

**Manufacturing compromise: a study of gendered labour
processes at a Chinese nickel refinery in Papua New
Guinea**

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A thesis submitted for the degree of Doctor of Philosophy of
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Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university. To the best of the writer's knowledge, it contains no material previously published or written by another person, except where due reference is made in the text.

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Abstract

A general perception exists about Chinese import labour practices, and gender ideas carried out at home, and that these practices and beliefs conflict with the values harboured by the communities and workers in Papua New Guinea (PNG). I argue in this thesis that both parties (Chinese and Papua New Guinean employees) learn to compromise and adjust to collaborate, upholding, in particular, the values and regulations developed during the Australian administration. Additionally, because most local employees are half subsistence farmers and half workers, indigenous cultural values continue to influence Papua New Guinean employees' understandings of work and modify Chinese management's behaviour. Due to the unfamiliarity with local culture and mining regulations, the Mandarin Chinese compound term *mohe* ('friction and cooperation') encapsulates the different stages of work relations in this ethnic enclave where the Chinese and PNG states are absently present. In the process of learning to work together, Papua New Guinean and Chinese employees' experiences as refinery workers are results of how they negotiated with past understandings and conceded to new work situations. Because of their intercultural work experiences, refinery employees' reconfigurations of gender identities, including masculinities, are also impacted by the compromises they make throughout their employment.

List of Abbreviations

Chinese multinational companies (CMCs)

Ganglau landowner company (GLC)

Highlands Pacific Limited (HPL)

Metallurgical Corporation of China Limited (MCC)

Mineral Resources Authority of Papua New Guinea (MRA)

National Catering Service (NCS)

Papua New Guinea (PNG)

Ramu NiCo Limited (RNC)

State-owned enterprises (SOEs)

The People's Republic of China (the PRC)

Glossary

<i>Bilum</i>	Net bag
<i>Chenggong man</i>	Successful man
<i>Chiku</i>	Endure adversity and work hard
<i>Chuanbangdai</i>	Transferring, assisting and leading
<i>Gutpela man</i>	Good man
<i>Harim tok</i>	Following orders
<i>Hausboi</i>	Young men's house' or male domestic staff'
<i>Hausman</i>	Men's house or male initiation
<i>Kamapim</i>	Become
<i>Kamapim gutpela man</i>	Become a good man
<i>Kapul</i>	Tree wallaby
<i>Mohe</i>	Friction and cooperation
<i>Wantok</i>	Friends, family or relatives
<i>Wok long taim</i>	Working on time

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Chapter 1 Introduction

1.1 Background research

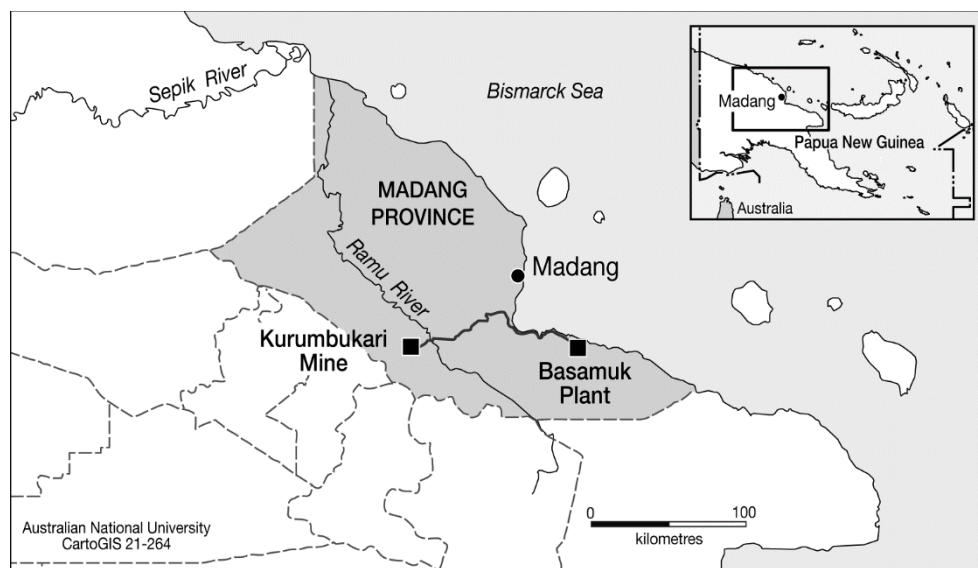
In 2010, seventeen Foxconn workers in Shenzhen, People's Republic of China (PRC), committed suicide by jumping off the facility's roof. To record this horrible event, one of my Taiwanese friends, an independent documentary filmmaker, created *Robot Somnambulism*, a film that delved into the lives of employees who worked on the iPhone 4. According to an activist in the documentary, one of the key reasons was the exploitative production method that caused people to overwork. Workers relocating from rural areas accepted overworking to improve their families' lives back home and ensure a chance to stay in the city. "Do employees give consent to overworking?" a former smartphone engineer, whose friend died from overworking, asked at the end of the film. "Yes, since their bosses do not threaten them with a gun. Although they acquiesce to overworking, today's difference is the concern for employees' rights." After watching this film, I was left wondering whether working conditions in the overseas factories of Chinese multinational companies (CMCs) were as coercive as they were in the PRC. I had also developed an interest in researching workers' stories as CMCs increasingly became major operators of the mining of developing countries.

During my master's degree at the New School for Social Research in 2014, I wrote a research proposal on Chinese overseas mining activities to investigate work relations in CMCs' foreign projects. I discovered a Chinese mine, the Ramu Nickel mine, in Madang Province, Papua New Guinea (PNG), which was and is the biggest Chinese overseas investment in the South Pacific. This mine, which finished construction in late 2012 and began production soon after, consists of the Basamuk refinery, a 135-kilometre pipeline and the Kurumbukari mine (see Map 1-1). This mine was managed as a joint venture project by a CMC, Ramu NiCo (RNC), collaborating with Canadian and Papua New Guinean shareholders.¹ This mine, in my opinion, was an excellent case study for the next stage of the PRC's engagement with the rest of the world, as it transitioned from a world factory to one of the world's significant capital and technology exporting countries. To me, understanding capital–labour relations in the

¹ RNC owns 85 per cent as a shareholder; Conic Metal, a Canadian company, holds 8.56 per cent after buying from the prior Australian owner Highlands Pacific Limited; and the PNG government and landowners respectively own 2.50 per cent and 3.94 per cent.

Chinese overseas factories necessitates a shift away from conventional studies of East–West and North–South encounters and towards encounters between Chinese and other ethnic groups as CMCs expand their operations in developing countries. Based on these considerations, I chose this case as my fieldwork location. I expected work relations in this extractive investment to reflect a cultural cauldron that had not been investigated in previous ethnographic studies.

Map 1-1 The Ramu Nickel mine



Source: ANU CartoGIS

After receiving a fieldwork grant, I travelled to Madang and spent over a month living in a displaced highland community, Enekwai, near the Kurumbukari mine. At the time, I made efforts to study local culture by participating in people's everyday lives. A week before I said my final goodbyes to my host family, a group of armed young men from Enekwai attacked the mine, set fire to nine excavators, one fuel tank and one lighting vehicle, and harmed five Chinese employees. This incident profoundly affected my connections with village residents. Several individuals raised concerns about my potential connections with Chinese employees after the strike due to my Asian appearance. Others expressed frustration at not benefiting from the mine's operation (e.g. delayed royalty payments and job opportunities). Facing this situation, my host family explained my positionality to others to guarantee that I could depart without trouble. When the day of departure arrived, I boarded a community van with other

rural residents bound for Madang town. The atmosphere on the route was very different from prior encounters, as most passengers remained silent for the duration of the four-hour journey. As we approached Madang town, a news broadcast highlighted this incident, stating that the type of development brought about by this mine was not what the people of the impacted area desired. That evening, I wrote in a field note that I wondered if this was a regular occurrence in CMCs' overseas projects. This event further heightened my concern for the plight of workers at the Ramu Nickel mine.

Figure 1-1 A meeting in Enekwai after the 2014 strike



Source: Photo by the writer

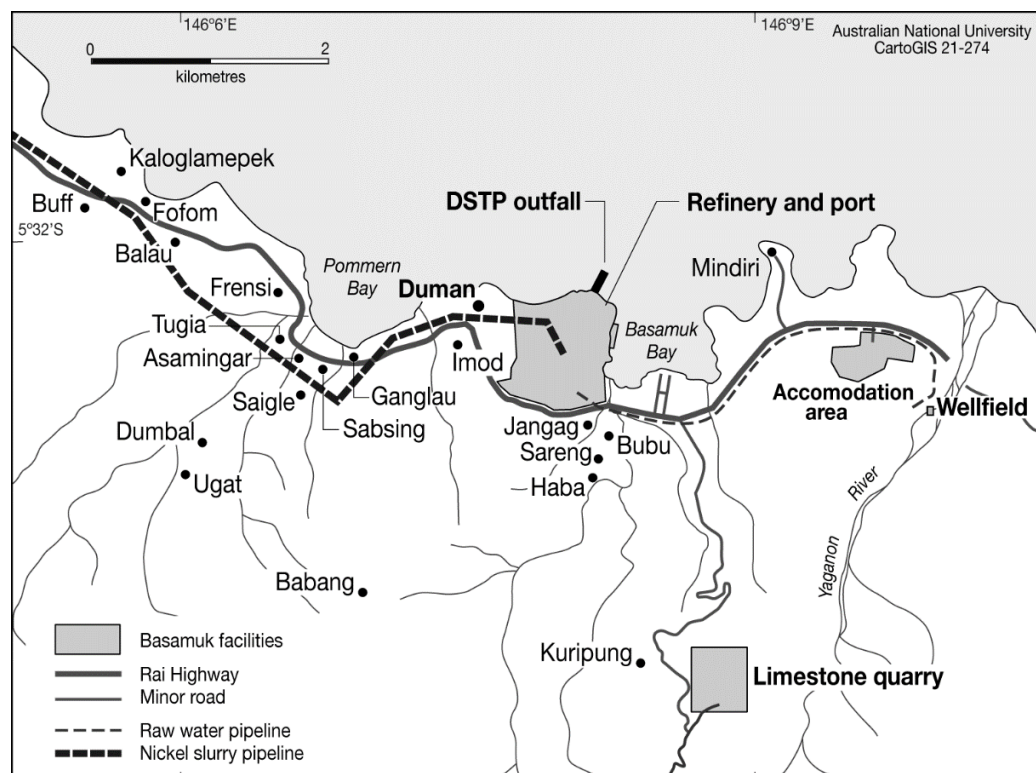
Three years after the preliminary research, I began my second fieldwork, a three-month visit to explore local people's perceptions of the refinery's environmental impact (Kuo 2020). I chose an impacted coastal community, Mindre, near the Basamuk refinery, for this project in 2017. While lodging with a local non-government organisation, the Bismarck Ramu Group, I met a Papua New Guinean employee active in the Ramu NiCo Allied Workers' Union's negotiations with RNC. In 2019, while conducting thesis fieldwork in another impacted coastal community, Duman, near the refinery (see Map 1-2), I was introduced to a former union chairman during a soccer tournament. According to the chairman, the trade union spent six months in 2017 in Madang finalising an industrial award with the RNC and an official from PNG's Department of Labour and Industrial Relations. Based on my observations

during the 2014 strike, I realised that this industrial award represented the Chinese management's concession to Papua New Guinean workers following years of industrial struggle during the construction phase (e.g. the 2009 strike in Basamuk). This situation reminded me of Imbun and Morris's (1995) description of the Porgera Allied and Mine Workers Union's effort during the Porgera dispute in the early 1990s to reach an industrial compromise with the Canadian operator of the mine. This industrial award also demonstrated the critical role of trade unions in dealing with international mining companies in PNG. These reflections suggested that labour relations at the Ramu Nickel mine may differ from those in the PRC, where the union was a state-led alliance.

Additionally, Imbun (2000) states that local employees demonstrated a lower level of interest in worker unions than migrant workers, owing to their ties to landowners who employed residents of impacted communities.² According to Imbun, local employees considered joining a trade union an anti-employer move, which reduced their enthusiasm for unionisation. However, one aspect of my experience set it apart from Imbun's observation. In the case of the Basamuk refinery, instead, local workers from impacted communities were instrumental in establishing the trade union. Except for advising local workers in the impacted area, Papua New Guinean migrant workers from other provinces played a minor role in unionisation due to their awareness of the Chinese management's hostility towards the trade union. Local employees, particularly those with leadership abilities, took over the trade union to bargain with RNC, risking their job security in the process. Because they were half subsistence farmers and half workers, they could continue leading the community and supporting their families even if RNC dismissed them.³ These findings demonstrated the crucial role of the trade union in assisting local employees in pursuing their interests.

² The term "landowners" in this thesis refers to the relationships of Papua New Guinean employees with landowners rather than the dual identities of Papua New Guinean employees as refinery workers and landowners. This distinction was made because Bainton's (2017) study on migrant labour and local landowners in the Lihir gold mine found that most landowners prefer to have business contracts rather than perform the actual work. Although my thesis does not address the situation in which refinery employees are also landowners, the landowner is still a critical background factor that distinguishes the situation in the refinery from mining activities, particularly in other developing countries. Similar to my assessment of the Chinese manager as an agent of Chinese capital, the impact or exercise of landowner power is reflected in the behaviour or attitudes of Papua New Guinean managers. As a result, landowners must still be considered in Papua New Guinean refinery employees' negotiations with, and concessions to, Chinese employees.

³ My description of male Papua New Guinean refinery workers as half subsistence farmers and half workers does not imply that these are the only economic activities in which they engage. Some may also dive and fish with fishing guns, construct canoes for fishing and sell fish to Chinese personnel at the local market. In addition, some may use their income and funds from family members to open trade stores that sell goods from Madang town to refinery employees and locals. Their families may also cultivate tobacco and vanilla as cash crops. My thesis focuses primarily on subsistence farming and refinery employment because these economic activities are two of the most influential factors in the workplace adaptations of Papua New Guinean employees and Chinese staff.

Map 1-2 Duman village and the Basamuk refinery area map

Source: ANU CartoGIS

1.2 An imposed industrial system where the state is absently present

The trade union's engagement reflects a threefold industrial relations framework (employer, workers' association and state) that had originated in PNG during the Australian colonial period. According to Imbun's (2016) labour market analysis and Hess's (1992) unionisation study, this tripartite system reflects the 1960s transition from coercive indentured labour to a modernised Australian-style industrial relations system. During the same period, Imbun (2017) adds that capital-labour relations in PNG also shifted from adversarial to collaborative, owing to the absence of the PNG government in remote mining sites.⁴ Because of this transition, Imbun emphasises that international employers and Papua New Guinean employees should view one another as significant others to meet each other's demands – the former require the permission of local communities to operate the production, while the latter

⁴ In this thesis, the PNG government refers to the national government of Papua New Guinea. Similarly, the Chinese government refers to the Chinese state government.

require job opportunities and services provided by the company (Imbun 2007). Regarding CMCs' increasing footprint in PNG, Imbun maintains that CMCs, including RNC, must respond to the needs of Papua New Guinean employees because their capacity to unionise is supported by the PNG government (Imbun 2017).

Partially differing from Imbun's view, I suggest that the PNG state's limited presence contributes to the unique partnership between multinational mining corporations and Papua New Guinean personnel. Differing from perspectives that attempt to position the state along a spectrum of presence and absence, the state's role in the encounter between Chinese and Papua New Guinean employees in the Ramu Nickel mine reflects the state's absent presence. According to Bainton and Skrzypek (2021), the physical absence of the state demonstrates that the state's effect is not always contingent upon active engagement or direct intervention. Rather, the failure to provide services to impacted communities and the inability to enforce regulations indicate a distinct state presence that reminds Papua New Guinean employees of the critical nature of fighting for their rights (e.g. unionisation). This point of view corresponds to one explanation I heard in Mindre in 2017 regarding the outbreak of the 2009 refinery strike. According to a local interlocutor, the strike was directed not only at the Chinese management but also at the PNG state despite it having a limited physical presence at the refinery (Main 2021).

Additionally, given the acceptance and renewal of the mining lease and the mine's social licence, we can see why the PNG state continues to act as a gatekeeper in allowing mining operations to begin. As mines go through various stages, the state's relevant legislation and regulations affect employment relations within the refinery. These variables demonstrate that the state is absent from the workplace yet is present during the industrial relations and mining contract negotiations. In other words, the institutional involvement and legislative authority of the PNG state make it necessary for Papua New Guinean personnel to improvise on the ground in ways that differ from previous scholars' perceptions of the state's absence.

Similarly, the absent presence of the Chinese state affects RNC's behaviour at various stages of mining. During the construction phase, infrastructure work was delegated to many provincial-based Chinese companies. At the time, signing the agreement informed the RNC management that this mine fell within the Chinese state's *zouchuqu* ('going-out') policy and

thus, the mine's success determined the PRC's long-term resource security (Smith 2012b, 2018). RNC became the primary operator after the construction was completed in late 2012, at which point it realised that the situation had deviated from its previous expectations. RNC management discovered that the Chinese state provided little aid in operating the business and resolving staff conflicts (Smith 2013). Additionally, the Chinese employer became aware of the militancy of Papua New Guinean employees during the breakout of strikes in 2009, 2014 and 2016. Following the formation of the trade union by local employees, the Chinese management also recognised the assertiveness with which Papua New Guinean workers sought to pursue their interests. These facts demonstrate that the climate for conducting mining operations in PNG is markedly different from that in the PRC.⁵ Because this mine is related to China–PNG relations, the absent presence of the Chinese state pushes RNC management to improvise, to modify previous practices and ideas and to concede to local regulations.

Chinese management must overcome another misconception about employment relationships to collaborate with Papua New Guinean employees. According to Filer (2021), Papua New Guinean landowners view their relationships with foreign mining companies as a form of landlord–tenant relationship. On the other hand, foreign mining companies see their relationships with landowners as patron–client relationships. Bainton (2021) characterises this situation as one of mutual incomprehension, noting that their misunderstandings are reflected in different ideas about development and landowners' awareness of the need to demonstrate their power in order to remind the company to involve them.⁶ According to Bainton and Macintyre (2021), foreign mining companies must also play a state-like role in delivering services to impacted communities that the PNG government cannot provide. These findings show that the RNC must recognise the rights of local employees and landowners and respond to their needs to work with them. To take on a state-like role, RNC must also change its behaviour, which differs from those practised by state-owned enterprises (SOEs) in the PRC.

⁵ According to Smith (2013), some senior Chinese managers stated that their work experiences in the refinery during the construction phase were similar to their earlier work experiences on the PRC's borders (e.g. Tibet and Xinjiang). My thesis expands on Smith's studies to show how work relations at the refinery are evolving and how Chinese employees' attitudes and behaviours have changed after working alongside Papua New Guinean colleagues for many years.

⁶ This chapter defines power as the ability to command people, acquire their obedience, intervene in their freedom and compel them to act in a certain way (Fairchild 1944).

Because RNC is unfamiliar with local practices and the state-like role, this situation deepens its need for partnership with Papua New Guinean employees to run this mine.

1.3 The China threat and the China alternative – research questions

Although the state is not directly involved in most mining operations in PNG, the mining sector has long been critical to this country's economy. According to Mineral Resources Authority of PNG's *Mining and Exploration Bulletin 2018*, there were six operational mines in PNG: Ok Tedi copper and gold mine, Porgera gold and silver mine, Hidden Valley gold and silver mine, Lihir gold and silver mine, Simberi gold mine and RNC nickel and cobalt mine. Additionally, according to the PNG Extractive Industries Transparency Initiative's 2019 report, the extractive sector (mining, oil and gas) accounted for 88 per cent of total exports, 26 per cent of GDP growth and 28 per cent of GDP in 2019. These statistics demonstrate that the mining industry made a sizeable contribution to the national economy in PNG.

The PRC has steadily become a prominent investor in PNG's mining industry over the past two decades. PNG exports of minerals to the PRC climbed at an annualised rate of 16.8 per cent during the last 24 years, from US\$ 67.5 million in 1995 to US\$ 2.82 billion in 2019 (OEC 2019). The PRC was ranked as PNG's second-largest export partner (25.5 per cent), trailing Australia (25.8 per cent) but ahead of Japan (21.6 per cent). Additionally, when we examine the products sent by PNG to the PRC in 2019, we can notice that mineral resources account for the majority of exports, including petroleum gas (49.2 per cent) and nickel mattes (19 per cent) (OEC 2019). Since the Ramu Nickel mine began production in 2013, nickel mattes, the refinery's intermediate product, has continuously ranked as PNG's second or third largest export to the PRC. These statistics suggest that the PRC is edging closer to becoming PNG's primary export partner. Additionally, these findings highlight the importance of PNG's mineral resources in sustaining the PRC's economic growth and the two countries' economic and resource complementarity (Wei et al. 2013; Zhang 2016).

Confronted with the PRC's growing prominence in PNG's mining sector, I note that current research on China in the Pacific has primarily focused on the Chinese state's recent arrival and the Pacific countries' reactions to its expanding influence. Two distinct ideas emerge

from these studies – the China threat and the China alternative. According to researchers who write about the China threat, CMCs' growing operations in the South Pacific reflect the Chinese state's intention to displace established Western powers (e.g. Australia and the United States). For example, Henderson and Reilly (2003) argue that the decline in engagement between Pacific states and the U.S. following the Cold War creates a vacuum for the PRC to fill as a new Asia-Pacific regional power.⁷ Reilly (2016) takes the same approach to understand democratisation in Southeast Asia, arguing that the Chinese government intends to export its autocratic development model to swing states geographically close to the PRC (e.g. Burma, Thailand and Vietnam) to counteract the United States' alliance in this region and rebuild the tributary system originating from the Ming dynasty.

Another viewpoint highlighted by Henderson and Reilly (2003) that exacerbates the situation is the Pacific nations' inability to deal with the Chinese state. Melanesian societies appear to these experts to be intrinsically split and unstable. This political and social insecurity erodes the Pacific governments' capacity to deal with challenges such as ethnic strife, corruption and political violence. Given the Pacific states' fragility, they observe that Pacific leaders cannot play the political game with the mighty Chinese state. Likewise, Reilly (2016) claims that increased economic ties with the PRC will make it difficult for multiethnic countries like Thailand and Burma to exercise autonomy over their foreign policy and democratic transitions. Faced with the emergence of the autocratic PRC, Reilly (2020) contends, the Australian government must re-emphasise democratic values in its diplomatic connections with Pacific states to guarantee the region's geopolitical stability.

Disagreeing with the China threat story, an increasing number of experts are adopting a neutral stance in response to the PRC's expanding profile in the South Pacific. For example, Porter and Wesley-Smith (2010) suggest that Henderson and Reilly's perspective is based on the inaccurate premise that the Chinese state is a monolithic and single-minded actor. Rather, Porter and Wesley-Smith observe that several Chinese prime ministers and politicians have shaped the Chinese government's foreign policy over time. Additionally, they stress that the PRC's current foreign policy is better viewed as a decentralised and evenly balanced world system rather than a militant approach. Porter and Wesley-Smith claim that the PRC's

⁷ Crocombe (2007) made a similar argument about Asian countries displacing Westerners by emphasising the long historical relationship between Asia and the Pacific.

membership in multilateral organisations and extensive bilateral contacts with South America, South Asia, Africa and the South Pacific countries reflect the Chinese state's commitment to cooperative international relations. Finally, in addressing the Pacific states' fragility, Wesley-Smith (2010) cites the Republic of Kiribati's 2003 decision to terminate its diplomatic relations with the PRC as evidence of its ability to act firmly and forcefully with the Chinese state.⁸

Furthermore, Wesley-Smith advocates for a new perspective on China's rising activities in the South Pacific. Rather than viewing China's expanding presence as a replacement for the U.S., Wesley-Smith (2010) claims that the United States' allies, including Australia, New Zealand, Japan and the European Union, have been enhancing relations with and providing aid to Pacific states. Furthermore, the author observes that aid from these countries is based on a set of neoliberal economic principles that compel Pacific states to maintain political stability, accountability, efficiency and transparency. The author notes that some Pacific state leaders do not entirely believe in the expected outcomes of complying with these political and economic reform agendas. He also claims that some data (e.g. World Council of Churches 2001) indicate that more integration into the global economy may exacerbate poverty. As a result, Wesley-Smith maintains that the PRC's growing involvement provides Pacific states with additional options to development in addition to relying on their traditional partners (Wesley-Smith and Smith 2021).

These opposed perspectives demonstrate that two distinct groups of researchers view the Chinese state differently – the China threat scholars tend to view the Chinese state as a monolithic actor, whereas the China alternative scholars tend to view the Chinese state as a collection of different actors. Additionally, the two groups of scholars have divergent views on the Pacific states: those who view the PRC as a threat tend to regard the Pacific states as disempowered victims, while those who view the PRC as an alternative tend to regard them as possessing and exercising agency in their dealings with external actors like the PRC. By examining their positions, we can see that the China threat researchers' positions are predicated on the strong–weak state binary, which my study seeks to avoid. According to them, the Chinese state is far too powerful for the Pacific's weak states to cope with. This

⁸ The Republic of Kiribati re-established diplomatic relations with the PRC in 2019, replacing diplomatic relations with Taiwan. Once again, this case highlights the Pacific states' capacity to engage the PRC to achieve their desired futures.

perspective does not effectively explain how RNC operates the mine in PNG or the evolving work relations between Chinese and Papua New Guinean employees. Instead, the China alternative perspective is more nuanced approach that acknowledges that the Chinese state is not a monolithic entity, and that ‘weak’ Pacific Island states are able to exercise agency in their dealings with ostensibly ‘strong’ states and other powerful entities like transnational corporations. As a result of these considerations, my thesis is more inclined to follow the China alternative argument’s course.

Additionally, China alternative scholars dispute the existence of a Chinese development model as argued by those who see Western models of development being displaced by a Chinese or Asian model. Crocombe (2007), for example, claims that Asian countries, including the PRC, will inevitably supplant Western countries in the South Pacific due to their better corporate investments (e.g. fishing, forestry, hotels and retailing), faster economic growth and capacity to offer aid. Rather, Smith and D’Arcy (2013) disagree with the notion of a China model, which presupposes that the Chinese state is actively guiding its investment, aid and multinational firms in the South Pacific.⁹ According to Smith (2012a), the Chinese embassy in Port Moresby is understaffed, not to mention incapable of directing the operations of CMCs’ businesses in PNG. Concerning the Ramu Nickel mine, Smith and D’Arcy (2013) assert that we need studies to ascertain how RNC operates locally, including adapting to local norms and adhering to host country legislation (see also Smith 2013).

Indeed, Smith and D’Arcy have identified a research gap regarding the activities of CMCs in PNG. I suggest that studies on CMCs’ adaptations in PNG are better situated in a postcolonial framework to address this gap. The operation of the Ramu Nickel mine in postcolonial PNG demonstrates that employment relations are not limited to Chinese and Papua New Guinean personnel. Instead, as stated earlier in this chapter, the Australian-imported industrial system and regulations continue to play an essential role in shaping work relations in CMC-owned and operated mines. This unique threefold interaction demonstrates that Chinese

⁹ My thesis does not deny that the Chinese government might have learned to devise certain tactics for managing its geoeconomic ties with Pacific Island governments based on its sponsorship of research institutions and projects (Connolly 2020; Zhang 2020). My thesis, however, is still cautious about arguing for the formation of a Chinese development model. In my opinion, this concept exists largely at the official level, as advocated by the Chinese government in its diplomatic interactions with developing nations (see Varrall 2014). In terms of the day-to-day running of businesses, however, there are regional differences in the PRC. Foreign companies (such as the Taiwanese manufacturing factory mentioned in the beginning) have also contributed to varied management styles in Chinese firms (more discussions in Chapter 2).

management's adjustments in PNG are double-sided: adaptation to the Australian-style industrial system and adaptation to the cultural values of Papua New Guinean employees. Additionally, Papua New Guinean employees must make two adaptations: they must adapt to the Chinese work ethic while also reflecting on practices and attitudes impacted by Australian-style industrial system. This situation is consistent with Nelson's (2007) assessment that, while the CMC is becoming a significant participant in PNG, Australians continue to play a critical role.¹⁰

Recognising this threefold relationship, I propose that we avoid viewing the Ramu Nickel mine's operation as the introduction of a Chinese model of development or capitalism with Chinese characteristics, as these two perspectives are based on Chinese exceptionalism and do not contribute to the examination of mutual dependence and influence between Chinese and Papua New Guinean employees in postcolonial PNG. As Chan (2015) demonstrates, the concept of Chinese labour exceptionalism reflects only the enormous size of migrant labour in the PRC and does not help explain how Chinese SOEs incorporate foreign experiences, such as inviting trainers from Australian unions to impart their collective bargaining experiences in the mid-1990s. In terms of CMCs' mining activities in PNG, as my research shows, the Chinese management's behaviour is more influenced by negotiations and concessions with local actors and is not simply about imposing a new system, as CMCs' methods of conducting mining activities are not deemed to be best practice by Papua New Guinean personnel.

Additionally, I suggest that we avoid identifying this mine as an instance of neo-colonialism or neo-imperialism, as both perspectives presuppose that the Chinese government controls CMC's overseas operations to compete with and eventually replace Western countries (Lee 2017; Yan and Sautman 2013). As Lee (2018) demonstrates, the Chinese state is absent from CMCs' mining operations in Zambia, although it reminds CMCs that their operations are intertwined with China–Zambia relations (see also Kernén and Lam 2014; Sautman and Yan 2014). Similarly, the threefold relationship (Chinese, Papua New Guineans and Australian impacts) of managing mining businesses in PNG suggests that what is happening on the

¹⁰ This chapter defines work ethic as the value placed on labour by those who perform it. By executing work in this manner, labour can accomplish a personal objective, while the manager can maximise productivity from the workforce (Scott 2015).

ground depends on CMCs' abilities to navigate complex local conditions and is beyond the Chinese state's control (Smith 2012a).

I argue that the study of labour processes emphasising the workplace can shed new light on how CMCs localise and adapt to different contexts in PNG in order to become the partner of various communities (for example, the Gende people impacted by the Ramu Nickel project and discussed in Zimmer-Tamakoshi, 2014).¹¹ Chinese and Papua New Guinean managers play crucial roles in this process because the former serves as the agent of Chinese capital, while the latter serves as the agent of local landowners who both have the ability to influence the capitalist labour process (Burawoy 1979: 23). In other words, the emphasis of the labour process analysis in my thesis is on the interactions and relationships between managers and workers from the two sites rather than on Chinese capitalist class and local employees.

Additionally, the Basamuk refinery, one of two sites within this mine, offers opportunity to examine work relations and worker identities rather than the Kurumbukari mine site because a coconut plantation operated in the exact location during the Australian colonial period (Burton, 1999). The refinery also hires the greatest number of employees compared to RNC's office in Madang town and the Kurumbukari mine. These considerations demonstrate that the Basamuk refinery is an ideal case study for examining the experiences of Chinese and Papua New Guinean personnel in postcolonial PNG.

My selection of the refinery as a fieldwork location also inspires me to pose four research questions that serve as the framework for this thesis: How can Chinese and Papua New Guinean workers learn to collaborate in a postcolonial context where Australian-style industrial ideologies and practices persist? Is there another ideology that arose during the colonial era that continues to impact interactions between Chinese and Papua New Guinea personnel, other from industrial legacy? How do Australian-imported gender stereotypes and subsistence farming-based cultural values co-influence Papua New Guinean employees' perception of occupations and work relations with Chinese employees? How do intercultural work experiences instil new conceptions about male identities in the Chinese and Papua New Guinean workers?

¹¹ Rubbers (2022) emphasises the value of researching the application of mining companies' labour policies, new categories of mine employees, and the variety of tasks performed by the workforce in his review article about mineworkers. Therefore, my dissertation's emphasis on analysing labour processes is consistent with this advocacy.

1.4 An impacted village in postcolonial Papua New Guinea – research site

My dissertation investigates work relations and worker identities at the Basamuk refinery. According to information provided by a Chinese manager, the refinery employed approximately 300 Chinese workers and 600 Papua New Guineans.¹² RNC, Raibus Limited (the main national contracting company, which had subsidiaries in engineering, security, housekeeping and national catering) and three local landowner firms (Ganglau landowner company (GLC), Baleng clan company and Kusup Family Contract) are the refinery's three major employers. There were also five types of workers employed in RNC's seventeen different departments: local-hire (LH), national-hire (NH), Chinese employees, local contract workers and foreigners.¹³

Local-hire (LH) was the term used to describe RNC Papua New Guinean employees from local communities who did not have secondary education (usually at least grade 10) or work experience. RNC Papua New Guinean employees with a college or university education, necessary work skills or expertise, and not native to the impacted area were referred to as national-hire (NH). A few NH employees from the impacted area were classified as 'LH', working and being paid in the same way as NH employees, but without the allowance paid by RNC to purchase plane tickets to return home. Because of the similarities between these 'LH' employees and NH employees, I classified them as NH. Furthermore, many Chinese employees were senior Chinese managers and workers with high school education and relevant work experiences gained while working in a zinc processing plant in Huludao, Liaoning Province, northern China. There were also some junior Chinese workers who had a university education but no prior mining experience. Employees of three landowner companies were referred to as 'local contract workers'. Finally, foreigners were non-Chinese managers and non-Papua New Guinean (for example, Australians) who worked in the refinery. Because of the refinery's proximity to Madang town, RNC decided to build a township to accommodate the Chinese, Papua New Guinean and foreign personnel, rather

¹² According to Smith (2013), the refinery staff was around two-thirds Chinese employees and one-third Papua New Guinean during the construction phase. The proportion of Chinese employees compared to Papua New Guinean employees is thus reversed throughout the production phase.

¹³ These seventeen departments are high-pressure acid leach, acid plant, counter-current decantation, lime plant, mobile equipment, instrumentation, fixed equipment, training, administration, warehouse (wharf), water pump, power plant, safety, maintenance, lab, human resources departments and community affairs.

than using the fly-in-fly-out system as the previous Australian owner, Highlands Pacific Limited, had planned (Highlands Pacific Group and Nord Pacific Limited 1998).

Due to RNC's refusal to offer me access to the refinery, I chose to conduct fieldwork in a nearby impacted village, Duman (see Map 1-2 above). Duman was an ideal hamlet for this project for a variety of reasons. To begin with, Duman's location provided numerous opportunities to meet and speak with Papua New Guinean labourers at the refinery. To ensure my safety, interactions with Papua New Guinean workers sometimes occurred at night or during workers' breaks at the *hausboi* ('young men's house') in Duman. During work hours, Duman's proximity to the refinery enabled me to visit the local market daily to meet with female vendors and residents of neighbouring villages and seek interview opportunities. Second, staying in Duman allowed me to engage with Papua New Guinean employees' after-work activities, including gardening, cooking, fishing, marriage ceremonies, launching a trade store, land mediation gatherings, house construction and soccer tournaments. Participating in these events provided valuable insight into how villagers' economic and social life affect their perceptions of jobs and work relationships in the refinery. Finally, being among the Duman enabled me to see interactions between the Chinese employees and their Duman acquaintances. These experiences further demonstrate the connection between employees' lives in the village and their job experiences.

Duman was also distinguished from other impacted communities by their ancestors' prior involvement in cash crop planting, migration to the coastal region and participation in the coconut plantation during the colonial era. Prior to the 1960s, the Duman ancestors lived in the inland village of Orinma, trading with coastal villages such as Ganglau and Mindre by bringing bowls and bark cloth to the coast and returning with fish, salt, dry coconuts and pots (Lawrene 1964). Moore (2003) describes these trade relations as a sub-trade system of the Bilbil, a trading system that operated between Astrolabe Bay and Karkar Island in Madang. He notes that, for thousands of years, these trade relations were the foundation of the locals' social infrastructure (2003: 45). Moore also mentions the formation of trade pidgin languages such as *Tukang Besi*, a trade language used in south-west Sulawesi, as a result of trading activities. Similarly, Ballard (1994) states in his study of trading relations in the Huli community of Papua New Guinea that trading activities reflect the mobility of locals and the malleable nature of the Huli social structure (1994: 140). Although trading relations between

the Orinma and coastal communities deteriorated during the Australian administration, according to colonial patrol reports, these findings support the Orinma people's capacity for interpersonal connection and language acquisition.

In the 1960s, an Orinma male leader purchased land known as Duman along the coast to manage a coconut plantation to increase his community's earning potential. 'Duman' was uninhabited before the 1960s and referred to a land that had not been developed and was owned by the Baleng clan in Ganglau village, near the Evangelical Lutheran Basamuk plantation. At the time, Ganglau residents managed coconut plantations and employed inland residents as seasonal employees to harvest. To the inland inhabitants, this intermittent employment provided opportunities to develop skills and earn pocket money to purchase Western products (e.g. salt, sugar, rice and canned meat) unavailable in the inland region. In 1962, a male *luluai* ('colonial village official') named Yambel from the inland hamlet of Orinma considered changing this relationship and acquired access to the Duman land through his sister's marriage to the Baleng clan. Yambel also converted to Christianity and acquired the skills necessary to work on a coconut plantation due to his experiences attending a church boarding school on Karkar Island. By bringing his brothers and sons to Duman, Yambel taught people to clear large areas of forest and prepare the area for house construction, garden creation and coconut tree planting. As a pastor, Yambel was also involved in administering the Lutheran Basamuk coconut plantation, including recruiting inland labourers.

During the Orinma people's relocation to Duman, the Australian administration introduced another cash crop, Robusta coffee, to this region. Australian *kiaps* ('colonial patrol officers') witnessed the acquisition of Duman land and the migration of the Orinma people by visiting villages to conduct census and collect head taxes. According to colonial archival patrol records, the Orinma people migrated to the coastal area in the 1960s as part of the interior people's migration seeking access to money-making opportunities and Western influences. While some *kiaps* characterised the inland region as backwards, they were impressed by Yambel's leadership and determination to learn how to plant coffee. The Ganglau people were considered slothful because they demonstrated a lack of enthusiasm in coffee growing and expanding the size of coconut farms (Muskens 1958/59). Apart from employing inland people to work on plantations, the *kiaps* stated that the Ganglau people spent most of their

time idle.¹⁴ To illustrate the distinctions between inlanders and coastal people, one *kiap* named Simmins wrote in 1963 that inlanders' future looked promising because they were attentive in cash crop planting, road development and colonial governance support (Simmins 1962/63).

