1994) Dreams from a saint: anthropological atheism and the temptation to believe. *American Anthropologist* 96 (3): 571-583.

Fellowship of National Bible Churches Hamtai (2003) *Äpa Mpuka*. Goroka, Papua New Guinea: New Tribes Mission Publications.

Fernandez, J.W. (1977) 'The performance of ritual metaphors'. In Sapir, D.J. and Crocker, C.J. (Eds) *The Social Use of Metaphor: Essays on the Anthropology of Rhetoric*. Philadelphia: The University of Pennsylvania Press.

— (1991) 'Introduction: confluents of inquiry'. In Fernandez, J.W. (Ed.) *Beyond Metaphor: The Theory of Tropes in Anthropology*. Stanford: Stanford University Press.

Fetchko, P. (1972) *Anga Material Culture*. Master Thesis: George Washington University.

Filer, C. (1990) 'The Bougainville rebellion, the mining industry and the process of social disintegration in Papua New Guinea'. *Canberra Anthropology* 13 (1): 1-39.

— (1997a) 'Compensation, rent and power in Papua New Guinea'. In Toft, S. (Ed.) *Compensation for Resource Development in Papua New Guinea.* Port Moresby: The Law Reform Commission.

— (1997b) 'The Melanesian way of menacing the mining industry'. In Burt, B. and Clerk, C. (Eds) *Environment and Development in the Pacific Islands*. Canberra: the Australian National University Press.

Filer, C., Henton, D. and Jackson, R. (2000) *Landowner Compensation in Papua New Guinea's Mining and Petroleum Sectors*. Port Moresby: The Papua New Guinea Chamber of Mines and Petroleum.

Filer, C. and Iamo, W. (1989) *Base-Line Planning Study for the Lakekamu Gold Project, Gulf Province*. Port Moresby: Department of Anthropology and Sociology, the University of Papua New Guinea.

Firth, R. (1934) 'The meaning of dreams in Tikopia'. In Evans-Pritchard, E.E., Firth, R., Malinowski, B. and Schapera, I. (Eds) *Essays Presented to C.G. Seligman*. London: Kegan Paul.

— (2001) 'Tikopia dreams: personal images of social reality'. *The Journal of the Polynesian Society* 110 (1): 7-29.

Fischer, H. (1968) *Negwa, Eine Papua-Gruppe im Wandel*. München: Klaus Renner Verlag.

Fisher, N.H. (1977 [1936]) 'Amongst the Kukukukus'. *The Journal of the Morobe Historical Society* 4 (1): 14-22.

Freud, S. (1959 [1908]) 'Character and anal erotism'. In *The Standard Edition of the Complete Psychological Works of Sigmund Freud, Vol. IX*. London: The Hogarth Press.

— (1994 [1900]) *The Interpretation of Dreams*. London: Fontana.

Freud, S. and Oppenheim, D.E. (1958) *Dreams in Folklore*. New York: The International University Press.

Geertz, C. (1993 [1973]) *The Interpretation of Cultures*. London: Fontana.

Gibungae, J. (1988) 'Overview of small-scale mining in Papua New Guinea: past, recent and future prospects'. In Thredgold, H. (Ed.) *Proceedings of the Papua New Guinea Institute of Chemistry's Fifth Congress: "Chemistry and Mining in Papua New Guinea" Held in Lae, 2-4 September 1988*. Port Moresby: Department of Chemistry, the University of Papua New Guinea.

Godelier, M. (1969) 'La monnaie de sel des Baruya de Nouvelle-Guinée'. *L'Homme* 11 (2): 5-37.

— (1982) 'Social hierarchies among the Baruya of New Guinea'. In Strathern, A. (Ed.) *Inequality in New Guinea Highlands Societies*. Cambridge: Cambridge University Press.

— (1985) 'Ethnie-tribu-nation chez les Baruya de Nouvelle-Guinée'. *Journal de la Société des Océanistes* 61: 159-168.

— (1986) *The Making of Great Men: Male Domination and Power among the New Guinea Baruya*. Cambridge: Cambridge University Press.

— (1989) 'Betrayal: the case of the New Guinea Baruya'. *Oceania* 59 (3): 165-180.

— (1997) 'Les Baruya de Nouvelle-Guinée: formes et étapes du processus d'occidentalisation d'une société tribale'. In Tcherkézoff, S. and Douaire-Marsaudon, F. (Eds) *Le Pacifique-Sud Aujourd'hui: Identités et Transformations Culturelles*. Paris: CNRS Editions.

— (1998) 'Corps, parenté, pouvoir(s) chez les Baruya de Nouvelle-Guinée'. In Godelier, M. and Panoff, M. (Eds) *La Production du Corps*. Amsterdam: OPA.

Godelier, M. and Strathern, M. (Eds) (1991) *Big Men and Great Men: Personifications of Power in Melanesia*. Cambridge: Cambridge University Press.

Godoy, R. (1985) 'Mining: anthropological perspectives'. *Annual Review of Anthropology* 14: 199-217.

Gordon, R.G. (Ed.) (2005). *Ethnologue: Languages of the World* (15th Edition). Dallas, Texas: SIL International.

Goulet, J-G. (1994) 'Dreams and visions in other lifeworlds'. In Young, D.E. and

Goulet, J-G. (Eds) *Being Changed by Cross-Cultural Experience: The Anthropology of Extraordinary Experience*. Peterborough, Ontario: Broadview Press.

Graham, L.R. (1999) 'Dreams'. *The Journal of Linguistic Anthropology* 9 (1-2): 61-64.

— (2003) *Performing Dreams: Discourses of Immortality among the Xavante of Central Brazil* (Second Edition). Tucson, Arizona: Fenestra Books.

