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Mining and Civil Conflict: Revisiting Grievance at Bougainville

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Abstract

This paper explores the drivers of civil conflict on the island of Bougainville in PNG. While not a 'popular' or 'traditional' example used for exploring the various dimensions of civil violence prevalent in resource-rich developing countries, Bougainville is, however, a unique case, which has proved difficult to reconcile with conventional explanations of causation. A particularly relevant event in the history of Papua New Guinea (PNG) was the opening of a copper mine in Bougainville in the 1960s, the establishment of which caused significant socioeconomic and political problems on the island, eventually culminating in civil war. It is argued that, rather than being driven by profit, civil war in Bougainville arose out of grievances caused by the convergence of social phenomena with economic and political factors.

Keywords: **Natural resources — Bougainville — development — social unrest — income distribution**

INTRODUCTION

This paper reviews the causes of civil conflict in Bougainville, a mineral-rich island in PNG. Considerable debate has arisen in recent years over the drivers of civil conflicts in resource-rich developing countries. The case of Bougainville, while not a 'popular' or 'traditional' case study, is, however, unique, because of its rich social background and the resulting implications for causation. A particularly relevant event in the history of PNG was the founding of a copper mine on Bougainville in the 1960s, the establishment of which caused significant socioeconomic and political grievances, culminating in civil war.

Significant academic attention has come to focus on the self-financing nature of civil conflicts: hitherto, most civil conflicts were placed solely within their broader, grievance-based context. Today, there is growing academic interest in how civil conflicts sustain themselves, as well as how the economies of countries experiencing civil conflicts can avoid collapse. Berdal and Keen (1997) were among the first to suggest that access to natural resources makes the continuation of conflict more profitable for the groups involved, creating a situation where there may be more to war than winning. This phenomenon is commonly referred to as the 'greed' theory of civil conflict and is often defended by the World Bank.

Notwithstanding the emergence of greed as an explanation for civil conflict, the case of Bougainville implies that it is important to examine how social, political and/or economic factors can combine to cause and exacerbate grievances. Specifically, drawing a link between poor mineral development and civil conflict can contribute to the literature on the resource curse by qualifying the circumstances under which it can occur, in turn providing insight into effective policy prescriptions. Rather than suggesting that conflict was conditioned by mineral abundance, this analysis demonstrates that in the case of Bougainville, poor policy led to wide-ranging socioeconomic and political grievances. The paper addresses the following questions:

(1) What historical and social dynamics are important for explaining conflict in Bougainville, and how did these become intertwined with economic and political factors?

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(2) What theoretical analyses can be applied to better understand the link between mineral abundance and conflict?
(3) What policy prescriptions can be realized, given this unique case?

The paper is organized as follows. First, a sociological and historical overview of both PNG and Bougainville is provided. The paper then turns to the body of the analysis, examining the aforementioned distinct grievances, and drawing upon several theories for exploring the case. The paper concludes by outlining a starting point for solutions in post-conflict Bougainville.

BOUGAINVILLE: HISTORY AND SOCIETY

Historical documentations of colonial PNG serve as a legitimate basis for examining the civil conflict, which surfaced in the 1990s, and for contextualizing post-conflict peace building. In PNG, the often-heard 'legacy of colonialism', through its ad hoc process of territorial redistribution and creation of arbitrary borders, was a root cause in the subsequent unravelling of factors which led to civil conflict.

PNG is one of the largest nations in the South Pacific, covering an area of roughly 460,000 square kilometres. It is comprised of a significant portion of the island of New Guinea (which accounts for roughly 85% of the country), whose remaining territory is the Indonesian Province of Irian Jaya. Several hundreds of tropical islands scattered throughout the South Pacific account for the rest of the nation, of which the largest is Bougainville.

The region of New Oceania is one of the most culturally and linguistically diverse in the world. It has roughly 1,100 spoken languages (three of which are official in PNG), which account for a staggering 20% of the world's spoken languages (Pawley, 2005, p. 1). While it is difficult to summarize the ethnic composition of PNG – which might be the subject of an entirely different study – the population is chiefly made up of brown- or red-skinned Papuans in the south and interior, and dark-skinned Malenesians in the north-east. Broadly speaking, Malenesians, Micronesians and Polynesians comprise the ethnic community of the South Pacific; the Malenesians of Bougainville are ethnically, culturally and linguistically distinct from the (indigenous) inhabitants of the island of New Guinea, which is predominantly Micronesian and Polynesian. This serves as a key point of interest in examining the larger socio-political dynamics of the region. In fact, the indigenes of Bougainville have much more in common with the people of the Solomon Islands than those of PNG, where colloquial rhetoric has, for several generations, branded the former 'blackskins' and the latter 'redskins' (Havini, 1990, p. 20). The level of diversity that exists elsewhere within the provinces of PNG, including Bougainville itself, should also be appreciated; prior to European influence, it is estimated that (at least) 19 different language groups existed on the islands of Buka and Bougainville alone (Quodling, 1991, p. 10).