Colonial *kiaps* also documented Yambel's involvement in the Lutheran Basamuk plantation. According to them, the Basamuk coconut plantation was overseen by an Orinma foreman and was used to produce copra for shipment to Madang town and overseas from there. According to Simmins's description, the Orinma people were mission-oriented, and the Basamuk plantation was a place for individuals from the Yaganon census division to work as casual labourers for one or two months to make pocket money (Simmins 1962/63). According to another *kiap* called G. E. Bailey, this plantation was the only one in the census division considered developed or on the verge of development. "The people who are involved in this development come from the MEIBU–ORINMA area," Bailey wrote to explain his viewpoint. "The original coastal inhabitants have done little to exploit their lands and continue in this vein with the exception of some new planting around MINDIRI [now Mindre]" (Bailey 1969/70, no page number). Sharing a similar viewpoint, Simmins described the Orinma people as entrepreneurs, noting that the *luluai* of Orinma represented a new type of 'strong man' who differed from a traditional type of big man in that he recognised the need for change and sought to lead people to the progress directed by Westerners (Simmins 1962/63).

Reading these patrol reports informed me that the Orinma people's interactions with *kiaps* and involvement in cash crop planting shaped the Duman people's contemporary conception of development. According to his son, Yambel's move to Duman and engagement in the Basamuk plantation and coffee planting aided in developing the Ganglau area. He explained that before his father's arrival, the Ganglau people lived in the past, believing in black magic but unable to comprehend God or plant coffee. This case reveals how the conversion to Christianity and interactions with the colonial *kiap* influenced Yambel's son's perspective about development. Additionally, this case shows that the new cash–crop planting initiated by *kiaps* was not a purely economic phenomenon. The Orinma people acquired colonial concepts of development and time (e.g. tradition and backwardness) through their participation in

¹⁴ The different attitudes between the Ganglau and Orinma peoples towards coffee planting mainly resulted from the former's opportunity to gain money (the ownership of coconut plantation), which the latter was denied. As a result, the Orinma people demonstrated a greater interest in coffee cultivation and collaboration with the colonial authorities.

coffee planting (Tuinamuana and Yoo 2020). While most of the Australian *kiaps* had departed before PNG's independence in 1975, these beliefs remained to shape contemporary Duman people's views on development.

Additionally, patrol reports on the Orinma people's engagement in coconut plantation and cash crop planting during the 1960s and 1970s indicate that the Lutheran church and Australian *kiaps* had different understandings of development.¹⁵ These examples demonstrate that we cannot assume that there was or is a single 'Western' development model, just as researchers disagree on the concept of a Chinese (or Asian) development model. Additionally, the coexistence of missionary and colonial influences demonstrates that religion, or more precisely, Christianity, cannot be viewed as the primary means by which Papua New Guineans achieve a modern understanding of development. *Kiaps'* portrayals of the Orinma people as hard-working and entrepreneurial were not based primarily on their Christian commitment. Rather, Yambel's capacity to adapt to new ways of earning and adapt to changes in livelihood gained him the reputation of being a strong man. This case reflects the importance placed by some Pacific scholars on the autonomy of Papua New Guineans in experimenting with various ideas and navigating different opportunities (Hau'ofa 2008; Teaiwa 2021). This story also demonstrates that Papua New Guinean employees can benefit by working with people from other ethnicities despite religious differences. Christianity in the Rai Coast (*Raikos*) region, where the refinery is located, is better thought of as a working religion mobilised by people whenever a need arises, not as a fundamental force determining locals' quest for a better life (Lawrence 1964).

1.5 The difficulties of positionality – research methods

While living in Duman, I employed two different research methods to study employees' experiences working in the refinery: ethnography and textual and archival sources. The ethnographic method was further divided into semi-structured and in-depth interviews, questionnaire surveys and participant observation. Around seventy interviews were done with five groups of employees (LH employees, NH employees, Chinese employees, local contract workers and one Australian employee). Because RNC management refused to participate in

¹⁵ A similar situation is demonstrated in the conflicts and cooperation between Lutheran missionaries and the German colonial government in Madang during the late nineteenth and early twentieth centuries (Wagner and Reiner 1986).

my project, the research findings were primarily based on interviews with workers about the organisation of work in each department, their experiences learning to work, their interactions with employees of diverse cultures and their reflections on gender identity following their work in the refinery.

Each interview was conducted in the following manner. To begin, I explained the research objectives and questions to interviewees. Following their considerations, I requested their permission to participate in my interviews and for audio recording. Additionally, I assured them that I would maintain the confidentiality of their personal information and avoided asking for their real names to ensure that their participation in my interviews would not risk their job security. Each interview lasted approximately an hour to an hour and a half.

Occasionally, if the conversation went well, the discussion may have gone on for two hours. I did a survey questionnaire (see Appendix) prior to concluding each interview to better understand the significance of certain factors and their explanations. It proved to be an excellent method to conclude the dialogue, as it provided an opportunity for interlocutors to reflect on and explain earlier comments. While residing in Duman, I understood the cultural meanings portrayed in the interviews by engaging in Papua New Guinean employees' daily lives in Duman. These insights enabled me to rethink and tweak questions the next time I conducted interviews.

The method of textual and archival sources entailed archival research and image collection. Throughout my fieldwork, I frequently stopped by the Divine Word University library in Madang to scan relevant studies and documents. At the conclusion of fieldwork, I spent a week researching at the National Library and the National Archives in Port Moresby – the former preserved early environmental and socio-cultural studies on the Ramu Nickel mine, while the latter housed numerous valuable colonial archives and patrol reports on the Rai Coast district, Madang Province, which is home to the refinery. I spent time in the National Library of Australia after relocating to Canberra in November 2019 to locate further colonial records and patrol reports relating to the Rai Coast district. In addition, with the consent of Papua New Guinean interlocutors and local landowner companies, I photographed some corporate documents relevant to my research. While I stayed in Duman, photographing employees' after-work activities was a significant part of my everyday activities.

Another critical challenge I encountered during fieldwork was that of positionality (Bainton and Skrzypek 2022; Ballard and Banks 2003; Zimmer-Tamakoshi 2018).¹⁶ Seeing my project as an expansion on Wu's (1982) foundational study, I sought permission to undertake fieldwork in the refinery to better understand workers' perspectives from both sides. Inspired by Lee's (2009) experience developing relations with the Zambian national government to gain access to the Chinese mine, I emailed the acting managing director of PNG's Mineral Resources Authority (MRA), Nathan Mosusu, to ascertain his position on my project. After receiving a positive response from Mr Mosusu, he offered me a letter of recommendation to communicate with RNC. Additionally, he connected me with a project coordinator and a Ramu Nickel project officer. Both attempted to assist me in communicating with RNC as well. Finally, Professor Philip Gibbs wrote me a recommendation letter that I could use to prove my affiliation with the local university. At first glance, the situation appeared promising in obtaining authorisation to perform fieldwork in the refinery.

However, the scenario became dramatic during the interaction with RNC. To begin, I phoned the RNC's Madang headquarters' community affairs office prior to Christmas 2018. While I awaited a response, I approached one of the Kurumbukari landowners' associations to solicit their support. Additionally, I changed the research proposal to make it more comprehensible to RNC staff. I was granted a meeting to provide a quick presentation about my proposal after receiving an email from one RNC employee after one or two months. While listening to my project, several Papua New Guinean employees stated that they found no issues but that only the Chinese senior management could make the final decision. Due to the company president's return to China, they suggested that I revise the research proposal, removing references to *wenhua ronghe* ('cultural integration') and instead focusing on social licence and socio-economic progress.

Additionally, I was advised to change the fieldwork location from the refinery workplace to a company-owned hotel in Madang town named Madang Inn for safety reasons.¹⁷ After making these adjustments and waiting several months, I eventually met the Chinese deputy manager in person in June 2019. Following another presentation of my study, our conversation centred

¹⁶ Zimmer-Tamakoshi (2018) reflects on her experiences studying the Gende people's interactions with mining prospects and the challenges (such as the politics of landownership identification) she has faced since the 1980s.

¹⁷ During communicating with RNC, I proposed to embark on fieldwork within the refinery site. Meanwhile, I also stayed in Duman to interview factory workers, in case RNC never responded to my request, and I ended up waiting for nothing.

on popular culture in the PRC and Taiwan (such as TV series and pop music). Regarding my project, I was refused permission to conduct fieldwork or obtain any assistance from the company. Knowing the negative response from Chinese management, those employees who assisted me previously advised me to consider changing the research topic and avoid mentioning this mine.

In reviewing my experiences with RNC, I believe there are four reasons for RNC's avoidance of me. The first explanation could be that I am Taiwanese. Due to the protests in Hong Kong in 2019, my Taiwanese identity may have been somewhat sensitive to the RNC during my research. The second possibility is that the refinery site would be expanded. RNC was awaiting final approval from the PNG government for increasing the refinery's operational area after signing a memorandum of understanding during the 2018 Asia-Pacific Economic Cooperation meeting in Port Moresby. RNC was cautious about engaging with external parties during this period, as any negative news or reports could affect the PNG government's decision. The third factor could be the ongoing legal battle between RNC and the provincial administration of Madang. During my fieldwork, Peter Yama, the Madang provincial governor, accused RNC of failing to bring significant progress to Madang and the surrounding areas. According to one interlocutor, the RNC's upper management assumed that I was assigned to investigate the mine by the Madang provincial government. Finally, because of its anti-mining stance, my previous contacts with a local non-government organisation, Bismarck Ramu Group, may have been an influence.

Although communicating with RNC was difficult, these experiences taught me that this mine was not a zero-sum game between the Chinese management and Papua New Guinean personnel. Instead, due to the absent presence of the Chinese and PNG states, the two sides are dependent on each other for different reasons. For example, the Chinese employees' emphasis on social licence reminded me that the refinery's operation was subject to permission from impacted communities under regulations in PNG. Additionally, the Chinese employees' reference to socio-economic developments demonstrated that RNC was developing the capacity to act in a state-like manner to provide services to impacted communities. These two scenarios were markedly different from RNC's operations in the PRC, where the state owned the land and mining employers were not responsible for infrastructure maintenance, medical care delivery or school construction.

As a result of RNC's unfamiliarity with these requirements, I became aware of the crucial responsibilities carried out by Papua New Guinean managers with prior experiences working in other PNG mines. Although they were unable to assist me in the field, their positions had a considerable impact on communications between RNC, local landowners, the MRA, the PNG Chamber of Mines and Petroleum and the Madang provincial government. These elements demonstrate RNC's reliance on Papua New Guinean personnel to manage the refinery's operation. Given the distinctions between running mines in the PRC and PNG, the refinery's operation turns out to be a mutual learning process that entails conflicts, negotiations and eventually concessions. This conclusion was also based on my observations since the 2014 strike.

1.6 Becoming refinery workers based on compromising

My research examines the intercultural work experiences of Chinese and Papua New Guinean employees through the lens of compromise labour process theory supplemented by the concept of becoming.¹⁸ Compromise theory views industrial relations in mining operations as different stages of negotiations and concessions rather than as a constant antagonistic relationship. Similarly, compromise theory sees worker identities as evolving into processes based on negotiating with pre-existing notions and conceding to new work settings. Inspired by the Chinese interlocutors' use of a Mandarin Chinese compound term *mohe* ('friction and cooperation') to describe changing work relations in the refinery, I selected compromise theory because RNC and Chinese employees arrived in PNG when Australian-imported regulations and cultural values were still in effect. To run the refinery, RNC neither imitated Australian-standard-based practices nor imported practices and beliefs from the PRC. Instead, two ideologies and techniques of operating the refinery co-existed, resulting in Chinese and Papua New Guinean employees' various compromises.

Furthermore, the identities of most Papua New Guinean workers as half subsistence farmers and half workers created a situation in which their cultural values, rooted in subsistence

¹⁸ Bainton and Skrzypek (2022) demonstrate how different anthropologists' positions with the mining company and impacted communities are intertwined with various observational and knowledge-generating methods. Since my goal was to comprehend the perspectives of both Chinese and Papua New Guinean employees, I had to set aside my opinion regarding the future of PRC–Taiwan relations to better comprehend those of my interlocutors. I believe that the compromise idea eventually crossed my mind and became the main theoretical framework of my dissertation as a result of these individual negotiations and concessions.

farming continue to influence their perception of work and work relations with the Chinese personnel (Skrzypek 2020). Due to the refinery's proximity to Duman village, workers' experiences were not of a separation between rural and urban (or village and factory), but rather a connection (Ferguson 1999). This connection created a unique situation in which three different value systems are inextricably linked. The interactions and entwined character of three ideologies reflect a specific temporal, transformative and uncertain postcolonial setting where the ties between them were not linear and binary, as has been employed in prior studies of encounters between East and West and North and South. Instead, the communications and interactions of different ideologies reflect the diversity of individuals' everyday life regarding the people they worked with, the technologies they used and the specific context in which these relationships occurred (Goffman 1956).

Given the incomplete nature of modernity introduced during the colonial time, the establishment of the refinery provided Papua New Guinean employees, particularly those from impacted areas, with new options to pursue desirable and feasible futures (Bacalzo et al. 2014; Errington and Gewertz 2004; Sahlins 1999). I suggest that we do not regard Papua New Guinean employees' adjustments as merely a resistance to their Chinese employer. Although their work relationships with Chinese employees appeared to be chaotic, these frictions and negotiations were processes during which Papua New Guinean employees reflected on earlier viewpoints learned from subsistence farming and contact with Westerners and adapted to the new situation and gained new ideas (Appadurai 1996; Schram 2018; Tsing 2005). Due to their unfamiliarity with the Chinese SOEs' work culture, Papua New Guinean personnel must seek alternative approaches to work with the Chinese employees. On the other hand, they also realised they could continue using previously developed approaches (e.g. unionisation) to claim their benefits and rights. Finally, given their relationships with local landowners, it was only a matter of time before Papua New Guinean employees took on the role of educating the Chinese employees about the behaviours and attitudes that they must adopt to become partners (Golub 2021).

Chinese employees faced a similar reflexive and conflictual predicament. To see how they tried to properly manage the refinery's operations, I propose that we look beyond their officially stated objectives of dominating the manufacturing process or Papua New Guinean workforce. Constrained by the unfamiliarity of the local context, Chinese employees,

particularly those senior and experienced, were pushed to reflect on and modify their previous work experiences to collaborate with Papua New Guinean staff (Banks 2014; Zimmer-Tamakoshi 2014).¹⁹ Although RNC employed a certain number of experienced Chinese workers, the institutional structure for managing mining businesses in PNG is distinct from that in the PRC. Along with the state-like role outlined previously, RNC had a great deal to learn beyond activities immediately related to refinery management. These distinctions served as a reminder to Chinese employees and the RNC that they conducted business on traditionally owned land and in a foreign institutional context. As a result, they must learn to work with Papua New Guinean employees to secure the refinery's operation and the PRC's long-term resource security.

Based on this mutual learning process, my thesis argues for a view of Papua New Guinean and Chinese employees' endeavours and journeys as compromise-based processes of becoming factory workers. Informed by Papua New Guinean interlocutors' use of *kamapim* ('become') to describe the process of becoming a man, my thesis applies Deleuze and Guattari's (1987) definition of becoming to illustrate the processes of becoming workers in a postcolonial context defined by fluidity and plurality, as well as the blurred boundaries associated with specific binaries (e.g. self/other, individuality/relationality and tradition/modernity). By understanding the formation of workers' identity as the process of becoming, this concept allows me to demonstrate how individual gender identities become multi-layered and interconnected and are realised during the communication between self/other and past/present (Braidotti 2002). Additionally, the becoming concept aims to decolonise the installation of the West as the icon of modernity by recognising the capacities of people from previously colonised countries in experiencing heterogeneous ideas and navigating new ways of becoming (Braidotti 2003). This work is needed because previous research has demonstrated that modernity in PNG often involves a process in which Papua New Guineans blame themselves for their inability to perform self-control, obedience and unification compared to Westerners (Bashkow 2006; Zimmer 1985). Therefore, rather than reproducing the same ethnic and colonial hierarchy, the journey of Papua New Guineans

¹⁹ According to Zimmer-Tamakoshi (2014), Chinese employees must comprehend local cultures in order to work as partners with impacted communities.

through the process of becoming demonstrates their malleability in adjusting to a newly globalised and decentralised world (Biehl and Locke 2017; Golub 2014; Nash 1979).

Deleuze's becoming idea is also helpful since it provides a different insight into power dynamics within the refinery. Biehl and Locke (2010), for instance, argue that a presupposed dominance narrative does not assist us in comprehending people's everyday conflicts and interpersonal dynamics. The authors note that by employing Deleuze's becoming notion, we may explore how individuals negotiate complicated and sometimes conflicting realities in settings where the future is unknown, how individuals becoming is interconnected to collective becoming and the relevance of temporalities. Similar to Braidotti's focus on minority agency, Biehl and Locke (2017) assert that Deleuze's becoming idea demonstrates the flexibility of power relations, in which power interactions become dispersive and modulatory, rather than controlling or adversarial. To them, '[p]eople and the world they navigate and the outlooks they articulate are more confounding, incomplete and multiplying than dominant analytical schemes tend to account for' (Biehl and Locke 2017:28–29). These perspectives demonstrate that becoming is a valuable concept for studying refinery workers' hybridised masculine identities in contexts where temporalities are essential and individuals are intertwined with their interactions with others (Biersack 2016). This concept also allows me to examine the Chinese management's behaviour because they must adjust their attitudes and behaviour when confronted with obstacles posed by Papua New Guinean personnel.

Additionally, previous research has demonstrated that the becoming concept helps examine Papua New Guineans' interaction with the mining industry, such as becoming landowners and working class (Stead 2017). My thesis follows Gewertz and Errington's (1999) description of the situation of working class in PNG. According to them, Papua New Guinean employees' understanding of the working class was animated by their participation in the capitalist economy introduced by Westerners starting from the late nineteenth century. Differing from the conjunction between class ('class *of* itself') and experience ('class *for* itself') in Western societies, the authors note that the conjunction does not apply to the PNG context where a clear distinction between property owners and workers does not exist and interests between grassroots in the village and the working class in town overlap (see also Cox 2014). Inspired by Thompson (1963), Gewertz and Errington regard the working class as a process of emergence to investigate new forms of social and ethnic relations and class-based inequalities

in postcolonial PNG. To them, class “has been happening in Papua New Guinea, and its happening has increasingly become evident to many” (1999: 2). Inspired by Gewertz and Errington, my thesis examines working class identity as a process of becoming in which modernist and traditional modes of self-representation become fluid, multi-faceted and interrelated rather than polarised and separated (see also Cox 2013, 2021; Parry 2020).

Furthermore, the concept of becoming aids my research in overcoming previous scholars’ differences in emphasising the individuality of workers’ identities (e.g. Macintyre 2008) and the relationality of workers’ identities (e.g. Strathern 1988). Given the proximity of employees’ homes and workplaces, my thesis follows LiPuma’s (2000) idea that there are both individual and relational dimensions in both Melanesian and Western societies. To demonstrate this situation, LiPuma writes, “*persons emerge precisely from that tension between dividual [relational] and individual aspects/relations*” (2000: 132; see also Hemer 2008; Jacka 2019).²⁰ Participating in the capitalist mode of production is a trigger of the individual aspect of personhood in Melanesian societies, rather than a replacement of the indigenous meaning of labour by Western individualism. As a result, after becoming waged labour, individuals, including Papua New Guineans, must deal with the tension between personal interests and communal expectations (see also Bainton 2008; Zimmer-Tamakoshi 1997a).²¹ According to LiPuma, modernity should be viewed as mutual transformations rather than a one-way process in which Westerners shape the locals to achieve a predetermined outcome. Inspired by LiPuma’s standpoint, I propose that we refrain from interpreting the arrival of Chinese personnel as the introduction of a Chinese version of modernity. Instead, two groups of employees influence each other’s perceptions of work and personal identity. To become factory workers, Papua New Guinean and Chinese personnel must learn how to self-reflect, negotiate and communicate.

1.7 Outline of the chapters

The chapters in this thesis look at various elements of compromise through Papua New Guinean and Chinese workers’ experiences. The myriad of compromises you are about to

²⁰ Italics in original.

²¹ Zimmer-Tamakoshi (1997a) uses the last big man in Gende, Ruge, in PNG, to demonstrate his efforts to reduce the growing economic inequalities between a few individuals who benefited from mine operations while others were left behind.

read are specific to the refinery in terms of Duman's and affected communities' agency in pursuing desired futures, Basamuk's former coconut plantation, the labour processes involved in processing nickel slurry and the adaptability of local young men. In other words, there may be varied manifestations of work relations in the Ramu Nickel project's Kurumbukari mine or other mining activities in PNG that involved CMCs due to different colonial histories, labour practises and indigenous cultures.

To begin, the second chapter illustrates why examining work relations in the refinery requires compromise theory. After investigating the PRC's labour process studies, I noticed that many researchers' works were based on conversations with Burawoy (1979, 1985) and his consent and hegemonic despotic factory regime theories. Labour process studies, according to Burawoy, should examine how employees' consent to employers is manufactured in diverse settings rather than considering relations between two parties as essentially adversarial. However, given the PRC's wide-ranging local variances, some other Chinese labour academics have questioned the applicability of Burawoy's theory. In line with this advocacy, I propose examining how CMCs adjust to new overseas contexts following Polanyi's (1944) idea of embeddedness – local beliefs and practices operate as a restraining force in moulding CMCs' actions. I suggest that Polanyi's point of view reflects the process through which CMCs get embedded in local norms and legislation, as demonstrated by Ching Kwan Lee's finding of a CMC's compromise in Zambia's Copperbelt. To study RNC's compromises during the refinery's management, I propose that Wright's (2000) three-stage theory of class compromise is applicable. Notably, compromise theory also contributes to Brewer's (2018) demand in social science for theorising the compromise concept.

The third chapter demonstrates how compromise is manufactured and the stage of compromise in the refinery's current operation. This chapter looks at how labour relations in the refinery have progressed from initial conflict to a level analogous to a battlefield stalemate resulting from the workers' strikes. The first portion of this chapter, which uses the high-pressure acid leach department as an example, describes the experiences of Papua New Guinean personnel who participated in training and worked alongside Chinese staff. Papua New Guinean personnel realised the importance of understanding a Chinese work ethic and mastering the refinery's workplace pidgin while working together. The second half of this chapter details the Chinese managers' experiences working with Australian managers and

adapting to Australian and New Zealand-based safety requirements. Given the unfamiliarity of Chinese managers with PNG regulations, this chapter also emphasises the growing importance of Papua New Guinean managers assisting RNC in self-governing workplace occupational health and safety. This chapter concludes that the refinery's current work relations echo Wright's (2000) definition of negative compromise, based on establishing a structured training system and the critical role of Papua New Guinean managers.

The fourth chapter portrays the geographical context in which compromise is manufactured. This chapter uses the limestone department as an example to show how the transition from a subsistence garden to a limestone quarry reflects shifting gender relations among local employees. The first section shows interviews with male workers at the limestone quarry and processing plant. The findings in this section reveal that these two workplaces are primarily male-dominated, even though some employees have good perceptions of the capacity of local women to perform their duties. In response to this contradiction, the second section interviews a Papua New Guinean manager for GLC. According to this manager, the company is not permitted to increase local women's work chances because their contracts are primarily for general labour, which he deems to be men's jobs. Following this manager's discussion of how he met with local landowners and became a manager, this conversation highlighted the relevance of local male landowners in influencing local women's career chances. According to prior anthropological research, colonial activities (such as coconut plantations) resulted in the separation of men's and women's jobs, and local women's work opportunities remained limited even after PNG gained independence in 1975 (Fahey 1986, 1988). Given that the refinery site was once a coconut plantation, this chapter argues that imported gender stereotypes continue to affect local male landowners and managers when hiring women from the impacted area. These findings indicate that RNC does not solely cause male dominance in the refinery; instead, local contractors continue to mobilise place-based gender stereotypes to limit local women's job prospects.

The fifth chapter examines the intersectionality of gender, class and ethnicity in the manufacture of compromise. This chapter examines the experiences of Papua New Guinean male employees who work in jobs that contradict their gender identities, using the mining mess hall as an example. This chapter begins with a depiction of village cooking and then discusses the cultural value and gender division of labour connected with food preparation in

Duman. This chapter next describes the work experiences of a male butcher and a male canteen service attendant in a township and refinery mess halls, respectively. This chapter explains how, based on interview findings, their understandings of jobs in the mess encompass the two layers of meaning discussed previously. Their male identity alterations in response to performing gender-atypical jobs reveal a contradiction between local understanding and imported conceptions about men performing women's tasks. Finally, by illustrating work interactions with Chinese employees, this chapter shows how local male employees' adaptability to performing women's jobs intersects with their work relationships with the Chinese. Based on these examples, this chapter concludes that the gender compromises of two male employees show distinct intersectionality between gender, class and ethnicity, owing to individuals' diverse backgrounds.

The sixth chapter examines the ways in which conceptions of masculinities among refinery workers change in response to the influence of different aspects of time, during the manufacture of compromise. This chapter, using the confined space, a particular workplace in the refinery, as an example, presents the experiences of Papua New Guinean employees who demonstrate their devotion and ability to keep track of time due to their motivation to work alongside Chinese colleagues. Additionally, this chapter discusses how a Chinese manager may develop into a manager of local personnel by knowing their culture and demonstrating respect for them. This part also illustrates how a junior Chinese employee learns to adapt to the diverse backgrounds of Papua New Guinean personnel to work with them. Due to the mutual involvement of local male employees – subsistence farming and refinery labour – the Chinese management can only request that most local employees learn to work on time. After demonstrating how two groups of workers learn to collaborate, this chapter demonstrates how their evolving perceptions of becoming a good man are related to their intercultural learning experiences – the new perspectives on becoming a *gutpela man* ('good man') for Papua New Guinean employees and becoming a *chenggong man* ('successful man') for Chinese workers. These findings suggest that the masculine compromises made by Papua New Guinean and Chinese employees represent multiple temporalities, since individuals often assume multiple identities and interact with others from varied backgrounds daily.

My thesis concludes by suggesting that employment relations in the refinery should be evaluated beyond the control–resistance binary. As discussed in Chapter 3, the control–

resistance binary corresponds to the initial stage of compromise formation, during which two parties remain at odds. After recognising that the other party has what they require, both parties recognise the critical nature of avoiding reciprocal harm in exchange for the other's concession, especially in light of the absent presence of the state. During the compromising processes, Chinese and Papua New Guinean personnel are both agents while remaining subject to inexperienced domains because of their mutual dependency. Additionally, my thesis argues that the various compromises demonstrated are multi-scaled because of the diverse challenges faced by workers in various workplaces, the ideological influence of the prior Basamuk coconut plantation and the symbolic relationships between workplaces and locations in the village. These factors demonstrate that place is not a backdrop but a vital element influencing work relations and workers' identities in mining activities. Finally, my thesis argues that the illustrated compromises are multi-layered, involving power relations, ethnicity, gender relations and time frames. These considerations underscore the importance of examining the interactions and intersections between them in the overseas mining activities of various CMCs.

Chapter 2 From consent theory to compromise theory

2.1 Introduction

Prior to starting fieldwork in PNG in late 2018, I lived in University House, a student dormitory at The Australian National University with a tiny library where residents and guests could peruse Australian newspapers and enjoy complimentary coffee to start the day. I came across a news report before the start of the Asia-Pacific Economic Cooperation (APEC) meeting in Port Moresby in November 2018 that referred to the main convention centre erected by a Chinese contractor under a Chinese grant to host the APEC meetings as a ‘white elephant’. According to the author, readers should be concerned about China’s rising involvement in PNG and the changes wrought by CMCs.

Figure 2-1 The main convention centre in Port Moresby



Source: Photo by the writer

Similarly, my literature analysis revealed that a popular narrative in Australia, the China threat, viewed CMCs' operations in PNG as a vehicle for the Chinese state's competition with existing Western powers (such as Australia and the United States) and expansion of its influence.²² For example, Cole Latimer highlighted the Ramu Nickel mine as an example of the PRC's rising influence in PNG in an article published in *The Sydney Morning Herald* on 14th September 2018. By citing the chief executive of Oil Search, the author stated that "Chinese signs on Port Moresby bus stops are one indication of Beijing's growing influence and should be a wake-up call for Australia" (Latimer 2018). Scholars who subscribed to this narrative considered Chinese employers dominant due to their prowess in technology and manufacturing. Additionally, they presumed that Chinese employers might operate their firms according to standards in the PRC without comprehending applicable PNG rules or monitoring adverse effects on host communities. According to these perspectives, CMCs' activities in PNG were characterised as governmental intervention and management by autocratic Chinese employers.

However, the picture changed when I examined workplaces regulated by CMCs from the bottom up. My research included interviews with multiple workers on both sides to better understand how Chinese and Papua New Guineans collaborate. According to the interview findings, the labour process involved arguing ideas, negotiating and conceding, all of which taught two sets of workers how to work together. After more than a decade of operation, Mr Xiang, a Chinese manager who has worked at the refinery since 2008, noted that the Chinese management recognised the need to learn PNG's mining regulations based on Australian norms. Mr Xiang also emphasised the importance of senior Chinese employees adapting their practices and ideas from Chinese SOEs culture to work with Papua New Guinean workers. Mr Xiang's experience indicated how Chinese management's adaptation to refinery work was a dynamic process comprising confrontations between old and new understandings and concessions to the new environment.

Other Chinese interlocutors referred to comparable job scenarios to those described by Mr Xiang using the Mandarin Chinese term *mohe*. *Mohe* was a compound phrase with two distinct meanings: *moca* ('friction') and *hezuo* ('cooperation'). The first referred to an early

²² Smith (2011) mentioned the phrase 'China threat', which I have used.

stage during which opposing parties had antagonistic connections. The latter referred to a later stage of the conflict when each party recognised that they must abandon specific values to obtain concessions from the other. Similar to the transition between these two periods, Mr Xiang observed that Chinese employees recalled an incident in 2009 in Basamuk, in which Papua New Guinean employees stood up for their rights and caused injury to several Chinese employees. The strike was subsequently resolved with the intervention of mediators from both sides during a meeting in the old camp attended by Papua New Guinean and Chinese personnel. Due to the ferocity of the 2009 strike, some Chinese interlocutors referred to it as the '8th May incident'. Following the incident and years of collaboration, Chinese employees learned the value of putting themselves in the shoes of others rather than making unilateral decisions based on home norms. From my perspective, the way Chinese employees learned to interact with Papua New Guinean employees and other foreigners entailed a challenge to preconceived ideas, negotiation with other parties and concessions to changing conditions. These three stages corresponded to compromise theory of labour processes in labour studies.

This chapter discusses how compromise theory helps to examine labour relations at a PNG refinery operated by a CMC. This chapter contains four sections. The first section discusses Michael Burawoy's consent and hegemonic despotic factory regime theories and scholars' discussions around these two theories when researching capital-labour relations in the PRC. The second section is devoted to Burawoy's (2014) proposal to revisit Polanyi's (1944) writings on workers' countermovement (e.g. the trade union movement and the founding of the Labour Party) against the commodification of labour to evaluate CMCs' overseas projects. This section, inspired by Burawoy's advocacy, suggests employing Polanyi's (1944) embeddedness concept to highlight CMCs' reflections on home practices and concessions when dealing with local personnel's countermovement. Inspired by Lee's (2017) finding, this section also shows how a CMC embeds its mining operation in Zambia by making concessions to local labourers and local government. Based on these findings, the third section introduces labour process compromise theory by demonstrating Przeworski's (1985) development of Gramsci's (1971) concept of compromise, as well as Erik Olin Wright's (2000) formulation of class compromise theory, to investigate how Chinese and Papua New Guinean employees build work relations. Finally, this chapter concludes by demonstrating how compromise theory can be applied to the study of labour relations and worker identities

in the refinery, which aligns with Brewer's (2018) support for the use of compromise theories in social research.

2.2 The manufacture of hegemonic consent in Chinese SOEs

Paul Thompson, an established labour process expert, presented a statement during a closing symposium called 'Extending and Debating Workplace Regime for the 21th Century' during the 39th International Labour Process Conference. Reviewing the development of workplace regime theories, he observed that Burawoy's theory "is way more ambitious [than that of Edwards (1980)] in describing the whole decades [as] a single regime, despotic, hegemonic, hybrid, [and] hegemonic despotism." Feeling sceptical about this theoretical construction, Thompson noted that the influence of Burawoy's theories had attained overarching significance due to numerous scholars studying employer control and employee consent. This section, animated by Thompson's point of view, examines Burawoy's ideas of consent and the hegemonic despotic factory regime, as well as how scholars placed their research in dialogue with these two theories.

2.2.1 Burawoy's consent and hegemonic despotic factory regime theories

Following Braverman's book, *Labour and Monopoly Capital* (1974), a popular viewpoint in labour process studies held that capital–labour relations were essentially antagonistic. Scholars who supported Braverman's view believed that employers could unilaterally control employees by deskilling them, advancing technology and implementing scientific management. Burawoy (1979) disagreed with this viewpoint, stating that Braverman's theory neglected employees' thoughts in favour of emphasising employers' technological considerations. If researchers adopted Braverman's methodology, Burawoy observed, labour process studies would devolve into a study of employers' techniques without considering the social interactions in the production and employees' experiences while engaging in it. According to Burawoy, this method assumed unfettered capital's domination over labour and failed to untangle employees' subjective views and interests during labour processes.

To develop another approach, Burawoy (1979) adapted Gramsci's (1971) theory of hegemony to develop consent theory to study the capitalist labour process. According to Burawoy, Gramsci's emphasis on citizen consent demonstrated that establishing the state's hegemony depended on civilian participation and agreement. Motivated by Gramsci's view, Burawoy asserted that studies of labour processes should consider workers' consent and voices even when the work condition was precarious and the employer was coercive. Based on this point of view, Burawoy used his experience working for the Allied corporation in the United States to demonstrate how operators' consent was manufactured in the workplace.

Three key variables influenced how consent was manufactured in Allied. To begin, introducing the piece-rate system with automated machinery increased operators' motivation to work and improve their skills by providing them with a measure of autonomy in determining their work speed and output rate. Second, management's investment in establishing a mechanism (e.g. a training system) for coordinating the interests of managers and operators. By establishing this mechanism, operators' efforts to upgrade skills and improve work performance intersected with capital's goal of growing production and profitability. Even more importantly, unionisation allowed employees to negotiate with bosses and protect their rights as a group. It also ensured that rules to monitor employers' behaviour and prevent them from infringing operators' rights were enacted with the involvement of the trade union. Based on these findings, Burawoy wrote,

The rise of rules and, with them, constraints on managerial intervention have opened up an area of choice within which workers can constitute work as a game. Workers are sucked into the game as a way of reducing the level of deprivation. But participation has the consequence of generating consent to the rules, which define both the conditions of choice and the limits of managerial discretion. Thus, it is not the rules themselves but the activities they circumscribe that generates consent. (1979: 199)

Burawoy demonstrated that operators' efforts to improve work performance became their consent, aligning with managers' desire for self-discipline and profit growth. Employers were restrained from making unilateral decisions due to the establishment of these rules, and

workers were protected by the rules of the game, giving them opportunities to pursue individualist interests.

Burawoy (1985) expanded on the notion of the hegemonic factory regime followed by an analysis of Allied operators. According to Burawoy, Marx's (1867 [1999]) study of the capitalist labour process displayed a rare form of market despotism in which the market factor regulated the capital-labour relationship despotically. Defining this labour system as the despotic factory regime, Burawoy wrote, "[here] despotic regulation of the labour process is constituted by the economic whip of the market. Workers' dependence on cash earnings is inscribed in their subordination to the factory" (1985: 123). Within the despotic factory regime, he stated, employees were subordinate to employers because of the reliance on selling labour power for a wage, the fragmentation of labour's skills and knowledge and employers' control over labour's work through the advancement of new machinery and managerial methods. However, based on his experience working with operators in Allied, Burawoy observed that

Workers must be persuaded to cooperate with management. Their interests must be coordinated with those of capital. The despotic regimes of early capitalism, in which coercion prevails over consent, must be replaced with hegemonic regimes, in which consent prevails (although never to the exclusion of coercion). (1985: 126)

By focusing on operators' interests, Burawoy defined the case of Allied as a hegemonic factory regime in which employees must be persuaded to work, and employers must coordinate their interests with employees.

According to Burawoy, the despotic factory regime portrayed a system in which coercion trumped consent; in contrast, the hegemonic factory regime placed a premium on consent, even if coercion may still exist. Burawoy observed that coercion was regulated within the hegemonic factory regime, and employers must obtain employees' consent. According to the author, state intervention was critical in protecting employees' welfare and monitoring employers' behaviour to maintain the hegemonic factory regime. Finally, in a globalised world, Burawoy claimed that shifting factories from developed countries to developing

countries searching for cheaper labour and lax environmental regulations would result in a new form of hegemonic despotic factory regime (1985, 127). Employers could increase labour control under this factory regime by introducing temporary or part-time positions and instituting autocratic regulations based on patriarchy or paternalism. As a result of the lack of protective policies and the fear of factory closures and termination, Burawoy stated that employees' participation in the labour process amounts to consent to authoritarian control. This hegemonic despotic factory regime was distinct from Marx's despotic factory regime in that employees' consent was required regardless of their coercive employment conditions.

2.2.2 Hegemonic consent of workers within Chinese SOEs

The PRC gradually became one of the world's factories following the reform and opening-up of its economy in the 1990s. More and more multinational corporations have relocated their operations to the PRC because of its low cost of labour and land. Meanwhile, many people from rural areas in the PRC moved to coastal cities in search of better job prospects. Global capitalism, state socialism and family expectations collided throughout this process, creating new labour exploitations associated with class and gender (Pun 2005). With an increasing number of commodities produced in the PRC using low-wage labour, the Chinese government enacted a series of policies and legislation to safeguard the welfare of formal workers, including the Labour Contract Law in 2007 and the Social Insurance Law in 2010. Additionally, the Chinese state intervened by directing labour unions and supporting Chinese SOEs in maintaining global competitiveness. Employers in the PRC could create a variety of tactics for improving labour control because of the intervention of the Chinese government and workers' unions' alliance with employers. Faced with this circumstance, Burawoy's theories of the hegemonic despotic factory regime and workers' consent have been used as one of the major theoretical frameworks for examining capital-labour relations in the PRC.