Gramsci, A. (1997) *Le Opere*. Roma: Editori Riuniti.

Gregor, T. (1981) '"Far, far away my shadow wandered." The dream symbolism and dream theories of the Mehinaku Indians of Brazil'. *American Ethnologist* 8 (4): 709-720.

— (2001) 'Content analysis of Mehinaku dreams'. In Bulkeley, K. (Ed.) *Dreams: A Reader on the Religious, Cultural, and Psychological Dimensions of Dreaming*. Basingstoke, UK: Palgrave.

Gressitt, J.L. and Nadkarni, N. (1978) *Guide to Mt. Kaindi: Background to Montane New Guinea Ecology*. Wau, Morobe Province, Papua New Guinea: The Wau Ecology Institute.

Guédon, M.F. (1994) 'Dene ways and the ethnographer's culture'. In Young. D.E. and Goulet, J-G. (Eds) *Being Changed by Cross-Cultural Encounters: The Anthropology of Extraordinary Experience*. Peterborough, Ontario: Broadview Press.

Hacking, I, (2002) *Historical Ontology*. London: Harvard University Press.

Haley, N. (1996) 'Revisioning the past, remembering the future: Duna accounts of the world's end'. *Oceania* 66 (4): 278-285.

Hall, C.S. (1951) 'What people dream about'. *Scientific American* 184: 60-63.

— (1953) *The Meaning of Dreams*. New York: Harper and Row.

Hall, C.S. and Van de Castle, R.L. (1966) *The Content Analysis of Dreams*. New York: Appleton Century Crofts.

Hall, T. (1981) *New Guinea, 1942-44*. Sydney: Methuen.

Halvaksz, J. (2003) 'Singing about the land among the Biangai' *Oceania* 73: 153-169.

Halvaksz, J. (2005) *Re-Imagining Biangai Environments: Mining and Conservation in the Wau-Bulolo Valley, Papua New Guinea*. PhD Thesis, The University of Minnesota.

Hancock, G. (1991) 'An economic appraisal of small to medium scale alluvial gold mining systems in Papua New Guinea'. In Rogerson, R. (Ed.) *Proceedings of the PNG Geology, Exploration, and Mining Conference, Rabaul 1991*. Parkville, Australia: The Australian Institute of Mining and Metallurgy.

— (1994) 'The economics of small-scale gold mining systems in Papua New Guinea'. In Ghose, P.K. (Ed.) *Small-Scale Mining: A Global Overview*. Rotterdam: A.A. Balkema.

Hanson, L.W. et al. (2001) *Papua New Guinea Rural Development Handbook*. Canberra: The Australian National University.

Healy, A.M. (1967) *Bulolo: a History of the Development of the Bulolo Region*. Guinea Research Bulletin No.15. Canberra: The Australian National University.

— (1968) 'Labour and combination in New Guinea to 1942'. In *Labour and the Goldfields*. Canberra: The Australian Society for the Study of Labour History.

— (1972) 'Goldfields'. In Ryan, P. (Ed.) *Encyclopaedia of Papua New Guinea- Volume I: A-K*. Melbourne: Melbourne University Press.

Heijnene, A. (2005) *Dream Sharing in Iceland*. PhD Thesis, The University of Aarhus, Denmark.

Herbert, E.W. (1998) 'Mining as microcosm in precolonial sub-Saharan Africa: an overview'. In Knapp, B.A., Pigott, V.C. and Herbert, E.W. (Eds) *Social Approaches to an Industrial Past: The Archaeology and Anthropology of Mining*. London: Routledge.

Herdt, G. (1977) 'The shaman's calling among the Sambia of New Guinea'. *Journal de la Société des Océanistes* 33 (56/7): 153-167.

— (1982) 'Fetish and fantasy in Sambia initiation'. In Herdt, G. (Ed.)

Rituals of Manhood: Male Initiation in New Guinea. Berkeley: The University of California Press.

Herdt, G. (1984) 'Semen transactions in Sambia culture'. In Herdt, G. (Ed.) *Ritualised Homosexuality in Melanesia*. London: The University of California Press.

— (1987) *The Sambia: Ritual and Gender in New Guinea*. London: Harcourt College Publishers.

— (1988) 'The ethnographer's choice'. In Appell, G.N. and Triloki, N.M. (Eds) *Choice and Morality in Anthropological Perspective*. Albany, NY: The State University of New York Press.

— (1989a) 'Spirit familiars in the religious imagination of Sambia Shamans'. In Herdt, G. and Stephen, M. (Eds) *The Religious Imagination in New Guinea*. London: Rutgers University Press.

— (1989b) 'Father presence and ritual homosexuality: paternal deprivation and masculine development in Melanesia reconsidered'. *Ethos* 17 (3): 326-370.

— (1992) 'Selfhood and discourse in Sambia dream sharing'. In Tedlock, B. (Ed.) *Dreaming: Anthropological and Psychological Interpretations*. Santa Fe, New Mexico: The School of American Research Press.

— (1994 [1981]) *Guardians of the Flutes*. London: The University of Chicago Press.

— (1999) *Sambia Sexual Culture: Essays from the Field*. London: The University of Chicago Press.

— (2004) 'Sambia women's positionality and men's ritual'. In Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

— (2006) *The Sambia: Ritual, Sexuality and Change in Papua New Guinea*. London: Thomson Wadsworth.

Herdt, G. and Stoller, R.J. (1990) *Intimate Communications: Erotics and the Study of Culture*. Oxford: Columbia University Press.

Hinton, J.J. et al. (2003) 'Women and artisanal mining: gender roles and the road

ahead'. In Hilson, G. (Ed.) *The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries*. London: Taylor and Francis.