The above should be placed within the historical context of an evolving colonial administration, which lacked both a willingness to consider local dynamics and the technical 'know-how' to devolve power in a sustainable manner – part of the 'legacy' that has become academic. As Bennett (2000) explains, the end of World War I saw the former German protectorate of Bougainville officially branded a 'C' class Australian mandate, giving the latter everything but full sovereignty over the island, with the oversight of the League of Nations. Continues Bennett (2000, p. 75), 'though the Australian Prime Minister, W.M. Hughes, had wanted the [Solomon Islands], their potential cost was a concern and he would not seek the islands simply to link them to…Murray's native protection policies'.[1] Thus, Bougainville remained politically distinct from the Solomon Islands (a British colony), notwithstanding cultural similarities, a reality substantiated by significant migratory patterns between the two regions.

However, Bougainville traces its current attachment to the island of New Guinea to the conclusion of World War II, when it was decided that the territories would be lumped together into the larger Territory of Papua and New Guinea – a United Nations (UN) trusteeship administered by Australia until PNG independence in 1975 (Wilson-Roberts, 2001, p. 24). The following two significant, simultaneous political developments took place in PNG in the immediate post-war period: 1) the establishment of provincial governance; and 2) the devolution of power from the colonial administration to an indigenous national government. Comparatively, Australia was slow in its progress towards political devolution, a delay which attracted criticism from the UN

in 1962. Furthermore, as Claxton (1998, p. 23) explains, the post-war Australian administration's authority was not held in particularly high regard by the various indigenous communities on the island, because 'in 1962 in Eastern Buka…the Hahalis Welfare Society cult vigorously opposed the imposition of local government council'. The community was 'in favour of pursuing a model of development though local communal action (refusing to pay the government head-tax and raising its own levy)' (Claxton, 1998, p. 23).

Nonetheless, both of these events must be placed within the context of mining in Bougainville. In the early 1960s, Cozinc Riotinto Australia (CRA), now Rio Tinto Ltd., was actively surveying the area of Panguna for mineral deposits.[2] After extensive field work commissioned by the World Bank, these explorations provided promising findings – namely, significant copper ore deposits at Panguna – culminating in a 1967 agreement struck between the Territory of Papua and New Guinea (i.e. the Australian administration), and a newly-established subsidiary company of CRA, Bougainville Copper Ltd. (BCL) (Quodling, 1991, p. 4). This, however, would ignite grievances throughout the island.

An editorial in the Australian Financial Review noted that 'District Commissioners, with their doubt, their arrogance and their remoteness, seemed to be throwbacks to the British Raj rather than Australian civil servants' in diffusing local protests and grievances.[3] The mine served as a pretext for a wave of secessionist movements throughout Bougainville, including the Napidakoe Navitu movement and the more radical student-led Mungkas Association in 1969.[4] Secondly, in much the same way that BCL's presence was becoming grounds for separation, its presence as a potential source of national wealth – Panguna is the largest open-pit copper mine in the world – was unquestionably a pretext for complete national sovereignty. Until this point, the national economy and infrastructure development was fully buttressed by Australian aid, which enhanced regional eagerness to open the mine and create the prospect of self-sustenance in PNG (Filer & Imbun, 2004, p. 5). These factors, therefore, converged in the mid-1970s, culminating in an independent national government with Michael Somare as Prime Minister, and 19 provincial assemblies. Reflecting the cultural affinity with the Solomon Islands, Bougainville became the North Solomons Province (NSP) (Griffin et al., 1979, pp. 236–239).

There is a large body of literature that examines indigenous peoples on Bougainville and their political and sociological development (e.g. Ogan, 1971; Oliver, 1973, 1981, 1991; Quodling, 1991). In assessing civil conflict on Bougainville, it is necessary to touch upon the indigenous 'mentality' where it took place. This is important for two reasons: first, it will lay the bedrock for the discussion on mining and inequality in indigenous communities, allowing for a comprehensive assessment of local grievances; and secondly, it will help to identify the necessary ingredients of a framework for continued peace-building and development in post-conflict Bougainville.

Professor Eugene Ogan, an expert on indigenous communities in Bougainville, provides a useful starting-point for conceptualizing communities on the island.[5] According to Ogan (1971), a significant characteristic of Nasioi society (one of four linguistic groups directly impacted by BCL's operations during its lifetime – the others being Torau, Nagovisi and Banoni) is its indistinguishable hierarchy of leadership. Within the community, there is an absence of clear forms of political leadership or organization, where 'social control in the traditional context was based more on public opinion and the fear of sorcery than on physical coercion' (p. 83). Moreover, and perhaps both the most relevant and complicated characteristic, land is owned corporately by matrilineal descent, often characterized by vague territorial groupings, including shifting residency from other communities. Continues Ogan (1971, p. 84):

> 'Merely to talk of owning land is to obscure important aspects of the situation. One is better advised to employ such terms as "primary"…rights with the qualification that even this terminology may lead to over-simplification'.