Similar to Burawoy's analysis of employers' rising control during factory migration, labour process research on capital-labour interactions in the PRC have revealed employers' different techniques for strengthening labour control. Pun and Smith (2007), for example, examined two Chinese export-oriented firms, China Golden and China Silver, and demonstrated how adopting dormitory regimes became an effective method of labour control. China Golden's management employed a paternalistic dormitory labour regime to compel employees to work

longer hours and control their personal life outside of work. Although China Silver employed a modern dormitory labour regime that adhered to worldwide norms for employee welfare, this dormitory labour regime enabled the employer to maintain a more nuanced control over employees' activities (e.g. CCTV system). According to Pun and Smith, these two cases demonstrated how establishing alternative dormitory labour regimes might help Chinese businesses manage their employees more effectively.

Aside from the dormitory regime, Chinese employers used various factory regimes to increase labour control in the workplace. Zhang (2008), for example, investigated automobile factories in China and demonstrated the impact of instituting a dual labour regime. A dual labour regime, according to Zhang, included both directly employed and subcontract workers. With these two sources of labour, Chinese automakers could exercise both hegemonic and despotic labour control. Under hegemonic control, formal employees agreed to work for better pay and job security in exchange for hegemonic control. On the other hand, subcontract employees worked under despotic labour control, with lower pay and no job security. Furthermore, Zhang observed that some businesses used a high-pay and high-turnover strategy to control all workers without job security. These findings demonstrated that Chinese managers used a variety of strategies to reduce labour's bargaining power and mobility.

Jia's (2016) study of a state-owned heavy machinery factory, the South Factory, provided a comparable instance, highlighting multiple modes of control under the dual labour regime. The South Factory managers, according to Jia, implemented an internal subcontract system to create a dual labour system that included both formal and subcontract workers. For subcontract workers, management used patriarchal control, in which a foreman acted as the patriarch of a family to motivate workers to increase production rates and reward them on a piece-rate basis. To avoid labour protest or intervention in production, management used a lenient approach with formal workers, paying only the base wage. Based on these findings, Jia concluded that a dual labour regime enabled the employer to exert greater control over labour in the South Factory.

Experts also illustrated how hegemonic consent was manufactured in China, along with rising employer control over labour. The first example shows how this consent was produced in the workplace. Zhang (2008) demonstrated how hegemonic consent was generated through three

factors: first, the Chinese managers' responsibilities of production, financial performance and looking after their employees; second, the factory unions' roles in avoiding and mediating disputes between managers and workers and their reluctance to recognise the existence of conflicts of interests; and third, the party factory committee's mobilisation of 'old traditions' (e.g. hard work and dedication to work) that had originated during the Mao era to assist management in achieving ideological control over employees. As Zhang pointed out, the interventionist Chinese government, the Chinese managers, the factory unions and the factory party committees were all involved in manufacturing the hegemonic consent in PRC. According to Zhang, employees consented to their employer while participating in labour because the trade union could not articulate their struggles and employment was their only means of livelihood.

The second example shows how consent was produced outside of the workplace through external causes. Lu (2016) discussed three factors affecting workers' consent at a company called BZ: first, the Chinese state's participation in alleviating employers' difficulties and ensuring workers' welfare; second, the BZ company's paternal role in providing education, transportation and shopping facilities for its employees; third, the intervention of the Chinese state in resolving labour disputes and workplace confrontations. Based on these three key factors, Lu wrote,

[in] this situation, the company is the authorized representative of employees' voices and interests, and employees have accumulated deep trust in the management as well as low demand in participation, thus tending to consent to the participation mechanism with low participation levels based on their consent to traditional welfarism.
(2016: 51)

This quote showed that employees' consent in BZ was generated by governmental intervention, employers' representation of workers' views and interests and workers' unwillingness to raise their voices in light of the company's provision.

This section reveals how scholars employed Burawoy's consent and hegemonic despotic factory regime theories to investigate Chinese labour relations. We can first draw parallels

between these examples based on these findings, such as the Chinese government's decisive intervention, Chinese employers' growing control and tactics and trade union insignificance. These three factors coincide with Burawoy's description of the likelihood of new hegemonic despotic factory regimes in developing countries, discussed in the previous subsection. Furthermore, as Paul Thompson previously stated, these findings illustrate how labour process scholars in the PRC applied Burawoy's concepts to analyse employers' expanding control and the manufacture of workers' consent.

Confronted with this situation, Paul Thompson noted that it reflected "too much focus on control at the expense of the wider process when capital meets labour in production." To advocate for alternatives, he suggested future studies look at what social relationships and mechanisms are privileged in a given workplace, in a context where capital-labour relations are more complicated than employers' control and employees' consent. Similarly, some Chinese scholars (e.g. Zhang 2008) have reminded us that Burawoy's theories may not account for all regional differences, diverse corporate behaviour and complex interrelationships between local and national governments across the PRC. Because of these differences, scholars (e.g. Smith and Zheng 2016) also cautioned against assuming that a unique model emerged during China's economic development, even as overall employers' control increased. These lessons are critical for examining capital-labour relations within CMCs' overseas operations, especially when the Chinese state is absent from operations, Chinese management is inexperienced with local regulations and local employees' trade unions play a prominent role in claiming their rights and benefits.

2.3 CMC's concession in Zambia while operating a copper mine

Burawoy (2014), four decades after his study of workers employed in Zambia's Copperbelt, drew on prior perspectives to provide new directions for future labour process studies. Using Lee's (2009) study as an example, he demonstrated some preliminary findings regarding CMCs' growing engagement in the copper business in Zambia. On the one hand, Burawoy asserted, Chinese employers' behaviours differed from those of their counterparts in the PRC. Chinese managers, for example, were hesitant to recruit subcontractors and preferred a long-term staff comprised of Zambians. On the other hand, some ideas learned in the PRC continued to influence Chinese employers' perceptions of Zambian workers. Chinese

managers, for example, required Zambian staff to be able to *chiku* ('endure adversity and work hard') and follow management instructions. These incongruent characteristics, according to Burawoy, demonstrated that we could not regard labour relations in Chinese mines in Zambia as a direct extension of practices and beliefs in the PRC.

Furthermore, Zambia's institutional and socio-cultural settings did not allow Chinese employers to enhance labour control in the same way they did in the PRC. Instead, Burawoy observed that the growing involvement of CMCs in Zambia's mining industry represented a conciliatory relationship between Chinese management, the Zambian government and Zambian employees. Confronted with this unique circumstance, Burawoy observed that Polanyi's (1944) studies on workers' countermovements in various societies served as a timely reminder for scholars to reconsider activities such as transnational mining operations as another phase of affecting host communities, as a result of changing expressions of various factors of production (Burawoy 2014, 987). To examine overseas mines operated by CMCs, Burawoy suggested that new theories were needed to understand better the internal contradictions of Chinese employers' behaviour and the different manifestations regarding various encounters between CMCs and local actors.

2.3.1 Embedding CMCs' overseas activities

In line with Burawoy's ideas, I suggest that Polanyi's 'embeddedness' concept can help us understand the different interactions between workers in developing countries and CMCs. Polanyi's emphasis on the social meaning of labour serves as a reminder that different communities have varying conceptions of what work entails. In other words, workers in the host communities are not merely passive receivers of Chinese firms and managers. Rather, attitudes and practices shaped by current or defunct economic activity (e.g. subsistence farming and colonial plantations) continue to affect how local employees perceive their interactions with CMCs. Therefore, Polanyi's embeddedness idea is not just used in my research to look at varied cultural meanings of labour. Instead, the purpose of my research is also to explore the cultural and institutional roots of transnational mining operations as they interact with other communities (Peck 2013). This approach enables us to see that CMCs are rarely as rational as they are frequently depicted or claimed to be (Welker 2014).

Moreover, expanding on Polanyi's (1957) conceptualisation of the instituted character of economic relations, my thesis also demonstrates how the Chinese management's behaviour and ideas are socially and culturally reshaped. According to Polanyi, the substantial meaning of economic activities refers to the "instituted process of interaction between man and his environment" (1957: 248). Similarly, an instituted perspective reminds us that studies of multinational mining activities should be embedded in their relationships with local communities and the surroundings (e.g. the availability of workforce, water and infrastructure). Working with local employees and running the mining operations in PNG, CMCs face situations that are not of their making and selection. Sometimes, the logic of these new rules might even go against CMCs' corporate cultures. Therefore, I suggest that examining labour processes in CMCs mining projects should be embedded in a specific location by considering previously established rules, indigenous perspectives on work and Chinese management's business practices.

Smith and Zheng (2016) discuss three similar dimensions in a review article about CMCs' overseas businesses. Smith and Zheng begin by stating, using Lee's (2009) study as an example, that previous employment with American mining companies influences Zambian workers' preference for flexible work. The authors also mention instances in which workers in developing countries accuse Chinese employees of violating labour laws such as working hours, workplace health and safety and the use of coercive labour control. Furthermore, the authors discuss situations in which CMCs' behaviour and policies are altered in response to local demands when they interact with local actors. For example, while CMCs prefer to hire workers from the PRC, they must deal with host-society pressures and continue to hire and train locals. Based on these findings, Smith and Zheng argue that the growing global activity of CMCs is not exporting a Chinese model to emerging economies (2016, 374). Working with local employees also prevents Chinese management from exercising the hegemonic or despotic labour control that is currently in place in the PRC. Given the paucity of empirical evidence, Smith and Zheng suggest that it is vital to investigate how working with foreign employees causes Chinese employers and managers to reconsider their previous practices.

2.3.2 Negotiating and compromise as a way of embedding

Taking mine operation as an example of embeddedness, Ching Kwan Lee's research on a CMC, NFC Africa Mining PLC, operating in Zambia's Copperbelt revealed an under-researched situation: CMC compromises. According to Lee, the CMC's willingness to negotiate and make concessions to local actors was motivated by two factors. First, even though this company's project corresponded to the PRC's going-out policy in 1997 and was a subsidiary of a Chinese SOE, these political ties did not assist in dealing with work relations with Zambian workers and local government. Instead, because the operation of this mine was critical to the larger issue of the PRC's relationships with Zambia, the company was compelled to be more open to negotiating with and conceding to local actors rather than abandoning the project or moving it to a different location. Second, the Chinese management could not challenge or replace the established regulatory norms influenced by Western standards, which were valued by local workers and adhered to by the Zambian government. These factors showed that CMCs' political backgrounds in the PRC did not help manage overseas businesses; instead, this political tie pushed CMCs to adhere to local rules, address the needs of local players and prioritise long-term stable production and employment above labour retrenchment and massive subcontracting, as Western mining firms do in response to mineral price swings (Lee 2018).

Lee's findings also showed how Chinese management changed its practices and beliefs as it conceded to local actors. According to Lee (2017), Chinese employees and Zambian workers had different perspectives on work; the former valued hard work, whereas the latter viewed the Chinese manner of doing jobs as exploitative. After a period of collaboration, Lee noticed that some Chinese managers realised they could not cling to their home practices or urge Zambian personnel to follow orders after receiving complaints from local workers about overworking. Based on these findings, Lee stated that:

Just as the imperatives and labour regimes of Chinese state capital were susceptible to changes and pressures emanating from local Zambian society and international political economy, its [CMC's] ethos was also neither carved in stone nor under total remote control by Beijing. (2017: 157)

This explanation demonstrated that Chinese employees learned to work with Zambian labour not by following practices acquired in the PRC or instructions from the Chinese state government. Instead, their evolving understandings of work occurred due to their interactions on the job with employees from diverse cultures. These intercultural work experiences enabled the Chinese management to reflect on prior conceptions of work and develop a pragmatic adaptation to the way things are done in the local setting.

Notably, other researchers studying employment relations in Chinese SOEs in African nations have found comparable results to Lee's. Sautman and Yan (2014), for example, looked at a 2010 shooting at the Collum coal mine in Zambia, in which two Chinese managers injured 13 Zambian workers. According to the authors, the incident was sparked by a Zambian workers' strike for higher pay, which resulted in the death of one Chinese employee and the hospitalisation of others, four of whom were seriously injured and four less seriously. In terms of the Chinese government's role afterwards, Sautman and Yan argued that the Chinese embassy and ambassador urged Chinese management to protect local employees' rights and respect local laws rather than assisting them to settle the situation. Kernen and Lam's (2014) examination of the localisation of Chinese SOEs in Ghana, including construction and telecommunications enterprises, found a similar situation. According to the authors, Ghanaian labour law encouraged local workers to form unions and strengthened their bargaining power. Regarding day-to-day operations on the ground, the authors noted a comment from a senior Chinese manager, stating that "[a] closer relationship with the Chinese central state does not automatically produce the best master of micro-management of daily affairs and public relations" (1071). Kernen and Lam concluded that the various Chinese SOEs' localisations in Ghana reflected distinct patterns and were independent of the Chinese state.

However, there were some differences between Lee's findings and my observations in PNG. For instance, Lee (2018) discussed the existence of an ethnic glass ceiling among local employees. According to Lee, the highest-paid position available to Zambians was human resources manager. In contrast, Ramu NiCo (RNC) employed a female Papua New Guinean manager in the finance department at the project headquarters in Madang town and a Papua New Guinean site manager at the Kurumbukari mine, in addition to the Papua New Guinean managers' critical role in hiring local personnel. While there may be an ethnic glass ceiling, these examples demonstrated that RNC would still provide opportunities for some Papua New

Guineans who understood Chinese work ethics and could collaborate with Chinese employees, particularly when Chinese management required their assistance to ensure the mine's operation. The roles of these Papua New Guinean managers were crucial because they acted as an intermediary, linking local personnel, Chinese management and non-Chinese foreigners, as well as understanding and upholding regulations based on Western standards.

Additionally, Lee argued that the trade union's authority in Zambia was dwindling, even though the 2011 strikes resulted in a concession from the Chinese management. According to Lee, three factors contributed to the trade union's decline: accepting bribes from employers, declaring workers' strikes illegal and generational divisions and status cleavages among union members. Lee also added that when employees went on strike, "the prevailing dialect, and tribal identities were not invoked in any discussion of class conflicts, collective bargaining, or management discourses" (2018: 53). This circumstance differed from what I have observed in PNG. Members of the trade union in the refinery were not paid for their participation, and ethnicity (the *wantok* system) was still a significant motivator for leaders to mobilise members and local employees. In terms of Chinese management, I also have not found substantial evidence that they have developed an effective strategy for dealing with trade unions other than firing union leaders or active members. These differences demonstrate that trade unions still played an essential role in negotiating with Chinese management on behalf of Papua New Guinean employees. It also indicated that I should keep a close eye on the trade union's progress and its relationships with Chinese management.

Based on these findings, we may deduce that three elements are linked to CMC compromises in PNG: the Chinese state's non-involvement in managing the operation, the trade union's significant role and Chinese management's limited ability to exercise labour control. These three elements differ from the reasons discussed above regarding the PRC's manufacturing of hegemonic consent: the interventionist Chinese state, the trade union's insignificance and Chinese employers' labour control techniques. As a result of these distinctions, I propose that we require a new theory to understand the concessions made by CMCs in PNG. By viewing CMC concessions as embedding processes, this theory should place a premium on the engagement of Papua New Guinean employees, as some of them are the landowners and others have experience dealing with rules set by the previous Australian administration. By giving Papua New Guinean employees a voice, this theory enables me to investigate in a

postcolonial setting the CMC migrant from a nearly developed country residing in a developing country and the agency of previously subordinated Papua New Guineans in responding to the emergence of new power relations and dynamics in their encounter with the CMC (Ejiogu 2020). With an emphasis on local personnel, this theory describes compromises as a two-way process in which two parties reflect on previous practices and ideas and make concessions to the other. This unique two-way compromise occurs when two parties are dependent on one another, and Australian-imported values remain in place.

2.4 The manufacture of compromise in CMCs' mining projects

The PNG Prime Minister, James Marape, offered an opening remark on the responsibility of the PNG government during the first webinar of the PNG Mining and Petroleum Seminar on 3 June 2021. Starting with an accusation, Marape claimed that some foreign investors believed the PNG government was hard-nosed and aggressive and attempting to drive them out. Instead, he asserted that changes in PNG's governments did not negate the significance of adhering to the law and the agreements reached between various PNG administrations and foreign investors. Recognising the importance of international investors, Marape claimed that the benefits of mining and petroleum projects went beyond tax income and included improved service delivery to host communities. As a result, the PNG government intended to collaborate with foreign investors by consulting them on policy revisions and completing legislative and resource agreement frameworks. This case exemplified the institutional role of the PNG government in attracting foreign investors and signing contracts. The PNG government's physical presence was often limited when mining projects started, as shown in the previous chapter. This case also demonstrated that RNC must collaborate with local employees to reach industrial compromises in PNG affected by Australian standards and industrial systems.

2.4.1 Compromise in the capitalist labour process

I propose that compromise theory helps examine work relations in the refinery's operation in which the PNG state plays a non-interventionist role, and Papua New Guinean employees' involvement is crucial. Importantly, labour process compromise theory does not seek to replace Burawoy's consent theory. Rather, as I shall demonstrate later, compromise theory

shares the same intellectual base as Burawoy's theory and the same emphasis on the subjective experiences of employees. Supporting this view, Burawoy (2003) also wrote regarding his understanding of Gramsci's (1971) compromise concept, noting that

Gramsci is here elaborating the second dimension of "hegemonic" domination. If the first dimension was the combination of force and consent that distinguishes hegemony from dictatorship, the second dimension refers to a configuration of class domination in which negotiated compromise replaces irreconcilable interests, in which cooperative antagonism replaces zero-sum conflict. (2003: 225)

Burawoy's explanation demonstrates that another critical component of Gramsci's theory is compromise, which refers to negotiated employment relations that allows employers and employees to work together. Thus, compromise theory is an alternative to Burawoy's theory in situations where consent cannot be manufactured, and CMCs and local employees should find ways to collaborate that differ from previous experiences.

Following a review of labour process studies, I noticed that some scholars had previously identified the value of investigating industrial compromise in labour process studies (Joyce 1984). Similar to Burawoy's elaboration of Gramsci's (1971) discussion of citizens' consent, other scholars emphasised Gramsci's discussion of the compromise equilibrium between citizens and the state to develop compromise theory to study the capitalist labour process. Przeworski (1985) and Wright (2000) laid the essential groundwork among these scholars. As a result, this section shows how Przeworski elaborated on Gramsci's concept of compromise and how Wright expanded on Przeworski's elaboration to develop labour process compromise theory.

Przeworski (1985) noted that Gramsci's (1971) theory of hegemony offered a different scenario regarding the capitalist labour process, in contrast to Marx's (1867 [1999]) understanding of capital-labour relations as a zero-sum game. According to Gramsci,

hegemony presupposes that account be taken of the interests and the tendencies of the groups over which hegemony is to be exercised, and

that a certain compromise equilibrium should be formed – in other words, that the leading group should make sacrifices of an economic-corporate kind. (1971: 161)

Gramsci argued that coercion or submission alone did not achieve hegemony. Instead, the leading party should consider the interests of the opposing group to establish a certain level of compromise between the two sides. Gramsci also noted that compromise was an alternative when both parties had what the other needed and were willing to learn to work together. In contrast to combating adversaries, achieving concessions offered another resolution that allowed two adversaries to become partners.

Przeworski, drawing on Gramsci's perspective, noted that two elements determine whether a compromise could be reached in the capitalist labour process. First, the employer must commit to reinvesting a portion of profits in pay hikes and other necessary investments (e.g. employee training). Second, employees were motivated to work to meet their own material needs, which helped employers earn profits (Przeworski 1985, 182). The author emphasised that the employer's investments secured profit gains under these two conditions and prevented employees from quitting work. Similarly, employee participation ensured that they received rewards and that their employers cared about their well-being. Przeworski added that the material interests of employers and employees could be concretely coordinated through negotiations and mutual concessions. Throughout this process, both sides made their own strategic decisions, and the conclusion of each compromise varied according to the unique work relationships and environments in which they operated.

Przeworski also portrayed two scenarios for reaching a compromise. Employers were initially the sole decision-makers, and employees had to strike to exercise their right to association and collective bargaining. After facing significant hurdles, employers eventually established a method to improve employees' pay and well-being. At this point, employers oversaw this process, which was driven by their desire to increase productivity and profits. After another period of collaboration, employees' participation in the labour process became increasingly important, and employers could not control the mechanism for wage increases unilaterally. Employees could further emphasise their engagement with the wage-increasing mechanism by forming workers' associations (e.g. the trade union) to ensure that employers invested

portions of their profits into actual investments that benefited employees (1985, 180). The evolution of these two scenarios, according to Przeworski, was a reversible process since both parties must evaluate if it was worth compromising the current situation. If employees were dissatisfied with the mechanism, they might strike again for their perks rather than compromise.

Finally, Przeworski considered the government's role in reaching a compromise between employers and employees. According to the author, the government did not interfere with employer–employee compromises. Instead, the state and its policy enactments were representations of the compromise reached between employers and employees. Przeworski wrote the following to demonstrate the state's unique situation:

They [states] are quite instrumental with regard to the interests of a class coalition that leads to a compromise, the state does what appears necessary to reproduce capitalism because this is the choice of the workers as well as the capitalists. (1985: 202)

According to Przeworski, “[the] organisation of the state as an institution and the policies pursued by this institution constitutes an expression of a specific expression of a specific class compromise” (1985: 202). As a result, we could infer that the government's job was to enact relevant policies and processing regulations, comparable to James Marape's point of view. The state was generally absent from activities on the ground; thus, the scenario became interactions between employers and employees to see if a compromise could be achieved.

2.4.2 Labour process compromise theory

Wright (2000) developed compromise theory to study the capitalist labour process, building on Przeworski's elaboration. In reviewing Przeworski's finding, Wright noted that Przeworski's demonstration of two scenarios represented two kinds of compromise: a negative compromise and a positive compromise (2000, 965). Wright added an initial stage, an illusion, and defined these three scenarios as follows: the first stage referred to a situation in which employees struck for benefits and rights because employers had complete control over workers' wages. Work relations progressed to a second stage, the negative compromise,

as employees' ability to form workers' associations grew. During this stage, the relationship between the two parties was analogous to a stalemate on the battlefield. Both parties recognised that, rather than continuing mutual harm, they must give up some values to gain concessions from the other side. Employers could no longer control wage increases and working conditions unilaterally while negotiating and conceding. Employees also ensured that there was a mechanism to assist them in meeting material needs from the profits of their employers. Work relations could progress to the third stage, the positive compromise, when stable cooperation between two parties was achieved due to the equilibrium between two parties, as workers' involvement increased (2000, 957–958). Wright, like Przeworski, maintained that the evolution of these three stages was reversible, depending on whether employees were satisfied with their employers' concessions.

Additionally, Wright presented three contexts in which compromise theory was applicable: the exchange sphere, the productive sphere and the political sphere. In the productive domain, Wright observed that compromise manifested itself in various work relationships and the resolution of workplace problems. The author noticed that employers had two conflicting goals within the productive sphere: the desire to control labour processes unilaterally and the parallel wish to create a cooperative, proactive and responsible workforce. The many stages of compromise illustrated the employers' various negotiations regarding their conflicting interests. Wright stated that employees' associational power (such as unionisation) and structural power (such as critical job positions) were crucial in countering employers' desire for unilateral control and fostering collaboration and coordinated interests between two parties (2000, 962). Wright noted that when workers' two powers increased, these two fundamental elements influenced the various stages of compromise between two sides. Employees' struggle for rights also served as a reminder to employers of the importance of negotiating with them over improvements to the labour process. Wright concluded from these findings that control was not the only goal of employers and that collaboration between employees was beneficial for improving work relations in production.

Finally, different institutional and systematic factors influenced the formation of various compromises. Wright drew a comparison between the United States and Sweden to demonstrate the impact of these two factors. Wright pointed out that these two countries were democratic and had capitalist property relations as systematic characteristics. As a result of

their various national histories, they differed primarily in institutional elements (e.g. federal legislation regarding trade unions and labour protections). Because of the anti-union legislation and the law guaranteeing management autonomy in the United States, reaching an agreeable compromise was more complicated. In Sweden, on the other hand, two-party collaboration appeared to be more hopeful because the law preserves workers' rights to unionise to protect their jobs. These two examples demonstrated how historical differences between countries resulted in diverse institutions. The ability to collaborate between employees and employers varied depending on the institutions in countries with different histories.

More and more researchers have used Wright's theory of class compromise to investigate work relations in various circumstances. Scholars observe that the control and resistance framework could not adequately accommodate the multiple stages of work relations, similar to Wright's depiction of the shift from employers' unilateral control to cooperation between two parties (Dörflinger et al. 2020). Scholars have also added to Wright's theory by illustrating additional aspects influencing employee–employer compromises. Selwyn (2011), for example, noted that a compromise was formed based on five primary factors: first, workers' associational mobility (e.g. unionisation); second, employers' requirement to adhere to global standards; third, employers' requirements for an industrious workforce; fourth, trade union involvement; and fifth, employers' emphasis on corporate reputations.

While compromise theory emphasised cooperation between employers and employees, scholars pointed out that this cooperation did not always reflect two parties' aligned interests. Instead, the two parties' interests could sometimes be mutually exclusive while still achieving a cooperative partnership (Bélanger and Edwards 2007). Given this circumstance, some scholars recommended studying the compromise between two parties using the term 'concern' rather than the term 'interest' (Edwards et al. 2006). The discussions about balancing the interests of employers and employees, according to the authors, may overlook how power structures function over or restrain the fundamental objectives of both parties. Finally, in response to Wright's assessment of workers' power, research on the trade union and shop steward has demonstrated how workers' associational power contributed to achieving a compromise in African mining projects (Moodie 2010; Webster 2001). These

findings showed that Wright's compromise theory animated numerous lively debates and provided a valuable framework for studying the capitalist labour process.

This section has shown how scholars constructed labour process compromise theory based on Gramsci's concept of compromise equilibrium. By conceptualising the establishment of compromise equilibrium as a three-stage process, this theory demonstrated the crucial role of employees in creating employer–employee collaboration. Employees' engagement in developing countries affected the compromise stage between employers and employees by founding trade unions and occupying crucial job positions. Additionally, Przeworski's conceptualisation of the state as an institutional involvement in reaching compromises and Wright's discussion of systemic and institutional factors demonstrated that compromise theory enabled scholars to study labour processes in situations where the state's role was defined by its absent presence (Bainton and Skrzypek 2021). With different states enacting distinct policies and institutions, the emergence of compromise stages also varied according to their respective histories and cultures. These features illustrated the utility of compromise theory in examining capital–labour interactions in a CMC's mining activities in PNG, where the state was partially present, the trade union was allied with Papua New Guinean workers and the concerns of Papua New Guinean employees were paramount.

2.5 Conclusion: compromise theory in social science

Compromise, I suggest, could be given more attention when examining how employees of various cultural backgrounds work in different mines in multiple countries. Rather than the negative connotation often associated with this concept, compromise helps examine the processes through which CMCs are compelled by circumstances to accept far less than they might expect in different countries (Margalit 2010; Fumurescu 2013). Papua New Guinean employees' willingness to compromise does not imply that they have surrendered to the Chinese employer; instead, it demonstrates their flexibility to choose an alternative that is good for them in the long run, given that the Chinese employer needs their cooperation. The lens of compromise enables us to contextualise the operation of Chinese-owned and managed mines in postcolonial PNG, where Chinese employers' control is constrained, and Papua New Guinean employees' agency in responding to power imbalances is noticeable (Ejiogu 2020).

In social science, there is similar advocacy for compromise theory. For example, according to Brewer (2018), sociology requires compromise theory to investigate interpersonal relationships in which two parties were formerly adversaries but may now work together through negotiations and concessions. Brewer claims that compromise also occurs in personal feelings and language performance on an individual level. By focusing on persons, Brewer asserts that when compromising, certain binary boundaries in personal life disintegrate since the link between different realms is not antagonistic but intertwined. Brewer uses the link between the public and private spheres as an example, noting that people's private domains (such as emotions, attitudes and values) considerably impact their compromises in public. As a result, according to Brewer, the idea of compromise is not a return to the private–public binary. Instead, reaching a compromise is a process in which certain binary distinctions linked with people's everyday lives are blurred or eliminated.

Building on Wright's and Brewer's perspectives, my thesis employs compromise theory, defining compromise as employment and social relations founded on negotiations and concessions to achieve mutually satisfactory futures (Brewer 2018). Given the mutual incomprehension of Chinese and Papua New Guinean personnel, language in the workplace becomes an essential factor to consider while researching workplace compromise creation. This theory also motivates me to investigate how Chinese and Papua New Guinean employees make concessions in a specific location with a unique background of experimenting with different capitalist economies. With a blurred distinction between past and present, examining industrial compromise on a particular terrain necessitates an investigation of how previous economic activities that had occurred on this landscape still influence current job organisation in the workplace. Finally, considering becoming working class as a compromise process pushes me to look at how different work practices and understandings affect employees' gender identities. Due to the blurred boundary between tradition and modernity, researching workers' gender compromises leads me to consider how their gender performances incorporate multiple, sometimes contradictory, ideologies and reflect the multi-temporal nature of workers' everyday life.

Chapter 3 Negative compromise: employment relations in the acid leach production phase

3.1 Introduction

During my stay in the displaced community of Enekwai in 2014, I made weekly trips to Madang town to shop for groceries in the supermarket. One evening, while returning in a public motor vehicle with other villagers, we stopped by the Kurumbukari mine's accommodation area to sell vegetables to Chinese workers. While sitting in the vehicle, I first tasted how Papua New Guineans and Chinese employees communicate. Because they were unfamiliar with each other's language, I heard that some Chinese employees were disappointed and complained about the damage to the vegetables caused by the bumpy road trip. I also overheard villagers laughing at Chinese employees, expressing that Chinese people should not be so demanding because they were not working in the PRC but in PNG. During their interactions, the villagers made fun of the Chinese because they could not express their outrage in English or Tok Pisin.

When I visited another coastal impacted village, Mindre, in 2017, I noticed a different situation. A group of Chinese employees were buying vegetables from local women vendors at a market outside the township before taking a bus to work at the refinery (Figure 3-1). When I approached them, one of the middle-aged Chinese employees attempted to purchase green onions and lemons from a local woman vendor. During their conversation, I noticed that the Chinese employee could ask for the price using phrases like ten *toea* ('cent'), twenty *toea*, or fifty *toea*. He also knew *wanpela* ('one') and *tupela* ('two') to indicate the number of items he intended to purchase. Female vendors would use hand signals to indicate whether they accepted the price or not. Some of them also learned the Mandarin Chinese term *mao* ('cent, which is equal to ten *toea*') to communicate the price of vegetables to the Chinese employees, such as *yi mao* ('one cent, which is equal to ten *toea*') or *er mao* ('two cents, which is equal to twenty *toea*'). This encounter was distinct from my prior one in 2014, in that two participants progressively developed a unique method of communication. The interactions between the two groups were also different from the prior tense situation in that some local vendors learned what kinds of veggies and fruits the Chinese employees preferred.

Figure 3-1 Chinese employees shopping for vegetables at a local market near Mindre



Source: Photo by the writer

After observing these two settings, I wondered if a similar change would occur in work relations after many years of collaboration between Chinese and Papua New Guinean staff. Villagers' laughter at Chinese employees' failure to converse in English reminded me of Papua New Guineans' previous adaptations to Australian educational and industrial systems, as seen in Chapter 1. Prior work experiences with Westerners continued to influence Papua New Guinean employees' work attitudes and employment interactions with Chinese workers after the arrival of CMCs. Furthermore, as Parry (2005) pointed out, values and behaviours learned from previous work experiences might be used to evaluate and even influence new work settings. Based on these ideas, I decided to investigate how Papua New Guinean workers adapt to work and how two groups of workers created workplace-specific communication methods. Confronted with the impact of the Australian industrial system, I also wanted to learn how Chinese management dealt with the situation and what role Papua New Guinean personnel played.

This chapter is divided into four sections. The first section outlines Errington and Gewertz's (2004) research on labour relations in a British-owned and managed sugar mill in PNG. According to the authors, Papua New Guinean employees from various backgrounds had distinct experiences at work, and Papua New Guinean managers played a critical mediating role in the relationship between Western management and local employees. Similar findings can also be seen in studies examining Papua New Guinean employees and managers involved in mining activities in PNG. The second section of this chapter, which is inspired by Errington and Gewertz's perspectives, describes the experiences of Papua New Guinean employees working alongside Chinese management and learning a specific workplace pidgin in a refinery. The third section delves into the experiences of Chinese employees in PNG adjusting to Australian-style industrial rules and the crucial role of Papua New Guinean managers in assuring the refinery's operation. The final section argues that the refinery's current labour relations, at times, resemble Wright's (2000) depiction of the negative compromise.

3.2 Adaptation of Papua New Guinean workers to industrial work

The Rai Coast district in Madang Province, PNG, where the refinery is located, is a well-known anthropological fieldwork site for the cargo cult movement led by a local male leader, James Yali, during the late 1940s and early 1950s (Lawrence 1964). In their descriptions and analyses of this significant event, various scholars have different interpretations of Yali's motivations, which lead to different perspectives on encounters between Westerners and hosting communities in PNG. For example, Errington and Gewertz (2004) disagree with Diamond's (1997) reading of Yali's observation regarding ethnic discrepancies as a concern about Papua New Guineans' lack of cargo compared to Westerners' ownership, which Diamond used to construct a grand history driven by the power of those who had resources and the pain of those who did not. But Yali's observation, according to Errington and Gewertz, was about the social inequalities between Papua New Guineans and Westerners, as opposed to Diamond's emphasis on ownership of things (see also Sullivan 2005). "That Diamond does not stretch his imagination to understand Yali's cultural views of the desirable and the feasible is consistent with the history he presents," they wrote (2004: 8). To give a counterbalance, Errington and Gewertz propose that the comparable historical process should be grounded in Papua New Guineans' standpoint in the face of capitalist economic expansion.

To demonstrate their point of view, Errington and Gewertz use Ramu Sugar Limited, operated by the PNG government with the assistance of a British international agricultural management firm, Booker Tate Limited, as an example to explain local employees' work experiences. By examining the training and localisation program, the authors highlight that Papua New Guinean employees' capacity to learn and complete duties demonstrate that they were not technologically ignorant. By engaging in the training, the authors observe that the experiences of local personnel represent "a particular kind of life trajectory – the idea of a career, and by implication, a sense of whether a particular life is on course or off course" (2004: 143). According to the authors, Papua New Guinean workers from various backgrounds had varying experiences with training and jobs. Local labourers who continued to engage in subsistence farming complained about their low wages and monotonous employment. Instead, other permanent employees regularly indicated pleasure with their jobs. They expressed delight at the prospect of acquiring new technical skills and valuable interpersonal contacts that could prove advantageous in the future. These accounts show that workers from varied backgrounds had distinct experiences and motives when receiving training and performing tasks.

Errington and Gewertz also claim that implementation of the training program was not a carbon copy of the British firm's prior practices in Caribbean countries but rather a modification based on engagement with Papua New Guinean employees. The authors use the example of a Papua New Guinean manager, Joe Herman, who received his education in the United States, to demonstrate how he balanced and synthesised the contradictory interests and objectives of different groups in a multi-ethnic work environment. Because of his in-between position, Herman had to deal with hierarchical class interests due to his company responsibilities and ethnic interests resulting from his commitment to communities in the village. To describe his experience, the authors note that Herman's situation frequently required him to seek compromises between company obligations and *wantok* ('family or relatives') expectations. According to the authors, Herman was in a fractured situation because he dealt with the conflicts between Papua New Guinean and Western colleagues. Considering these findings, Errington and Gewertz argue that Herman's position was critical for this project, given that it operated in a multi-ethnic and agro-industrial context.

Similar points of view can be found in PNG mining studies. Polier (1994), for example, demonstrates how Papua New Guinean employees were able to understand and perform work in the mining sector. Using the Min people of Western Province as an example, Polier notes that the company-produced book of photography called *Ok Tedi: 24 Hours* (Fishman and Lamb 1983) revealed that local employees were considered technologically ignorant and backwards, whereas heavy equipment operated by Western employees was massive in size, scale and scope. To counter this viewpoint, Polier interviewed a Papua New Guinean employee and discovered that he was able to detail the process and experience of working in the cyanide room and was aware of the danger of breathing cyanide on his body. Polier notes, based on this example, that mining jobs became another social path for local workers to pursue a company career involving working with machinery, which was different from making gardens, building houses and finishing male initiations.

Previous research has also shown that Papua New Guinean managers played the role of an intermediary in linking multinational mining employers and local employees. For example, Golub and Rhee (2013) show how Papua New Guinean managers working in the mining and petroleum industries aided in the operation of these economic activities by leveraging personal connections with locals. “[They] lubricate the pathways through which transnational capital passes and connect off-shore offices, exploration camps and full-scale operation, enabling distant forces to gain traction in Port Moresby,” the authors wrote (2013: 232). This study indicates that the significance of Papua New Guinean managers is worth investigating, particularly in Chinese mines in PNG, since Chinese management lacks understanding of local practices and values.

Inspired by these viewpoints, this chapter demonstrates how Papua New Guinean employees navigate work situations in the refinery. Working with Chinese workers requires Papua New Guinean employees to learn new ideas about work ethics and a way of communicating that are different from working with Westerners. Because of the Australian-style industrial system described in Chapter 1, Chinese employees must also implement a new training system for Papua New Guinean employees and comply with PNG workplace safety regulations. Because of this unique work situation, Chinese management must respond to the needs of Papua New Guinean employees and seek assistance from Papua New Guinean managers. These circumstances significantly impact the nature of work relationships in the refinery.

3.3 Adaptation of Papua New Guinean workers to working with Chinese employees

Following the construction phase, the start of the production phase introduced different requirements for locals seeking to become refinery workers. According to my interviews with Papua New Guinean employees, there were more modest jobs during the construction phase, such as assisting Chinese contractors erecting bridges, constructing worker housing and laying down the refinery site's construction works. They emphasised that these low-skilled jobs required less formal education and greater physical strength, drawing many migrants from the Rai Coast and Morobe border regions. When the refinery entered production, however, the situation changed, as RNC required personnel with educational certificates ranging from grade 10 to 12 to run machines and manage the company's enterprises. As a result of this shift in requirements, the number of immigrants has declined since the production phase started. Local residents were also required to develop new techniques and acquire new skills to find jobs in the refinery.