Hirsch, E. (2001) 'New boundaries of influence in Highland Papua: "culture", mining and ritual conversions'. *Oceania* 71: 298-312.

Hodgson, A.G.O. (1926) 'Dreams in Central Africa'. *Man* 26: 66-68.

Hollan, D. (1989) 'The personal use of dream beliefs in the Toraja Highlands'. *Ethos* 17 (2): 166-186.

— (1995) 'To the afterworld and back: mourning and dreams of the dead among the Toraja'. *Ethos* 23 (4): 424-436.

— (2003) 'The cultural and intersubjective context of dream remembrance and reporting: dreams, aging, and the anthropological encounter in Toraja, Indonesia'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. Basingstoke, UK: Palgrave.

Holmberg, A.R. (1950) *Nomads of the Longbow: The Siriono of Eastern Bolivia*. Washington, DC: The Smithsonian Institution.

Howard, M.C. (1988) *The Impact of the International Mining Industry on Native Peoples*. Sydney: The University of Sydney.

— (1991) *Mining, Politics and Development in the Pacific*. Oxford: Westview Press.

Howitt, R., Connell, J. and Hirsch, P. (Eds) (1996) *Resources, Nations and Indigenous Peoples: Case Studies from Australasia, Melanesia and Southeast Asia*. Oxford: Oxford University Press.

Hyndman, D. (1994) *Ancestral Rain Forests and the Mountain of Gold: Indigenous Peoples and Mining in New Guinea*. Boulder, CO: Westview Press.

— (1995) 'Afek and rebaibal: ideologies of social protest and the Ok Tedi mining project in Papua New Guinea'. *The Journal of the Polynesian Society* 104: 75-88.

Idriess, I.L. (1933) *Gold-dust and Ashes: The Romantic Story of the New Guinea Goldfields*. Sydney: Angus and Robertson.

Imbun, B.Y. (1995) 'Enga social life and identity in a Papua New Guinea mining

town'. *Oceania* 66: 51-61.

Imbun, B.Y. (1999) *Industrial Employment Relations in the Papua New Guinea Mining Industry*. Port Moresby: The University of Papua New Guinea.

Jackson, R.T. (1988) *The Socio-Economic Impact of the Hidden Valley Gold Project*. Townsville, Australia: Hidden Valley Gold Pty Ltd.

— (1991) 'Not without influence: villages, mining companies and government in Papua New Guinea'. In Connell, J. and Howitt, R. (Eds) *Mining and Indigenous Peoples in Australasia*. Sydney: Sydney University Press.

— (2003) *Hidden Valley Project Impact Assessment Study*. Richard T. Jackson Consultancy Service, the Philippines.

Jama, S. (1996) *Anthropologie de Rêve*. Paris: Presses Universitaries de France.

James, N. and Walker, M. (1995) 'Small scale mining legislation in PNG'. In Afenya, P.M. (Ed.) *Proceedings of the Huon Seminar '94 Workshop on Small Scale Gold Mining Held in Lae, Papua New Guinea*. Lae, Papua New Guinea: The Papua New Guinea University of Technology.

Jedrej, M.C. and Shaw, R. (Eds) (1992a) *Dreaming, Religion and Society in Africa*. Leiden: E.J. Brill.

— (1992b) 'Introduction'. In Jedrej, M.C. and Shaw, R. (Eds) (1992a) *Dreaming, Religion and Society in Africa*. Leiden: E.J. Brill.

Jorgensen, D. (1998) 'Whose nature? Invading bush spirits, travelling ancestors and mining in Telefolmin'. *Social Analysis* 42: 100-116.

— (2001) 'History and the genealogy of myth in Telefolmin'. *Paideuma* 47: 103-128.

— (2004) 'Who and what is a landowner? Mythology and marking the ground in a Papua New Guinea mining project'. In Rumsey, A. and Weiner, J. (Eds) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Jouvet, J. and Gessain, M. (1997) *Le Grenier des Rêves: Essai d'Onirologie Diachronique*. Paris: Éditions Odile Jacob.

Jung, C.G. (2002) *Dreams*. London: Routledge.

Kempf, W. and Hermann, E. (2003) 'Dreamscapes: transcending the local in initiation rites among the Ngaing of Papua New Guinea'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. New York: Palgrave MacMillan.

Kennedy, J.G. and Langness, L.L. (1981a) *Ethos* (Special Issue Dedicated to Dreams) 9 (4).

— (1981b) 'Introduction' *Ethos* 9 (4): 249-257.

Kilborne, B. (1978) *Interprétations du Rêve au Maroc*. Claix: La Pensée Sauvage.

— (1992) 'On classifying dreams'. In Tedlock, B. (Ed.) *Dreaming: Anthropological and Psychological Interpretations*. Santa Fe, New Mexico: The School of American Research Press.

Kirsch, S. (1997) 'Regional dynamics and conservation in Papua New Guinea: the Lakekamu River Basin Project'. *The Contemporary Pacific* 9 (1): 97-120.

— (2002) 'Anthropology and advocacy: a case study of the campaign against the Ok Tedi mine'. *Critical Anthropology* 22: 175-200.

— (2004) 'Changing views of place and time along the Ok Tedi'. In Rumsey, A. and Weiner, J. (Eds) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Knauft, B.M. (1993) 'Like money you see in a dream: petroleum and patrols in South New Guinea'. *Oceania* 64: 187-190.

Kracke, W. (1981) 'Kagwahiu mourning: dreams of a bereaved father'. *Ethos* 9 (4): 258-275.