According to Oliver (1991, p. 108–109),[6] the Siwai people found it customary to permit moving populations temporary use of land for its resources (e.g. hunting, harvesting) through a consensual process of exchange. Often, in such a scenario, there existed distinctions between ownership of land (by the residing matrilineage) and of deliberately planted crops (by an incoming group); however, no similar distinctions existed

between ownership of a land's surface and its lower layers, since there is no relevant history of small-scale mining. In short, indigenous Bougainvilleans (traditionally) have no rigid concept of political representation or ownership, particularly with regard to land. Prior to the establishment of BCL, the primary mode of production was still the subsistence economy; such 'food-getting consumed most the time and energy of most Bougainvilleans prior to 1965' (Oliver, 1991, p. 96). All of this had significant cultural implications, in particular that the resulting relationship between the people and the land was one of high sophistication. Three Bougainvillean students reflected upon this in 1974, as tensions began to grow:

> 'Land is our life, land is our physical life – food and sustenance. Land is our social life; it is marriage; it is status; it is security; it is politics; in fact, it is our only world. When you take our land, you cut away the very heart of our existence. We have little or no experience of social survival detached from the land. For us to be completely landless is a nightmare which no dollar in the pocket or dollar in the bank will allay; we are a threatened people.' [Böge, 1999, p. 215].

There is a particularly long-lived history of social interaction on Bougainville at odds with fundamental tenets of both capitalism (i.e. ownership of private property) and liberal democracy (i.e. leadership determined by suffrage). Table I provides a summary of key events in Bougainville's history.

ANALYZING CAUSES OF CONFLICT

The above section has served to historicize political, economic and social relations in PNG and, more specifically, Bougainville. The events discussed are important for conceptualizing the conflict in terms of its historical roots, from which the discussion that follows seeks to build. What, then, can account for social upheaval within the existing indigenous community on Bougainville in the 1970s and 1980s? This section now turns to an examination of the build-up to the war, making several grievances distinguishable, particularly political and economic factors, with social issues serving as a common point of connection. Specifically, how did the establishment of BCL (socioeconomic) and the formation of an independent PNG government (sociopolitical) serve as a basis for grievance on the island, and what theories can assist in explaining these grievances?

Socio-economic Grievances

The most obvious and widely documented impact of the development of the Panguna copper mine was its harsh environmental effect on the surrounding ecosystem. More than being the largest deposit of copper ore (during its lifetime), Panguna was a high-volume/low grade operation: a small quantity of ore extract yields a significantly higher proportion of waste. It is estimated that between 1972 and 1989, a total of 1.25 billion

Table I. *Chronology of Events in the History of Bougainville.*

Year/Period	Description
1880–1900	Germany takes full control over north-eastern New Guinea and the islands of Bougainville and Buka; Britain annexes south-eastern New Guinea
1905	British New Guinea becomes the Territory of Papua, under the administration of the Commonwealth of Australia as of 1902
1914	German New Guinea is taken under the administration of the Commonwealth of Australia
1949	Papua New Guinea Act sees the union of the territories of Papua and New Guinea
1960s	Cozinc Riotinto Australia (CRA) begins prospecting for mineral deposits in PNG
1967	Bougainville Copper Ltd. (BCL) begins constructing mining enterprise
1975	PNG achieves independence
1979	Formation of the Panguna Landowners Association (PLA)
1988	Formation of the New Panguna Landowners Association (NPLA), precursor to the Bougainville Revolutionary Army (BRA)
1989–1997	Civil Conflict
2001	Signing of the Bougainville Peace Agreement

tonnes of material was removed for the recovery of 10 million tonnes of concentrate. The nature of the enterprise thus made the storage of waste a significant issue, particularly, but not explicitly, the liquid tailings that flowed from the mine in the form of slurry. On average, 120,000 tonnes of fully ground material was released from the mine during every 24-hour period of operation, 80% of which passed hydraulically into the Jaba River, and subsequently, into the Pacific Ocean (Quodling, 1991, p. 29–30). According to Filer and Imbun (2004, p. 7–8), environmental provisions were included in the mineral policy regime in the 1970s and 1980s. This included the *Improvement Plan for 1973–1974*, the *Environmental Planning Act* in 1978 and the *Disposal of Tailings and Waste Rock Agreement 1987*, the latter seeing the construction of a 'tailings disposal pipeline' by direct route to the ocean. However, few provisions were realistically capable of implementing environmental regulations. For example, both the Panguna and Ok Tedi mines were exempted from the act in 1978 on the basis that their relevant development agreements were signed before the act came into force. This legislative 'side-stepping' was encouraged by the reality that corresponding environmental laws in the region at the time were scarce. Quite literally, the 'pieces of legislation…-were completely inadequate' and ''there might as well have been no legal attempts at all to limit environmental damage'' (Böge, 1999, pp. 213–214).

Given the cultural attachment to the natural environment discussed above, the devastation of the ecosystem surrounding the mine served as the basis for lobbies for autonomy and independence at the earliest stages of mineral development at Panguna. This implies that the problems summarized above can be placed within their own category of social grievance; this is justified.