This chapter focuses on the refinery's acid leach production phase to show how Papua New Guinean and Chinese staff worked. I made this selection because high-pressure acid leach processing was crucial in determining the economic profitability of the mine and the processing plant at Basamuk (NSR Environmental Consultants Pty Ltd 1999). By focusing on this production stage, we can better comprehend how Papua New Guineans received formal training, because of the Ramu NiCo Allied Workers' Union's efforts, and how they learned to work alongside Chinese personnel. On the other hand, this case enables us to comprehend how Chinese employees adapted to PNG mining regulations. These factors demonstrate that the acid leach production phase is an excellent case study for investigating changing work relations in the refinery.

3.3.1 Job applications at the refinery

To begin, becoming a worker in the refinery first involved preparing several documents. A letter of interest, curriculum vitae, letter of recommendation and a letter of support from landowners were included in these documents. Even after they completed grades 10 or 12,

most local residents had no idea how to write these papers, let alone had access to printers in the village. Given these difficulties, some job seekers might seek assistance from current Papua New Guinean workers with college or university degrees to aid them in writing and printing those papers. Others might seek assistance from Papua New Guinean managers employed by local landowner companies. Due to the high volume of requests, some local contractors were forced to post a notice on the door informing people that they could not assist them in preparing and printing these documents. Those without assistance would have to spend three and a half hours on a single dinghy trip to town and hire someone from one of the service shops to assist them in completing these documents.

After completing the necessary paperwork, local job seekers were required to interact with the refinery's *wantok* system. Local interlocutors referred to this process as *putim pepa* ('submitting application documents') and stated that the *wantok* system was critical for RNC to employ local workers, for two reasons. Firstly, the *wantok* system ensured that the job seeker corresponded to the individual listed on the application materials, as most people in Rai Coast lacked a national identification card. The PNG government was promoting national identity registration in Madang during my fieldwork. However, the office was frequently closed owing to staffing shortages or machine malfunctions. Residents of the Rai Coast were deterred from lodging the application since it was commonplace for people who had travelled a considerable distance to the town only to discover that the office was closed, or they were required to return another time. As a result, the RNC employee ID functioned as most local employees' first formal identification card, replete with their names and images, which could be used at the airport to travel to other provinces in PNG.

Additionally, the *wantok* system was operational during the labour recruitment process in the human resources department. Rather than viewing familial ties as a guarantee of employment, many local interlocutors indicated the need to find ways to reinforce *wantok* relationships with the human resources staff. They recommended that individuals purchase cigarettes or beverages for their *wantok* at the human resources department to create and sustain ties. They might receive a response from the human resources department regarding interview opportunities after a few months or even years. Their stories reminded me of research on how immigrants formed relationships with local landowners to find work in the mining sector (e.g. Bainton 2008). The refinery's *wantok* system demonstrated that, like immigrants, residents

needed to maintain and strengthen familial ties to secure jobs, even though they were already human resources personnel's *wantok*.

3.3.2 Learning Chinese work ethics

After job applications were approved, local residents were required to learn to work with Chinese employees whose work attitudes differed from Westerners. This subsection uses the case of Nathan, a Papua New Guinean worker in his late twenties, to describe how he acclimated to the new work environment.²³ Nathan obtained a university degree and worked in the acid leach department's control room. Nathan stated that he became aware of RNC's corporate culture when looking for a position with the company. As a recent university graduate, Nathan expected to perform accounting-related employment consistent with his skill set and understanding of Australian corporate culture. After receiving word of job acceptance, the human resources department inquired whether he might work in another department due to the lack of accounting-related employment openings. Nathan was surprised by this arrangement but accepted the job offer to develop his talents and build on the knowledge he gained at the university.

After being assigned to the acid leach department, Nathan was introduced to a specific training system for Papua New Guinean employees. According to the *Ramu Nickel Project Operations Industrial Award 2018 (Basamuk overview)*, the training system was governed by the PNG Apprenticeship and Trade Testing Act 1986. There were five levels of workers in Nathan's department, which included trainee operator (HR grades 2–3), process operator level 1 (grades 4–5), process operator level 2 (grades 6–8), process operator level 3 (grades 9–10) and control room operator (grades 11–12) (see Table 3-1). Pay rates would rise on promotion to a higher level. Nathan had started in grade 2 and was in grade 10 or 11 when I met him, based on his completion of training courses in machinery and equipment operation, sulphur handling and steam production. Nathan's case demonstrates that Papua New Guinean workers had a formal and quite effective process for improving their skills, levels and pay rates.

²³ All names in this chapter and this thesis are fake names in order to protect interlocutors' identities.

Table 3-1 Workers' grades and levels in the acid leach department**Classifications & Grades****Schedule 1. Classifications and wage grades**

Work area & Pay grades	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Acid plant															
Trainee operator		✓	✓												
Process operator level 1				✓	✓										
Process operator level 2						✓	✓	✓							
Process operator level 3									✓	✓					
Control room operator											✓	✓			
Trainee room operator															
Trainee assayer			✓	✓	✓										
Assayer						✓	✓	✓							
Boiler operator					✓	✓	✓	✓	✓						

HR Grade	Title	Points	K
2	Trainee 0.1	0 to 4	3.65
3	Trainee 0.2	5 to 9	3.80
4	Level 1.1	10 to 14	4.16
5	Level 1.2	15 to 19	4.92
6	Level 2.1	20 to 24	5.74
7	Level 2.2	25 to 29	6.56
8	Level 2.3	30 to 34	7.38
9	Level 3.1	35 to 39	8.2
10	Level 3.2	40 to 44	9.02
11	Level 3.3	45 to 49	9.84

Source: Reproduced by the writer from *Ramu Nickel Project Operations Industrial Award 2018* (Basamuk overview)

Along with the PNG-defined training system, Nathan received on-the-job instruction using more distinctly Chinese methods. Nathan and other Papua New Guinean personnel learned numerous technical skills (such as welding, grinding and scaffolding) from Chinese staff while they were trainee operators. While training on the job was available in other mines in PNG, the Chinese team's engagement brought a training system unique to early Chinese SOEs – *chuanbangdai* ('transferring, assisting and leading'). As in an apprenticeship, new employees were assigned to a 'master' who instructed them on specific tasks and kept tabs on

their overall attitude and performance. In addition, RNC provided a formal definition of this training approach in an internal corporate document:

Transferring entails conveying the concepts of eating bitterness and working hard. Assisting involves passing on knowledge. Senior Chinese personnel with solid security awareness would be partnered with new Papua New Guinean colleagues to help them develop their abilities. Leading entails encouraging work ethics, including abstaining from betel nuts and tobacco, working diligently and being devoted to working.²⁴

This explanation demonstrates that RNC intended to use *chuanbangdai* to teach Papua New Guinean personnel skills and the Chinese work ethic – *chiku* (‘eating bitterness’, a Mandarin Chinese compound term meaning enduring adversity and working hard).

Nathan encountered some tensions and contradictions between the two systems due to his participation in two different training methods, particularly in terms of workplace safety. During his Health, Safety and Emergency training as a trainee operator, Nathan was told by a Papua New Guinean trainer about the importance of workplace safety. Nathan should stop working if he considered the working conditions unsafe, according to the trainer. During on-the-job training, Nathan observed some Chinese employees’ devotion to work that he deemed unsafe, such as working on rainy days, because the rain would bring the airborne sulphur dust and steam to the ground rather than evaporate in the sky. Nathan was initially hesitant to assist the Chinese staff due to the Papua New Guinean trainer’s instructions.

However, after attempting to assist Chinese employees a few times, he realised how they understood and practised hard work ethics to maintain consistent production. Nathan gained this idea during a pre-start meeting the next day after arriving on the job site. During the meeting, Chinese supervisors discussed the performance of Papua New Guinean workers based on whether they aided Chinese employees in their work. “[In a] Chinese company, you have to work very, very hard,” Nathan stated to explain his realisation. “It is rain or sun, whatsoever. You must work work. And then they will know that you are [a] hard-working

²⁴ This paragraph is a verbatim quote from the corporate document. The original language of this paragraph is Mandarin Chinese and is translated into English by the writer.

guy.” Confronted with divergent perspectives from Papua New Guinean trainers and Chinese supervisors, Nathan chose to work ‘very hard’ since he was aware that the Chinese supervisors’ evaluations were a significant component in evaluating his work performance on the performance sheets used for the job promotion (Figure 3-2).

Figure 3-2 An example of Papua New Guinean workers’ performance assessment sheet

Ganglout Landowner Company Limited - Labour Hire Service to MCC

Evaluation Report

Reporting Date 11/05/2019 Department HPAL Employee Name [redacted]

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Attendance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Signature MCC Supervisor [redacted] Sited by GLC Manager [redacted]

Ganglout Landowner Company Limited - Labour Hire Service to MCC

Work Evaluation Report

Reporting Date 11/05/2019 Department HPAL Employee Full name: [redacted]

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Attendance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Signature MCC Supervisor [redacted] Sited by GLC Manager [redacted]

Ganglout Landowner Company Limited - Labour Hire Service to MCC

Work Evaluation Report

Reporting Date 11/05/2019 Department HPAL Employee Full name: [redacted]

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Attendance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

Work Performance
A-Excellent B-Good C-Satisfactory D-Needs Improvement E-Warning

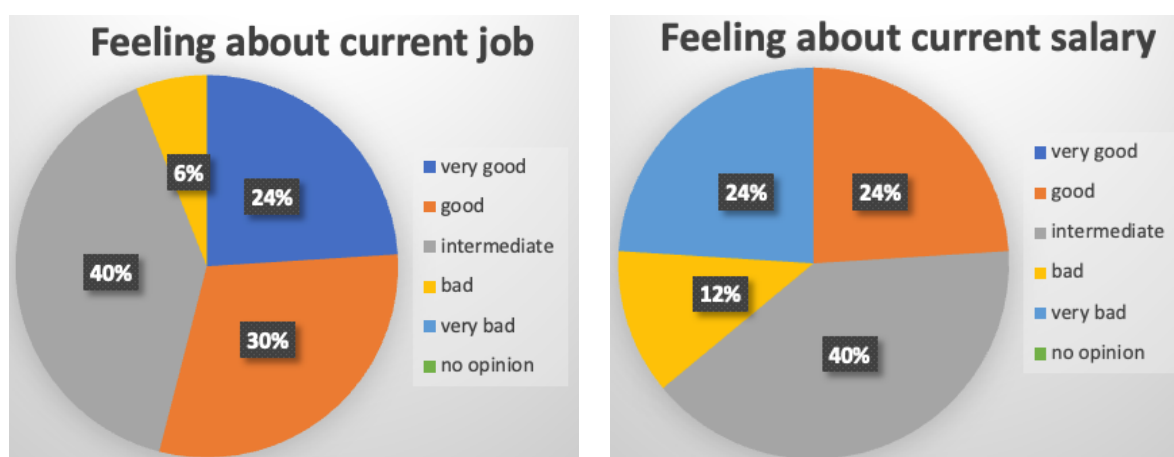
Signature MCC Supervisor [redacted] Sited by GLC Manager [redacted]

Source: Photo by the writer

Inspired by Nathan’s story, I conducted thirty-four questionnaires to learn about other Papua New Guinean employees’ perceptions about jobs at the refinery. Interlocutors were asked to review their perceptions of their current jobs and wages in six categories: very good, good, intermediate, bad, very bad and no opinion. According to the findings, 54 per cent of respondents thought their current jobs were very good or good, 40 per cent thought they were

intermediate and only 6 per cent thought they were bad (Figure 3-3). Concerning their current salary, 24 per cent noted it was good, 40 per cent noted it was intermediate and 36 per cent noted it was either bad or very bad (Figure 3-3). These findings suggest that most Papua New Guinean employees were satisfied with their jobs at the refinery, though the wage situation could be improved. This situation differs from a widely circulated narrative about Papua New Guinean employees' complaints about working for RNC due to low wages. Instead, according to the results of my survey, only one-third of refinery employees were pessimistic about their pay. Furthermore, their positive attitude towards current jobs suggests that wages are not the determining factor influencing Papua New Guinean employees' attitudes towards their jobs.

Figure 3-3 Survey results

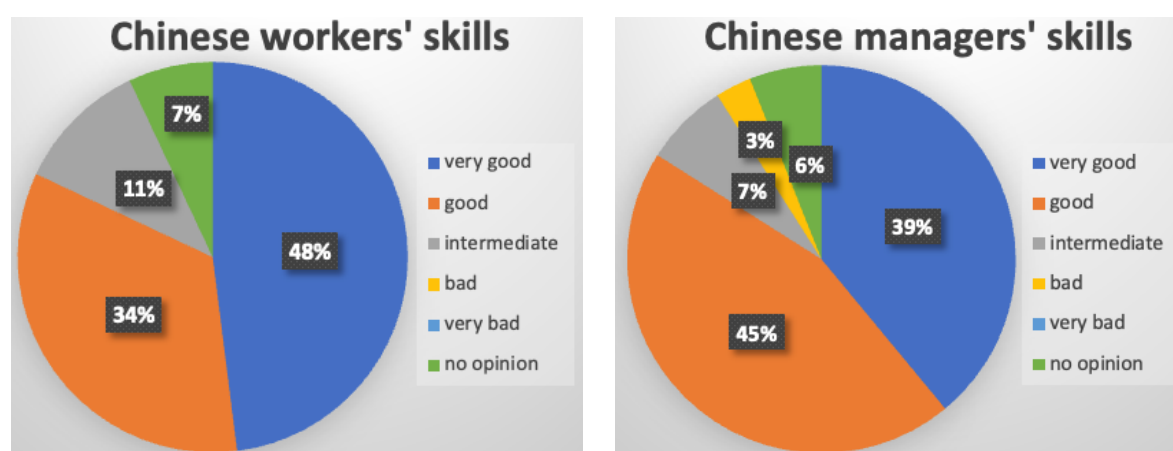


Source: Made by the writer

I also asked for answers to twenty-seven questions to ascertain whether Papua New Guinean employees benefit from their work at the refinery. Interlocutors were asked to review their perceptions of Chinese workers' and managers' work experiences and knowledge in six categories: very good, good, intermediate, poor, very poor and no opinion. According to the results, 82 per cent noted that Chinese colleagues' related work experiences and knowledge were either good or very good, 11 per cent noted that their skills were intermediate and 7 per cent had no opinion (Figure 3-4). Regarding Chinese managers, the results suggest that 84 per cent thought their work experiences and knowledge were either very good or good, 6 per cent thought they were intermediate, 3 per cent thought they were poor and 7 per cent had no opinion (Figure 3-4). These findings indicate that most Papua New Guinean employees had a

positive opinion of the talents and expertise of Chinese employees. These findings explain why many local employees, like Nathan, stressed the importance of gaining work experiences and technical skills through employment at the refinery. Additionally, these results reveal that *chuanbangdai* is an effective method for RNC to educate Papua New Guinean employees through skill development, in conjunction with official training provided by third-party companies and Papua New Guinean managers.

Figure 3-4 Survey results



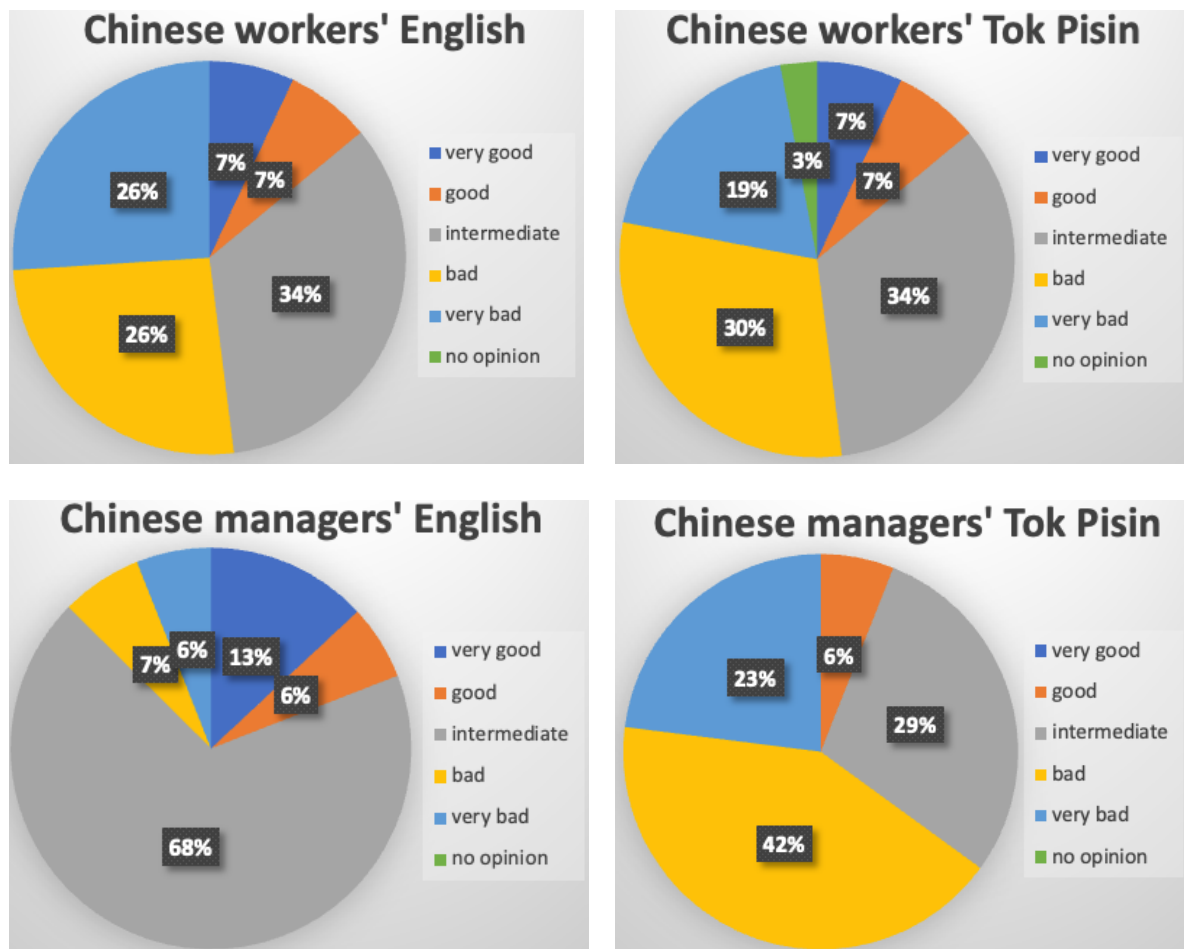
Source: Made by the writer

3.3.3 Learning workplace pidgin

Working with Chinese employees also required local employees to learn a specific workplace pidgin. At the start of my research, I conducted twenty-seven surveys to learn about Papua New Guinean employees' perceptions regarding language communication at the refinery. Interlocutors were asked to review their perceptions of Chinese workers' and managers' English and Tok Pisin levels in six categories: very good, good, intermediate, bad, very bad and no opinion. According to the survey results, 52 per cent of respondents said Chinese workers' English skills were poor or very poor, 34 per cent said intermediate and 14 per cent said good or very good (Figure 3-5). Regarding Tok Pisin proficiency, 49 per cent said Chinese workers were very bad or bad, 34 per cent said they were intermediate and 14 per cent said they were good or very good (Figure 3-5). Regarding Chinese managers' English proficiency, 13 per cent said it was poor or very poor, 68 per cent said it was intermediate and

19 per cent said it was good or very good (Figure 3-5). Finally, when asked about Chinese managers' Tok Pisin level, 64 per cent said it was bad or very bad, 29 per cent said it was intermediate and 6 per cent said it was good (Figure 3-5).

Figure 3-5 Survey results



Source: Made by the writer

These statistics show that most Chinese workers could not communicate in either English or Tok Pisin. Despite their poor Tok Pisin skills, Chinese managers could communicate in English at a medium level. These findings support many interlocutors' claims to communicate in English with Chinese supervisors. One possible explanation for Chinese workers is that most of them were senior SOE employees who did not receive proper English education while working in the PRC. To alleviate the language barrier in the workplace, interlocutors

indicated that senior Chinese staff received weekly language instruction to improve their English. Additionally, they stated that interpreters from the PRC and PNG benefited the refinery's language communication. I also learned of a weekly Mandarin Chinese training program for Papua New Guinean employees at the late stage of my fieldwork.

Moreover, as I gradually learned to speak Tok Pisin, I found another unique workplace pidgin had emerged in the refinery. Due to my limited vocabulary in Tok Pisin phrases, I occasionally inserted English terms into my Tok Pisin sentences to express Tok Pisin meanings that I had not yet acquired. Surprisingly, this method worked for most local interlocutors and allowed me to conduct interviews in Tok Pisin. Listening to how I spoke Tok Pisin, some interlocutors told me that the way they communicated with Chinese employees was also based on a mixed language. Inspired by this communication, I started to ask local interlocutors about how they learned and used this workplace language.

This subsection draws on Nathan's experiences to show how Papua New Guinean employees communicate with Chinese employees. According to Nathan, a workplace language emerged because of years of collaboration between Chinese and Papua New Guinean staff and was a combination of Tok Pisin, Mandarin Chinese and English, along with hand signals. When a Papua New Guinean employee was hired for the first time, he or she must spend several weeks or months studying the language in either group or individual learning. Group learning occurred when a Chinese supervisor offered work instructions to local staff. When junior local employees heard the instruction, they discussed and guessed what the supervisor said and what his actions indicated. Due to the repetitious nature of the job in each department and the similarity of the machinery employed, novice Papua New Guinean employees could acquire this language by working for a given period and following the advice of experienced Papua New Guinean employees.

Individual learning was described as *wokim aksen* ('take action') and *bihainim aksen* ('follow the action') by Papua New Guinean employees. Using the example of learning to operate a Terex dump truck, the Chinese employee invited Papua New Guinean newcomers to sit next to him and demonstrated the function of each button as well as how to control the steering wheel and block gears. During the training, there was not much verbal interaction. Following the demonstration, the Chinese staff member would request the local staff member to repeat

his action to ensure he understood it. If the Papua New Guinean employee did well, the Chinese employee would say, ‘okay la’ or ‘good good’ and inform other Chinese employees that he had passed. When a local employee made a mistake, the Chinese employee instructed him to stop by saying ‘no good’ and repeated the demonstration.

The use of this language in different workplaces reveals both similarities and variances. For Chinese colleagues to understand, Papua New Guinean workers indicated that they must adopt simplified sentence structure by emphasising or repeating specific nouns (machine or equipment names), verbs (activities) and adjectives (conditions). Using the valve malfunction as an example, Nathan stated he said to a Chinese employee:

Poroman (‘friends’), *nage* (‘that’) *valve no good ah. Nage broken, no good ah. Poroman come, stand and see. Nage no good, we talk talk and maintenance ah, come ah, fix* (‘Friends, the valve is not operating correctly. Friends, come, stand here and check the valve. The valve has a problem. Let us have a discussion and inform the maintenance team to come and fix the valve’).

This example demonstrates how Nathan communicated the valve’s malfunction to Chinese colleagues by emphasising and repeating the noun ‘*nage*’ (‘that’ or ‘the valve’) and the adjective ‘no good’ to convey that additional action was required.

Additional instances of this workplace pidgin were used in the acid leach department. “*Poroman* (‘friends’) *gut* (‘good’) morning ah,” a Papua New Guinean employee would say after distributing tasks to Chinese colleagues in the morning. “*Mi* (‘I’) *wok* (‘work’) *wok* with you, *mi wok wok* with you. Today *mi wok wok* with you ah” (‘Good morning, friends. I collaborate with you. I am working with you today’). In this scenario, the local employee repeated the verb ‘*wok*’ (‘work’) to inform his Chinese colleagues that they were working together today. “Okay, you stay, *poroman* (‘friends’),” a Papua New Guinean employee would respond when he or she received gifts (e.g. salt, cigarettes, biscuits, or noodles) from Chinese colleagues. “*Mi* (‘I’) go home la. Mushroom, lemon *kam* (‘come’) give you” (‘All right, my friend, you can stay here. I am going home to get some mushrooms and lemon to offer to you’). The local employee emphasised the nouns mushroom and lemon since they

were familiar with how Chinese employees used them when cooking in the dorms. Finally, Papua New Guinean staff were taught common Mandarin Chinese terms to describe labour or machine situations, such as *nage* ('that one'), *you* ('have'), *meiyou* ('do not have'), *hao* ('good'), *huaile* ('broken') and *alibaba* ('stealing or thief').

The use of this workplace pidgin varied according to the names of various machines and equipment in various departments. During on-the-job training with Chinese supervisors, for example, Papua New Guinean employees learned different Mandarin Chinese machine names, such as *chaiyou* ('diesel fuel') and *yaoshi* ('key') in the limestone mill; *pidai* ('conveyor belt'), *bangpu* ('pump') and *qiumoji* ('ball mill') in the limestone processing plant; and *banshou* ('spanner'), *dahuoji* ('lighter') and *shoutao* ('gloves') in the instrumentation department. Nathan said he used onomatopoeia to write the machine name's pronunciation without tone to remember these terms. When employees used this workplace pidgin, it was not easy to tell if they spoke English or Mandarin Chinese. A more accurate description is that it reflected a situation in which two groups of workers did not share a common language and interacted by employing limited vocabulary derived from Tok Pisin, English and Mandarin Chinese.

Finally, the requirement to learn this language made Papua New Guinean workers who had not completed college or university education more equivalent to those with such qualifications. Learning this language did not require formal academic qualifications. The ability to speak this language also provided local employees with the opportunity to learn how to operate machinery and other relevant technical skills, particularly in welding, grinding and scaffolding. A few Papua New Guinean workers with official higher education credentials indicated being pushed to downgrade their linguistic abilities. When people spoke this language, they had the impression that they were speaking in a childlike manner or simplifying things. They expressed frustration at their inability to speak at an average rate and perform tasks rapidly. Additionally, some workers said that their capacity to communicate in this language affected their job promotion. Owen, a Papua New Guinean worker at the limestone plant, said that his brother was promoted to team leader because of his ability to

converse with Chinese people. Instead, Owen's inability to communicate in this language frustrated him and affected his relationships with other employees who spoke it fluently.²⁵

This section's demonstration of worker training and workplace language reflects how previous work experiences with Westerners affect Papua New Guinean employees' navigation of a new work environment (Parry 2005). Nathan's training participation indicates that enacting a new training system does not exclude the Chinese system or values. Instead, Papua New Guinean workers' emphasis on the Chinese work ethic and the workplace pidgin reflect that the Chinese management still holds a certain level of power in evaluating and promoting Papua New Guinean workers. After realising the situation, Nathan's participation reflects a negotiation between conflicting ideas and a concession to the Chinese management. Based on these findings, I argue that enacting the new training system in the refinery creates a situation where labour mobility in the workplace is increasing. At the same time, the Chinese managers still maintain a certain level of control. These findings demonstrate that the refinery's operation does not reflect RNC's dominance. Instead, Nathan's adaptability in learning and adapting to the new work setting is consistent with the emphasis placed on flexibility by Errington and Gewertz (2004) and Polier (1994).

3.4 Chinese employees' subordination to the Australian administrative system

Chinese employees working in the acid leach production phase, like Papua New Guinean employees, are influenced by their previous work attitudes and behaviours learned while working in Chinese SOEs. Chinese labourers must learn to adjust to PNG mining regulations, which are based on the Australian industrial system, while working in the refinery with local employees and Australian supervisors, as shown in Chapter 1. Papua New Guinean managers are also crucial in bridging the Chinese management and PNG mining rules based on Australian standards. This section demonstrates another aspect of work and power relations reflected in operating the acid leach production phase by showing their work experiences.

²⁵ There were still Papua New Guinean employees with university or college degrees who could communicate in this workplace pidgin. Nathan, for example, expressed no apprehension about communicating in this language with Chinese colleagues. Owen was hesitant to use this language because he stressed that he had completed training in Australia and possessed the necessary skills and experiences to perform his job. As a result, Owen may have been hesitant to learn this language because he perceived it as a threat to his competence.

3.4.1 Incorporating the Australian safety administrative system

According to an Australian Papua New Guinean former chairman of Raibus Limited, Clint, Chinese employees are initially ignorant of PNG regulations based on Australian and New Zealand standards (e.g. AS/NZS 4801).²⁶ During the first meeting with RNC staff, Clint's presence, as a white man, surprised Chinese managers. Clint believed the Chinese management thought signing an agreement with the Michael Somare government gave them the approval to direct the operation of this mine. This story corresponds to an Australian employee, Horace, previously working with RNC. Situated in between Chinese and Papua New Guinean employees, Horace's experience of educating Chinese employees regarding mining regulations in PNG included three stages: firstly, understanding that Chinese staff have a different way of working; secondly, realising the PNG government's limited capability to police rules and regulations; and thirdly, persuading Chinese staff they must adhere to laws and rules in PNG to avoid severe punishment (such as shutdown). Horace noted that the absence of the PNG state in the mine's operation forces RNC to self-govern when complying with regulations in PNG. Following Horace's view, this section shows how RNC's self-governance is achieved by Chinese managers making concessions, given the increasing influence of Papua New Guinean managers.

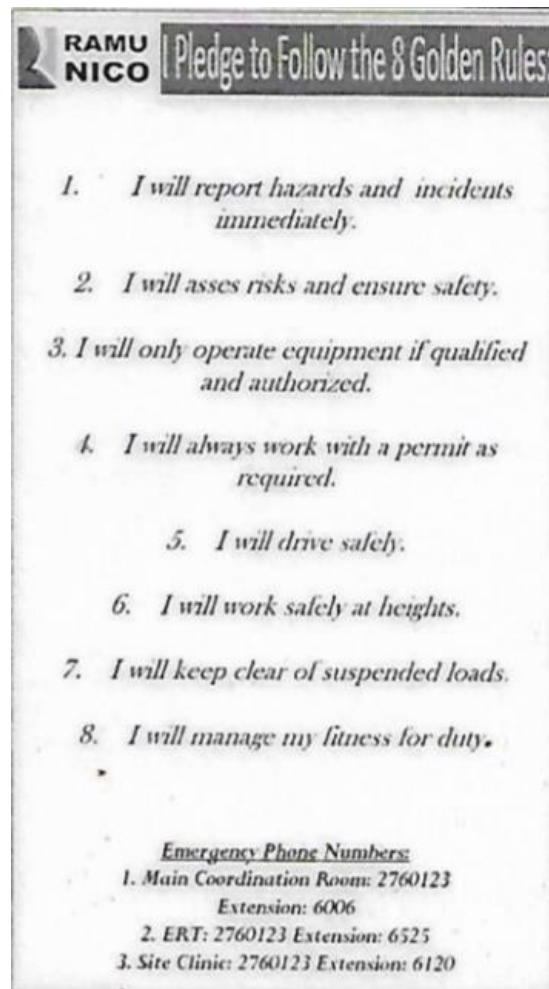
The first story is about a Chinese manager named Mr Xiang, working at the acid leach department. Aged over fifty, Mr Xiang's family had been working for RNC's parent company, Metallurgical Corporation of China Limited (MCC), for three generations. Describing himself as a *zidi* ('son') of MCC, he has worked for this company since the age of twenty, in many jobs: as a car repairer, machine operator, driver, manager of the vehicle garage and material storage room, and now as a safety manager. Mr Xiang noted that he gained many experiences through the training method called *chuanbangdai* discussed above. Describing MCC's unique work culture, Mr Xiang said this culture developed during the planned economy period in PRC, when there was no systematic training and workers' working conditions were difficult, and wages were low. Mr Xiang notes that this previously

²⁶ Raibus Limited is a landowner company that comprises subsidiaries, including engineering, security, housekeeping and national catering services. Clint is an Australian who used to be a patrol officer during the Australian administration. After the independence of Papua New Guinea, he acquired Papua New Guinean citizenship and started to manage some businesses in Madang.

grim situation resulted in RNC's emphasis on following supervisors' orders and sustaining continuous production.

Working in the refinery for more than a decade, Mr Xiang learned the workplace pidgin and some local culture through visiting local villages. He also experienced different understandings of workplace safety between Chinese SOEs and foreign (non-Chinese and non-Papua New Guinean) managers. In Chinese SOEs' culture, Mr Xiang says, the focus is on a top-down managerial system based on detailed rules accompanied by rewards and punishments. Supervisors play a critical role in managing workplace safety compared to workers' relative insignificance within this system. With foreign managers' understanding, instead, the focus is on sufficient training for workers and adequate safety equipment to achieve workers' self-safety management – workers evaluate the situation and make the decision. Encountering these contradictory ideologies, Mr Xiang says, was an unavoidable situation when the RNC began operating in PNG. The necessity is to adjust Chinese senior workers' attitudes and behaviour inherited from the Chinese SOEs' culture. After years of negotiation with foreign managers on work safety, Mr Xiang said the situation in the acid leach department has become a combination of some Chinese managerial methods and the importance of obeying occupational health and safety regulations in PNG. Using his experience as an example, Mr Xiang accompanies Papua New Guinean workers to decide whether the workplace is safe to work in. He also participates in Health, Safety and Emergency training with Papua New Guinean employees to update his knowledge and ensure that their work follows the 'Golden Rules' based on the Australian understanding of workplace safety and PNG mining regulations (see Figure 3-6).

Figure 3-6 The Golden Rules



Source: Photo by the writer

Finally, different understandings of workplace safety also affected operations in the acid leach department. Describing how Chinese staff worked as *kaobenneng* ('by instinct'), Mr Xiang said most senior Chinese workers were experienced operators, so they knew the standard operating procedures and could run the operation. However, there were situations when Chinese operators must negotiate with Australian managers regarding workplace safety. For instance, some Chinese operators might take shortcuts or breach the rules to achieve a higher production rate. These behaviours were unacceptable to non-Chinese staff, including Australian managers, who required that Chinese employees always adhere to safety regulations in PNG. Additionally, Chinese workers placed a strong focus on continuous production ahead of their best efforts to ensure safety. For non-Chinese managers, the primary

priority was to ensure their safety before moving to production. When confronted with these opposing viewpoints, Mr Xiang stated that Chinese employees must negotiate with and frequently make concessions to Australian managers.

3.4.2 The critical role of Papua New Guinean managers

Papua New Guinean managers also play an essential role in monitoring workplace safety. According to Horace, five to six foreigners worked in the Ramu Nickel mine at the time of the interview compared to ten to fifteen at the peak. He said the difficulty of communication with Chinese employees was one reason for the decrease in foreigners. Papua New Guinean managers, especially those educated in Chinese universities, played an increasingly important role because of the declining number of non-Chinese foreign managers and their understandings of PNG mining regulations and Chinese culture and language.

Luke, a previous safety training manager at RNC, was one illustration of this transition. Luke was hired by a private Chinese company to teach younger Chinese personnel business English and project management. The company also financed his study at a Chinese university. RNC hired him as a training manager after he graduated from university to teach Papua New Guinean and Chinese staff about workplace safety because he spoke Tok Pisin and Mandarin Chinese. He provided safety training and inspected work locations for senior Chinese workers. He also constantly advised Papua New Guinean employees to say no to their Chinese supervisors when they accompanied Chinese supervisors to work and perceived the work environment to be unsafe. His reminders reflect Australia's influences on his knowledge of the mining safety regulations in PNG. "Even Chinese [employees] they have the capability to manage their own operation," Luke said based on his observations in the refinery. "Just like all the mining companies in PNG, they [Chinese managers] have to report to MRA [Mineral Resources Authority of Papua New Guinea]." This instance demonstrates Luke's critical role in educating Papua New Guinean and Chinese employees about the importance of workplace safety and assisting RNC in understanding and complying with PNG's mining rules.

Luke's position also allowed him to bargain with Chinese employees. Luke's power to do this was based on his understanding of mining regulations in PNG and his knowledge of some Chinese workers' violations of safety practices. Previous research has shown how such claims

to authority could increase a supervisor's ability to intervene. For example, in Burawoy's (1985) study of a tractor plant in Soviet Hungary, the Red Star, workers' violations of rules in search of higher output rates underwrote the foreman's ability to police the regulations and alter workers' rates. Burawoy also explains in another chapter how applying the 'safety first' program in Zambia's Copperbelt empowered supervisors to monitor workplace safety in the dangerous underground mine. Given that working in the acid leach department was a high-risk job, Luke's knowledge of mining rules in PNG and his managerial position gave him the ability to influence Chinese employees.

In this section, Mr Xiang's and Luke's stories demonstrate RNC's concession in incorporating Australian and New Zealand workplace safety management. Chinese management must negotiate with and concede to Australian or Papua New Guinean managers to understand PNG regulations when implementing this safety system. This demonstrates that, while Chinese employees continue to wield power based on production know-how and machinery ownership, Papua New Guinean managers' power is growing due to their understanding of Western managerial culture and regulations in PNG. This balance of power is similar to that shown in the previous section, in which local employees' mobility in improving grades and levels at work is increasing. At the same time, Chinese managers still have some control over that mobility. I argue that Chinese employees have limited control over workplace safety. Non-Chinese foreigners and Papua New Guinean managers can use safety regulations to counteract Chinese management. These findings align with Errington and Gewertz's (2004) and Golub and Rhee's (2013) emphasis on the role of Papua New Guinean managers in linking multinational company operations in varied PNG settings. Papua New Guinean managers' growing influence due to their knowledge of PNG mining legislation also supports Parry's (2005) assessment of the impact of earlier industrial activity on the contemporary work environment.

3.5 Conclusion: the negative compromise

Similar to what I observed in the marketplace, this chapter has demonstrated how Chinese and Papua New Guinean employees gradually learned through nearly a decade of collaboration. As discussed in Chapter 1, the initial mutual incomprehension between the two parties resulted in Papua New Guinean workers' strikes that significantly impacted the refinery's

operation. Local employees now have formal training to improve their skills and pay rates thanks to the efforts of the Ramu NiCo Allied Workers' Union. They can also gain technical skills and Chinese work ethics through on-the-job instruction while working alongside Chinese personnel. Because of the influence of the Australian industrial system, Chinese management is forced to negotiate with and concede to Australian managers. Papua New Guinean managers with Chinese university education are also becoming increasingly crucial for the refinery's long-term operation due to their understanding of the Chinese language and culture.

We can conclude from these findings that employment relations in the refinery are not inherently adversarial. Rather, after years of struggle and negotiation, Papua New Guinean and Chinese employees gradually recognise the value of putting an end to mutual injury in exchange for concessions from the other, recognising that they each have what the other requires. Because of this transition, I argue that the current employment relation in the refinery is similar to Wright's (2000) definition of the negative compromise. By emphasising workers' participation, Wright notes that workers' associational power (such as forming the trade union or the labour party) and structural power (such as workers' critical position in the workplace) determine different stages of capital-labour relations. Considering the situation in the refinery, the trade union's effort in enacting the training system reflects Papua New Guinean workers' rising associational power in bargaining with the Chinese management. In the process of incorporating the Australian and New Zealand safety administration, Papua New Guinean managers' knowledge and critical positions become their structural power to counteract Chinese employees. These cases show that work relations in the refinery can, at times, correspond to Wright's definition of the negative compromise – two parties still have different, often conflicting, ideas but realise they cannot proceed without negotiating and making a concession to the other party.