Kuluah, A. (1983) 'Wokim gold long Morobe, 1922-1942'. In Blowers, M.J. (Ed.) *Proceedings of the Conference on Small Scale Mining in Papua New Guinea Held at the University of Technology, Lae, 4th-8th June 1983*. Lae, Morobe, Papua New Guinea: Department of Chemical Technology, the Papua New Guinea University of Technology.

Kuper, A. (1979) 'The structure of dreams'. *Man* 14 (4): 645-662.

— (1983) 'The structure of dream sequences'. *Culture, Medicine and Psychiatry* 7 (2-3): 153-175.

Kuper, A. (1986) 'Structural anthropology and the psychology of dreams'. *The Journal of Mind and Behaviour* 7: 333 [203]- 344 [214].

— (1989) 'Symbols in myths and dreams'. *Encounter* March 1989: 26-31.

— (1993) 'Post-modernism, Cambridge, and the great Kalahari debate'. *Social Anthropology* 1 (1A): 57-71.

Kuper, A. and Stone, A. (1982) 'The dream of Irma's injection: a structural account'. *The American Journal of Psychiatry* 139: 1225-1234.

Lakau, A.L. (1990) *The Biangais of the Wau-Bulolo Valley and Their Management of Customary Land in a Changing Context*. Lae, Morobe, Papua New Guinea: Department of Surveying and Land Studies, The PNG University of Technology.

— (1996) 'Customary land tenure and common/public rights to minerals in Papua New Guinea'. In Larmour, P. (Ed.) *The Governance of Common Property in the Pacific Region*. Canberra: The Australian National University.

Lakoff, G. and Johnson, M. (2003 [1980]) *Metaphors We Live By*. London: The University of Chicago Press.

Lattas, A. (1993) 'Sorcery and colonialism: illness, dreams and death as political languages in West New Britain'. *Man* 28: 51-77.

Lawrence, T. (1994) 'Impact of mining in Papua New Guinea: the Morobe Goldfields'. In Morrison, J., Geraghty, P. and Crowl, L. (Eds) *Science of Pacific Island Peoples, Volume III- Land Use and Agriculture*. Suva, Fiji: the Institute of Pacific Studies, the University of the South Pacific.

Le Vine, S. (1981) 'Dreams of the informant about the researcher: some difficulties inherent in the research relationship'. *Ethos* 9 (4): 276-293.

Leahy, M.J. (1994) *Explorations into Highland New Guinea, 1930-1935*. Bathurst, NSW: Crawford House Press.

Lemonnier, P. (1990) *Guerres et Festines: Paix, Échanges et Compétition dans les Highlands de Nouvelle-Guinée*. Paris: Editions de la Maison des Sciences de L'Homme.

— (1992) 'Couper-coller: attaques corporelles et cannibalisme chez les Anga

de Nouvelle-Guinée'. *Terrain* 18 (mars 1992): 87-94.

Lemonnier, P. (1993) 'Pigs as ordinary wealth'. In Lemonnier, P. (Ed.) *Technological Choices: Transformation in Material Culture since the Neolithic*. London: Routledge.

— (1996) 'Food, competition, and the status of food in New Guinea'. In Wiessner, P. and Schiefenhover, W. (Eds) *Food and the Status Quest*. Providence, RI: Berghahn.

— (1997) '"Mipela wan bilas". Identité et variabilité socioculturelle chez les Anga de Papouasie-Nouvelle-Guinée'. In Tcherkézoff, S. and Douaire-Marsaudon, F. (Eds) *Le Pacifique-Sud Aujourd'hui: Identités et Transforations Culturelles*. Paris: CNRS Editions.

— (1998a) 'Maladie, cannibalisme et sorcellerie chez les Anga de Papouasie-Nouvelle-Guinée'. In Godelier, M. and Panoff, M. (Eds) *Le Corps Humain: Supplicié, Possedé, Cannibalisé*. Amsterdam: OPA.

— (1998b) 'Showing the invisible: violence and politics among the Ankave-Anga (Gulf Province, Papua New Guinea)'. In Keck, V. (Ed.) *Common Worlds and Single Lives: Constituting Knowledge in Pacific Societies*. Oxford: Berg.

— (1999) 'Femmes et richesses en Nouvelle-Guinée'. In Descola, P., Hamel, J. and Lemonnier, P. (Eds) *La Production du Sociale*. Paris: Fayard.

— (2004) 'The variability of women's "involvement" in Anga male initiations'. In Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

— (2006) *Le Sabbat des Lucioles: Sorcellerie, Chamanisme et Imaginaire Cannibale en Nouvelle-Guinée*. Paris: Stock

Lévi-Strauss, C. (1968) *Structural Anthropology*. London: Penguin.

— (1982) *The Way of the Masks*. London: The University of Washington Press.

— (1987) *Anthropology and Myth: Lectures 1951-1982*. Oxford: Basil Blackwell.

Lévi-Strauss, C. (1996 [1966]) *The Savage Mind*. Oxford: Oxford University Press.

Lincoln, J. (1935) *The Dream in Primitive Cultures*. London: Cresset Press.

Lloyd, R.G. (1973) 'The Angan language family of Papua New Guinea'. In Franklin, K.J. (Ed.) *The Linguistic Situation in the Gulf District and Adjacent Areas, Papua New Guinea*. Canberra: The Australian National University.

Lohmann, R.I. (2000) 'The role of dreams in religious enculturation among the Asabano of Papua New Guinea'. *Ethos* 28 (1): 75-102.

— (Ed.) (2003a) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. Basingstoke, UK: Palgrave Macmillan.

— (2003b) 'Introduction'. In Lohmann, R.I. (Ed.) (2003a) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. Basingstoke, UK: Palgrave Macmillan.