However, as a cause/effect relationship, the above connects to a major economic topic for discussion – compensation. In the absence of any frame of reference, Australian officials, in the late 1960s, drafted mining legislation comprised of several compensation policies. These included, inter alia, damages to surface vegetation, loss of surface rights and access, consequential damages, formulation of complaint procedures and various payments for the deprivation of land. This policy framework 'was significant in that it introduced the policy of an ongoing financial return to the holders of custom owned land' (Quodling, 1991, pp. 46–50) but by the late 1970s, dissatisfaction with the existing compensation package led to the creation of the Panguna Landowners Association (PLA), which was eventually able to renegotiate the conditions in 1980.[7] It is possible to suggest that the pursuit of more favourable compensation served to ignite civil conflict on the island; however, by extension, this suggests that economic assets, resulting from the exploitation of a natural resource, stimulated violence in the pursuit of profit (after Collier, 2000), which is difficult to apply in several respects. Rather, demands for increased compensation were based on their negligible quantitative 'trickle-down' to communities, and by linking environmental issues (social) with the compensation system (economic), there is insight into a larger, 'engineered' spiral of *socioeconomic* grievances.

What was destruction in its harshest form for many native Bougainvilleans was intended to bring economic development throughout the island and nation, and therefore the system of compensation was introduced as a method of offsetting physical damage in the hope of providing incentives (or at least allaying fears) for further mining development. However, as already noted, the question of land tenure is a highly sophisticated and complex characteristic within indigenous communities on Bougainville, making compensation a highly sensitive issue. In its most rudimentary form, BCL's (and the PNG government's) theoretical approach to the problem was such that social grievances and economic compensation would lead to social stability and economic development. However, as Wesley-Smith (1990) explains, merely the conception of land as a commodity that can be bought and sold, or one that could be compensated for through cash payment, is not a logical procedure for individual Bougainvilleans. More specifically, this transaction does not translate as coherently as it might in capitalist societies, where the ownership of private property is a basic precept. Such a 'clash of civilizations' made the payments virtually irrational, and any notion of 'just' compensation for environmental and cultural impacts highly dubious (Böge, 1999, p. 218). The overall process raised the questions: who gets the compensation, how much, and on what basis?

More problematic is the reality that the introduction of compensation payments, by extension,

led to the formation of a cash-based economy. Hitherto, the primary function of the indigenous community was subsistence agriculture, with seldom an occasion for cash or currency circulation,[8] but the distribution of compensation payments (and rents) inevitably produced two complex, interrelated circumstances. First, compensation provoked landowner disharmony. The establishment of the PLA in 1979 allowed the particular landowners affected by the mining lease areas to receive the bulk of compensation, which was generally distributed to male representatives of particular matrilineal clans (there were 850 so-called land title holders). As Regan (2003, pp. 137–138) explains, 'in addition to the intra-clan disputes that this method caused, compensation deals provoked intergenerational disputes about fairness, as younger landowners…tended to receive small shares'. Perhaps as a corollary, the status of women was significantly undermined by this entire process, given that the suspiciously male-oriented 'culture' of mining – from the corporation, to the government departments, to the local community workforces (Ranchod, 2001) – moved in this direction. Officers at BCL were inclined to negotiate with indigenous males, and the mine itself provided few employment opportunities for women. All of this served to create several cleavages between landowners.

Secondly, the introduction of a cash economy failed to create any sustainable, long-term economic or mineral development.[9] As Filer and Imbun (2004) explain, various charters of PNG's National Constitution call for 'equitable distribution of incomes' and place great emphasis on participation by local stakeholders in the national economy; but the introduction of cash, partly by virtue of revolutionizing economic day-to-day decision-making, inhibited any process for sustainable development. Cash distributed to landowners was quickly dispensed into emerging marketplaces at Panguna and nearby Arawa, satisfying short-term needs but denying any improvement in living standards or opportunities for devising a strategy for long-term development. The basis for compensation distribution, by creating the cleavages summarized above, exacerbated this problem by implying that 'uncompensated' landowners, particularly the younger generation, would eventually be left with little to show for a destroyed territory and a defunct ecosystem once the minerals were exhausted:

> 'Since non-renewable resources could not exactly be 'replenished' for the benefit of future generations, the wealth derived from their extraction should ideally be invested in another form of development…for a period which would not simply come to an end with the closure of the mine whose location was an accident of geology. But the local beneficiaries of such an accident could not be expected to make this kind of investment, especially if they had no experience of any other form of development'. [Filer and Imbun, 2004, pp. 8–9].

These two factors combined to unite the younger generation of landowners, who formed the New Panguna Landowners Association (NPLA) in 1988, a short-lived precursor to the Bougainville Revolutionary Army (BRA) (Regan, 2003).

Socio-political Grievances

The historical documentation in this paper alluded to two key political developments in the 1970s: the establishment of provincial governance and the creation of an independent national government. As with many countries, both events proved important in shaping PNG's political landscape thereafter. Similarly, both can be traced to the development of much larger political grievances in the disintegration to civil war in Bougainville; and yet, an examination of the Bougainville conflict seems unable to move far from a discussion on social difficulties. The following section seeks to marry these two ideas by outlining *sociopolitical* grievances.