Finally, in terms of workplace language, I argue that the material in this chapter demonstrates how workplace compromises are about more than just the material interests of capital and labour (as discussed in Wright 2000 and Moodie 2010). Regarding workplace language development and communication about safety management, we discover that language plays a critical role in realising the concession between two parties and improving work relations. In other words, language development, in this case, is more than just a representation of

compromise; rather, the development of the workplace pidgin and the effectiveness of communication (between Chinese and Papua New Guinean managers) affects the situation of compromise in this intercultural work situation (Brewer 2018). By focusing on the language dimension of mining, this research enables us to examine capital–labour interactions and CMCs’ growing involvement in the mining industry in PNG from new perspectives (Cornips and Muysken 2019; Gillespie 2014). Given the refinery’s predominantly male workforce, additional research is needed to evaluate whether this workplace language is gendered, rather than drawing judgements merely because language users are primarily male.

Chapter 4 A place of compromise: the male domination of jobs in the limestone department

4.1 Introduction

I had the opportunity to engage in a land mediation while living in Duman and observed how two groups of men persuaded others that they were the landowners in early 2019. While the land mediator from Madang and audiences were present, two groups of male landowners sat on the ground during the meeting to tell stories regarding their families' migration and relationships with the land, triggered by a potential logging field. As I listened to the landowners' stories, I realised that, aside from providing food for the meeting, the local women who sat behind the men played only a limited role in the conversation. Although women's marriages to other clans were important for local males to acquire land and form relationships, their voices and benefits appeared to be overlooked at this gathering. This experience reminded me of conversations I had with female employees of Ganglau Landowners' Company (GLC), a local landowners' company that helped RNC hire local workers and conduct various jobs. One female interlocutor expressed that local women might undertake skilled tasks at the refinery, but male landowners had not urged that RNC to improve local women's job prospects. Given that GLC was owned and operated by the Baleng clan, the primary landowners of the RNC-managed limestone mine near the refinery, I decided to investigate the causes of the women's silence.

Figure 4-1 The land mediation

Source: Photo by the writer

After the meeting, I followed up with a friend about his ancestors' migration to Duman. He illustrated his ancestors' migration route on a sheet of paper and stated they shared a *hausman* ('men's house') in Orinma with another clan that attended the meeting. He also mentioned that, even though his family relocated to Duman, people still considered Orinma their home and maintained contact with family members living there. As I listened to his story, I realised how important place was to the Duman people's identity.²⁷ The process by which two groups of people retold the stories revealed how they used the past to reinterpret their relationships with the land and with one another (McGavin 2016; Reed 2003). These cases demonstrated that the past was not something that had been forgotten, abandoned and rendered inaccessible (Appadurai 1981). Instead, the past was present in how the locals used it to establish land ownership and defend their rights (Bainton 2010). When considering job opportunities for women, I was inspired to examine the refinery's operation as a historical

²⁷ This chapter follows Agnew's (1987) definition of place as a specific geographic location on the earth, a location where people's subjective perceptions (such as individual and group identities) are built upon and a location where people conduct their daily activities and interactions.

moment and examine how previous economic activities that occurred in the refinery landscape impacted the current transnational mine's operation (Appadurai 1991).

This chapter is divided into three sections. The first section examines studies that explain the male-dominated labour process in the mining industry, to demonstrate why including place and local actors' voices is critical to understanding male domination in the refinery. Second, this chapter depicts two labour processes in the limestone department: the limestone quarry and the limestone processing plant, and workers' perspectives on the factors contributing to male dominance of jobs in these workplaces. Finally, the third section demonstrates how RNC's geotechnical considerations and GLC managers' gender stereotypes inherited from the prior Basamuk coconut plantation contributed to male-dominated jobs in the limestone department. Based on these findings, this chapter concludes that the male-dominated jobs in the limestone department and the refinery were co-determined by the Chinese management and local contractors. This circumstance indicates that the refinery is a place of compromise, as the Chinese employer did not interfere with increasing female workers, while local contractors' gender stereotypes resulted in limited job prospects for local women. The findings in this chapter also support the current advocacy for investigating geographical factors in labour process studies.

4.2 Locating male-dominated mining operations in place

I discovered two viewpoints after reviewing studies on male-dominated jobs in the mining industry. To begin, some scholars contended that male dominance in mining was linked to the company's control over technology use. Laplonge (2014), for example, noticed that mining corporations' employment of specialised technology reflected a modern systemised control over profit generation and corporate replication of masculinities. Other scholars took another approach, claiming that the mining industry's male dominance should consider the impact of local factors. Wajcman (2004), for example, advocated for research into the mutual shaping interaction of local social relations (including gender) and international corporations, including mining companies. Wajcman pointed to Cockburn's (1983) study as an example of how the company and male labourers co-determined male dominance of jobs: the former focused on deskilling labour, while the latter focused on keeping 'men's jobs' and male identities. According to Wajcman, transnational enterprises' usage of specific technology

should be analysed in the context of the gender interaction in which it was embedded to investigate the link between technology and local players.

Lahiri-Dutt (2013b) agreed with Wajcman, arguing that transnational mining companies were not the only actors responsible for introducing gender dynamics into impacted communities. Instead, Lahiri-Dutt discovered that locals, particularly male miners, were also involved in the process of constructing and reconstructing male dominance. Considering this situation, Lahiri-Dutt (2011, 2013a) emphasised the significance of studying place to deconstruct males as naturalised mineworkers. Place, which was co-constituted by humans, their labour and nature, was distinctive in that it was accessed differently by different actors to perform their gender identities. Gender identities were performed and often recreated by people who represented mining capital, locals and immigrants, as well as ordinary labourers. By emphasising how the mining industry's masculinities were reflected in a specific location, Lahiri-Dutt's perspective revealed the importance of researching the mining industry's male dominance as a form of place-making in which humans and place were mutually determined (see also Crook 2007; Jacka 2015; Lahiri-Dutt and Chowdhury 2018; Low 2009). This approach also demonstrated how diverse locales influenced the operations of global mining businesses.

Scholars that examine mining activities in PNG have also emphasised the importance of analysing the concept of place. For example, Bainton and Banks (2018) use mining-induced immigration in four mine operations in PNG, the Frieda River project, the Wafi–Golpu project, the Lihir gold mine and the Porgera gold mine, to highlight the need for researching place. According to the authors, place is a central location for landowners to claim benefits and exercise their rights. On the other hand, changes in the land were linked to the formation and reformation of human identities and social relationships. The authors continue that the locals' engagement in mining activities would not cause them to become alienated from the land but would deepen human–place links. In a similar vein, Bebbington and Bebbington (2018) pointed out that mining activities occurred in areas previously produced as places. They emphasised the need of considering prior events, stating:

[mining] occurs on and beneath land that has prior cultural and productive value determined both by its physical properties, the

political economy and forms of capitalism in which it is embedded, and by the social relations that have defined who has access to, and can exercise influence and control over, that land. (442)

This description emphasised that when examining the alteration of social relations (including gender relations) by mining activities, the impact of prior capitalist economic activities in the exact location should be considered. Additionally, Bebbington and Bebbington reminded us that the processes through which certain local groups used their landownership to claim mining benefits (such as employment opportunities) could have some effect on the mine's operation.

4.3 Male domination of jobs in the limestone department

The limestone department in the refinery is used in this chapter to demonstrate how local women's job opportunities came to be limited. I made this selection because the adjacent limestone deposit was a significant factor that caused the decision of the previous Australian owner, Highlands Pacific Limited (HPL), to build the refinery in Basamuk (NSR Environmental Consultants Pty Ltd 1999). Examining changes in this landscape provides me with good opportunities to study a male-dominated workplace.

The landscape surrounding the refinery's limestone quarry was once grassland, according to the *Archaeology and Material Culture Study of the Ramu Nickel Project*, prepared by NSR Environmental Consultants Pty Ltd in 1998. Both men and women worked in the subsistence labour processes (e.g. yam cultivation), while men traded valuables with other villages, notably stone-ground seashells. Despite traditional gendered task allocation, men and women's relationships were based on complementarity rather than separation (Leach 2003). There were also local burial grounds beneath a series of limestone shelters, where perished residents were memorialised. Along with the subsistence lifestyle, the arrival of Evangelical Lutheran missionaries in the 1960s had a profound effect on people's lives. Following the establishment of the Basamuk coconut plantation and a boarding school on the site where the refinery is now located, more and more local male youngsters began enrolling in the school to obtain the technical skills needed to work on the plantation (Wagner and Reiner 1986). With the introduction of money, people began to sell their labour power to buy basics (such as salt,

sugar, canned meat, clothes, rice and medicine), pay school fees and pay head tax to the Australian colonial administration. This report concluded that local people had a solid relationship to the limestone site and that changes in the landscape were linked to people's changing identities, including gender relations.

However, following the refinery's development, inhabitants living near the limestone landscape experienced a succession of changes. Leach (2011), for example, observed that the residents of Reite found themselves in a predicament where mining revenue became a crucial supplement to subsistence farming. With deteriorating relationships to the land, Leach argued that the autonomy provided by customary land tenure was gradually supplanted by individualist property ownership and the power of a few persons to distribute resources. Zimmer-Tamakoshi (1997b) described a similar situation with the Kurumbukari prospect, the location of the Ramu Nickel mine's present mining activity. Following the proposition of mining in Kurumbukari, more and more individuals claimed ownership of the land by fabricating familial connections to the Gende. She also noticed the effects on local ancestral spirit worship and practices caused by the expansion of human settlements and the development of the mining camp.

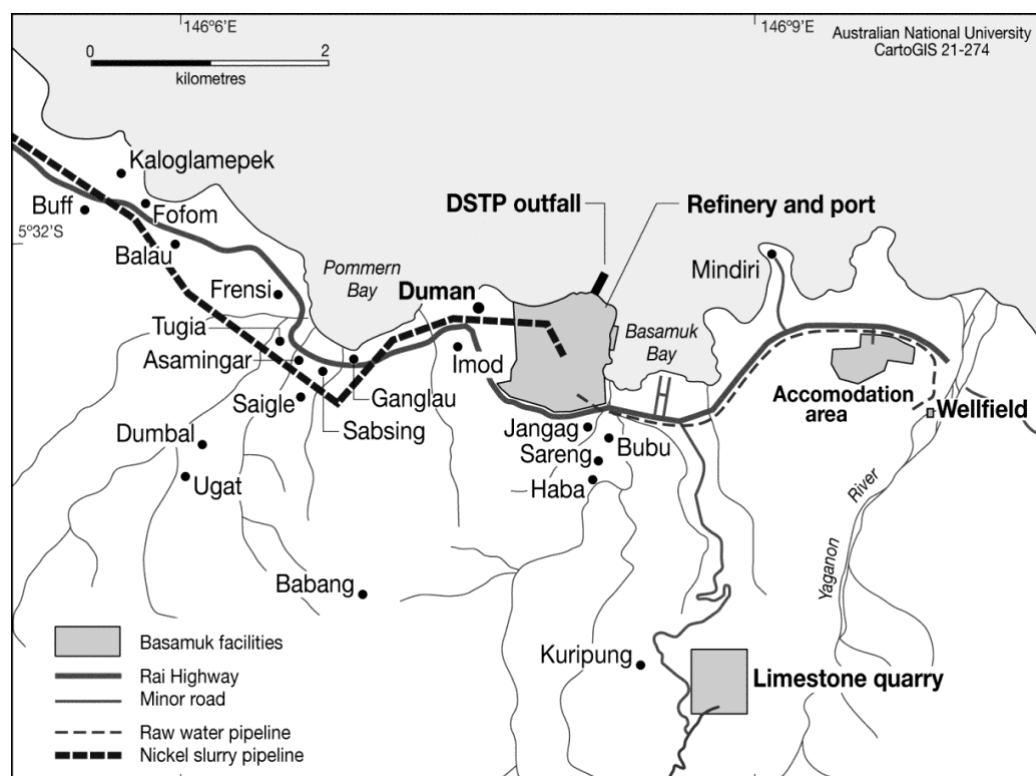
Based on the findings just outlined, this chapter depicts local mineworkers' experiences with changes brought about by the establishment of a limestone quarry and a processing plant, focusing on the workplace.

4.3.1 The limestone labour processes

Local people living around the limestone terrain became mining equipment and machinery operators after the refinery was established. There were two kinds of machine operators in the limestone department: heavy equipment operators at the limestone quarry and process operators at the limestone processing plant (Figure 4-2). The limestone quarry was located three kilometres from the refinery (see Map 4-1), and heavy equipment operators' work comprised three stages. At the outset of every day, there was a pre-start meeting during which Chinese supervisors announced the job of the day and any items that required special attention. Following the meeting, Papua New Guinean staff were responsible for inspecting the safety of equipment, machinery and vehicles according to 'Golden Rules' mentioned in

the previous chapter. Second, after arriving at the quarry by company bus, workers smashed limestone into smaller blocks and then ground it into gravel using equipment such as drillers and hammers. Following these two steps, employees used dozers and excavators to load limestone gravel onto the Terex dump truck for transport to the limestone processing plant (Figure 4-2). Additionally, there was monthly blasting where workers used dynamite to break up limestone outcrops, based on the needs of the processing plant. Residents who lived near the refinery had grown used to getting a *Tok Save* ('notice') from RNC about the blasting each month. The noise of bursting limestone, which sounded like an air raid siren, became an essential part of limestone mining operations.

Map 4-1 Location of the limestone quarry in relation to the Basamuk refinery



Source: ANU CartoGIS

Figure 4-2 A Terex dump truck on its way to the limestone processing plant

Source: Photo by the writer

Process operators in the processing plant had three sorts of work: 1) crushing and screening limestone gravel; 2) grinding and producing limestone slurry; and 3) calcination and producing limestone milk (RNC 2014). To begin, process operators crushed and filtered limestone into two sizes using crushers and vibrating screens: one type of particle smaller than 15 mm in diameter and another between 15 and 40 mm in diameter. Following the first stage, employees transported the smaller limestone particles by conveyor belt to a ball mill machine, where they were further ground to make limestone slurry. Additionally, process operators transported the larger particles through a bucket elevator to a vertical pre-heater, where they were heated to 800 degrees Celsius. The heated particles would then be moved to a rotating kiln for calcination, at temperatures between 1100 and 1250 degrees Celsius. When the calcining process was complete, and the temperature dropped below 100 degrees Celsius, the calcined product was mixed with water to create limestone milk.

Participation in the limestone labour processes formed a new social ladder among local employees. According to the *Ramu Nickel Project Operations Industrial Award 2018* (*Basamuk overview*), heavy equipment operators and process operators were classified into

various levels and grades (see Table 4-1). Heavy machinery operators were classified into four levels: trainee, level 1, level 2 and level 3. There were three levels of process operators: trainee, level 1 and level 2 process operators. Each level could further be subdivided based on the number of points workers earned by completing necessary training. For instance, heavy equipment operators could be classified as trainees 0.1 and 0.2, heavy equipment operators 1.1 and 1.2, heavy equipment operators 2.1, 2.2 and 2.3 and heavy equipment operators 3.1, 3.2 and 3.3. Papua New Guinean employees in the limestone department, like the acid leach department described in the previous chapter, were required to use this training system to improve their levels and grades.

Table 4-1 Workers' grades and levels in the limestone department

Classifications & Grades

Schedule 1. Classifications and wage grades

Work area & Pay grades	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Limestone															
Trainee Heavy Equipment Op				✓	✓										
Heavy Equipment Op Level 1						✓	✓								
Heavy Equipment Op Level 2								✓	✓	✓					
Heavy Equipment Op Level 3											✓	✓	✓		
Trainee Process Operator		✓	✓												
Process Operator Level 1				✓	✓	✓									
Process Operator Level 2							✓	✓	✓						

Limestone Plant			
HR Grade	Title	Points	K
2	Trainee 0.1	0 to 4	3.65
3	Trainee 0.2	5 to 9	3.80
4	Level 1.1	10 to 14	4.16
5	Level 1.2	15 to 19	4.92
6	Level 1.3	20 to 24	5.74
7	Level 2.1	25 to 29	6.56
8	Level 2.2	30 to 34	7.38
9	Level 2.3	35 to 39	8.20

Limestone Quarry			
HR Grade	Title	Points	K
4	Trainee 0.1	0 to 4	4.16
5	Trainee 0.2	5 to 9	4.92
6	Level 1.1	0 to 12	5.74
7	Level 1.2	13 to 18	6.56
8	Level 2.1	19 to 25	7.38
9	Level 2.2	26 to 31	8.2
10	Level 2.3	32 to 35	9.02
11	Level 3.1	36 to 39	9.84
12	Level 3.2	40 to 44	10.66
13	Level 3.3	45 to 49	11.48

Source: Reproduced by the writer from *Ramu Nickel Project Operations Industrial Award 2018 (Basamuk overview)*

Finally, residents were required to undergo a physical training program called ‘fitness to work’ to maintain their performance. RNC’s national mining safety week activity at the refinery on 23 April 2018 offered me an excellent chance to comprehend the substance and objective of boosting ‘fitness for work’ (RNC 2018). At the inauguration ceremony, the Papua New Guinean manager of the limestone processing plant described ‘fitness for work’ as “an individual [who] is physically, cognitively and emotionally capable of performing their employment, enabling employees to perform given tasks competently” (RNC 2018: 4).

According to the manager, workers at the refinery were subjected to conditions that impaired their ‘fitness to work’, including strenuous manual labour, repetitive mundane work, long hours, shift work, heat, humidity and noise. As a result, he frequently encouraged local employees to maintain a healthy lifestyle, whether they spent their breaks in the village or worked in the refinery, to guarantee they were prepared to work at the refinery. By emphasising ‘fitness for work’, the manager concluded that employees would suffer fewer work-related injuries and receive respect from family members, friends and colleagues after changing their lifestyle according to the training.

Local men and women underwent a sequence of changes as the limestone landscape was changed into a limestone quarry to serve the limestone processing facility, marking a split with the past. If the past was defined by the use of hand tools and physical strength, today’s landscape is defined by colossal machinery and massive equipment. Women and men were obliged to live in a dual scenario where they were expected to work as machine operators and follow managers’ commands in the job while remaining bearers of knowledge of the former landscape by participating in gardening work during their break times (for a similar situation in Soroako nickel mine in Indonesia, see Robinson 1986). Working in the gardens reminded local workers of the importance of men and women working together and sharing the rewards of their labour. After working at the limestone department, they were inspired to start a new life path towards getting a good education and getting the proper technical skills (Polier 1996). They also had to live differently to ensure that their community’s activities and commitments did not disrupt their work. Because of the changes on the limestone site, local employees had a work-related dual life, shown by these various work circumstances and physical demands.

4.3.2 The male domination of jobs in the limestone department

As with the changes to the limestone terrain, local employees encountered a new work scenario due to altered gender relations. To begin, this part describes the quarry workplace and the experiences of heavy equipment operators. According to Louis, a Papua New Guinean interlocutor, the quarry employed twenty-nine people, including three to four national hires, three Chinese site supervisors and twenty-two to twenty-three local hires. Louis stated that none of these employees was female. Louis claimed that male dominance in the quarry could have resulted from an agreement between the Chinese management and landowners' associations. He noted that because this was the area's first mining project, local landowners lacked the experience necessary to petition the Chinese management for local women to work alongside men in the quarry.

The male-dominated work situation in the quarry also contrasted with Louis's previous work experiences. "I have seen so many ladies [who] are operating these trucks, only the lady, few men. Some other men they are operating machines, but most of the lady they are operating these Terex [dump trucks]," Louis observed at the Hidden Valley mine in Morobe Province, PNG. "It is automatic, so they [women employees] operating that. In here [the refinery], no, only men operate". Louis thus did not think that operating heavy equipment and vehicles contributed to women's exclusion from the quarry. Before we finished our conversation, Louis said that maybe it was because there were no jobs for women in the newspaper or because they thought the pay rate in the refinery was too low. His response revealed that he had no idea why men dominated the quarry, and he supported local women working there.

Another heavy equipment operator concurred with Louis's opinion. According to this interlocutor, Evan, the quarry jobs did not require much physical strength because they worked as machine operators and vehicle drivers. "We only use machines to operate. We do not use physical. Only when there is blasting. Yes, we use physical because you move around to charge the conduct and the blasting network lines," Evan explained, demonstrating why he thought women could carry out his tasks. "Because you know the truck which we are using to transport the lime, it is a... it is not manual operate. So, ladies can drive, so ladies can... ladies can work." Aside from machinery, I asked Evan if the harsh work environment, such as dust, dirt and the hot sun, impacted women's absence in the quarry. Contrary to my

assertions, Evan stated, “[all] of the time, most of [the] guys are in the car, they do not get the sun heat, heat from the sun. They do not get dehydrated, or they do not get washed by rain, because every time people are in the machine and the car.” His response showed that most works at the quarry occurred inside the machines and that operating the equipment did not require much strength. These findings also showed that Louis and Evan did not think that male-dominated jobs in the quarry were due to mining machinery, physical constraints or a hostile work environment.

Confronted with Louis’s and Evan’s statements, I turned to process operators to understand the processing plant’s situation. According to a Papua New Guinean team leader, York, the plant employed approximately thirty-nine people, including twelve Chinese workers in the crusher, three Chinese shift supervisors, one Chinese production supervisor and twenty-three local workers. York said that the plant was entirely staffed by men.

To explain why the plant was male-dominated, York first suggested that it could be due to the nature of the work. He stated that jobs in the plant were only for men and not for women. After hearing his point of view, I asked him whether women could do jobs like operating machines, inspired by my interviews with Louis and Evan. York agreed with me in part, noting that women could operate machines if they had the necessary skills. However, a few jobs in the plant, York added, required more strength, and women could not perform them. York described these jobs as ‘big jobs’, claiming that there were two types of jobs in the processing plant that required more physical strength: opening valves and pumps and moving and cleaning limestone that fell from the conveyor belt. Women could not operate valves and pumps because some pumps had become rusted after a long period of inactivity, necessitating more physical strength and the cooperation of three to four male workers. Regarding falling limestone or a blockage on the conveyor belt, York noted that both situations required males to work together to move the limestone or clean the belt. As a result, these were difficult jobs, and women could not perform them due to the danger and strength requirements.

This subsection demonstrates that, while the quarry and the plant were predominantly male-dominated, employees in two workplaces did not think women should be barred entirely from their jobs. Instead, the scenarios that prevented women from participating were confined to operating rusted and hefty valves and relocating falling limestone from the belt. Additionally,

based on Louis's observations in other mines in PNG, we could conclude that some male workers were aware that the male domination of jobs at the limestone department was not normal or natural. Instead, some suggested that local women should be involved to work alongside men. These findings support Wajcman and Lahiri-Dutt, who both argued that technological considerations had a limited impact on male-dominated mining operations. Instead, Lahiri-Dutt drew our attention to the ground by examining local labourers who lived and worked in the terrain to explain the situation. In the same vein, the subsequent section presents RNC's geotechnical considerations for establishing the refinery at Basamuk and GLC landowners' gender stereotypes about women's jobs impacted by the previous Basamuk coconut plantation.

4.4 RNC's geotechnical considerations and GLC landowners' gender stereotypes

According to my interviews with Papua New Guinean managers at two local subcontractors (GLC and Raibus Limited) at the refinery, men also dominated jobs at these two landowners' companies. Raibus Limited employed 122 employees at the refinery, forty to fifty at the Kurumbukari mine and forty at the Madang office of the RNC. Six national hires in technical roles, 110 local hires in general labour positions and just six female employees who worked as cleaners were among the refinery's 122 personnel. Employees from GLC worked in the refinery's limestone, acid plant, warehousing, high-pressure acid leach and counter-current decantation departments, among others. According to GLC's employment list, the company employed twenty-eight workers, all of whom were male. The refinery was similarly a male-dominated workplace, according to the Chinese interlocutors. As a result, we might reasonably conclude that men performed the majority of jobs at the limestone department and refinery, although the employment rate of local women at the Ramu Nickel mine is not dissimilar to that of other major mines in PNG.²⁸

²⁸ Local women made up 9.6 per cent of total national employees at the Ramu Nickel mine, compared to 13.8 per cent at the Lihir gold mine, 10.9 per cent at the Ok Tedi gold mine, 15 per cent at the Hidden Valley mine and 10.6 per cent at the Porgera mine, according to the *2019 Extractive Industries Transparency Initiative Report*.

4.4.1 RNC's decision to build the refinery in Basamuk

The nearby limestone resources were a significant factor in choosing Basamuk as the refinery's location. The nickel deposit in Kurumbukari was identified in 1962, discovered by HPL, according to the *Ramu Nickel Project Environmental Plan 1999* (NSR Environmental Consultants Pty. Ltd. 1999). For the next two to three decades, this deposit was considered not profitable because of the lack of viable processing technology. It was not until high-pressure acid leach processing technology was viable that the excavation of the Kurumbukari mine became available. To be lucrative, the high-pressure acid leach process required specific materials. As a result, HPL highlighted its concerns in the environmental plan:

the energy and consumables required by the new technology are substantial, and the ability to provide, in particular, sulphur, limestone and electricity at the low cost become critical to economic feasibility. Of the major consumables, limestone is available locally, but sulphur and fuel for electricity generation need to be imported. (1999: 20)

Limestone, sulphur and electricity were three critical components affecting the operation of high-pressure acid leach. While sulphur and fuel were permitted to be imported, HPL chose to acquire limestone locally, and conducted geotechnical studies to determine the best location for the refinery's construction.

Geotechnical investigations were conducted in two stages. HPL first researched a location called Erima near Madang town on the coast of Astrolabe Bay. Although Erima required the lowest pipeline length for construction, the pre-feasibility desk study and preliminary field investigation revealed that Erima lacked features (such as suitable port bathymetry and geotechnical conditions, shown in Table 4-2). The previous Australian owner researched the Rai Coast area and discovered two alternates: Cape Rigny and Basamuk. HPL ultimately decided to build the refinery at Basamuk because the seabed at Cape Rigny was not deep enough for a conventional port. Additionally, as shown in Table 4-2, Basamuk was chosen over the other two potential sites due to its proximity to a limestone resource, reliable water supply, suitable geotechnical conditions and the possibility of embarking on deep-sea tailing placement. With the availability of local limestone, HPL anticipated producing limestone

milk and slurry on-site to assure the profitability of the high-pressure acid leach processing technology.

Table 4-2 Factors influencing refinery location selection

Factor	Basamuk	Cape Rigny	Erima
Suitable port bathymetry	Good	Very poor	Poor
Flat topography	Poor	Poor	Very good
A reliable process water supply	Very good	Good	Poor
Suitable geotechnical conditions	Very good	Moderate	Very poor
Potential for deep-sea tailing placement	Very good	Good	Moderate
Proximity to a limestone resource	Very good	Poor	Poor
Length of ore slurry pipeline	Moderate	Good	Very good
Land tenure	Unknown	Poor	Good

Source: Reproduced by the writer from *Ramu Nickel Project Environmental Plan 1999*; suitability ratings: very good, good, moderate, poor, very poor, unknown.

After becoming the project's primary operator, RNC decided to build the refinery in Basamuk, in agreement with HPL's geotechnical concerns. This consideration echoes findings from the labour process studies about transnational mining companies' geotechnical embeddedness. Ellem (2016), for example, looked at Rio Tinto's Pilbara mining in Western Australia to show the company's different geotechnical concerns. To demonstrate the relevance of geotechnical aspects to mining corporations, he wrote the following:

Mining is an industry where employment relations are strikingly marked by geography. The industry attracts attention as one in which capital is apparently rendered immobile because of the fixity of ore bodies. This appears to place the industry differently from manufacturing or information industries in the practices of production and discourses of globalization. (933)

As noted by Ellem, global mining corporations are not as mobile as other businesses due to the immobility of mineral ore. Given this, it is reasonable to conclude that RNC's decision to locate the refinery site in Basamuk was influenced by geotechnical considerations based on the location's proximity to limestone resources.

RNC followed HPL's decision to use the conventional limestone processing plant to process limestone gravel transported from the limestone quarry, in addition to constructing the refinery site in Basamuk. As outlined above, York's comments about women's inability to operate rusted valves and pumps and dealing with the conveyor belt blockage revealed that using the conventional processing plant to some extent limited women's opportunity to work in the limestone department. This shows how RNC's decision to build the refinery site in Basamuk and then use the conventional processing plant had a gendered impact on the limestone labour processes, in effect barring local women from working. Although the decision was previously made by HPL, this situation demonstrates how geotechnical considerations in mining companies can have a gendered impact on work organisation.

However, this was simply one of the factors that contributed to the predominance of men in the refinery's workforce. Wajcman and Lahiri-Dutt's arguments from the previous part remind us that studies of mining corporations' geotechnical considerations should be contextualised within the social relations in which they were embedded.²⁹ In other words, these experts inform us that RNC's geotechnical considerations are not the sole driver of male dominance in the refinery but that local circumstances also had a role in this phenomenon. To understand what local factors contributed to male dominance in the refinery, the following section illustrates local managers' understanding of gender division of labour in the mining industry by referring to the Basamuk coconut plantation, which was established during the Australian colonial period.

4.4.2 Local managers' ideas about men's and women's work

As described in the introduction vignette, a female GLC employee stated that local landowners did not request that RNC provide job opportunities for local women. This

²⁹ Street (2014) depicts a similar scenario in which the general hospital in Madang Province, PNG, is a place where disease diagnosis should be contextualised by considering both technological factors and local cultural values.

example motivated me to look into the local landowners' perspective on male domination in the refinery. Interviews with Papua New Guinean managers at GLC showed that they thought about gender roles in a binary way. Also, they said that women should be hired as office cleaners or kitchen helpers. When this perspective was combined with Louis's and Evan's comments, a contradiction between GLC managers' binary understanding and mineworkers' favourable attitude about women's career chances became apparent.

These opposing viewpoints pushed me to schedule another meeting with a Papua New Guinean manager, Jonas, to understand better his perspective on the reasons for male dominance in GLC. Sitting in front of his desk in the office, I first asked Jonas if RNC had requested that GLC hire local men rather than women. "The business contract, labour-hire [contract]. If we were given the opportunity to hire or to employ housekeeping workers to do cleaning services stuff like that, [this] will give us a better chance to employ females," Jonas responded, referring to contract types other than RNC's request. "Why female cannot [work as general labour] because of... the condition, because of the terms of the condition of the company, of the contract actually. Because it is heavy-duty work." The phrase 'heavy-duty work', like the phrase 'big jobs' mentioned by York, piqued my interest, so I asked Jonas to explain what he meant. "The work is very much to deal with a lot of lifting, working outside, a lot of climbing, climate..." he replied, adding. "Heavy-duty work, yeah. The job [and] the scope of the work, from the way you can see it cannot allow many females to be employed." After hearing Jonas's response, I double-checked with him to see if this was RNC's or his idea. "No, the company [RNC] does not say. We [GLC] prefer male workers only," Jonas responded. "No, we [GLC] do want to employ female employees as well, but the scope of work... Looking at the scope of work, it is pretty much too physical. That is [a] physical job."

The conversation with Jonas showed that RNC did not decide to exclude local women from employment. He also stated that the GLC did not intend to limit women's job opportunities, but only if they could secure more housekeeping contracts. In the general labour contract, Jonas thought these jobs were 'heavy-duty work' due to the lifting and outdoor work environment which, he added, local women could not perform. Before we finished our interview, he stated that he was aware of the importance of gender equality in the workplace, but, as a manager at GLC, was prevented from hiring local women for the above reasons. We

may conclude from our discussions that Jonas's response mirrored local gender stereotypes regarding men's and women's roles in the refinery.

The conversation with Jonas contradicts both the female employee's point of view and the opinions of the local male workers discussed in the previous section. Given that RNC required many local employees to operate machines and perform manual labour, local subcontractor managers like Jonas wield considerable power in determining who could do what types of jobs and who could be hired. As a result, I decided to look into the origins of gender stereotypes concerning men's and women's work.

Jonas's explanation of his path of working with the Baleng clan, the landowners of the limestone landscape, provided me with an insight into the origins of gender stereotypes. Jonas began his career with GLC in 2008 as a secretary and was promoted to manager following RNC's formal offer of a contract to GLC in 2012. He stated that the chance to become a manager was presented to him due to his good relationship with the GLC chairman and his demonstrated capacity to manage a business. Jonas's emphasis on his relationship with the Baleng clan's male landowners indicated that their interactions might have affected Jonas's gender stereotypes. I got this idea from an interview with Irene, a gender coordinator at MRA who oversees the Women in Mining project with RNC. Irene remarked that because male landowners held most crucial positions in landowners' associations (e.g. chairman, vice-chairman and secretary), women's and children's issues were also under their administration (for a similar perspective, see Beer 2018). Thus, to conduct training for local women, Irene needed the support of male landowners. Given that local women were not benefiting from the mine, Irene noted that this was one of the primary reasons MRA encouraged Women in Mining projects in the impacted area, including near the refinery. Irene's responses emphasised the importance of examining how male landowners' gender stereotypes impacted Jonas's gender stereotypes and local women's employment chances in the refinery.

Notably, prior research on women's limited employment opportunities has revealed a similar scenario. Macintyre (2011), for instance, noted that local landowners' companies in the Lihir gold mine prefer to engage local women to perform tasks such as cleaning and meal preparation. To explain this inclination, Macintyre said that the impact of previous Australian administrations may have been a factor, as women were formerly restricted to clerical and domestic service jobs. Moretti (2006) also exemplified this position in artisanal and small-

scale mining in Morobe Province, PNG, highlighting the colonial impact on contemporary women's restricted presence. She wrote,

Far from being simply intrinsic to indigenous culture, however, I will argue that the current male dominance of Kaindi's mining landscape also related to the gendered history of the colonial goldfields. (2006: 135)

Like Macintyre, Moretti asserted that the colonial goldfield influenced the establishment of mechanisms for determining land ownership, resulting in a scenario in which male landowners dominated all registered mining leases, tributary rights and customary lands in Kaindi. Due to colonial influence, Moretti also remarked that men became prominent representatives in landowners' associations and miners' associations, and as government officials. Simultaneously, women were limited to negotiating with mining corporations directly to obtain employment. Based on these findings, Moretti concluded that

the gender inequalities of Kaindi's extractive landscape also reflect the peculiar history of colonial development of the Morobe goldfields and the Western "mining culture" that continues to dominate the legislative system of Papua New Guinea. (2006: 139)

Moretti's study shows that earlier economic activities managed by Australians in a given location substantially affected male dominance and contemporary perceptions of gender division of labour in PNG's mining industry.

Macintyre and Moretti's perspectives inspired me to investigate if colonial economic activity near the limestone landscape impacted local women's limited job opportunities in the refinery. As noted in the introduction, Basamuk used to be home to a coconut plantation. Early research has demonstrated how the prior development of coconut plantations resulted in the exclusion of women from wage labour in Madang. Fahey (1986) argued that the Australian copra industrial labour system resulted in the gender stereotyping of wage labour in Madang, based on research in a coastal community named Siar near Madang town. Fahey defined subsistence farming as a pre-capitalist labour process in which wives and husbands

worked together, and their relationships were intertwined, even though men and women were assigned different jobs. However, after the introduction of coconut plantations during the colonial period, Fahey observed that

[men] were the first to be brought into wage labour; they were the first to be approached in agricultural cash crop extension; they were granted loans because they were the landowners, and they were the first to receive training for skilled employment. (1986: 142)

To emphasise the impact of this indentured labour system, the author added that “[initial] labour recruitment was directed towards men although some women were involved in the lighter tasks and areas regarded by the colonisers as traditionally female” (1986: 142). Fahey concluded that the copra indentured labour system resulted in a new gender division of labour connected with paid labour and new gender stereotypes regarding men’s and women’s jobs.

Fahey’s research also revealed how these gender stereotypes continued to limit local women’s opportunities for wage labour after the end of the Australian administration. While conducting fieldwork following PNG’s independence in 1975, Fahey noticed that women’s opportunities to attend school increased because of the newly independent PNG government’s primary concern. However, she pointed out that the colonial gender stereotypes remained, and women’s jobs in certain industries (such as cigarette production, lumber, cordial production, engineering and shipping) were still limited. According to the author, these were ‘traditionally male-dominated fields’, and women should be hired as nurses, teachers, clerks, retailers and domestic servants. Fahey’s findings showed that as gender stereotypes about women’s jobs grew, women’s chances of finding work in each men’s area, such as mining, remained limited, despite having more opportunities to attend schools or receive training. These opposite circumstances corresponded to the paradox I observed during conversations with Jonas, the GLC manager. While recognising the importance of gender equality, he continued to consider local women for jobs as cleaners and housekeepers, which were ‘traditional roles’ for women that had originated during the Australian administration.

These findings indicated that local males acquired gender stereotypes while working in the Basamuk coconut plantation as the prioritised workforce. If local males retained positions in

landowners' groups, they maintained the same gender stereotypes in determining local women's employment options. This situation reminded me of Cockburn's (1983) study on how male compositors bargained with their employers to keep 'men's jobs' after the newspaper industry in the United Kingdom switched from hot-metal techniques to computerised photocomposition in the 1980s. This case showed that male-dominated mining operations are not solely dictated by employers or the use of specific technology. Instead, the engagement of male labourers was also an essential factor to consider. This situation also revealed that the use of landowner identity to seek benefits (such as employment opportunities) from foreign employers is gendered, with local male landowners retaining their male identities while local women's opportunities are marginalised. By differentiating 'hard' and 'soft' works, Cockburn wrote, "men represent themselves – as striving, achieving, engaging in the public sphere of work – they represent women as static, domestic, private people, as non-workers" (1985: 185).

Gender stereotypes also included the obfuscation of women's earlier involvement and contributions. My interview with a male landowner, Rex, in Duman exemplifies this in describing the gender division of labour on the previous Basamuk plantation. "Work together," Rex said. "Men will cut down the tree, clear it. Women carry the seeding for the coconut in this *bilum* ('net bag'); they plant the coconut. They help men to do that. Both of them work together." Following his response, I double-checked with him to see if he considered working on the plantation a man's job. "Women and men, both of them work together," Rex replied. This discussion demonstrates that local landowners' gender stereotypes, which stemmed from the Basamuk coconut plantation, did not adequately reflect past events. In other words, the current discussion of 'women's jobs' was formed by omitting women's previous and present participation and contributions. This condition is consistent with Lahiri-Dutt's (2013a) description of the invisibility of Indian *kamins*' ('pit women') prior engagement in an underground coal mine in Eastern India, resulting from British colonial administrators' birthing regulations in the 1920s. This case demonstrates how gender stereotypes work in the refinery in two ways: by restricting local women's employment opportunities to designated 'women's jobs' and by silencing local women's previous and current participation and contributions.