— (2003c) 'Supernatural encounters of the Asabano in two traditions and three states of consciousness'. In Lohmann, R.I. (Ed.) (2003a) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. Basingstoke, UK: Palgrave Macmillan.

Lole, H. (2005) 'The trend in artisanal and small-scale mining development in Papua New Guinea'. Paper presented at the "Learning Event": "Community and Small-Scale Mining: Sharing Experiences from the Asia-Pacific Region" held in Manila, Philippines, 7th-12th June 2005. Available at: http://www,casmite.org (accessed 23/03/2006).

Lortie-Lussier, M., de Koninck, J. and Roy, M.S. (1994) 'Du divan au laboratoire: quelques perspectives contemporaines en psychologie du rêve'. *Anthropologie et Société* 18 (2): 43-58.

Lowenstein, P.L. (1982) *Economic Geology of the Morobe Goldfield (Volume I)*. Geological Survey of Papua New Guinea Memoir 9. Port Moresby: The Geological Survey of Papua New Guinea.

Macintyre, M. (2002) 'Women and mining projects in Papua New Guinea:

problems of consultation, representation and women's rights as citizens'. In Macdonald, I. and Rowland, C. (Eds) *Tunnel Vision: Women, Mining and Communities*. Fitzroy, Victoria, Australia: Oxfam Community Aid Abroad.

Macintyre, M. and Foale, S. (2004) 'Politicized ecology: local responses to mining in Papua New Guinea'. *Oceania* 74: 231-252.

MacMillan, G. (1995) *At the End of the Rainbow? Gold, Land and People in the Brazilian Amazon*. London: Earthscan.

Mageo, J.M. (Ed.) (2003) *Dreaming and the Self*. Albany: The State University of New York Press.

— (2004) 'Toward a holographic theory of dreaming'. *Dreaming* 14 (2-3): 151-169.

Malinowski, B. (2001 [1927]) *Sex and Repression in Savage Society*. London: Routledge.

Martin, J-C. (1992) *Le Changement Social et la Question de la Résistance aux Techniques Nouvelles chez les Biangai de Papouasie Nouvelle-Guinée*. PhD Thesis, The University of Montreal.

Martin, J-C. and Oulette, F-R. (1981) 'Golden future? The dilemma of the Biangais of the Wau Valley, Morobe Province'. In Gordon, R. (Ed.) *The Plight of Peripheral Peoples in Papua New Guinea*. Cambridge, MA: Cultural Survival Occasional Paper 7.

Mbaginta'o, I. (1971) 'The Anga initiations'. *Journal de la Société des Océanistes* 27: 285-294.

— (1972) 'Les esprits guérisseurs chez les Dunkwi Anga. *Journal de la Société des Océanistes* 37: 337-343.

McArthur, M. (1971) 'Men and spirits in the Kunimaipa Valley'. In Hiatt, L.R. and Fayawardena, C. (Eds) *Anthropology in Oceania*. London: Angus and Robertson.

McCarthy, J.K. (1963) *Patrol into Yesterday: My New Guinea Years*. Melbourne: F.W. Cheshire.

Mihalic, F. (1971) *The Jacaranda Dictionary and Grammar of Melanesian*

Pidgin. Milton, Queensland, Australia: The Jacaranda Press.

Mimica, J. (1981) *Omalyce: An Ethnography of the Ikwaye View of the Cosmos*. PhD Thesis, The Australian National University.

— (1988) *Intimations of Infinity: The Cultural Meanings of the Iqwaye Counting system and Number*. Oxford: Berg.

— (1991) 'The incest passion: an outline of the logic of Iqwaye social organisation (Parts 1 and 2)'. *Oceania* 62 (1 and 2): 34-58; and 81-113.

— (2003) 'The death of a strong, great, bad man: an ethnography of soul incorporation'. *Oceania* 73: 260-286.

— (2006) 'Dreams, laki, and mourning: a psychoanalytical ethnography of the Yagwoia "inner life" (Parts 1-3)'. *Oceania* 76: 27-60; 113-131.

Mining, Minerals and Sustainable Development (MMSD) Project (2002) *Breaking New Ground: Mining, Minerals and sustainable Development*. London: Earthscan.

Mitio, N. (1981) *Biangai Marriage and Its Relationship to Kinship and Property: The Case of Werewere Village*. BA (Hons) Dissertation, Department of Anthropology and Sociology, The University of Papua New Guinea.

Moretti, D. (2005) 'Gold, tadpoles and Jesus in the manger: reflecting on myth, colonialism and redressal with the Hamtai-Anga of Mount Kaindi, Papua New Guinea'. Paper presented at the 6th Conference of the European Society for Oceanistes held in Marseilles, France, 6th-8th July 2005.

— (2006a) 'Osama Bin Laden and the man-eating sorcerers: encountering the "war on terror" in Papua New Guinea'. *Anthropology Today* 22 (3): 13-17.

— (2006b) 'The gender of the gold: an ethnographic and historical account of women's involvement in artisanal and small-scale mining in Mount Kaindi, Papua New Guinea'. *Oceania* 76: 133-149.

Neale, T. (1995) 'A century of mining and no small scale mining industry! Why?' In Afenya, P.M. (Ed.) (1995) *Proceedings of the Huon Seminar '94 Workshop on Small Scale Gold Mining Held in Lae, Papua New Guinea.*

Lae, Papua New Guinea: The Papua New Guinea University of Technology.

Nelson, H. (1976) *Black, White and Gold: Goldmining in Papua New Guinea, 1878-1930*. Canberra: The Australian National University.

New Tribes Mission (1974) *Niu Testaman: Mpuka Tanga Pane'a Yesusu Kitoi'na Ti*. Goroka, Papua New Guinea: New Tribes Mission Publications.