This paper has already outlined several socio-economic grievances resulting from the establishment of the mining enterprise on Bougainville. It has not, however, discussed the BCA in relation to these, notwithstanding its existence as a significant economic subject of analysis; out of fairness and coherence, this seems problematic. Yet, the BCA, in several aspects, also represents a tool for political analysis, as the agreement symbolizes the balance of power distribution between the several parties involved in the mining enterprise: BCL, the PNG government, the NSP government and the indigenous community. Thus, the agreement is politicized on the grounds that it was negotiated by political entities.

After four years of prospecting, the BCA was crystallized in June 1967, and eventually

renegotiated as the *Mining Amendment Act* in December 1974.[10] The substance of the agreement is detailed, and its dissection is a topic beyond the scope of this paper. However, there are some core aspects of the agreements that are relevant for the discussion at hand. The first concerns the general reality that neither the NSP nor the indigenous communities were party to the agreements' negotiating process. The first meeting was held during the Australian administration of the Territory (and therefore prior to the establishment of provincial governance), but the overall neglect of the community at large served to escalate tensions and engender the forming of a province-wide identity. By the time of the 1974 renegotiation, there were obvious calls for independence from the imminent NSP government based on the lack of representation in the negotiating process. As explained by Quodling (1991, p. 26):

> 'The (NSP) did not become involved in these meetings: a shortcoming that BCL considered unacceptable in view of the growing pressures within the province…the National government representatives contended, for their part, that the agreement was with PNG and that the (NSP) had no basis for involvement'.

These tensions in political dynamics escalated throughout the following decade – and exist in Bougainville to this day.

Secondly, the revenue-sharing agreement surfaced as a complete reflection of the impartial basis for negotiation. To begin with, there can be no disbuting about the significance of BCL for the development of the PNG national economy. It is estimated that sales of BCL product accounted for 40–50% of total foreign exchange; and contributions to the national budget represented 15–20% of all internally-generated income for the entire country (Table II). These are significant figures, demonstrating the extent of PNG's economic dependence on the copper mine.[11] However, local calls for greater separation did not succeed in convincing the national government to include the NSP in negotiations, nor provide it with a reasonable proportion of revenues. Based on the revenue allocation data provided in Table 2, a considerable discrepancy existed between those revenues flowing to the PNG government (US$387M) or shareholders in the mining enterprise (US$207M), and those going to the provincial government (US$27M) or landowners (US$9M). This failure to allocate revenues to the province in a broader national process of social development solidified the tensions between province and nation in a period when they should have been defused. Consider, for example, the political evolution of the NSP vis-à-vis popular support by Bougainvilleans. In the 1964 House of Assembly, there was only one representative from Bougainville; this number increased to three in 1968, and out of 100 open electorate members in 1975, one more was added, totalling four. This was indeed a perceived triumph, furthered by the activity of three of these members on the national political front (on the eve of PNG independence). Paul Lapun and Donatus Mola became Ministers for Mines and for Business

Table II. *Direct Cash Benefits[13] from BCL Operations, 1972–1989.*

To PNG National Government	USD (million)	To Landowners	USD (million)
Income Tax	209	Royalties (5%)	1
Dividends	60	Occupation/Compensation	8
Dividend withholding tax	34		
PAYE tax	43		
Customs duty	37		
Miscellaneous	4		
Total	**387**	**Total**	**9**
To North Solomons Province	**USD (million)**	**To Investors**	**USD (million)**
Royalties (95%)	22	Dividends	207
Taxes	4		
Non-renewable resource fund	1		
Total	**27**	**Total**	**207**

Source: Quodling (1991, p. 34)

Development, respectively, while John Momis was appointed deputy chairman of the committee for the drafting of the national constitution for PNG. Notwithstanding the supposed progress, such 'involvement of three of four elected members in the process of PNG independence did not appease Bougainvillean aspirations for self-determination' (Quodling, 1991, pp. 16–18). The national government repeatedly failed to improve the prospects for development on the island, despite frequent outcry from the community.[12] Amid this sociopolitical background, these events contributed to a wider sentiment on Bougainville – namely an ethno-nationalist one.