This subsection has shown how, during the previous Basamuk coconut plantation operation, gender stereotypes that limited local women's job opportunities in the refinery were formed. This illustration also reflects how residents in the impacted area now live in a dual situation in which they practise gender complementarity while participating in subsistence farming while maintaining a separation between men's and women's jobs in the refinery. The ideological impact of the previous coconut plantation corresponds to Massey's (1995) discussion of how pre-existing ideology regarding men's tasks and men's role as breadwinners continues to affect women's exclusion in a coalfield in the United Kingdom. According to Massey, the corporate employment structure cannot wholly picture women's exclusion in mining. Instead, the current male dominance is reflected in the history of a particular place, which earlier labour systems and industrial operations have shaped. In line with Massey's view, Fahey (1988) stated that:

The same layer of investment may have different effects in different areas since it comes into contact with different pre-existing socio-economic structures, each of which is a product of a distinctive set of investment practices, and cultural and historical experiences. (39)

This quote demonstrates that how local institutions and beliefs influence the behaviour of transnational mining companies is not limited to the current situation. Instead, ideologies passed down from early economic activities in a specific location continue to influence local employees' engagement with new economic projects and investors. Notably, the inclusion of a local geo-historical factor corresponds to Bainton and Banks's insistence on examining transnational mining companies' activities in the terrain in which they are embedded. The investigation of prior economic activities in Basamuk also underscores Appadurai's perspective that "past in these constructed lives is as important as futures, and the more we unravel these pasts, the closer we approach worlds that are less and less cosmopolitan, more and more local" (1991: 208).

4.5 Conclusion: a place of compromise

Working in the refinery exposed local residents not only to a new social path to becoming working class but also to a gender division of labour that differed from that of their

communities. After its conversion to a quarry to feed the processing facility, the contemporary limestone landscape's labour process was characterised by local men being key labourers for physically and technically demanding occupations, while local women were deemed fit only for mostly housekeeping jobs. This chapter has shown that, while RNC's geotechnical considerations were a factor, limestone landowners' gender stereotypes had a significant impact in deciding local women's employment options, and bringing about a change in gendered roles (Filer et al. 2016). Based on these facts, I can say with considerable certainty that RNC and local male landowners co-determined the refinery's male-dominated jobs. This situation also demonstrates the ideological impact of gender roles in wage labour in the mining industry that arose from the earlier Australian administration, in addition to the imported industrial system that was demonstrated in the previous chapter (for a similar discussion in a gold mining site in West Lombok, Indonesia, see Lahiri-Dutt et al. 2021).

The examination of male-dominated jobs in the refinery terrain conforms to research conducted by some researchers on the geographical dimension of compromise. For example, Su and Cai (2020) employ Gramsci's (1971) concept of compromise to examine the Chinese government's border control in the borderland town of Ruili between Myanmar and the PRC. Rather than viewing border control as effective Chinese state intervention, Su and Cai observed that the Chinese government allowed Burmese to move and work if ethnic boundaries between Chinese people and Burmese migrants were maintained. Meanwhile, Burmese migrants liked working and living in Ruili, even though they were not entitled to labour protections and social benefits as Chinese residents. Su and Cai concluded that Ruili represents a space of compromise where the Chinese government and Burmese migrants could benefit from mutual concessions. Similarly, I propose that the mutual concessions shown in this chapter between RNC and the limestone landowners reflect that the refinery landscape is a place of compromise. This compromise was reached on one hand through RNC's non-intervention to increase job opportunities for local women, so as to secure the landowners' agreement to mine the limestone resources. On the other hand, this compromise was reached due to the limestone landowners' failure to request that RNC provide more job opportunities for local women, thus maintaining the distinction between men's and women's jobs.

Finally, the focus on the geographical component aligns with recent calls for examining place in labour process research. Employers are not the only actors whose geotechnical decisions affect the organisation of work, according to Rainnie, McGrath-Champ and Herod (2010). Instead, labourers are a part of the same process in which their concerns and ideas impact how work is organised at each given place of employment. As a result, the authors propose that labour process studies should be grounded in examining how the geographical location in which capital–labour relations occur shapes them. In a similar spirit, this chapter has shown how prior economic activity on the Basamuk terrain impacted the refinery’s current male-dominated labour processes. These findings suggest that researching the geography of labour processes is an endeavour that requires incorporating different scales (Herod et al. 2007). Additionally, these findings demonstrate that analysing the geography of labour processes can offer us new insights into gender issues associated with labour process studies.

Chapter 5 The intersectionality of compromises: men doing women's jobs in the mining mess hall

5.1 Introduction

My interest in men's work experiences in the mining mess stemmed from visiting the Braidwood Museum in a previous gold mining town in New South Wales, Australia. This museum, located on the outskirts of town, preserved various mining machinery and equipment to show visitors work procedures and conditions in the alluvial goldfield during the late 1850s. When I walked into the museum, a passionate male guide greeted me and told me stories about the Chinese people in the photographs. He claimed that Chinese immigrants worked as miners and managed market gardening near the mine area to provide food and fruits to miners from various countries. Chinese people's involvement in food production was critical because mining operations frequently resulted in large-scale immigration. As a result, catering to workers from various backgrounds became essential for mining operations. For example, during a similar period during California's gold rush, certain men catered to miners to sustain the mine operation. Because of the influx of male workers from Mexico, China and South America, catering to miners evolved into a cultural melting pot with a diverse range of preferences and cooking skills (Caughey 1975). These cases demonstrated the importance of food catering in examining males' work experiences and ethnic interactions within mine operations (Conlin 1987).

Men working in food catering could also be found in the colonial mining industry of PNG. For example, in the colonial goldfields of Morobe Province, PNG, a distinct culture dubbed the *masta-boi* ('white men/boss and local men') interaction emerged between Western male miners and local youths (Nelson 1982). During the 1960s and 1970s, some Madang men left their villages to work as housekeepers and cook for masters' families (Zimmer-Tamakoshi 1997a). The working experiences of these men, known as *hausboi* ('male domestic staff'), were remarkable because their jobs were in service of other men and, as a result, their work could be considered to be similar to that of "women" (Zimmer 1985: 31).³⁰ Due to this

³⁰ In Zimmer's (1985) thesis, she states that the distinctions between the big man and the *rubbis* man (a 'man of low status') were based on laziness, inability to attract wives, lack of wealth, and working as "women" in the service of other men (31). Therefore, although *hausboi*'s jobs could not be defined as "women's jobs", it is reasonable to assume their jobs were, to some extent, in the service of the White masters and their families, and that their jobs could, to some extent, influence their shifting understandings of male identities.

consideration, these *hausboi* preferred not to tell their families about their job situations when they returned home (Zimmer-Tamakoshi 1997a). As a result, their stories have gone primarily untold and unrecorded. With the increased involvement of CMCs in PNG's mining industry, some local men continued to work as caterers in the mining mess hall alongside local women and Chinese personnel. Their stories inspire me to investigate how their participation in food catering is linked to their male identities and work relationships with Chinese employees.

As discussed in Chapter 4, Papua New Guinean employees at the refinery encountered two distinct gender ideologies: one derived from colonial coconut plantations and was based on the separation of men's and women's jobs; and another derived from community subsistence farming and was based on men and women complementing one another. This chapter expands on these findings and illustrates how these two gender ideologies affect men doing women's jobs in food catering by examining their everyday multiple positioning between work and personal life in communities. Since the mess employs Chinese staff, these male employees' experiences also serve as an excellent resource for understanding their navigations of work relationships between Chinese and Papua New Guinean employees. Understanding the stories of these male employees allows me to investigate how ethnicity, gender and class are intertwined and mutually constitute one another (Davis 2008). Men working in women's jobs also demonstrate the intersectionality of ethnicity, gender and class, as evidenced by their changing male identities as they navigate between their work experiences and family lives and their work relationships with other Papua New Guinean and Chinese colleagues (Näre 2010).

This chapter comprises three sections. The first section addresses two perspectives on work relations in the mining mess hall: one is structural and defines ethnic group separation as the dominance of foreign employees, while the other is intersectional and emphasises interactions and relationship building among employees. The second section depicts how locals view food preparation and distribution in the communities and how these ideas influence local males' work experiences in the mess. This section also explains why the dominant viewpoint does not accurately reflect the scenario in my case study. Later, the third section depicts a male butcher's and a male catering service attendant's work experiences and how they adjusted their male identities through negotiations and concessions. Because Chinese personnel were present, their adjustment of male identities intersected with ethnic relations in the mess hall.

Based on these findings, the chapter concludes by arguing that gender compromises made by two male interlocutors when performing women's work indicated an intersection of gender identities, occupational hierarchy and ethnic relations. The findings in this chapter are also consistent with the current emphasis in labour process studies on investigating gender issues through intersectionality.

5.2 Intersectionality of ethnicity, gender and class in workers' jobs

When I started fieldwork in late 2018, I asked a friend, Alex, about observing work situations in the refinery because RNC allowed him to visit the mine site. Employees' job situations (both Papua New Guinean and Chinese) were dreadful, according to Alex, and their lives were miserable. The cafeteria (precisely, the mess) was a good illustration, he said, because two groups of workers sat separately – Chinese employees on the upper floor and Papua New Guinean workers on the lower floor. Alex further claimed that when he sat with Papua New Guinean staff, a few Chinese employees showed a negative attitude towards him. Alex's description, in my opinion, showed a structural and adversarial perspective on the relationship between foreign and Papua New Guinean personnel.

Alex's description corresponded with some studies on ethnic relations at the mess hall in mining contexts in PNG. Polier's (1994) investigation of the mess in Tabubil township in the Ok Tedi mine in Western Province, for instance, shared a similar perspective. Polier noticed the following to demonstrate the relationship between Western managers and Papua New Guinean employees:

A picture of stratification by nationality, ethnicity, class, colour and gender; in one section of the mess hall sit expatriates, in another Filipinos, and in the largest quarter sit Papua New Guineans, often by ethnic group; a small minority of indigenous women sit together, surrounded on all sides by male onlookers and commentators. (1994: 74)

According to Polier's description, the mess was divided into sections based on the employees' class, ethnicity and gender. Papua New Guinean men and women working in a mess became subservient as white supervisors acted as the dominant group.

On the other hand, other research has found that work relations in the mess hall reflected the interconnection of different workers. Lahiri-Dutt (2013b), for example, used the Tanjung Bara mining camp's dining hall to highlight various miners' gender performances. Lahiri-Dutt claimed that investigating interaction and relationship building revealed that workers' gender performances intersected with their diverse ethnic and class backgrounds in the dining hall. Similarly, Lahiri-Dutt (2017) argued for examining varied women's employment experiences in the mining industry through the lens of intersectionality. According to her, the intersectionality lens assisted in examining the impact of ethnicity, gender and class on the identities of female employees. The study of the intersectionality of three components, she added, also revealed the complexity of women workers' lives, which transcended a binary explanation for differences. Based on these findings, Lahiri-Dutt suggested that scholars could analyse "how race is gendered and how gender is racialised" through the lens of intersectionality.

Notably, studies on women's employment experiences in PNG's mining industry concurred with Lahiri-Dutt's viewpoint. Macintyre (2003), for example, documented the obstacles encountered by Lihiran women seeking employment in the Lihir gold mine. According to the author, Lihiran men objected to women's employment for three reasons: working without the supervision of their parents and brothers, wearing trousers and exposing themselves to the risk of being raped or seduced by non-Lihiran men and therefore becoming pregnant. Additionally, the author stated that Lihiran women were deemed incapable of becoming Moxy dump truck drivers since these positions were "viewed as masculine, and linked to notions of modernity, power and physical strength" (2003: 5; see also Lahiri-Dutt 2012). Faced with these gender stereotypes, Macintyre's (2006) research of Lihiran women employed by the Niolam Catering Service at the Lihir gold mine revealed that, despite their employment, they were unable to escape indigenous cultural expectations surrounding women's household duties. Furthermore, their acceptance of catering jobs reflected their acceptance of gender stereotypes about women's jobs that had originated during the Australian colonial era. We can conclude from these findings that the job application

procedure for Lihiran women reflected the intersection of ethnic conflicts between Lihiran men and non-Lihiran men, gender hierarchy between Lihiran men and women and job segregation between men's and women's jobs.

Confronted with these views, this chapter demonstrates why Lahiri-Dutt and Macintyre's approach is more helpful in examining work relations in the mess hall in the refinery. By comparing food preparation in the village and in the mess hall, we can learn how two different cultural meanings linked with food work affect male employees' work experiences (Goody 1982). In comparison to the obstacles faced by female employees, male employees' stories illustrate a different side of employees who work in women's jobs. By examining their stories, we can understand how they negotiate the workplace's two opposed gender ideologies. We can also learn how male employees' gender reconfigurations are related to ethnic work relations involving Chinese personnel. Based on these findings, this chapter illustrates another aspect of intersectionality concerning women's jobs in the PNG mining industry.

5.3 Catering to refinery workers

The refinery had two mess halls – one on the plant grounds and another in the township. My excursion to the township mess occurred on a Sunday morning in March 2019. While walking to a local market outside the refinery's main gate with local friends, a car passed us and came to a halt as we climbed a small hill next to the limestone processing plant. When the car door opened, a Chinese employee named Wei greeted me, and three other Chinese employees sat in the back, while a Papua New Guinean employee sat in the front seat next to the driver. Wei inquired about my whereabouts and what I consumed in local communities with a friendly expression. I was initially scared before answering his questions because RNC management was not favourable towards me.

After knowing his friendliness, I informed him that I ate primarily local garden food. Occasionally, people boiled rice with quick noodles, locally grown veggies and tinned fish. He appeared empathetic upon hearing my responses and offered me to join them for a meal in the township mess. On our drive to the township, Wei explained that they visited a local friend's village, Ganglau, to purchase roosters for cooking in the dorm kitchens. He asserted

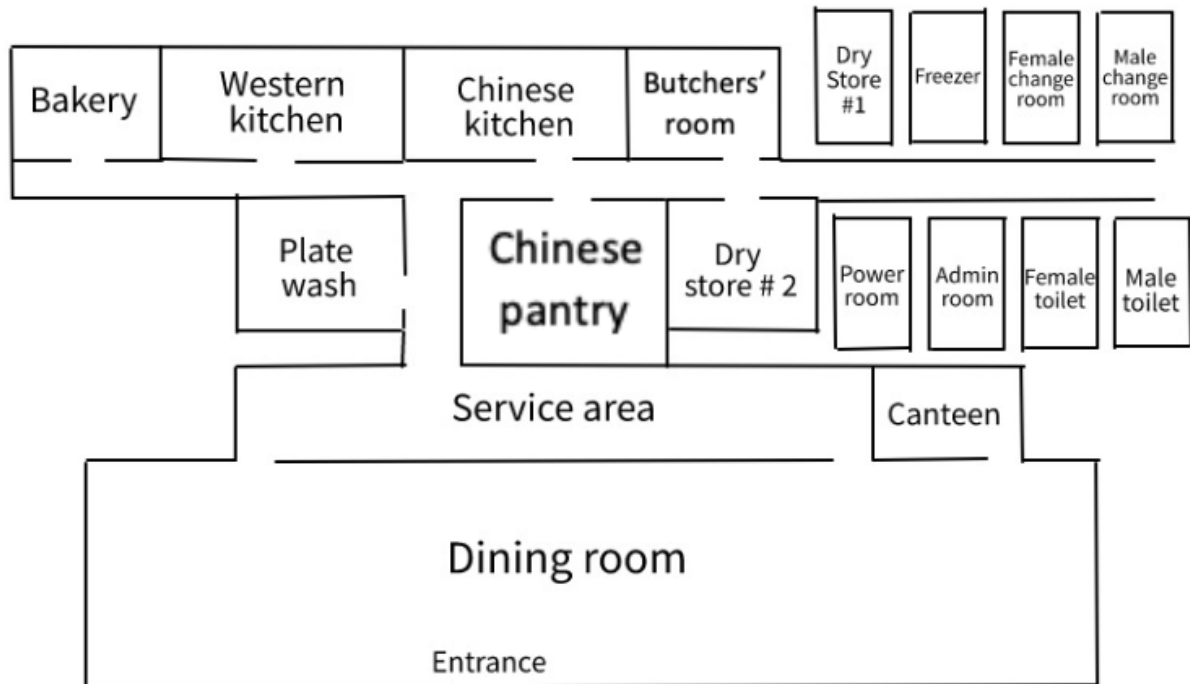
that the Chinese chef prepared cuisine following the tastes of southern PRC. This preference differed from Wei's since most Chinese employees came from northern PRC. When the car stopped in front of the mess hall, the driver left me with Wei while the others returned to their rooms for lunch. I was both nervous and excited at the time to learn about how Chinese and Papua New Guinean workers interacted by observing how they served and ate food.

5.3.1 Food service in the township mess

The township mess hall was a glass curtain building with only one level, covered by an iron sheet roof, located on the township's centre back (Figure 5-2). Because there was just one entry, both Chinese and Papua New Guinean personnel queued up to swipe their mess cards and got access. A female Papua New Guinean staff member sat at a table on the left-hand side of the door as Wei and I approached. Wei pulled the mess card from his pocket and handed it to the female staff, addressing me as 'a friend'. The female staff smiled as she noticed a black *bilum* ('net bag') with the words 'Beautiful Madang' on my neck and used a machine to charge Wei with one kina to count how many meals he had consumed. After entering the mess, Wei briefly described to me how to obtain food and returned to his dorm to eat with his father.

Standing in the centre of the dining room, I saw two food service areas in front of me (Chinese and Western) and the canteen (the beverage and snack shop) on the right (Figure 5-1). Due to my long-term consumption of garden food, I joined the Chinese food line alongside a few Papua New Guinean workers. When my turn came, a female Papua New Guinean servant picked up a stainless dish and inquired whether I wanted a steam bun or rice. Due to my hunger, I chose rice and then agreed to whatever she offered for the remainder of the chat. When the female server completed the order, she offered me the plate, which had rice, two proteins (spicy fish chunks and salty pork cubes cooked in soybean sauce) and two vegetables (water spinach and cabbage) (Figure 5-3). I was scared when I held the dish because I did not know anyone. Fortunately, I noticed a Papua New Guinean staff member called Carl who had spoken with me previously. Therefore, I sat down with him to eat together.

Figure 5-1 The township mess hall's interior layout



Source: Made by the writer

Figure 5-2 The exterior and interior of the mess hall



Source: Photo by the writer

Figure 5-3 Chinese food and Chinese food section

Source: Photo by the writer

I asked Carl about his thoughts on the food in the mess while we were eating together. Carl, who was in his late twenties and had worked for RNC for several years, first noted the relevance of meals for his job while working in the maintenance division of the instrumentation department. As a trade assistant, he explained that his job required moving between several departments daily to service broken machinery. He claimed that eating enough food helped him move heavy equipment (e.g. pumps) and do his duties to the best of his ability. This chat reminded me of one I had with Luke, a former Papua New Guinean safety and training manager discussed in Chapter 3. Luke emphasised the importance of food consumption for employees working in the refinery because it could prevent staff from feeling weak, causing accidents and delaying the operation. Luke also highlighted the need for eating well to maintain good physical conditions for those who work in environments comparable to Carl's (such as those requiring strenuous physical labour, the use of heavy machinery or working at heights).

To ensure that workers received nutritious meals, a PNG joint venture food catering company, National Catering Service (NCS), offered various food options. Workers could choose bread, scrambled eggs and sometimes sausage from the Western food section and stream bun or soup noodles from the Chinese food section for breakfast. There was also tea or coffee, sugar and condensed milk available for workers, but no fresh milk. In terms of lunch and dinner, a

Western section meal included a staple food (such as sweet potato, yam, pumpkin or banana), two vegetables and one protein; a Chinese section meal included a staple food (either rice or steam bun), two vegetables and two proteins (chicken, pork, beef, fish or lamb). After dinner, fruits (e.g. pineapple and watermelon) were also available for dessert. NCS sourced many of the ingredients for these meals from nearby communities. Some Chinese workers also went to the local market near the township's main gate to buy fresh seafood. In other cases, Papua New Guinean personnel relayed the news to Chinese workers about what sorts of fish they had captured for them to purchase. Lunch and dinner at NCS were diverse because of the five various types of meat available. As an illustration, if lunch was chicken and pork, dinner might have lamb and beef (or fish). Although most Papua New Guinean personnel could not get acclimated to the chilli flavour used in Chinese cookery, they would attempt the Chinese cuisine line to consume more meats.

Observing the various staple food offered by NCS, I realised that these differences reflected varied ethnic perspectives on food and work. For Chinese personnel, rice was favoured at each meal to support daily labour, as they considered sweet potato or other local garden food in the Western food section to be veggies or fruits, not staples. This cultural understanding was based on the long history of rice cultivation and eating in Eastern Asian countries. Rice in the Chinese food section was not considered a staple food by Papua New Guinean workers because people would become hungry again after a short period. Most Papua New Guinean employees stated that garden food (such as yams, sweet potatoes and bananas) were preferable since they had more nutrition and fibre, allowing them to work for an extended period. This cultural awareness was based on their involvement in subsistence farming. These two examples demonstrated how different types of staple food in two sections reflected different workers' perspectives on food and work.

While having lunch with Carl, I noticed that the two groups of workers were not interacting much. When lunchtime was over, I discussed my observations with William, a Papua New Guinean butcher, to better understand the situation. According to William, two groups of workers sat separately most of the time. They sat together only when there was no other space or when the Papua New Guinean employee was a close friend of the Chinese employees. William explained that the chilli seasonings that Chinese employees brought to the mess and utilised while eating was one primary reason why Papua New Guinean employees refused to

sit with them. Employees from Papua New Guinea chose not to dine with Chinese employees since they were not used to this odour.

William's explanation was critical because it contradicted Alex's and Polier's perspectives on the dominance of Westerners and Chinese employees discussed in the introduction.

According to their narrative, the condition of the Papua New Guinean employees became dismal. Instead, according to William, I discovered that Papua New Guinean staff could not get used to the smell of chilli in Chinese food and thus refused to sit with Chinese employees. This differed from Alex's account of Chinese expatriates' disrespectful attitude towards him when sitting with Papua New Guinean staff. When eating in the mess, Papua New Guinean employees made their own selections of food and companions. Moreover, an interview with another Papua New Guinean NCS employee, Jordan, revealed that, in the two-storey mess hall, the Chinese section was on the ground floor and the Western section was on the first floor. This contradicted Alex's belief in Chinese employees' display of dominance by occupying the upper floor.

5.3.2 Food preparation in the mess

The discussion with Carl on Papua New Guinean employees' preference for garden food as a staple reminded me of how their subsistence farming experiences affect their work experiences in the mess hall. Food preparation was linked to the formation and maintenance of social relationships and gender relations among those employees who lived near the refinery. For example, von Poser (2016) stated that cooking was a situation in which the Bosmun people of Daiden in PNG taught children the value of relatedness. Von Poser remarked that during Bosmun children's engagement in playful cooking, for example, parents observed and encouraged their children not to be selfish but to be thoughtful of others in the community. Furthermore, the author stated that local males remained with women during food preparation, although cooking was considered a woman's job. These factors indicated that cooking was an important way for Bosmun children to learn about gender relations. Men and women learned how to do each other's jobs during food preparation, even though women did the most cooking.

During my time living in Duman, I witnessed a similar situation to that described by von Poser. In Duman, cooking for the whole family usually started with mothers and grandmothers peeling the skins off garden food, cutting them into large chunks and arranging them in the kitchen. Children stayed with their mothers, studied them and played with them simultaneously. When it was time to cook, fathers or sons would prepare the fire by chopping wood kept under the kitchen. They would also prepare the coconut milk, by cracking the coconut shell with a piece of sharp metal stuck in the ground near the kitchen, and scraping out the coconut flesh using a specialised stool with a sharp round spike. When most of the ingredients were prepared, the mother put them in a large pot and cooked them on a hearth. It took roughly one to one and a half hours to cook the dishes after adding some salt and the flavour saceht from a packet of instant noodles. During this time, folks sat in the kitchen telling each other stories or jokes. There would be no rush. When the cooking was done, the mother or a young man divided cooked food evenly into various bowls and placed them on the ground. There would be more food in individuals' bowls if they accomplished more tasks during the day.

My involvement in cooking for the whole family in Duman matched von Poser's depiction. Duman young men learned how to cook and about complementary gender relations between men and women by helping their mothers or sisters (Leach 2003; West 2012). Rather than denigrating women's efforts, the gender division of labour during food preparation attempted to teach men about respect for the women in their families and their role in food preparation. Also, the equitable food distribution demonstrated that eating together was intended to sustain the bonds among family members (Kahn 1998; Fajans 1997).

Additionally, some cooking is performed exclusively by men in Duman. Men's cooking is divided into two categories in PNG: cooking on the hunt and cooking in daily life. According to Majnep and Bulmer (2007), whenever Kalam men went hunting, they built an oven in the bush to prepare delicacies and cook the first animal they captured as a gift to the spirits and ancestors to ensure a successful hunt. As a young man, the authors learned about oven construction, the use of particular herbs and magic spells by witnessing and accompanying their dads and brothers when they went hunting. In contrast to cooking on the hunt, the men's cooking in Duman that I engaged in was referred to as young men's cookery, cooking in daily life. Young men's cooking occurred whenever they went fishing or when a new *hausboi*

(‘young men’s house’) was being built. Because fishing and construction require collaboration between brothers, the host young man was required to prepare a rooster and garden food from his garden and purchase rice, canned fish and instant noodles to make food to express gratitude to brothers who had assisted him.

The procedure and tasks involved in young men’s cookery were comparable to those engaged in cooking for the whole family in Duman. After the day’s work was completed, all brothers gathered to prepare food ingredients without a clear division of labour (Figure 5-4). The atmosphere was pleasant, with American or PNG pop music playing from smartphones, and everyone assisted one another. They sat together while cooking food to share stories or laughs. Occasionally, a young man skilled in hair cutting would assist others in organising their hair. Other times, a young man who knew how to repair a bicycle would aid others in repairing theirs. When the food was ready, the host young man placed all dishes on the ground and distributed the food following the volume of work performed by everyone (Figure 5-4). After eating, they all washed their plates and returned them to the host young man.

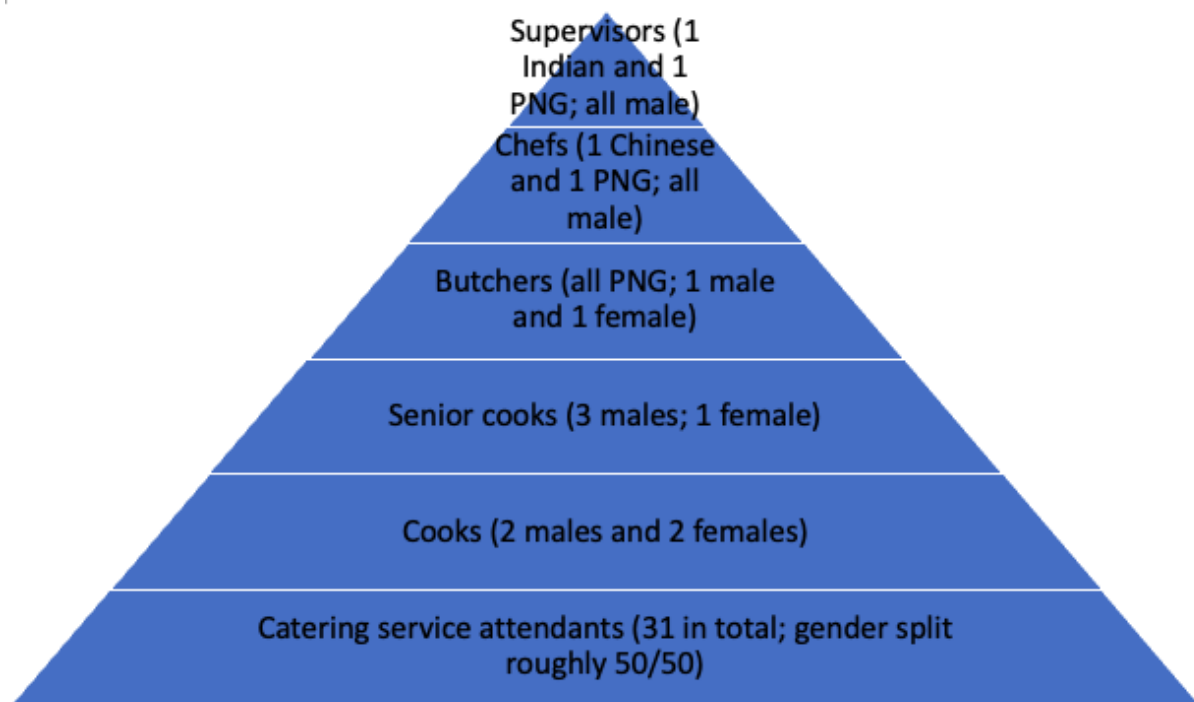
Young men’s cookery demonstrated that they were capable of food preparation. This experience demonstrated the mutual support and maintenance of relationships between brothers by participating in young men’s cookery. When young men later underwent male initiations and resided in the *hausman* (‘men’s house’), they were also required to prepare food on their own because their mothers and sisters were not allowed to visit them (more discussion in the next chapter). These instances showed that while young men’s cookery did not include offering food to spirits, it was nevertheless ritualistic in the sense that it influenced young men’s perceptions of gender identities and relationships with women.

Figure 5-4 Young men preparing and distributing food



Source: Photo by the writer

However, while working in the township mess, local males found themselves in a different scenario, with different ethnic relations and gender relations. According to William, each shift in the township mess had forty-five employees, including one Indian supervisor and one Papua New Guinean supervisor (all male), one Chinese chef and one Papua New Guinean chef (both male), four senior cooks (three male and one female), four cooks (two for Chinese and two for PNG food; two males and two females), two butchers (one man and one woman) and thirty-one catering service attendants (CSAs; the gender split was roughly 50/50). These figures indicate that males dominated more administrative and skilled occupations (chef and senior cook) in the township mess, whereas women's predominant employments were in lower-skilled jobs (cook and CSA) (Figure 5-5). This gender and hierarchal division of labour differed from local young men experienced in the hamlet. Additionally, serving and cleaning tasks were considered women's jobs, while cooking was considered a man's job, although the gender ratio of CSAs was roughly half-and-half. This gendered segregation enacted by NCS Papua New Guinean managers reflected gender stereotypes originating from the colonial era, as discussed in the previous chapter. This gender division of labour also varied with the experiences of local males partaking in food preparation in the village, which was centred on men and women complementing and respecting one other.

Figure 5-5 The township mess hall's job structure

Source: Made by the writer

In order to work in the township mess, Papua New Guinean male employees also needed to learn new skills. The first task was to prepare food following the refinery's work schedule. In Duman, there was no strict set time for cooking, for the whole family or for young men's cookery, due to people's obligations to community affairs or unexpectedly extended time working in the garden. However, after becoming an employee in the mess, they had to work on different shifts to assure the refinery's twenty-four-hour functioning. CSAs, for instance, had to work one week on the day shift and another week on the night shift. When working the day shift, a CSA would get up early in the morning before breakfast to wait beside the highway for the NCS car to arrive at the township mess on time. If the CSA missed the car, the walk from Duman to the township mess could take up to 30 minutes. After arriving at the mess, a CSA worked from 8:00 a.m. until 1:00 p.m., until lunchtime was over. Taking a break between 1:00 and 2:00 p.m., they returned to work from 2:00 until 7:00 p.m. to prepare dinner. CSAs worked seven days and then took a day off because there was no formal break schedule. Because of this unusual work schedule, local males need to discover other ways to

labour in their gardens. They also spent most of their time recuperating during the day when working the night shift. These scenarios demonstrated that various food preparation tasks represented different time perceptions (Mintz 1985).

Papua New Guinean male employees' second lesson was maintaining personal hygiene while preparing food. Using the CSA as an example, they must wash their hands with warm water and soap after entering the workplace from outside. They then changed into a mess suit and a cooking cap in the locker room. Following completion of these food safety procedures, they were assigned to five tasks: preparing garden food and vegetables, peeling garden food (such as sweet potato, banana, yam or pumpkin), assisting chefs (mostly Papua New Guinean chefs) in cooking and deep-frying garden food, serving cooked food and cleaning tables and utensils. Other employees, including the butcher, were subject to the same food safety rules. Before cutting another meat or assisting CSAs with preparing garden food and veggies, butchers must wash their hands and change their attire. Luke, the former Papua New Guinean manager, stated that mess staff learned how to cook and ensured that food was safe, clean and free of contamination to emphasise the importance of food security. This demonstrated that employees in the mess should prepare food with a more serious attitude than the relaxed atmosphere during food preparation in the village.

Finally, local male employees needed to learn skills that differed from village food preparation. When CSAs worked with Chinese chefs or cooks, for example, they needed to learn how to prepare ingredients not found in the local diet, such as mushrooms. They were also required to learn how to use specific spices to assist Chinese chefs and cooks prepare Chinese food. Butchers' jobs consisted of three steps: reviewing the menu for the next few days, retrieving meats from the freezer, putting meats to thaw and finally cutting them according to the menu. If the menu stated, 'steam meat', butchers cut meats into small cubes; if the menu stated, 'roasted meat', butchers cut meats into large cubes; and if the menu stated, 'stew or fry', butchers cut meats into slices or strips. Importantly, they had to rewash their hands whenever they finished cutting meat and needed to switch to another type of meat. Butchers placed completed cuts of meat in the freezer for cooks or chefs to collect. These cases demonstrated that local males employed by NCS were required to follow chefs' and cooks' orders when preparing food to ensure that the taste was correct. This situation differed from the case in the village, where local men knew and decided how to prepare food.

This subsection's presentation of food preparation demonstrates the two varied scenarios encountered by Papua New Guinean male employees in the mess. They learned the value of collaboration to sustain social bonds with family members and the complementarity of men and women when engaging in cooking for the whole family or young men's cookery. After becoming workers at the mess hall, they joined another social path marked by occupational hierarchy, segregation of men's and women's jobs and the value placed on punctuality and obedience to orders (see Counihan 1999 for a comparable transformation in the gender division of labour between subsistence wheat and bread production, and capital-intensive wheat and bread production in the town of Bosa, Italy). Faced with these distinctions, the restriction of betel nut chewing in the meal served as an excellent depiction of their experiences. Planting and sharing betel nuts were crucial for most Papua New Guineans in establishing and maintaining social relationships. People may be seen sharing betel nuts from the start of an ordinary day through the funeral of a loved one, always in the spirit of reciprocity. On the other hand, chewing betel nut was considered a hazard to workers' health and a violation of work ethic in the mess hall (Figure 5-6). Confronted with two situations, the varying interpretations of betel nut echoed the struggle experienced by local male employees who worked in fields that were traditionally considered women's occupations.

Figure 5-6 Notification about not chewing betel nuts in the township mess hall



Source: Photo by the writer

5.4 Gender, class and ethnic relations related to doing women's jobs

This section uses the stories of a butcher and a CSA to illustrate their experiences of finding jobs and working in the township and refinery mess halls. This manner of describing enables us to comprehend how opposing gender ideologies mentioned above affected their work experiences. Additionally, because Chinese workers are involved, Papua New Guinean male employees' accounts can illuminate whether their negotiations of opposing gender ideologies are related to their interactions with Chinese employees. Based on these examples, this section demonstrates why Lahiri-Dutt and Macintyre's intersectionality discussions are more helpful in studying male employees' work experiences in the mess hall.

5.4.1 Butcher's table-serving and cleaning experiences

The first story follows William, a male butcher who worked in the township mess. William worked in the refinery after finishing grade 12 and received welding and grinding training at a technical workshop at a marine college in PNG. However, a baby was born after he had worked for one and a half years, and this unexpected event changed his refinery job. Because he was a junior father, he was obliged to miss a month of work, and RNC fired him.

According to William, the company only offered maternity leave to women, and males could only apply for a week of unpaid leave. After staying at home for a month, he applied for a job with NCS because he needed money to support his family and other younger brothers. NCS first appointed him as a CSA after accepting his application. Later, he was promoted to butcher because of a job vacancy. Two senior employees showed him how to cut meats into rows and cubes according to the menu while he was a freshman. One of the senior staff members went to work in the dining room after William's training, while another went to work in the refinery mess hall.

To begin, William first demonstrated his work relations with the Chinese chef. In the township mess, there used to be two Chinese chefs. One who was fired in 2018 could not communicate in English. Another person who could communicate in simple English was still working. According to William, Amos, the fired Chinese chef, did not clean or wash dishes. When Amos arrived at the mess, he sat down and played on his smartphone, ordering Papua New Guinean staff to do this and that. What was worse, Amos changed the menu and asked butchers to cut meats that were not on the menu. When refinery workers finished their meals, Amos would tell Papua New Guinean employees to collect plates without assisting them. While working with him, William disliked Amos's behaviour and used *bos bos* ('boss') to describe his feeling. "[Like] you talk to them [Chinese chef], and they cannot talk to you properly, in a proper manner, a good manner," William explained. This sentence demonstrated William's dislike for Amos because he acted as a master, ordering Papua New Guinean employees. According to my observations, some Papua New Guinean male elites who completed university education and returned to villages exhibited similar behaviour. Locals said these people had attitude problems, which helped explain their negative feelings about being ordered by these elites. Similarly, we could discover that William disliked Amos because of his attitude problem.

Following his illustration of Amos's behaviour, William related a story about his acquaintance with the current Chinese chef. After years of service in the township mess, William noted that the current Chinese chef, Andrew, acquired basic English and the workplace pidgin demonstrated in Chapter 3. To get assistance from Papua New Guineans, William noted that Andrew would say, "can you come and help me cook meat?" As a result of this courtesy, William declared Andrew his best friend. William described Andrew as a likeable person, saying: "He [Andrew] can pop up with Papua New Guinean staff. He cannot argue with you. He cannot talk hard to you. His attitude is okay. He is a good guy." William's explanation demonstrated his appreciation for Andrew's willingness to learn the workplace language and his respect for local employees. Andrew's attitude was favourable for friendship building, owing to the skills and cultural differences between Chinese and Papua New Guinean workers. William's bond with Andrew also reminded me of conversations with village residents about their expectations for how the RNC would interact with them. Most of the time, village residents suggested that the Chinese management come out, sit down with the locals and share tales about one another. We might discover that a comparable understanding affected William comprehending his work relationships with Andrew.