— (Undated) *Kapau Dictionary*. Goroka, Papua New Guinea: New Tribes Mission Publications.

Nihill, M. (1999) 'Time and the red other: myth, history and the paradoxes of power in Anganem'. *Canberra Anthropology* 22 (1): 66-87.

O'Faircheallaigh, C. (1984) *Mining and Development: Foreign-Financed Mines in Australia, Ireland, Papua New Guinea and Zambia*. London: Croom Helm.

— (1989) 'Colonial administration, mineral revenues and economic development: New Guinea, 1926-1940'. In Latufeku, S. (Ed.) *Papua New Guinea: A Century of Colonial Impact, 1884-1984*. Port Moresby: The National Research Institute.

O'Neill, J. (1979) *Up from South: A Prospector in New Guinea*. Oxford: Oxford University Press.

O'Nell, C.W. (1976) *Dreams, Culture, and the Individual*. San Francisco: Chandler and Sharp.

O'Shea, M. (1996) *A Guide to the Snakes of Papua New Guinea*. Port Moresby: Independent Publishing.

Oates, W. and Oates, L. (1968) *Kapau Pedagogical Grammar*. Canberra: Department of Linguistics, The School of Pacific Studies, Australian National University.

Ohnuki-Tierney, E. (1991) 'Embedding and transforming polytrope: the monkey as self in Japanese culture'. In Fernandez, J.W. (Ed.) *Beyond Metaphor: The Theory of Tropes in Anthropology*. Stanford, CA: Stanford University Press.

Ollier, C.D., Drover, D.P. and Godelier, M. (1971) 'Soil knowledge amongst the

Baruya of Wonemara, New Guinea'. *Oceania* 42 (1): 33-41.

Oulette, F-R. (1987) *Rapport de Sexe et Développement Capitaliste chez les Biangai de la Région de Wau*. PhD Thesis, The University of Montreal.

Parman, S. (1991) *Dream and Culture: An Anthropological Study of the Western Intellectual Tradition*. New York: Praeger.

Perrin, M. (Ed.) (1990) *Antropologia y Experiencias del Sueño*. Quito, Ecuador: Ediciones Abya-Yala.

Plane, M.D. (1967) *Stratigraphy and Vertebrate Fauna of the Otibanda Formation, New Guinea*. Canberra: Bureau of Mineral Resources, Geology and Geophysics.

PNG Department of Mining (1999a) *Introduction to Small Scale Gold Mining Techniques*. (Also available in Tok Pisin as 'Sampela ol isipela wei bilong wok gol'). Port Moresby: PNG Department of Mining.

— (1999b) *Mercury- Safe Uses in Small Scale Alluvial Gold Mining*. (Also available in Tok Pisin as 'Mekuri- lukautim yu yet taim yu wok gol'). Port Moresby: PNG Department of Mining.

— (1999c) *Introduction to Mechanised Small Scale Gold Mining*. (Also available in Tok Pisin as 'Sim wei bilong yusim ol masin long liklik wok gol'). Port Moresby: PNG Department of Mining.

— (2001a) *Restoration of Landscape and the Environment*. (Also available in Tok Pisin as 'Lukautim wara, bus na graun bihain long yu wok gol na pinisim wok gol'). Port Moresby: PNG Department of Mining.

— (2001b) *Occupational Health and Safety in Small Scale Alluvial Gold Mining*. (Also available in Tok Pisin as 'Helt na sefti long liklik wok gol'). Port Moresby: PNG Department of Mining.

— (2001c) *Economics of a Small Scale Mining Business*. (Also available in Tok Pisin as 'Wei bilong ronim gut liklik wok gol bisnis'). Port Moresby: PNG Department of Mining.

— (2001d) *Gold- from Gold Pans and Sluice Boxes to Bars and Jewellery*. (Also available in Tok Pisin as 'Gol- wok gol I go inap long kukim na wokim kainkain samting'). Port Moresby: PNG Department of Mining.

Poirier, S. (Ed.) (1994a) *Rêver la Culture*. Special Issue of *Anthropologie et Sociétés* 18 (2).

— (1994b) 'Présentation'. *Anthropologie et Sociétés* 18 (2): 5-11.

— (1999) 'Une athropologie du rêve est-elle possible?' *Anthropologie et Sociétés* 23 (3): 175-181.

— (2003) 'This is a good country. We are good dreamers'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. New York: Palgrave.

— (2005) *A World of Relationships: Itineraries, Dreams, and Events in the Australian Western Desert*. London: The University of Toronto Press.

Polier, N. (1994) 'A view from the "cyanide room": politics and culture in a mining town in Papua New Guinea'. *Identities* 1: 63-84.

— (1996) 'Of mines and Min: modernity and its malcontents in Papua New Guinea'. *Ethnology* 35: 1-16.

Rivers, W.H.R. (1923) *Conflict and Dream*. London: Kegan Paul.

Robbins, J. (2003) 'Dreaming and the defeat of charisma'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. New York: Palgrave.

Rumsey, A. and Weiner, J. (2004) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Ryan, P. (1991) *Black Bonanza: A Landslide of Gold*. South Yarra, Victoria: Hyland House.

Sahlins, M.D. (1963) 'Poor man, rich man, big man chief: comparative studies of political types in Melanesia and Polynesia'. *Society and History* 5: 55-68.

Sapir, D.J. (1977) 'The anatomy of metaphor'. In Sapir, D.J. and Crocker, C.J. (Eds) *The Social Use of Metaphor: Essays on the Anthropology of Rhetoric*. Philadelphia: The University of Pennsylvania Press.

Sapir, D.J. and Crocker, C.J. (Eds) (1977) *The Social Use of Metaphor: Essays on The Anthropology of Rhetoric*. Philadelphia: The University of Pennsylvania Press.