The great struggle to homogenize an ethnically diverse nation is one of the 'legacies' that has never forsaken PNG or Bougainville to this day. Partially an inheritance of the colonial period(s), as already outlined, it became more clearly pronounced upon the launch of the mining enterprise in the 1960s. For example, the mine encouraged certain demographic trends, leading to mass population growth and urbanization in Bougainville, in general, and around the mine in particular. The project spawned two completely new towns, Panguna and Arawa, the populations of each growing to 3,500 and 15,000, respectively, by the late 1980s. The island's population expanded from 80,000 in 1970 to 130,000 in 1980, and finally to 180,000 in 1988. Moreover, and previously explained, mining is a male-dominated industry (after Ranchod, 2001), given that a diversity of the occupations associated with the industry tend to be conducted by men. There was thus a mass influx of male labourers, resulting in squatter communities balanced in neither sex nor ethnic composition. Exacerbating the situation was that BCL was required to meet quotas to employ foreign workers; in 1980, only 30% of mine site labourers were natives of Bougainville. The upshot was an array of social problems, including rape, prostitution, racism, crime and alcoholism, hitherto unknown on the island, and all resulting from the social changes caused by the mine's presence (Böge, 1999, p. 216). A high proportion of males increased the cases of rape; the influx of foreigners (recall 'redskins') perpetuated racism, and a lack of employment opportunities in general (mining is capital intensive, not labour intensive) increased crime rates. It is interesting to note that the indigenous peoples of Bougainville do have a history of inter-community wars and rivalries (see Oliver, 1991, pp. 101–103); but these differences were dismissed, for the most part, as a wider sense of national identity emerged in their stead.[14] The NPLA and the BRA surfaced just as much for socioeconomic grievances as they did for these sociopolitical ones. Underlining all of the problems summarized here is that Bougainvilleans tended to benefit comparatively less than migrant workers (a social issue), a reality that served to politicize grievances.

APPLYING THEORIES OF MINERAL DEVELOPMENT

There is a growing recognition of the relationship between inequality and resource development in indigenous communities (e.g. O'Faircheallaigh, 1998). Several studies (e.g. Smith, 1991) suggest that inequality in resource development is a natural precondition for the overall benefit of the indigenous community. These development theorists act on the assumption that inequality in income is an effective incentive for individual effort, and that as a result of capital investment, all members of society are better off. Other scholars, such as O'Faircheallaigh (1988), argue that mining enterprises lead to equal distribution of cash payments, as with the Ranger uranium project in Australia. In the Bougainville case, given the indigenous characteristics, the establishment of BCL led to the escalation of social grievances, whereby compensation was introduced as a solution. However, as a method of alleviation, cash created preconditions for inequality; and symbolized the lack of foresight and understanding on the part of BCL's policy-makers, who designed the compensation packages, and the PNG national government, which negotiated the rent-distribution system and failed to oversee the implementation of a successful development programme.[15] The situation was thus more representative of what Connell and Howitt (1991, p. 13) describe in their research on indigenous communities and resource development in Australasia as 'new forms of social stratification, and friction within and between communities'. The payments effectively cemented class division along traditional fault lines – age, gender and ethnicity – culminating in the formation of the NPLA and the outbreak of civil war in 1988. As argued by Filer (1990, pp. 10–12) and reinforced by Filer and Imbun (2004), resource development increases inequality in Malenesian societies; mining encourages the flow of revenues

to individual titleholders through the demarcation of distinct plots of land. In the Bougainville case, this led to a wider social stratification and the emergence of 'comprador capitalists', as the older generation secured mining revenues, leaving the younger one with nothing to show for a devastated environment. In short, compensation as a source of alleviating social and environmental problems created the preconditions for socioeconomic grievances; and to modify the theoretical approach taken by both the government and the multinational, the upshot was that social grievances and economic compensation led to inequality and underdevelopment, which in turn caused socioeconomic grievances.

Nonetheless, other scholars have suggested that the indigenous community at large abuses the cultural characteristics elaborated upon above, serving as beachheads from which the indigenous 'attachment' to land is exaggerated and defended for the purpose of economic benefit. Here, it is suggested that claims to land and kinship are overstated in a larger, calculated system of rent-seeking, where the situation 'becomes an exercise in alignment and self-definition in which the calculus of advantage intersects with questions of identity' (Jorgensen, 2001, p. 93). These postulations can be manipulated to some degree, implying a situation of self-seeking through a 'created' culture (or ideology) of land attachment – perhaps a sociological spin-off to the conventional 'greed' theory of civil wars (after Collier, 2000). Indeed, there is widespread documentation of the so-called 'rediscovery' of chieftaincy by Bougainvilleans,[16] where individuals rose to claim benefits from the pending crisis, some emerging with the most power since pre-colonial times (Ballard and Banks, 2003, p. 301; Filer, 1991, p. 139; Regan, 1996, p. 15). However, while discussing these developments as anomalies within the larger context of escalation in the 1970s and 1980s, it is difficult to prospect them as replacing a larger socio-cultural indigenous emphasis on land attachment. Moreover, the assumption that the pursuit of profit underpinned the build-up to civil war ignores the socioeconomic grievances already discussed. Consider, for example, the declaration of war by the BRA:

> 'Our land is being polluted, our water is being polluted, the air we breathe is being polluted with dangerous chemicals that are slowly killing us and destroying our land for future generations. Better that we die fighting than to be slowly poisoned'. [Böge, 1999, p. 221].

Given the sociological outcry underpinning the statement, the criticisms seem problematic.