Throughout our discussion about the differences between Amos and Andrew, William repeatedly emphasised Amos's unwillingness to do cleaning jobs. William's emphasis on cleaning and serving tables piqued my interest, so I inquired why he mentioned these types of jobs. To illustrate his point, William stated that some Chinese chefs and cooks did not want to clean the kitchen at the end of the day. Instead, the Papua New Guinean chefs, in contrast to the Chinese chefs, were willing to clean up with the butchers and CSAs at the end of the day. To express his feelings about these differences, William stated that he appreciated Papua New Guinean chefs' willingness to clean with local staff, even though they were from other provinces. William's response indicated that he saw cleaning and serving tables as an ethnic and class distinction between Chinese and local employees. Working in a situation where job assignments were based on skill level, Papua New Guinean chefs' willingness to assist local employees in cleaning tables alleviated potential tensions associated with the job hierarchy and ethnic differences between them. Instead, William saw some Chinese chefs and cooks' refusal to clean the kitchen reaffirm their ethnic differences and class hierarchy. As a result, he disliked some Chinese chefs, particularly Amos.

Our discussion about cleaning also brought up another point related to William's employment experience. Upon observing William and me conversing, the female staff member responsible for checking workers' mess cards joined our table and sat with us. Inspired by her participation, I attempted a different approach to interviewing William by asking him if he thought jobs in the mess were women's jobs. "Yeah, but I love to work," he responded in a high-pitched tone as if he had been considering this topic for an extended period. "It is [like] the job that I... I used to do [it] at home. It is just like you staying home, and you go to the garden and come back, cooking, eating, playing, just like that." After hearing his explanation, I inquired why he saw duties in the mess hall as women's jobs. "Because most of the thing are washing plates, dishes, cleaning, mopping, peeling banana [and] *kaukau* ['sweet potato']," he continued. "For some males, they [local male employees] come [and] see me... they do not [want to help me, and] just go away, they will tell you [that] I do not want to do that. It is not my job. It is [a] female job."

Our conversation revealed that William had two perspectives on women's jobs. On the one hand, he comprehended women's jobs by comparing what he did in the village to his jobs in the township mess. William did not think this was strange because men and women worked together in the village. On the other hand, William's interactions with other male employees, as well as their denials of cleaning, gave these jobs another meaning, one that separated men's work from women's work.

Knowing William's opposite feelings, I continued to enquire about his initial reaction to hearing other male staff members' refusal since it was a woman's job. "In the beginning [it] was very hard time. Because it is my first time, because I... like all the people, male," he replied awkwardly. "People sitting and eating and moving. And they [local male staff] saw me a male go here and washing plates and mopping. It is really hard." After hearing his response, I began to inquire why he regarded it as a difficult time. "Because I feel like people will sit down and look at you [as] a man moving around, clean the kitchen, cleaning, washing plates dishes, everything," he explained. "He [referring to himself] is a male, but he is doing a female job. That is what makes me [feeling] hard. As time goes on and then I say it is OK." His mental adjustment drew my attention, and I inquired why he later felt OK. "After all, I thought it is OK. At least I do something, and I earn my living," he responded. "Once you get

employment, you have to look after it. Cause nowadays living is like you have money, your living is easy. So, that is one thing [that] makes me [to think that] it is OK, even it is [a] female job, but I have to do it.”

William’s conflicted emotions, negotiating and concession is revealed in this discussion. His worry about cleaning jobs was first linked to varied work relationships with two Chinese chefs. Recognising the value of cooperation over command, he recognised Chinese and other Papua New Guinean chefs’ willingness to clean as a bridge between staff with varied skill levels and cultural backgrounds. Additionally, his stress occurred when other male employees glanced at him while cleaning and washing with other female employees. This setting was in stark contrast to his experiences cooperating with women in the village. These contradictory situations corresponded to the two opposing gender ideologies indicated above – one that arose during the colonial era and was based on gender separation, and another that was influenced by subsistence farming and was based on men and women’s complementarity. Confronted with these conflicts, William’s employment in the township mess required him to negotiate with opposing perspectives. Given the importance of money, William’s later adjustment reflected his concession to negative feelings caused by the gaze of other male employees and the gender stereotypes that were especially prevalent while working in the township mess. Based on these findings, we could reasonably argue that William’s concession to do women’s jobs in the township mess hall represented an intersection of ethnic relations, occupational hierarchy and gender identity.

5.4.2 Catering service attendant’s concerns regarding food consumption

The second story was about a male CSA who worked in the refinery’s mess hall. Jordan, a CSA from East New Britain Province, PNG, began learning trade skills, such as welding and carpentry, in secondary school and then at a technical college. Jordan worked as a store worker at the East New Britain provincial government’s work department before migrating to Madang in search of a job. To earn school fees, he relocated to Madang, staying in an impacted village with relatives and participating in casual jobs offered by RNC to local landowners’ companies before joining NCS.

Jordan had prior experiences making friends with Papua New Guinean Chinese people in East New Britain Province before joining NCS. Jordan mentioned that Papua New Guinean Chinese people used to invite him to their homes to bring them food and show them how to cook garden food in a local style. Interested in learning the local cooking style, Papua New Guinean Chinese people offered Jordan and his local friends rice or other items in return. They also invited Jordan to spend the night in their homes, sharing stories and resting together. These interactions, according to Jordan, were the reason that they became friends. Their friendship was reflected in sharing food preparation knowledge, staying together and telling stories to each other. This example demonstrated how cooperation in food preparation in the communities became a catalyst for developing friendship and cross-cultural understanding between the two communities.

Jordan made another remark about Chinese employees following his contract work at a refinery. Jordan formerly worked for a local landowner company, where he assisted other local men in removing goods from the ship and storing them in containers. These informal jobs, which typically last two weeks, required four local male staff to load shiploads into seven to eight containers. Jordan watched how local males interacted with Chinese staff while working with them. “Those people [local males] working with them [Chinese staff], they learned many things,” Jordan explained. “Those guys [Chinese staff] teach [local male staff] like this [and] like that.” Jordan’s observation prompted him to think that working in the refinery with Chinese personnel could teach him more trade skills. “I know that those guys [Chinese employees] are good. They show you what you do not know,” he continued. “When you go working with them [Chinese employees], work, work, work, and they show you many many more things you do not know about it.” Based on his observations, Jordan later applied for work at RNC to broaden his trade skills and better grasp how to handle various machines and equipment.

Jordan also applied for jobs at NCS concurrently if there were no job openings at the refinery. NCS first accepted him, so he worked as a CSA at the refinery mess. To begin, Jordan first described his job as ‘everyone’s job’ because he assisted other local staff members in preparing and cooking garden food and veggies. His remark prompted me to enquire whether he considered service attendant professions to be women’s jobs. “Like you know, you cook and you... it is like most of the jobs are like women’s work,” he agreed and added. “Women’s

job in NCS, like cook and you serve food then wash plates and clean up, and it is like... it is like feeling [no] good too much.” His remark reminded me of William’s unfavourable attitude towards his jobs, so I inquired why he felt bad. “I do not feel all right... Like I apply to RNC, [it is] like a big expectation. It is going to take... but those guys they (RNC) [do not] respond to my paper. So, anyway, I just go and work with them (NCS) for a moment, waiting for RNC too,” he replied.

Jordan’s response suggested that his apprehension about doing women’s jobs stemmed from his separated understanding of men’s and women’s jobs associated with mining activities. Jordan did not allude to gender relations in local communities but solely to separating men’s and women’s employment related to mining activities, probably because of his immigrant background. With a preference for employment in the men’s field, his worry about doing CSA’s work also indicated a devaluation of women’s jobs.

As a reminder of his relationship with Papua New Guinean Chinese, I inquired Jordan about meal preparation in the refinery mess before we ended our discussion. To ascertain the distinction, I asked him whether meal preparation in his community and the refinery mess were comparable or dissimilar. “[Not] the kind I learned from *hausman* [‘men’s house’]. Something is different,” he responded. “I work for money, so I come to work [for] money. That is the company policy. I must follow.” I was taken aback by his allusion to the *hausman* and asked him to elaborate. “The *hausman* is sometimes boys will have to prepare own food not eating from women cooking food,” he continued. “But in the company, you know policy. I mean, I am not staying [in] my own village. I am working in the company, so I just eat what they prepare.” Before we continued, Jordan smoked a cigarette and then said, “[like] those frozen food, for instance. [They] already stay [a] long time in the ice, and it cannot give [me] good energy.” I was perplexed as to why eating frozen protein could not provide adequate energy, so I persisted in my enquiry. “Like it cannot give you too much energy. Some of them stay [in the freezer] long time already,” he answered. “So, like [the skills learned from] *hausman*, you go fish and get [a] fresh one. You cook, and you eat. In here the company, [NCS] will not offer you this [kind of fresh meat], so it is hard.”

Jordan’s response was noteworthy in that it charted a different path in comparing food labour in the mess hall to food work in the communities. Rather than focusing on male–female

collaboration, he was concerned with the skills he gained during male initiation and the value of obtaining and eating fresh food based on those abilities. His statement demonstrated that when male employees working in the mess hall dealt with gender issues, they considered both the production and consumption elements of their jobs (Finn 1998).

This subsection demonstrates Jordan's contradictory emotions, negotiating and concession. Beginning with his early passion for developing trade skills, Jordan's early perception of particular vocations as men's fields influenced his perception of work at NCS. While his consideration about generating revenue was similar to William's, Jordan's worry stemmed from his segregated view of men's and women's employment and the devaluation of women's jobs, rather than gender complementary in the communities. Additionally, in consideration of gaining additional trade skills through employment with Chinese employees, Jordan agreed to work in NCS, a profession he regarded to be reserved for women. Finally, when he discussed food work in the community, he referred to the sort of food consumed due to what he had learned at the male initiation. These findings demonstrate that Jordan's negotiations and concessions while working as a CSA represented an intersection between gendered occupational hierarchy and his esteem for Chinese employees' technical competence.

5.5 Conclusion: the intersectionality of compromises

Inspired by Chinese people's engagement in food catering in the late 1850s alluvial goldfields of New South Wales, this chapter details the experiences of Papua New Guinean male employees working in the refinery's two mess halls. Rather than seeing work relations as a matter of Chinese workers' domination, this chapter demonstrates how male employees' negotiations and concessions while performing women's jobs represent the intersection of gender, class and ethnicity. Based on William's and Jordan's stories, we could deduce that various workers' life experiences represent varying perspectives on workplace challenges and gender reconfigurations. These distinctions align with Näre's (2010) position on using intersectionality to investigate the plurality of gender identities when males do occupations generally assumed to be for women, as mentioned in the introduction. In examining William's and Jordan's varied experiences working with Chinese staff, the lens of intersectionality also

allows us to understand why their gender reconfigurations cannot be analysed in isolation from ethnic interactions (Davis 2008; Durbin and Conley 2010; Lahiri-Dutt 2017, 2022).

Moreover, the intersectionality of the workplace and the hamlet is demonstrated by William's and Jordan's gender compromises. In William's example, his gender compromise illustrates a negotiation between complementary men's and women's labour during food preparation in the village and the separation of men's and women's work in the township mess hall. To make money, he changed his thinking and accepted the work environment and the gaze of other male colleagues. Simultaneously, the village's complementary and cooperative relationships continue to influence his view of work relations with Chinese chefs. Jordan's gender compromise demonstrates how his past acquaintance with Papua New Guinean Chinese in the East New Britain Province, as well as observation while on contract, influenced his decision to work in the refinery mess. Jordan mentioned the food taboos he acquired during male initiation and how food intake influenced his job in the mess hall while discussing food work in the community. These two anecdotes illustrate that male employees from various origins intersect their gender compromises in various ways, depending on their past encounters with other ethnicities and understandings of gendered job distinctions.

The various intersectional expressions in William's and Jordan's stories highlight the uniqueness of using intersectionality to research the gender compromises experienced by male workers. According to earlier research, the intersectionality idea helps examine how women in Melanesia negotiate and resist the inequities brought about by mining, as demonstrated by Horowitz's (2017) study of Kanak women in New Caledonia and Manning's (2016) investigation of sexual violence at the Porgera gold mine in PNG. Similarly, applying intersectionality to the study of local male employees demonstrates that local men's repositioning should not be limited to class dynamics. To some extent, their interactions with Chinese employees are influenced by their perceptions of ethnic relations and the gendered nature of their jobs. In other words, as shown in the previous chapters, the studies of local male employees navigating new work settings in the postcolonial PNG are not solely about improving their job status or technical skills. Instead, this exploration and experimentation process also influences how they interpret their working relationships with Chinese employees in light of their indigenous culture, their varied perspectives on gender relations

and what it means to become a man. These results demonstrate the value of studying men's experiences from an intersectional perspective.

Finally, male workers' gender compromises gradually alter their views on women's employment and future expectations for spouses. At the end of our conversation, I asked Jordan if he thought it was the men's role to be the breadwinner and if he would encourage his future wife to work for NCS. He responded positively, saying that nowadays both men and women must work to support their families. If his wife decided to work for NCS, he would support her choice and stay at home with the kids. Jordan's response stated that his NCS job experience taught him that women can also be breadwinners and that men and women should share household duties. This instance demonstrates how working in a women's field may provide males with new perspectives on pre-existing views about men's and women's roles and the gender division of labour. This evolving awareness also demonstrates that men's gender compromise is not just a reproduction of existing unequal gender relations; instead, the process of grappling with ideological inconsistencies helps men to reflect on and emancipate themselves from the established gender barrier. This situation also explains why, after working in mines operated by Western companies, some Papua New Guinean male employees have favourable attitudes toward women working in the limestone workplace, as illustrated in Chapter 4.

Chapter 6 The temporalities of compromises: refinery workers' changing understandings of becoming a good man

6.1 Introduction

My interest in masculinities began in 2014 while conducting exploratory fieldwork in Enekwai, a displaced village near the Kurumbukari mine. When I lived with a host family, one of the most unforgettable impressions I acquired from the locals was that male youngsters occasionally carried a knife and played with it (Figure 6-1). My parents warned me against using a knife when I was a child, and hence this situation astounded me. In 2017, when conducting follow-up research in Mindre, a coastal impacted village adjacent to the refinery, I encountered a similar situation in my contacts with Chinese interlocutors. A Chinese employee working in the community affairs office described his initial interaction with local male employees during their breaks as 'surprised', since he saw them strolling about with a long and sharp knife. Such behaviour, he asserted, would be seen as harmful in Chinese society. After years of working together, he realised local males used the bush knife to defend themselves, create gardens and cut down long grass along the road. This anecdote represented how the Chinese interlocutor discovered that the local male employees were more than refinery workers. They were also involved in subsistence farming and communities, which might influence their jobs at the refinery.

Figure 6-1 A male youngster holds a knife in Enekwai

Source: Photo by the writer

I gained another understanding regarding local male employees while living with a Papua New Guinean worker's family in Duman, another coastal impacted village near the refinery, from December 2018 to October 2019. I was often accompanied by a group of young local males; they escorted me to interviews and included me in their daily routines. I was initially perplexed when I heard others refer to these physically well-built men as 'boys' because individuals above twenty are generally considered adults in Taiwanese society. After months of being a part of their lives and interviewing local male workers, I realised that young males in Duman see manhood as a process of *kamapim gutpela man* ('become a good man') that begins with completing *hausman* ('male initiation'), finishing men's responsibilities (such as building a house and tending to a garden), looking after family and obtaining community recognition (see also Lawrence 1964). These interactions have prompted me to see masculinities as becoming processes, comparable to the account of becoming a refinery worker in the preceding chapters. Inspired by the chat mentioned above with a Chinese interlocutor, my experiences living in Duman also made me wonder to what degree their mutual involvement – in subsistence farming and refinery labour – affected their understanding of becoming a good man.

As stated in the introductory chapter, the proximity of Duman and the refinery demonstrates that the experiences of local male employees mirrored a continuity between families (or communities) and the workplace. While travelling between these two locations, the many tasks and concerns of local male employees reminded me of the temporal component of people's everyday lives that some anthropologists have emphasised (Fabian 1983 [2002]; Ingold 1993; Latour 1993). To advocate for investigating temporalities in mining activities, D'Angelo and Pijpers (2018) note that one aspect of temporality is reflected in how previous mining activities on the specific terrain continue to shape local actors' expectations and interactions with new transnational employers, which is similar to my findings discussed in Chapters 3 and 4. They also say that employees' conflicts and negotiations with industrial time and the seasonality of subsistence farming are indications of the temporality of mining operations in their everyday lives. By emphasising the perspectives of employees rather than the dominance of employers, D'Angelo and Pijpers argue that "they [local employees] also appropriate, construct, draw upon or try to manipulate perceptions of time and temporality in order to position themselves advantageously in a field of different, often conflicting, interests" (2018: 221). In the same vein, the temporal lens reminds us that investigating changing masculinities caused by CMCs' businesses should be grounded in consideration of the local gender norms of places where mining activities occur.

This chapter emphasises the confined space in the refinery to demonstrate refinery workers' changing masculinities. I made this selection because the confined space is where many local young men from impacted villages first work with Chinese supervisors. Chinese supervisors also learn about Papua New Guinean workers and evaluate whether they can become corporate employees by guiding and observing these young men. As a result of these variables, the confined space is an outstanding example of changing masculine identities brought on by intercultural work experiences.

This chapter comprises four sections. The first section explains why temporality is a helpful framework for studying employees' changing masculinities as they move between the industrial workplace and their communities daily. The second section describes how Papua New Guinean workers impress their Chinese supervisors through negotiations and concessions about industrial and subsistence farming time. This section also shows how working with Papua New Guinean workers alters Chinese employees' perceptions of work

and behaviour. Later, the third section explains why Papua New Guinean employees' changes result in their new understandings of what it means to be a *gutpela man* ('good man'), as well as what it means for Chinese expatriates to be a *chenggong* man ('successful man'). The findings in this section also show that the new understandings of becoming a good man among Papua New Guinean and Chinese employees reflect their masculine compromises based on negotiations and concessions. Finally, this chapter concludes by explaining why Papua New Guinean and Chinese employees' changing understandings of becoming a good man reflect the multiple temporalities of individuals' identities, which vary according to the context of everyday life and relationship to others.

6.2 Multiple temporalities associated with mining activities in PNG

Scholars of masculinities have suggested that CMCs' activities are changing indigenous masculinities in developing countries. According to Connell's theory of masculinities, the large-scale extractive sector introduced during colonisation was the preceding key factor influencing the masculinities of indigenous male labourers (Connell 2016). Given the growing involvement of multinational corporations in the postcolonial context, Connell (2014) writes, "the integration of the world economy by transnational corporations, international trade and global finance, has created new elites that are heavily masculinised" (227). As a result, Connell emphasises the importance of investigating how multinational corporations take the place of early colonial administrations in managing the extractive industry and influencing indigenous masculinities (Connell 2014). Based on Connell's perspective, we can understand that postcolonial studies of masculinities must investigate how indigenous masculinities constantly reconstruct, renovate and combat in light of CMCs' growing worldwide participation in the extractive industry.

Corresponding to Connell's advocacy, my literature study findings suggest that existing studies on masculinities in PNG and the PRC reflect a dialectical relationship between tradition and modernity. Some researchers believe that the impact of Westerners on indigenous masculinities in PNG has resulted in the marginalisation or alienation of traditional masculinities (Eves 2008; Gibbs 2016; Lipset 2017). Some researchers, on the other hand, see the reconfiguration of indigenous masculinities because of indigenous cultures' ability to incorporate Western influences (Kempf 2002). A similar situation occurs

in Chinese masculinities studies as it does in PNG studies. For example, according to Louie (2014), the traditional *wen-wu* ('literary-martial') model of Chinese masculinities continues to aid Chinese men in dealing with problems posed by Westerners. In contrast, Song and Hird (2014) employ the concept of a crisis of conventional masculinities to illustrate present issues encountered by Chinese men because of women's empowerment and the challenges posed by Western and Japanese men. With China's growing global participation, Song and Hird observe that Confucian and Maoist masculinity paradigms have been swept aside. These works have greatly aided our comprehension of the encounter between East and West, North and South, in contexts where Westerners are seen as the manifestation of modern masculinities.

This chapter suggests that an alternative framework is needed for studying the encounter between Papua New Guinean and Chinese personnel. As shown in Chapter 3, how Papua New Guinean personnel learned to work alongside Chinese employees represents their negotiation with Western values and concessions to Chinese work ethics. In other words, the compromises made by Papua New Guinean personnel demonstrate their versatility in understanding Chinese work culture while upholding Australian ideals. To them, working with Chinese personnel is another opportunity to pursue the unfinished modernisation project introduced by Westerners (LiPuma 2000; Lusby 2018). During this process, Papua New Guinean personnel no longer regard themselves as 'traditional', as they once did in comparison to Westerners. Instead, individuals have autonomy in pursuing what they deem feasible and desirable for themselves (Errington and Gewertz 2004). After a long period of collaboration, as demonstrated in Chapter 3, they realise that they have the expertise and ability to teach the Chinese management how to comply with the rules and regulations in PNG. In addition, as you will see later in this chapter, working with Papua New Guinean personnel creates shifts in Chinese employees' perspectives on their jobs and behaviour. These factors indicate a distinct power dynamic between Papua New Guinean and Chinese personnel compared to Western-managed mines.

In considering an alternative approach, this chapter posits that my realisation of the temporalities of workers' everyday lives serves as a reminder to investigate the many times experienced by employees. Kirsch (2014), for example, presents the scenario of mine-induced environmental effect in PNG to explain how various timings operate. According to the author,

multinational corporations frequently postpone acknowledging their environmental repercussions to focus on constructing a bright future for shareholders and local landowners. To counteract this trend, Kirsch asserts that it is necessary to educate local actors about the functioning of time politics, namely the long-term environmental impact of mining operations and the irreversibility of environmental disaster once it occurs.

Similarly, Halvaksz (2008) focuses on different perspectives on time to explain how mine closure can take on a variety of meanings. The author emphasises, using the mining in the region of Wau, Morobe Province, PNG, as an example, that the closing of a mine signifies the end of responsibility for transnational companies and the PNG government. However, for the residents of the impacted region, their prior exposure to mining operations would continue to influence their expectations and relationships with new employers. Additionally, Halvaksz asserts that the inhabitants of Biangai's many temporalities are reflected in their negotiations between 'white time' in jobs, church and schools and 'their time' in subsistence farming. Based on this finding, Halvaksz notes, "Biangai employees have learned to distinguish between their work-time and that of the company, and some aspire to mediate these realms" (2008: 29). These prior works demonstrate that analysing various ideas and experiences of time aids in understanding workers' stories and work relations in the refinery.

Based on these factors, this chapter suggests that the road of modernity in this context is better understood as openly flexible and nonlinear (Lipuma 2000). Rather than a predetermined dominant ethnic relation, this chapter proposes utilising becoming a good man as an alternative to studying contexts where indigenous and imported masculinities are contested and negotiated. Workers are concerned more about fulfilling criteria that characterise a good man in various situations less than whether he is modern or not during the process of becoming a good man. In other words, good man masculinity represents a man's numerous identities and obligations in everyday life, such as father, spouse, community member, subsistence gardener and refinery worker (Barnett-Naghshineh 2019; Rolston 2014). This interpretation corresponds to Lusby's (2018) study on changing *raitman* ('good man') masculinities in East New Britain Province, PNG. To show how contemporary Papua New Guinean men become a *raitman*, Lusby notes, "what it means to be a *raitman*, a 'real' man or 'good' man, and men's positionings and subjectivities within these definitions are malleable and take on different meanings viewed from new social context" (2018: 192). Informed by

her view, this paper argues for developing good man masculinities as responses to the situations they experience, the materials they use and the people they meet. The interaction between indigenous and Chinese understandings of masculinities in this setting indicates various components of workers' everyday lives, the multiplicity of persons and their relatedness to others.

6.3 Papua New Guinean workers' adjustments and their impacts on Chinese employees

While residing in Duman, numerous local young men told me stories about working in the confined space as a primary means of earning money and becoming corporate employees. Every three months, during the scheduled shutdown, a local landowner contractor named Ganglau Landowner Company (GLC) supported RNC in hiring local young men from impacted villages to labour in the confined space. After the recruitment, selected young men had to complete the health, safety and environment training offered by the training department, as the confined space is a high-risk environment. As Chinese employees worked together with local young males, a Papua New Guinean trainer conducted safety training in English and Tok Pisin, with a Chinese interpreter translating into Mandarin Chinese for Chinese personnel. Before starting to work, an investigative team entered the confined space to check the oxygen level and accumulated chemical contamination. Workers were not allowed to enter if the oxygen level was too low or the concentration of chemical pollutants was too high.

After entering the confined space through a small round entrance, local young men perform two sorts of work: first, removing the catalyst from the tank and replacing it with the new catalyst, using a spade; second, washing away the clogged concrete slurry inside the tank with a water hose. Concerning working conditions, Papua New Guinean interlocutors stated that the tank's wall was thick with catalyst residue, and the internal environment was unventilated. Due to the nature of this job, they might occasionally have difficulties breathing if they do not correctly wear personal protective equipment. If the scenario persisted, they might become ill or vomit. As a result, most interlocutors emphasised that the confined space was one of the most dangerous work environments. This description demonstrates that working in this situation requires following proper directions and having a firm grasp of workplace safety.

Additionally, effective coordination between Chinese managers and local personnel is critical to ensuring job completion.

6.3.1 Learning how to keep track of time at work

As seen in Chapter 3, Papua New Guinean employees learned Chinese work ethics, such as *chiku* (‘enduring adversity and working hard’), while working alongside Chinese personnel. Notably, while cooperating with Chinese staff, local male employees experienced different understandings of time compared to their subsistence farming activities.³¹ To comprehend their experiences, this subsection illustrates how they impressed Chinese supervisors by understanding the value of attending and completing tasks on time.

To begin, this subsection first demonstrates how James, a former contract worker from Simbu Province, learned to work hard to satisfy Chinese managers to become an RNC employee. The interview with James took place near the refinery’s main entrance in a nearby market named Bobidik (Figure 6-2). The Bobidik market was a small market made of rusted iron sheets and iron pipes left behind after the construction phase by Chinese builders. This market, which opened at 10 a.m. every day, was where local girls or married women sold garden goods, vegetables, coconuts, betel nuts, cigarettes, snacks or soft drinks to Papua New Guinean workers. Local young men occasionally assisted sisters or mothers in selling items at the market. Other times, they spoke with Papua New Guinean personnel and managers or those who came to the market regarding job opportunities. Chinese labourers also occasionally stopped by the market to chat with locals on their way to a trade store behind the market. As a result, this market was where local lads could find work and spontaneous encounters occurred between locals and Chinese expatriates.

³¹ This chapter focuses on the different interpretations of time in subsistence farming and the workplace. However, this discussion does not assume these are the only two elements influencing refinery workers’ shifting perspectives on time. Instead, interactions with churches, involvement in early coconut plantations, and attendance at school could have contributed to locals’ varied perceptions of time prior to becoming refinery workers. This chapter focuses on employment in subsistence farming and refineries because these are the two key factors that influence how people perceive time differently and how that sense of autonomy changes over time, as seen in conversations with Chinese and Papua New Guinean staff.

Figure 6-2 The Bobidik market



Source: Photo by the writer

James and I met while he was assisting a sister-in-law at the market. Standing alongside me beneath a mango tree, he explained that he was awaiting an email response from his friend, Nelson, a Chinese manager in the refinery. This behaviour astonished me because most local young men sought corporate positions by bringing paperwork to the human resources department or enlisting the assistance of *wantok* ('friends or relatives') employed at the refinery, as demonstrated in Chapter 3. James relayed a story about a previous job to demonstrate how he became Nelson's friend. Between 2014 and 2016, he was assigned to work in the confined space in the counter-current decantation department as a contract worker. One day Nelson patrolled the worksite and observed how Papua New Guinean employees performed their tasks. When James finished his jobs, Nelson approached him, inspecting his identification and inquiring about his name. Later, Nelson instructed him to accompany him on a refinery tour, during which Nelson inquired about whether James attended school and had certificates. Nelson also instructed him to provide duplicates of his documents so that Nelson could enter his name anytime a job vacancy arose.

James's narrative piqued my interest, so I inquired as to how he had impressed Nelson. He responded by stating that, while he and other young men working in the confined space, some did not properly wear personal protection equipment. As a result, they felt weak, stood there

and refused to continue working. However, James noted that “When Nelson stood there and saw me, I was very active during that time.” I asked why he described himself as actively working. He answered, “I went into the confined space, coming out. I did not take like rest a lot. [I] went in again, come back like this. To complete the job.” This illustration is noteworthy because it demonstrates James’s ability to understand the Chinese work ethic, which emphasises constant production. While interacting with Nelson, James gained insight into how Chinese supervisors perceived hard labour. With Nelson’s recognition as a diligent employee and friend, James said he occasionally delivered fruits to Nelson in exchange for shoes, pants or shirts after Nelson returned from the PRC.

According to an interview with a Papua New Guinean manager employed by GLC, James was not the only one capable of picking up the Chinese work ethic. This manager stated that he frequently received requests from Chinese supervisors to promote local contract workers to RNC employees due to their high performance ratings on the performance evaluation sheet. Additionally, he continued, these young men were rarely absent from work, as shown by time sheets kept by Chinese supervisors (Figure 6-3). Interestingly, this manager’s response corresponds to local interlocutors’ demonstrations of how they impressed Chinese supervisors by referring to *harim tok* (‘following orders’) and *wok long taim* (‘working on time’). By checking their marks and records on these two sheets, local contract workers learned that following Chinese supervisors’ instructions and work schedules determined whether they could obtain good grades and become RNC employees.

Figure 6-3 Time sheet

GANGLAU LANDOWNERS COMPANY LIMITED
P.O. Box 73
MADANG 511
MADANG PROVINCE
PAPUA NEW GUINEA

Phone:
Fax:
Date:

Time Sheet

Month: **APRIL** Year: **2019**

Employee Name: [REDACTED] Code#GLOC-E Department: **ACID PLANT**

Date	Day	Working Time		Regular Hour	OT Hours		Total Hrs	Employee Signature	Supervisor Signature
		From	To		T½	OT			
1	MON								
2	TUE								
3	WED								
4	THU								
5	FRI								
6	SAT								
7	SUN								
8	MON	7:00	19:00	14			14	[Signature]	[Signature]
9	TUE	7:00	19:00	14			14	[Signature]	[Signature]
10	WED	7:00	19:00	14			14	[Signature]	[Signature]
11	THU	7:00	19:00	14			14	[Signature]	[Signature]
12	FRI	7:00	19:00	14			14	[Signature]	[Signature]
13	SAT	7:00	19:00	14			14	[Signature]	[Signature]
14	SUN	7:00	19:00	24			24	[Signature]	[Signature]
15	MON	7:00	19:00	14			14	[Signature]	[Signature]
16	TUE	7:00	19:00	14			14	[Signature]	[Signature]
17	WED	7:00	19:00	14			14	[Signature]	[Signature]
18	THU	7:00	19:00	14			14	[Signature]	[Signature]
19	FRI	7:00	19:00	14			14	[Signature]	[Signature]
20	SAT	7:00	19:00	14			14	[Signature]	[Signature]
21	SUN	7:00	19:00	24			24	[Signature]	[Signature]
22	MON								
23	TUE								
24	WED								
25	THU								
26	FRI								
27	SAT								
28	SUN								
29	MON	7:00	19:00	14			14	[Signature]	[Signature]
30	TUE	7:00	19:00	14			14	[Signature]	[Signature]

Total Regular Hours:
Total Over Time (O/T) (Time and half):
Total Over Time (OT) (Double Time):
TOTAL HOURS: **210**

Supervisor Sign: Manager Approval:

Source: Photo by the writer

However, Papua New Guinean employees found some difficulties when learning to keep track of time at work. For example, Jimmy, a Papua New Guinean RNC employee, explained his experiences of learning punctuality to impress Chinese supervisors to become a team leader. My conversation with Jimmy occurred in a *hausboi* ('young men's house') in Duman (Figure 6-4). Similar to the Bobidik market, *hausboi* was another place where local young men spent much time after completing *hausman* ('male initiation') and before getting married. The construction of a *hausboi*, made initially from specific types of wood and bamboo harvested from their own or relatives' bushes, necessitates cooperation between brothers and father and son and delicacies cooked by their sisters and mothers. Due to the establishment of the refinery and the early immigrants during the construction phase, it became increasingly difficult for Duman young men to collect the required materials to construct a *hausboi*. Instead, they fabricated the *hausboi*'s pillars and roofing out of iron pipes

and iron sheets left over from the construction phase by Chinese builders. Their goal was to work with RNC to earn enough money to build a permanent *hausboi* made entirely of imported materials. In Duman, *hausboi* represented the transition of local young males from subsistence farmers to refinery workers prior to build a *hausboi* entirely out of imported materials.

Figure 6-4 A *hausboi* in Duman



Source: Photo by the writer

To begin, I inquired of Jimmy about the similarities and contrasts between his refinery employment and his garden labour. Jimmy noted, as did other local employees, that one of the major distinctions was the requirement to adhere to the time.

In the garden, you do things at your own time. If you feel tired, you can rest. Chinese [supervisors are] also strict at timing; [they required us to] start the work on time and finish on time. Time is very important.

Similar to the previous discussion of *wok long taim* ('working on time'), Jimmy learned about the necessity of following the time by observing that Chinese supervisors kept track of when

he started and finished his work on the time sheet. Jimmy stated that if he were late for work due to a commitment in the village, the Chinese supervisor would tell him to go home and come back the next day.

Additionally, Jimmy noted that the Chinese supervisors' timekeeping procedures differed from those employed in the gardens.

[In the garden] like morning to belo ('noon'), depend long strong bilong sun ('depending on how hot the sun is'). When we feel that the sun is getting too hot, then we must take a break. And when the sun is okay, we go back and continue with the work,

Jimmy remarked, before adding:

[At the refinery] you cannot malolo ('rest'). Chinese [supervisors] will tell you to wake up and work because they follow the time, and they will pay you hourly at a fixed rate. One hour probably K3 or K4. If you miss one hour, then that K3 or K4 is gone.

His replies revealed that the sun was the primary indicator of daily activities while working in the garden, comparable to Halvaksz's (2008) description of the Biangai people's understanding of 'their time' (*taim bilong mipela*). Instead, when he worked in the confined space, he was required to work from 8 a.m. to 11:30 a.m. before taking a lunch break, and then resume work from 1:30 p.m. to 5:30 p.m. due to the hourly rate structure. These two scenarios reminded me of Thompson's (1967) discussion of the labour force's partial commitment to industrial work when villages are close to the workplace. Farming activities and industrial work, according to Thompson, reflect different senses of time and work habits. As a result, when the workplace and villages are close to each other, workers, particularly those who engage in farming activities, will become partially and temporarily committed due to the differences between work and village life. Thompson's point of view is consistent with Jimmy's description and explains what local male employees meant when Chinese supervisors emphasised the concept of 'time is money.'

Finally, Jimmy expressed his feelings about being ordered to obey the time by Chinese supervisors. “[There] are so many things that they (Chinese supervisors) do not follow us and since we do not have the power. We just follow them. We just tell ourselves to just forget the culture,” Jimmy explained. His remark drew my attention, although I did not entirely comprehend it. I inquired why he brought up power and culture. “Because we need money. We have the culture (indigenous culture), but we need money, money power. That is why we have to follow them (Chinese supervisors), because they have money and everything.” In the case of gardening, instead, Jimmy explained, “[We] work at garden, we work any time. We work, we own our time, many, any time.” Another local employee who sat next to us and was Jimmy’s friend overheard his remark and joined our chat. “I feel like working in the garden, you know work and I work at my own time. Like I work four half past... almost long hours or short hours. That all depends on yourself, oneself,” his friend added. “But working in the company, there is a boss they are looking after you. You have to work on time, wake up on time, come on time, [and] sleep on time.”

The conversation above reminded me of Imbun’s (2006) discussion on local labourers resigning from mining employment to prevent losing autonomy. This conversation also recalled the research conducted by Smith (2002) on the interpretations of time following the participation of Kragur people in mining wage labour in East Sepik in PNG. Smith observes that, for the Kragur people, whose primary necessities of life were dependent on subsistence farming, others (such as managers of mining companies) have no absolute control over their livelihood, in contrast to the experience of factory workers in Australia or the United States. This situation matched some local interlocutors’ comments of being their own bosses when working in the garden; nevertheless, when working in a confined space, they have Chinese supervisors who give them instructions, and they must follow them. In the face of these contradictions, Jimmy chose to follow the time and respect the instructions since he knew the Chinese supervisors’ evaluation was a significant component in deciding his potential to become a team leader.

The examples of James’s and Jimmy’s stories in this subsection demonstrate how local male employees dealt with divergent perceptions of time while gardening and working in the confined space (Taussig 1980 [2010]). When faced with contrasts, their reactions demonstrate how they were able to distinguish work situations from gardening and adapt their behaviours

accordingly, to ensure that their time sheets were accurate and received recognition from Chinese supervisors. These findings corroborate D'Angelo and Pijpers's (2018) description of the multiple temporalities that local employees encounter after becoming mining employees. Although Chinese managers oversee the time sheet and performance review, James's and Jimmy's experiences demonstrate the resilience of local male employees in adjusting to new situations and identifying methods to better their job positions.

6.3.2 Learning how to manage and work with Papua New Guinean employees

Although Chinese managers continue to exert influence, they are unable to evaluate and manage Papua New Guinean personnel based on their home practices and values. Rather, Chinese supervisors need to adjust, the same way that local workers do. For example, Mr Xiang, a Chinese manager who worked in the high-pressure acid leach department mentioned in Chapter 3, explained how he collaborated with local young males in the confined space. Mr Xiang and I met at the same market where James and I met. One day Mr Xiang drove by and parked his car in front of the market while I sat on the ground waiting for interlocutors. I was shocked by how peacefully he interacted with local female vendors during their brief conversation. When he visited the trade store on the market's rear, I was astounded by how locals referred to him as 'Mr Xiang'. According to my understanding, locals use Mr to refer to foreigners to show respect, as the foreigners often get along well with locals. After Mr Xiang had finished shopping, I introduced myself and asked if we could talk about his work experiences. We conducted our interview in his car, as it was unusual for outsiders to witness two persons of Chinese appearance conversing in the village.