Schieffelin, E.L. and Crittende, R. (Eds) (1991) *Like People You See in a Dream:*

First Contact in Six Papuan Societies. Stanford: Stanford University Press.

Sebag, L. (1964) 'Analyse des rêves d'une indienne Guayaki'. *Les Temps Modernes* 217: 2181-2237.

Seligman, C.G. (1923) 'Note on dreams'. *Man* 23: 186-188.

— (1924) 'Anthropology and psychology: a study of some points of contact'. *The Journal of the Royal anthropological Institute* 54: 13-46.

— (1932) 'Anthropological perspective and psychological theory: The Huxley Memorial Lecture for 1932'. *The Journal of the Royal Anthropological Institute* 62: 193-228.

Shulman, D. and Stroumsa, G.G. (Eds) (1999) *Dream Cultures: Explorations in the Comparative History of Dreaming*. Oxford: Oxford University Press.

Simpson, C. (1953) *Adam with Arrows*. London: Angus and Robertson.

Sinclair, J. (1966) *Behind the Ranges: Patrolling in New Guinea*. Cambridge: Cambridge University Press.

— (1978) *Wings of Gold*. Sydney: Pacific Publications.

— (1985) *Papua New Guinea: The First 100 Years*. Bathurst, NSW: Robert Brown and Associates.

— (1998) *Golden Gateway: Lae and the Province of Morobe*. Bathurst, NSW: Crawford House Publishing.

Spencer, H. (1876) *The Principles of Sociology (3 Volumes)*. London: Williams and Norgate.

Stephen, M. (1982) '"Dreaming is another power!" The social significance of dreams among the Mekeo of Papua New Guinea'. *Oceania* 53 (2): 106-122.

— (1987) 'Contrasting images of power'. In Stephen, M. (Ed.) *Sorcerer and Witch in Melanesia*. New Brunswick: Rutgers University Press.

— (1995) *A'aisa's Gifts: A Study of Magic and the Self*. London: The University of California Press.

— (1996) 'Dreams and self-knowledge among the Mekeo of Papua New Guinea'. *Ethos* 24 (3): 465-490.

Stewart, C. (Ed.) (2004a) *Anthropological Approaches to Dreaming*. Special Issue

of *Dreaming* 14 (2-3).

Stewart, C. (2004b) 'Introduction: dreaming as an object of anthropological analysis'. *Dreaming* 14 (2-3): 75-82.

Stewart, D.F. (1987) 'Small-scale mining and development: the case of Papua New Guinea'. *Natural Resources Forum* 11: 219-227.

— (1989) 'Large-scale v. small-scale mining: meeting the needs of developing countries. *Natural Resources Forum* 13: 44-52.

— (1997) 'Prospects and problems: small-scale gold mining in Papua New Guinea and the Philippines'. In Ghose, A.K. (Ed.) *Mining on a Small and Medium Scale: A Global Perspective*. London: Intermediate Technology Publications.

Stewart, D.F. and Blowers, M.J. (1985) 'Small scale mining as a rural development activity'. Paper presented at the "Asia Tech '85 Conference" held at Kuala Lumpur in December 1985.

Stewart, P.J. and Strathern, A. (1999) 'Female spirit cults as a window on gender relations in the highlands of Papua New Guinea'. *The Journal of the Royal Anthropological Institute* 5 (3): 345-360.

— (2002) *Remaking the World: Myth, Mining, and Ritual Change among the Duna of Papua New Guinea*. Washington, DC: The Smithsonian Institute Press.

— (2003) 'Dreaming and ghosts among the Hagen and Duna of the Southern Highlands'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. New York: Palgrave.

Stolpe, B. (2003) *Cultural Endocrinology: Menarche, Modernity, and the Transformative Power of Social Reconfigurations*. PhD Thesis, The University of Chicago.

Strathern, A. (1993) 'Great-men, leaders, big-men'. *Journal de la Société des Océanistes* 97: 145-158.

— (1994) 'Between body and mind: shamans and politics among the Anga, Baktaman and Gebusi in Papua New Guinea'. *Oceania* 64 (4): 288-301.

Strathern, A. and Stewart, P.J. (2004) 'Cults, closures, collaborations'. In

Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: the university of Pennsylvania Press.

Strathern, M. (1988) *The Gender of the Gift*. London: The University of California Press.

— (1991). 'One man and many men'. In Godelier, M., and Strathern, M. (Eds) *Big Men and Great Men: Personifications of Power in Melanesia*. Cambridge: Cambridge University Press.

— (1992) 'Qualified value: the perspective of gift exchange'. In Humphrey, C. and Hugh-Jones, S. (Eds) *Barter, Exchange and Value: an anthropological Approach*. Cambridge: Cambridge University Press.

Struben, R. (1961) *Coral and Colour of Gold*. London: Faber and Faber.

Susapu, B. and Crispin, G. (2001) *Report on Small-Scale Mining in Papua New Guinea*. London: The International Institute for Environment and Development.

Taussig, M.T. (1980) *The Devil and Commodity Fetishism in South America*. Chapel Hill: The University of North Carolina Press.

Tedlock, B. (Ed.) (1992a) *Dreaming: Anthropological and Psychological Perspectives*. Santa Fe, New Mexico: The School of American Research Press.

— (1992b) 'Dreaming and dream research'. In Tedlock, B. (Ed.) (1992a) *Dreaming: Anthropological and Psychological Perspectives*. Santa Fe, New Mexico: The School of American Research Press.

— (1992c) 'Zuni and Quiché dream sharing and interpreting'. In Tedlock, B. (Ed.) (1992a) *Dreaming: Anthropological and Psychological Perspectives*. Santa Fe, New Mexico: The School of American Research Press.