Berdal and Keen (1997, p. 797) were among the first to suggest that civil wars provide 'an alternate system of profit, power and protection'. Studies by Collier (2000), and Collier and Hoeffler (1998, 2001) examined 60 civil conflicts since 1960, and concluded that political grievances and economic disparities do not convincingly explain the causation of civil wars. Rather, when unemployed, uneducated, young men are combined with natural resource abundance, rebellion presents itself as a favourable opportunity – that is, war is pursued to win resources, not vice versa. To what extent can these scholars' ideas undermine the current study's argument, that a variety of mining-related grievances caused conflict? Consider, for example, Claxton's (1998) allusion to 'disenchanted youth' within the ranks of the BRA. These were largely uneducated and unemployed Bougainvilleans living within the changing economic and political environment on the island, who laid destruction to government and NSP infrastructure upon the outbreak of hostilities. Here, it could be argued that the 'opportunity' made civil conflict the most profitable choice. Furthermore, the famous demands made by the BRA to the national government in 1988 included both K10 billion in compensation and 20% equity share in the mine (Böge, 1999, p. 220). This suggests that the rebel interest in the conflict did, in fact, involve economic assets.

However, the 'greed' theory is problematic in explaining the Bougainville case because the main natural resource in question – copper – requires skilled labour and technology to be acquired, and is not a particularly profitable mineral in small-scale extraction. As Regan (2003, p. 156) explains, 'neither the rebels nor the cause for which they were fighting profited from the mine during the conflict'. Since the conflict was inherently a separatist one from the BRA perspective, in many ways they envisioned a return to 'traditional' Bougainvillean society. In applying Michael Ross's ideas on civil conflicts, similar concerns arise.

Ross (2003, p.56) suggests that 'unlootable' resources (i.e. resources which require skilled

labour/technology for extraction) tend to cause separatist conflicts, because revenues usually accrue to the company and government (which monopolize the inputs), causing grievances concerning the distribution of wealth. Initially, this might seem to be the case in Bougainville (e.g. copper abundance led to separation), but Ross's particular idea also highlights the second problem with the 'greed' theory: the BRA sought (and succeeded in achieving) the mine's closure. While Ross recognizes the grievances associated with rent distribution, separation was premised on a much broader social foundation. Continues Regan (2003, p. 157), 'what is perhaps unusual when Bougainville is compared to other cases is the…rebel agendas supporting permanent mine closure'. Those who initiated the rebellion were perhaps motivated by a desire to seek new revenue-sharing agreements, which might have been to their benefit. However, many of the other demands made by the BRA in 1988 – ranging from employment and business opportunities, to improved mechanisms for monitoring environmental damage, to improvement of housing standards for resettled landowners (Böge, 1999, p. 220) – reflect the pursuit of socioeconomic and political justice; and once the mine was closed, this mission did not vary too much.

CONCLUSIONS AND PROSPECTS

On 30 August 2001, the Bougainville Peace Agreement was signed at Arawa between the national government of PNG and leaders representing the people of Bougainville. The agreement marked a climax in a series of peace talks between the two parties following a civil war (1988–1998) that devastated both the population of Bougainville and the economy of PNG as a whole. A sustained commitment to a solution began with the signing of an agreement at Lincoln University in New Zealand,[17] which provided for a Peace Monitoring Group (PMG) and the establishment of the UN Observer Mission on Bougainville (UNOMB). The chief tenets of the agreement signed in 2001 (Regan, pp. 151–152) were as follows:

(1) Provisions for increasing Bougainvillean autonomy
(2) A referendum on separation from PNG delayed for 10–15 years (after the election of an independent Bougainville government)
(3) A multistage plan for weapons disposal by former rebels and arrangements for a complete withdrawal of PNG security forces

In recent years, the issues surrounding mineral development and its dealings with social and cultural problems have changed dramatically. The 'New Reality of Mineral Development' has brought on the partnership alliance of government, industry, NGOs (national and international) and indigenous society, proposing, inter alia, that "issues of land tenure, indigenous rights, revenue sharing and alternative land use…are of far greater importance to national governments than they were in the past" (Clark and Clark, 1999, pp. 189, 190).

Bougainville, in its current context, holds serious potential for implementing this framework. Regan (2003, pp. 152–153) explains that the island's fiscal self-reliance is unlikely to succeed in the near term, based on its current agricultural subsistence economy. Neither is it probable that the PNG government will be able to allocate sufficient funding to support infrastructure and economic development in the years to come. This demonstrates the "critical role that mining can yet play in Bougainville's path to peace, development, and self-reliance".

A new framework must make reference to the detrimental legacies of the past, both colonial and post-colonial, and the recurring theme, repeated throughout this paper, of the potential for socioeconomic and political grievances. This 'New Reality' can be wedded to mineral development in Bougainville, premised upon three factors: recognition, participation, and dialogue. There is burgeoning desire within the indigenous community for renewed mining practices on the island, although with improved environmental management (recognition), a greater involvement of landowners (participation) and more equitable distribution of revenues (dialogue). Similarly, indigenous society must detach from the legacies of the past and recognize the needs *of* and *for* the state and industry. Moreover, they must utilize the potential of NGOs. If all parties can play their roles effectively, and achieve the basic steps, then the positive effects of mining can be exploited. Failure to accomplish this will demonstrate that Bougainville will be unable to recover from the grievances that led to civil war, and further the poor reputation that mineral development has in developing countries.