— (1994) 'The evidence from dreams'. In Block, P.K. (Ed.) *Psychological Anthropology*. London: Praeger.

— (1999) 'Sharing and interpreting dreams in Amerindian nations'. In Shulman, D. and Stroumsa, G.G. (Eds) *Dream Cultures: Explorations in the Comparative History of Dreaming*. Oxford: Oxford University Press.

— (2001) 'The new anthropology of dreaming'. In Bulkeley, K. (Ed.)

Dreams: a Reader on the Religious, Cultural, and Psychological Dimensions of Dreaming. Basingstoke: Palgrave.

Terrell, E., et al. (2001) 'Foregone conclusions? In search of "Papuans" and "Austronesians"'. *Current Anthropology* 42 (1): 97-124.

Tilley, C. (1999) *Metaphor and Material Culture*. Oxford: Blackwell.

Toft, S. (Ed.) (1997) *Compensation for Resource Development in Papua New Guinea*. Port Moresby: The Law Reform Commission.

Tonkinson, R. (2003) 'Ambrymese dreams and the Mardu dreaming'. In Lohmann, R.I. (Ed.) *Dream Travellers: Sleep Experiences and Culture in the Western Pacific*. New York: Palgrave.

Trompf, G.W. (1989) 'Doesn't colonialism make you mad? The so-called "Mur Madness" as an index for the study of new religious movements in Papua New Guinea during the colonial period'. In Latufeku, S. (Ed.) *Papua New Guinea: A Century of Colonial Impact, 1884-1984*. Port Moresby: The National Research Institute.

— (1991) *Melanesian Religion*. Cambridge: Cambridge University Press.

Tudor, J. (1977) 'PNG as one of the last havens for old-time gold-seekers'. *Pacific Islands Monthly* May 1977: 63-67.

Tuzin, D. (1975) 'The breath of a ghost: dreams and the fear of the dead'. *Ethos* 3 (4): 555-578.

Tylor, E.B. (1871) *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom (2Volumes)*. London: Murray.

Vail, J. (1991) 'The days of gold'. Paper presented at the conference "New Perspectives on the Papua New Guinea Highlands: an Interdisciplinary Conference on the Huli, Duna, and Ipili Peoples" held at the Australian National University, Canberra, August 16th-18th.

— (1995) 'All that glitters: the Mt. Kare gold rush and its aftermath'. In

Biersack, A. (Ed.) *Papuan Borderlands: Huli, Duna, and Ipili Perspectives on the Papua New Guinea Highlands*. Ann Arbor: The University of Michigan Press.

Wagner, H. and Reiner, H. (Eds) (1986) *The Lutheran Church in Papua New Guinea: The First Hundred Years, 1886-1986*. Adelaide: The Lutheran Publishing House.

Wagner, R. (1967) *The Curse of Souw*. Chicago: The University of Chicago Press.

— (1972) *Habu: The Innovation of Meaning*. Chicago: The University of Chicago Press.

— (1978) *Lethal Speech: Daribi Myth as Symbolic Obviation*. London: Cornell University Press.

— (1981) *The Invention of Culture*. London: The University of Chicago Press.

— (1986) *Symbols That Stand for Themselves*. London: The University of Chicago Press.

— (1991) 'The fractal person'. In Godelier, M. and Strathern, M. (Eds) *Big Men and Great Men: Personifications of Power in Melanesia*. Cambridge: Cambridge University Press.

— (2001) *An Anthropology of the Subject: Holographic Worldview in New Guinea and Its Meaning and Significance for the World of Anthropology*. London: The University of California Press.

Wangu, A. (1995) 'Placer gold in Papua New Guinea'. In Afenya, P.M. (Ed.) (1995) *Proceedings of the Huon Seminar '94 Workshop on Small Scale Gold Mining Held in Lae, Papua New Guinea*. Lae, Papua New Guinea: The Papua New Guinea University of Technology.

Wardlow, H. (2004) 'The Mount Kare python: Huli myths and gendered fantasies of agency'. In Rumsey, A. and Weiner, J. (Eds) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Weiner, J. (1986) 'Men, ghosts and dreams among the Foi: literal and figurative modes of interpretation'. *Oceania* 57 (2): 114-127.

Weiner, J. (1994) 'The origin of petroleum at Lake Kutubu'. *Cultural Anthropology* 9: 37-57.

— (1995) *The Lost Drum: The Myth of Sexuality in Papua New Guinea and Beyond*. London: The University of Wisconsin Press.

— (2004) 'Introduction'. In Rumsey, A. and Weiner, J. (2004) *Mining and Indigenous Lifeworlds in Australia and Papua New Guinea*. Wantage, Oxon, UK: Sean Kingston.

Wiessner, P. (2004) 'Of human and spirit women: from mother to seductress to second wife'. In Bonnemère, P. (Ed.) *Women as Unseen Characters: Male Ritual in Papua New Guinea*. Philadelphia: The University of Pennsylvania Press.

Williams, F.E. (1936) 'Papuan dream interpretations'. *Mankind* 2 (2): 29-39.

Worsley, P. (1968) *The Trumpet Shall Sound: A Study of "Cargo" Cults in Melanesia*. London: Paladin.

Wurm, S.A. (1982) 'Papuan languages'. In May, R.J. and Nelson, H. (Eds) *Melanesia: Beyond Diversity*. Canberra: Research School of Pacific Studies, Australian National University.

Young, D.E. and Goulet, J-G. (Eds) (1994) *Being Changed by Cross-Cultural Encounters: the anthropology of Extraordinary Experience*. Peterborough, Ontario: Broadview Press.