Examining conflict in Bougainville necessitates an historical framework, merely for an understanding of the social composition of the nation to which it belongs. When placed within the context of mineral development policy guided largely by the national government and BCL, it becomes evident how the social fabric in the region spiralled into several sociopolitical and socioeconomic grievances. Additionally, various theoretical perspectives assist in explaining the build-up to conflict, while others clearly cannot be applied. This paper has demonstrated that mineral development incompetence prompted widespread grievance on Bougainville, leading to civil conflict.

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Notes

1. In 1919, the Australian government appointed a Royal Commission to assess the political future of Bougainville. Interestingly, one member of the three-member Commission (Murray) recommended a joint administration of Papua, New Guinea and the Solomon Islands (including Bougainville) on the basis that 'the natives were of the same race' (Bennett, 2000, p. 75). This 'native protection policy' was largely a euphemism for the commercial labour interests of the time. More importantly, it was completely false: there is no common indigenous identity among the three regions. Though political unification occurred some thirty years later, Bougainville traces its attachment to the mainland through arbitrary, uninformed boundaries drawn by Germany, Britain and Australia.
2. Small-scale gold mining in the 1930s and a report by the Australian Bureau of Mineral Resources provided CRA with evidence that the mountainous region of central Bougainville was a prospective region for mining (see Quodling, 1991, p. 4–9).
3. Cited in Cooper (1992, p. 24). For more on the impact of the mine on the community at large, see Bedford & Mamak (1974), Denoon (2000) and May & Spriggs (1990).
4. For more on Navitu movement see Griffin (1982). Mungkas means 'blackskin' in the Telei language.
5. Professor Ogan's research offers a valuable account of Nasioi land tenure patterns and cultural characteristics. He undertook extensive fieldwork in the Aropa Valley from 1962 to 1964, and returned six times between 1965 and 1978.
6. Professor Douglas Oliver's anthropological research on Bougainville's sociopolitical development has spanned some 40 years, and he has spent a lifetime in the study of the Pacific peoples.
7. For example, the reformed agreement included an increased occupation fee, physical disturbance compensation, social inconvenience compensation, river and fish payments and village relocation responsibilities.
8. For more on community life before the establishment of the mine, see Oliver (1991, p. 96–106).
9. Filer and Imbun (2004, p. 1) 'define 'mineral development' as the process of extracting mineral resources from the ground and converting them into mineral commodities which are then traded in a market, thus generating *mineral wealth* for a variety of national and foreign stakeholders'.
10. Clause 26a of the BCA acknowledged that the parties 'shall meet together during the seventh year after and at intervals of seven years thereafter, with a view to considering in good faith whether this agreement is continuing to operate fairly' (Quodling, 1991, p. 25).
11. BCL was extremely successful in its first three years of operation (1972–75), during which the BCA allowed for a three year tax-free period. This was introduced, seemingly, as part of a larger 'investor-friendly' framework designed to attract investment in developing countries. Significantly, the prices of copper and gold spiked during this phase (see Ballard and Banks, 2003, p. 288), causing windfalls to accumulate to BCL. The renegotiation witnessed the transfer of these rents to the national government, a process that exacerbated sociopolitical tensions between province and federation.
12. Indeed, the immediate initiative of the self-governing House of Assembly was the renegotiation of the BCA. One of the 'triumphs' of the amendment was an allocation to landowners of 5% of all royalties distributed to the NSP. This number, however, still remained negligible given the environmental destruction (for assessment of these numerical values, see the 'royalties' data in Table 2 for NSP and landowners).
13. The data are converted to 2006 US dollars. They are significant on their relative values.
14. From the 1970s through to the 1990s, there was little support for a province-wide identity or for succession in Buka and north Bougainville. Throughout the conflict, the region served as a source of PNG national sympathizers. This should not undermine the sense of unity brought on by sociopolitical grievances (Regan, 2003, p. 141).
15. The Bougainville Copper Foundation (BCF), an attempt by BCL at local economic development, was incorporated in 1971 to make grants and donations for education purposes, assist and promote commerce and industry, provide medical welfare services and assist in the training in professional, agricultural, commercial and industrial skills. However, while created with good intentions, its activities were "widely viewed with

distrust and attracted adverse political comment''. Father Momis is noted for deeming it a 'public relations stunt' reflecting ''BCL's power and patronage'' (Quodling, 1991, pp. 43–45)

16. According to Claxton (1998, p. 92), the general anthropological conception of the Malenesian 'leader' is non-hereditary, non-chiefly and non-'big-man'. As described earlier, leaders did exist in Bougainvillean society; but they arose, rather then existed through patrimony. This is a qualification that a 'rediscovered' chieftain, more characteristic of ancient Fijian models, seemed to emerge.
17. The Lincoln Agreement was finalized on 9 February, 1998. See *The Lincoln Agreement on peace, security and development on Bougainville*, (http://www.hartford-hwp.com/archives/24/159.html).

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