As demonstrated in Chapter 3, RNC's distinctive work culture, including obeying supervisors' instructions and ensuring continuous production, emerged during the PRC's planned economy era. After working in the refinery, however, Mr Xiang discovered that he could not apply the same work culture to the management of Papua New Guinean staff. He claimed that stringent regulations did not always work for local male employees since they have higher self-consciousness than Chinese workers, based on his experiences teaching corporate standards to local employees. In contrast to Chinese employees' adherence to supervisors' orders, Mr Xiang highlighted that enforcing strict restrictions would lead to resistance from local male workers.

Also, rather than focusing on work, Mr Xiang stated that local male workers were more concerned with whether Chinese supervisors respected them. “When you established relationships [with local staff], [although] your relationships have developed to a certain level, you [Chinese managers] still need to show your ability to work,” Mr Xiang continued. “Chewing betel nuts [with local personnel] is not enough. You need to show your ability to work. After they [experienced local staff] feel that you are qualified to manage them, they will accept you [to become their manager].” Mr Xiang’s experience suggests that Papua New Guinean male workers’ high self-consciousness is mirrored in their desire to be respected and their scrutiny of incoming Chinese managers’ competence. This instance demonstrates how, after becoming refinery workers, the autonomy in determining gardening tasks continues to influence local male employees’ feelings about whether they were respected, in addition to their acquisition of technical abilities. To be recognised as managers, Chinese personnel must overcome these twin obstacles by learning about local cultures and demonstrating work-related skills. This situation reminds me of Imbun’s (2000) discussion regarding changing work relations between Australian managers and local staff. According to Imbun, the effective way to teach local staff to follow work ethics, including punctuality, could not be done simply by policing formal rules. Instead, the situation improved after the Australian staff showed interest in learning about local staff’s domestic situations and building personal relations.

Junior Chinese employees also discussed their experiences adapting to work with Papua New Guinean employees. For instance, my interview with Felix, a 28-year-old Chinese employee who worked for RNC for only three weeks, demonstrates a different story from that of Mr Xiang. Serving as a translator between Chinese personnel and local employees in the confined space, Felix first explained why he applied for a job in the refinery. Felix had previously worked in a state-owned enterprise in a coastal city in Southeast China and had many opportunities to visit other provinces inside the PRC. These experiences motivated him to learn more about various cultures, so he filed for a working holiday visa to work in Australia. He said that, while working in northern Australia, he learned about numerous indigenous cultures when visiting indigenous heritage areas. After a year of work, a friend informed him of a job opportunity in the refinery. Considering exploring more indigenous cultures, Felix applied for the position and was accepted after being interviewed over the phone.

Unlike most young people in the PRC, Felix's goal while working in the refinery was not to make money, acquire a car, purchase a house and marry. Rather, he desired to meet others with varying perspectives on work and life. As a result of living in a globalised era, he added, there is a high value placed on being self-motivated, work-oriented and progress-driven. Instead, he was interested in learning from another set of individuals living in other parts of the world who do not necessitate waged labour or money. He desired to learn about the Papua New Guineans' customs and perspectives on labour through his work with them. He also wished to explore their ways of life and delicacies through his visits to their communities. To accomplish this, Felix maintained an open mind whenever local personnel approached him to speak or make friends. He also took advantage of every opportunity at work to speak with locals and advance his English. He said that curiosity motivated him to work in a remote location, away from his newlywed wife in the PRC.

However, Felix ran into an unexpected situation after months of working with local workers. He claimed that some Papua New Guinean employees with a college or university degree displayed *jinqixin* ('enterprising spirit') and were capable of appropriately demonstrating their knowledge. They were also interested in Felix's experience in Australia because they wished to encourage future children to study in foreign countries. According to Felix, this proactive attitude towards work was critical for local workers to progress their talents and career positions. On the other hand, Felix said many local staff members from impacted villages desired to pass the workweek. To illustrate his point, he recalled seeing a local male employee sitting in a ditch alongside the major road on a hot and sunny day while taking the company bus to the township. He saw the same person on his way back to the refinery sitting there and doing nothing. After witnessing this occurrence, he was first confused and realised that most local employees did not wholly depend on waged jobs. Felix noted that without a waged job, locals could subsist by catching fish in the sea and foraging for food in their gardens. In other words, these indigenous people are transient, even though money has become increasingly essential. Felix noted that he must comprehend two distinct categories of Papua New Guinean employees to work with them. These people have varying work attitudes because of their varying backgrounds.

Felix's example of some local male employees' hesitation to work at the refinery reminded me of a conversation I had with the Chinese staff member, Leo, who works in the community affairs office. According to Leo, Chinese employees could not require that specified quantities of labour be completed each day by local male employees. Instead, the Chinese management's purpose is to teach them that they should at the very least be on time for work and leave on time. "We do not even determine how much work they should accomplish as long as they work with us. Start working when it is time to work and leave when it is time to go," Leo explained. This is significant because it partially differs from Tang and Eom's (2019) findings of CMCs' efforts to change African employees' attitudes on time. The authors claim that the phrase 'time is money' has two meanings: punctuality and efficiency. Varied CMCs have different tactics for changing local staff's perceptions on time to achieve the goals mentioned above, including introducing incentive schemes (e.g. the piece-rate system). Faced with the reluctance of African employees to engage in the system, Tang and Eom note, "because they were not skilled enough to produce large quantities and afraid [that] they would make less income than on the default system" (2019: 472). In the refinery example, we can see that the problem was not wholly created by the competence levels of local male employees or their desire to make money. Instead, local male employees' apprehension about working at the refinery also stemmed from their mutual involvement in gardening and paid labour. Their hesitation pushed Chinese supervisors to urge local male workers to work merely on time rather than efficiently.

Mr Xiang's and Felix's stories demonstrate that they confronted situations inconsistent with their prior experiences or expectations. Regarding Mr Xiang, he was required to demonstrate respect for Papua New Guinean workers and show them his ability to work, despite being experienced in managing the refinery's operation. Regarding Felix, he needed to comprehend the distinctions between diverse local workers based on their histories. Despite his enthusiasm for indigenous cultures, he was still imbued with capitalist values, which linked him to Papua New Guinean employees with comparable education levels. Felix was required to comprehend the ambivalent views about the work of most local employees without a college education, owing to their identities as half subsistence farmers and half workers. These two stories demonstrate how Chinese expatriates modified behaviours and attitudes to manage and work with local male personnel through negotiation with previous experiences and present refinery realities. Due to the dual identities of most local male staff, Chinese supervisors

learned to simply expect them to work on time, rather than asking them to enhance productivity. Chinese workers also must be adaptable to work with Papua New Guineans from various backgrounds.

6.4 Papua New Guinean and Chinese employees' changing understandings of becoming a good man

As demonstrated above, local male employees' participation in subsistence farming continues to influence how they deal with work settings in the confined space. In addition to various interpretations of time, most local interlocutors associated men's employment in the community with the *hausman* culture. In their eyes, completing men's jobs in the community earns them the title of *gutpela man* ('good man'). This observation encouraged me to study whether their adaptations to work settings had given them new perspectives on becoming a *gutpela man*. The same idea drove me to examine if Chinese employees' adjustments to local circumstances alter their perceptions of what it takes to be a *chenggong* man ('successful man', a type of good man in the Chinese society).

6.4.1 Papua New Guinean workers' new understandings of becoming a *gutpela man*

During my time living in a *hausboi* in Duman, I discovered that Papua New Guinean workers had to accomplish various activities during their weekly breaks, like building new houses or kitchens, catching fish, tending to gardens and caring for their families. To perform these tasks, they emphasised that they must stay active by following the *hausman*'s directions, which included skills related to men's obligations in the community as well as techniques to care for their bodies. Conversations with them reminded me of discussions with James in the prior section about staying active to impress Nelson. As a result, it is critical to grasp how they think about the connection between staying active and *gutpela man* masculinity. This investigation aids my argument that learning about working on time is related to Papua New Guinean workers' new understanding of what it takes to become a *gutpela man*.

To qualify as a *gutpela man*, young males must fulfil a series of chores. Using Jimmy's experience as an example, he discussed what he learned in the *hausman*. To begin, his uncles and male leaders taught him how to build a house, dig a latrine, clear large bushes, create

extensive gardens, care for pigs and hunt with a dog. These abilities were valued because males were responsible for feeding their families. Men should also provide a haven for families to escape inclement weather and to rest. To show the distinction between a male youngster and a *gutpela man*, Jimmy said, “you will not go to your uncle or cousin and tell [them] go and hunt the *kapul* [‘tree wallaby’] [and] come give me. [Or tell them] go look for fish for me.” Instead, he emphasised the importance of males using what they learned in the *hausman* to support themselves and their families.

Additionally, uncles and male leaders handed Jimmy a *bilum* (‘net bag’) after completing the *hausman* to store matches, betel nuts, limestone powder and other items. They also told him that anytime a friend or family member came to see him, he had to take something from the *bilum* to share with guests to welcome them. Jimmy would sit down with a man who paid a visit to his hamlet and say, “Hey, you come take your betel nut, chew and let us story like this. We put bow and arrow on top of shoulder.” These examples demonstrate how young men learned about men’s obligations and the value of sharing with friends while participating in the *hausman*. These criteria influence whether members of the community and individuals self-identify as a *gutpela man*.

Completing men’s tasks also requires young men to maintain physical activeness by following the *hausman*’s directions. To keep their bodies active, they must watch what they eat and avoid certain animals (e.g. *kapul*), and certain kinds of fish and vegetables.³² Young men should avoid eating *kapul* (Figure 6-5), as they may develop a humpback similar to *kapul* and lose their capacity to work in the gardens. Young men should avoid a particular kind of red fish because its colour is akin to male youngsters’ blood during circumcision.

Additionally, lifestyle factors influence young men’s ability to keep an active body. To maintain a healthy lifestyle, men should sleep earlier and rise earlier than women. They must also wash their bodies early in the morning using a specific red leaf at *boi’s wara* (‘male youngsters’ washing area’) (Figure 6-5). Finally, young males should abstain from dishes prepared by unmarried girls, as menstrual blood may contaminate food. By adhering to these

³² This paragraph only utilises *kapul* as an example without identifying the names of other animals and plants to explain food taboos, followed by local young men to become a *gutpela man*. This method aims at avoiding disclosing too much indigenous sacred knowledge. Additionally, all interlocutors who participated in my interviews verbally consented to my utilising and writing about the contents of our conversations while keeping their identities confidential.

norms, young men can ensure that they remain active to fulfil their responsibilities to become a *gutpela man*, rather than becoming *rabis man* ('man of rubbish', meaning useless man, as discussed in Zimmer-Tamakoshi 2012).

Figure 6-5 A *kapul* (left-hand side) and *boi's wara* (right-hand side) in Duman



Source: Photo by the writer

However, specific job settings, particularly food and connections with women, affect whether young males can remain active after working in the confined space. For example, they expressed concern about eating frozen food and canned meats at the refinery canteen, as mentioned in Chapter 5. They stated that consuming fresh food is critical to maintaining an active lifestyle, based on what they learned in the *hausman*. Another topic of discussion was how men and women interact in the workplace. Some of them were concerned about physically working underneath women, fearful that they would demote men. Finally, they raised concern over meals prepared by unmarried girls in light of the aforementioned fear of contamination.

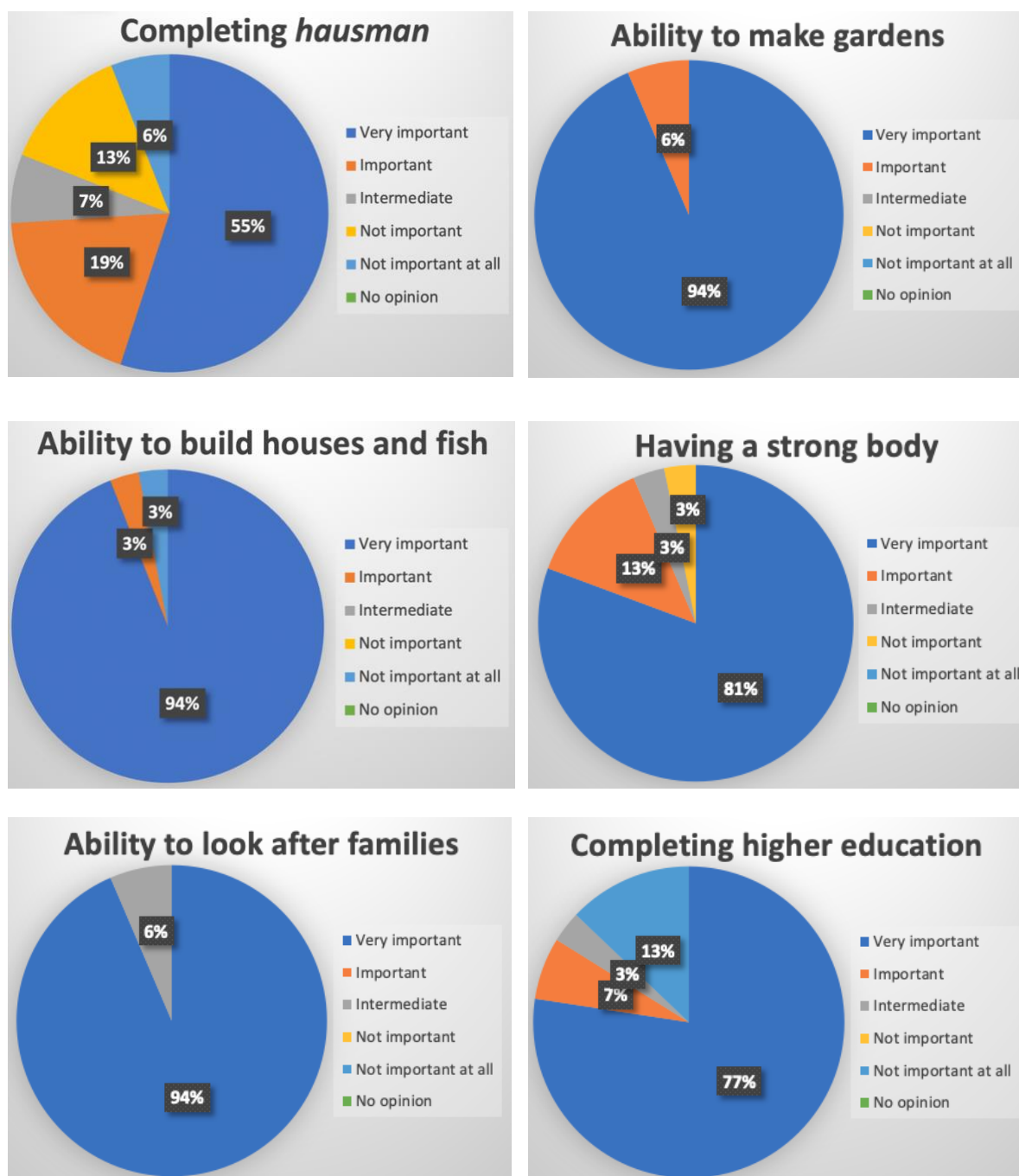
To address these issues, Papua New Guinean interlocutors' comments indicate that they did not feel alienated or needed to rethink *hausman* culture to adapt to the new environment. Rather, they distinguished the workplace from the village and set aside their concerns while at work. For instance, I learned about a remedy from a contract worker named Henry who explained how he dealt with workplace issues by saying, "like property belong

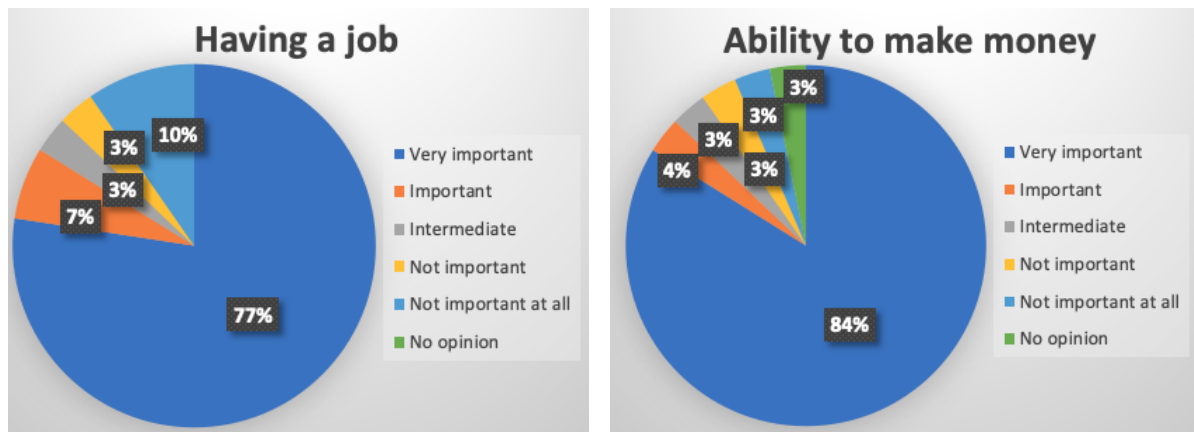
me, *strong* [‘strength and power’] belong me, I put them in the house, *hausboi*” (‘I left my property and *hausman*-learned understandings of body care in my village young men’s house’). Confused by his response, I asked: “putting it in the *hausboi*?” He then explained, “Yes, so I come nothing to refinery and work. So, I can eat the food. That is fine.” Henry’s solution demonstrates that he did not pit *hausman* culture and work environment against one another. Instead, they were distinct aspects of his daily life. When he worked in the confined space, he followed workplace instructions; when he finished and returned to the hamlet, he followed *hausman* culture.

To better understand other Papua New Guinean employees’ perspectives, I had twenty-nine employees complete questionnaires to ascertain their adaptations to *hausman* culture and work settings. My poll aimed to ascertain how Papua New Guinean workers evaluate several elements regarding their previous and new perceptions on what it means to be a *gutpela man*. There were eight questions related to previous perceptions, including completing *hausman* (‘male initiation’), cultivating a garden, fishing and building a house, maintaining a robust body and caring for one’s family. Interlocutors are given six options: extremely important, important, intermediate, not important, not at all important and no opinion. The results indicate that 74 per cent of them believe it is critical or extremely important to complete *hausman* (Figure 6-6); 100 per cent believe it is critical or extremely important to create a garden; 97 per cent believe it is critical or extremely important to know how to fish and build a house; 94 per cent believe it is critical or extremely important to have a strong body; and 94 per cent believe it is critical or extremely important to look after families.

Additionally, the questionnaire included three questions about newly acquired knowledge in the workplace, including completing higher education, employment and the ability to earn money. The results indicate that 84 per cent believe it is critical or extremely important to complete higher education (Figure 6-6); 84 per cent believe it is critical or extremely important to obtain a job; and 85 per cent believe it is critical or extremely important to earn money. These findings corroborate my prior observations that Papua New Guinean workers perceive both *hausman* teachings and workplace traits as necessary components of becoming a *gutpela man*.

Figure 6-6 Survey results





Source: Made by the writer

Finally, local male employees' new understanding of *gutpela man* masculinity is reflected in their regard for Chinese supervisors as a *gutpela man*. Using Mr Xiang as an example, Willy, a junior contract worker, stated that Mr Xiang is a *gutpela man* since he taught local employees work skills. When Mr Xiang told the local young men to go to work, he accompanied them to assess the situation. Willy further mentioned that Mr Xiang picked up a specific workplace language that was extensively used and established in the refinery after working for many years. Mr Xiang also visited local workers' villages to taste their cuisine, stay with them and share anecdotes about himself with the locals. As a result of their encounters and relationships at work and in the community, Will considered Mr Xiang a *gutpela man*. This example is similar to the story of the catering service attendant, Jordan, demonstrated in Chapter 5 about becoming friends with Papua New Guinean Chinese.

This subsection shows how Papua New Guinean employees' perceptions of becoming a *gutpela man* change over time, indicating that elements such as subsistence farming and refinery employment are both relevant. This result demonstrates that Papua New Guinean employees' work-related compromises, such as working on time, help them advance in their careers and become a *gutpela man*. Additionally, Papua New Guinean male employees evaluate Chinese employees' attitudes and behaviours based on their comprehension of a *gutpela man* while working together. If the Chinese supervisor is demanding or refuses to understand the local staff, these behaviours impact whether they will be acknowledged as managers by the local workforce. These findings indicate that, while local males set aside *hausman* culture to acclimatise to working in the confined space, this culture continues to

have an unconscious influence on their perceptions of work relations with Chinese personnel. This instance exemplifies the blurred boundaries between the elements that influence changing masculinity perceptions in indigenous culture and the workplace throughout the compromise process (Martin 2013). Because local employees value both *hausman* and work-related elements, I can reasonably argue that their enactments of good man masculinities reflect their numerous identities, many facets of their everyday lives and interpersonal relationships, as illustrated in the introduction.

6.4.2 Chinese workers' new understandings of becoming a *chenggong* man

Before concluding fieldwork in Duman, a senior Chinese manager named Justin paid a private visit to the unfinished home of one of my local acquaintances. Justin told me his story about being a member of my friend's family as we sat next to the stairwell. Hearing Justin use the term '*papa*' ('father or uncle') to refer to my friend's father, I inquired about Justin's relationship with my friend's family over the years. This unexpected interaction prompted me to investigate how intercultural work experiences shaped Chinese employees' perceptions of what it means to be *chenggong* men ('successful men', a kind of good man in Chinese society as shown in Liu (2019)).

To investigate Chinese expatriates' perceptions of masculinity, I first considered a series of masculinity models presented by the Chinese government over time. For example, during the 1960s and 1970s, the Chinese government pushed Lei Feng to embody exemplary masculinity. While visiting Beijing's Olympic Park in November 2019, I was impressed that the Chinese government still uses Lei Feng's image and name to teach its citizens the value of volunteering and community service (Figure 6-7). Lei Feng is extensively explored in Chinese masculinities studies because of his popularity. For example, Hinsch (2013) portrays Lei Feng as a symbol of revolutionary masculinity developed by the Chinese government to symbolise commitment to the nation's welfare, self-sacrifice and unconditional submission to the Communist Party. Additionally, Louie (2002) observes that Lei Feng, along with the other two cases (a Daqing worker named Wang Jinxi and a Dazhai peasant named Chen Yonggui), exemplifies a form of masculinity dubbed 'the peasant-worker-soldier model'. According to Louie, these three examples represent socialist conceptions of masculinities that emphasise commitment and selflessness.

Figure 6-7 A volunteer service station in the city bearing Lei Feng's image and name



Source: Photo by the writer

However, interviews with Mr Xiang and Felix demonstrate that the Chinese government's promoted masculinities were inapplicable to the work environment in the refinery. To Mr Xiang, Lei Feng's portrayal of job commitment and selflessness was problematic. To illustrate this point, he used Wang Jinxi as an example, stating:

Selflessness in work does not imply a lack of self or feeling. I used to work till I passed out, dozing off while strolling. This is not to say that I am more committed to my work than others. When you put your mind to something, you demonstrate dedication. Wang Jinxi is likewise a flesh-and-bones person. Numerous other workers are devoted to their ideals. From a distance, Wang appears to be a regular worker from that era, going about his business as usual.

Mr Xiang's answer demonstrates that he did not regard Wang Jinxi as an exemplary instance of work-related masculinities because many people worked hard, and this elevation dehumanised him. Additionally, Mr Xiang stated that RNC would not promote Wang Jinxi as

an ideal worker to motivate workers in the refinery because the work environment was different (e.g. scorching temperatures and rain and dry seasons in PNG) and the emphasis on job dedication needed to be modified. Felix concurred with Mr Xiang's assessment. He stated that he was unaware of Wang's story due to his 1990s birth. Additionally, Felix emphasised the importance of safety over self-sacrifice in the refinery, where Australian standards and Papua New Guinean managers play critical roles in ensuring RNC complies with mining regulations in PNG.

Although a unique work context renders job-related masculinities inapplicable in the refinery, Mr Xiang and Felix felt that working with Papua New Guinean workers provided new perspectives on manhood. To illustrate work experiences in the refinery, a former Chinese employee named George stated that Chinese employees faced numerous unforeseen challenges due to the plant's understaffing. George noted that working with local workers and Australian managers helped his cultural sensitivity as well. Agreeing with George's view, Felix said that mastering foreign languages and understanding indigenous cultures are also necessary to work in a refinery. Felix stated the following to justify his position:

By learning foreign languages, you increase your chances of comprehending the world. Each language reflects a culture's understanding of the world and its understanding of human relationships with nature and the environment. A language embodies the ethnicity's worth. When you learn a language, you obtain an insight into the ethnic group and culture associated with it.

Felix's narrative demonstrates how learning a second language enables Chinese workers at the refinery to communicate with and understand Papua New Guinean workers' perceptions of culture and human–nature relationships. In support of Felix's point of view, a former Chinese manager named Jacob remarked that through working in the refinery, he had learned to avoid seeing locals through a biased perspective. Jacob, who saw himself as culturally prejudiced before working overseas, said his time in the refinery taught him to value individual differences over preconceived notions. Felix stated that these new abilities are necessary for becoming a *chenggong* man because working in the refinery now means these abilities are a new requirement for *chenggong* man status.

I had five other Chinese employees complete questionnaires to better understand their perspectives on *chenggong* men after working in the refinery. My survey's goal was to find out how Chinese employees viewed prior and new perspectives on becoming a *chenggong* man. There were four questions relating to their prior perspectives: readiness to *chiku* ('enduring hardship and working hard'), independence, earning ability and capacity to care for family. The findings show that most Chinese employees still consider these characteristics crucial for becoming a *chenggong* man.

My questionnaire also included the following questions about working in the refinery: first, whether working in the refinery changes your prior understanding of what it takes to become a *chenggong* man; second, whether working in the refinery helps you become a *chenggong* man; third, whether working with Papua New Guinean employees affects your knowledge of what it takes to become a *chenggong* man; fourth, whether a *chenggong* man needs to learn foreign languages; and fifth, whether a *chenggong* man needs to respect indigenous cultures. According to the poll results, they all agree that working in the refinery does not change their initial opinions. However, four agree or strongly agree that working in the refinery helps them develop into *chenggong* men; three agree or strongly agree that working with Papua New Guinean employees affects their knowledge of developing into *chenggong* men; three agree or strongly people believe that a *chenggong* man should learn foreign languages, and three believe that a *chenggong* man should respect foreign cultures. Despite the limited sample size, the findings suggest that working with Papua New Guineans gives Chinese employees a distinct perspective on what it means to be a *chenggong* man, together with their previous perspectives.

Finally, Chinese expatriates' new perspectives on what it means to be a *chenggong* man are reflected in their interactions and relationships with Papua New Guinean employees in the hamlet. Again, using Justin as an example: he visited my friend's family nearly every month since he appreciated the natural life in the village. Justin presented my friends' family to his family at home in the PRC during his phone call with his wife and children. Although his family thought life in PNG was difficult, Justin enjoyed working and living there and wanted to share it with his Chinese family. Justin also illustrated how he changed local employees' behaviour in the workplace. Using the Analects quotation *ren zhi chu xing ben shan* ('man on

earth, good at birth'), he stated that how he altered the behaviour of local employees was mainly based on *ganhua* ('influencing through interaction') based on Confucianism. "If you respect them (local staff), they will reciprocate with respect," Justin explained.

Regarding the refinery's Australian-style regulations, Justin cited another Analects quotation, *ren zhi chu xing ben e* ('man on earth, bad at birth'), to show that this system assumes that people are born to be evil and must be disciplined by detailed legislation and guidelines. This explanation is critical because it mirrors the coexistence of formal training based on Australian norms and *chuanbangdai*, a Chinese SOE apprenticeship, as illustrated in Chapter 3. This example also demonstrates that *ganhua* is not a one-way street in which Chinese employees change the behaviour or values of Papua New Guinean personnel. Instead, the relationships with Papua New Guinean employees at work and in the village influence Chinese employees' reflections on prior and new understandings of becoming a *chenggong* man, particularly in the context where their lives are inextricably linked with local communities.

Beginning with the PRC government's promotion of work-related masculinities, this subsection demonstrates how Chinese employees' perceptions of becoming *chenggong* men are evolving. As I have shown throughout my research, the arrival of Chinese employees does not indicate the dominance of Chinese masculinities. Local contexts such as different seasons render these work-related masculinities inapplicable. This circumstance is analogous to D'Angelo and Pijpers's (2018) description of how local seasonality, as a kind of time, influences mining operations and workers' experiences. However, the inapplicability of these work-related masculinities at the refinery does not imply that the Chinese government is absent in the workplace. Instead, earlier conceptions, including work-related masculinities promoted by the Chinese government, remain during procedures in which Chinese employees, particularly senior employees, negotiate and compromise to implement new *chenggong* man masculinity.

Additionally, working with Papua New Guinean employees instils Chinese employees' new ideas on becoming *chenggong* men. Chinese employees' activities are evaluated based on their approval by local male workers and community members during enacting good man masculinities. These elements show how prior and new perspectives on good man

masculinities coexist and are valued equally. Chinese employees' masculinities are enacted in diverse ways depending on the cultural scripts they assign to whoever is seeing them (Goffman 1956). Similar to the influence of Australian-style regulations illustrated in Chapter 3, this subsection demonstrates how their interactions with local male colleagues reshape Chinese employees' identities. These two entanglements, as manifested in workers' enactment of masculinities, are peculiar to the refinery, where mining labour and village life are tightly connected.

6.5 Conclusion: the multiple temporalities of compromises

This chapter demonstrates how the adaptation of Papua New Guinean personnel to working in the confined space resulted in new perspectives on *gutpela man* masculinity, as well as Chinese employees' new perspectives on *chenggong* man masculinity. I suggest that seeing employees' changing masculinities through multiple temporal lenses helps us to grasp their work experiences in the confined space. As previously proven, Papua New Guinean employees' perspectives towards the relationship between prior and new understandings of becoming a *gutpela man* reflect complementary aspects of their everyday life, rather than a confrontation or a replacement. Local male employees' practices for enacting good man masculinities are contingent on their relationships with Chinese expatriates and the circumstances of their interactions. Regarding Chinese employees, their new attitudes on becoming *chenggong* men are shaped by their interactions with Papua New Guinean colleagues. To enact good man masculinities, Chinese employees' activities are evaluated based on their approval by their local co-workers in the workplace and in the village. These findings demonstrate how different situations and understandings of time affect Papua New Guinean employees' adjustments and Chinese personnel's work attitudes and behaviours (Halvaksz 2008). Moreover, the displaying of the two sides' changes in the workplace in connection to their evolving good man masculinities demonstrates that multiple temporalities mirror several identities, various elements of everyday life and interpersonal interactions among refinery employees.

In light of these observations, we can conclude that Papua New Guinean workers' efforts to engage with the process of becoming man indicate their plasticity in experimenting with ideas and navigating alternatives (Biehl and Locke 2017). By broadening their viewpoints on

becoming a *gutpela man*, they can adapt to work settings based on their Chinese superiors' observations to improve their occupational positions. Papua New Guinean personnel also function as observers during the same process, monitoring Chinese employees' activities and influencing their behaviours and views, including their gender identities. Based on these facts, I suggest that local male employees' work experiences in the confined space are comparable to Goffman's point of view, as he writes:

Sometimes those who are observed do, of course, employ these proper means of influencing the way in which the observer treats them. But there is another way, a shorter and more efficient way, in which the observed can influence the observer. (1956: 161–162)

Papua New Guinean employees, in my opinion, have the ability to influence Chinese personnel due to their ownership of the land, their connections to residents in the impacted area, their knowledge of mining regulations in PNG and Chinese employees' unfamiliarity with local practices and beliefs. The refinery's operation cannot be limited to profit maximisation or guaranteeing the PRC's long-term resource security in this partnership of mutual learning and influence. Rather, the benefits and concerns of Papua New Guinean workers determine whether the Chinese management is qualified to become their partner to operate the mine in the present and future.

Chapter 7 Conclusion

After completing fieldwork in Madang, I travelled to Beijing to catch up with Chinese interlocutors in November 2019. A month after returning to Canberra, the COVID-19 pandemic occurred in the PRC and later spread worldwide. This global pandemic sparked yet another round of condemnation of the Chinese government's ambition and misbehaviour in the South Pacific. These examples include the PRC's vaccine diplomacy and the Chinese state's use of Chinese employees in the Ramu Nickel mine for involuntary vaccine trials (Blades 2020a, 2020b). "While the Chinese government trialled vaccines on the staff of its companies working abroad, Australia's government was offering vaccine commitment to the Pacific Islands," Johnny Blades, an RNZ Pacific journalist, wrote to condemn the Chinese government's actions and to highlight Australia's commitment to providing vaccines to neighbouring countries. This case suggests that some journalists continue to assume that the Ramu Nickel mine symbolises the Chinese state's interests in the region; in this case, the mine is portrayed as a location where the Chinese state conducts vaccination trials (CBE News 2020). Because of these stories, RNC again became subject to political condemnations for serving the aim of the Chinese state and the accusation of ignoring local employees' occupational health and safety and human rights. These narratives also reflect a continuing assumption that the operation of the Ramu Nickel mine is under the direction of the authoritarian Chinese state.

In contrast to the viewpoint mentioned above, my observations about the pandemic's impact on the refinery are primarily about applying a set of procedures in the workplace. For example, on 24 March 2020, the Canadian shareholder announced in a COVID-19 response report that RNC had implemented new safety and health measures, including a fourteen-day quarantine to monitor employees' health after returning from overseas, the provision of face masks and disinfectant wipes and the implementation of refinery ingress and egress controls (Conic Metals Corp. 2020). Chinese interlocutors also reported being prohibited from returning to the PRC during vacations and visiting Papua New Guinean acquaintances in the village during the early outbreak in March 2020. In terms of vaccinations, Papua New Guinean interlocutors remarked that RNC administered Chinese vaccines to Chinese staff. Papua New Guinean employees choose whether to be vaccinated, and their vaccinations were AstraZeneca supplied by the Australian government and Chinese vaccines. Reading RNC's

response to the critique described in the preceding paragraph, I also discovered that RNC emphasised the importance of adhering to occupational health and safety rules in PNG and labelled the critique as “[tarnishing] the image of Ramu NiCo Management (MCC) Limited, and harm the cordial relationship between the People’s Republic of China and PNG” (Post Courier 2020). These factors demonstrate that the Chinese state does not control the RNC’s reaction to the pandemic. Instead, the RNC’s political ties compel the Chinese management to make compromises in order to meet PNG’s industrial practices and regulations.

7.1 Employment relations beyond the control and resistance dichotomy

This thesis has demonstrated how compromise is manufactured in the refinery and the associated settings, such as geographical location, intersectionality and temporalities. Compromise, in a postcolonial setting, encapsulates the unique work relation between CMCs and Papua New Guinean personnel, owing to the Chinese and PNG states’ absent presence. Due to the refinery’s distant location, its functioning is outside the Chinese state’s control, let alone its resolution of labour problems. Due to a paucity of law enforcement personnel, the PNG government is also largely absent from overseeing manufacturing procedures and looking after the benefits of local employees. However, when it comes to mining lease applications at various stages, the PNG government remains involved in drafting pertinent administrative processes and approving the applications. If RNC has financial difficulties, the Chinese government may merge it with another more prosperous state-owned enterprise, China Minmetals Corporation, rather than withdrawing it (Mason 2015). These factors indicate that the two states exert some influence over the refinery’s operation remotely. In the actual work environment, two groups of employees are left alone to improvise, compete and experiment.

This thesis argues that throughout the compromise process, Chinese and Papua New Guinean personnel develop dual identities: on the one hand, they become subjects to the regulations or rules they are not accustomed to, while on the other, they remain actors in attaining their goals and influencing the personnel they work with. This dual identity occurs in a postcolonial context in which Chinese SOE work culture encounters Australian-imported industrial regulations and gender stereotypes, as well as indigenous cultural values. As seen in Chapter 3, Mr Xiang’s account demonstrates that the refinery’s operation is governed by rules and

regulations based on Australian and New Zealand standards. Furthermore, as the number of Papua New Guinean employees increases, Mr Xiang's and Felix's experiences in Chapter 6 illustrate that Chinese employees are becoming more exposed to local settings shaped by colonial legacy and indigenous culture, based on subsistence farming. These factors demonstrate the subjectification of Chinese employees while working in the refinery with Papua New Guinean personnel.

On the other hand, Chinese personnel remain actors throughout training and work with Papua New Guinean staff owing to their ownership of machinery and manufacturing know-how. As Nathan's participation in training demonstrates in Chapter 3, Chinese managers continue to exert influence over Papua New Guinean employees' promotions and performance. When evaluating the performance of local employees, Chinese managers' understanding of *chiku* ('endure hardship and work hard') causes Papua New Guinean employees to reflect on training provided by Papua New Guinean managers and to concede to Chinese supervisors' emphasis on order compliance and continuous production. Additionally, through mediating between the divergent interpretations of time frames associated with subsistence farming and refinery employment, Papua New Guinean personnel develop new perspectives on their male identities. These indications suggest that Chinese employees are actors as a result of their technical skill education, evaluation control and cultural influence on Papua New Guinean employees.

Papua New Guinean employees develop this dual identity that differs from Chinese employees. With the introduction of the tripartite industrial system by Australians in the 1960s, creating workers' unions is a powerful tool for Papua New Guinean employees to bargain with RNC and urge the PNG government to address their concerns. Due to the RNC's need for a local workforce, Papua New Guinean managers hired by local contractors continue to set the gender ratio of the workforce. With their familiarity with PNG's rules and standards, Papua New Guinean management also plays a critical role in deciding the mine's continued operation and reputation (e.g. corporate social responsibility). Finally, because of the refinery's closeness to impacted communities, Papua New Guinean employees' expectations, shaped by indigenous culture, continue to influence Chinese employees' interactions with and management of local workers. In comparison to Chinese employees,

these characteristics suggest that Papua New Guinean employees are agents depending on institutional and environmental conditions.

However, because RNC is the primary operator, Papua New Guinean staff are still subject to the Chinese management's control to some extent. During formal and on-the-job training, Papua New Guinean personnel must acquire the workplace pidgin by memorising equipment and machine names in Mandarin Chinese and observing the actions of Chinese supervisors. When it comes to job promotions and upgrading levels and grades, Papua New Guinean employees must also perform in a style that Chinese managers recognise, particularly when working on time. Their work experiences also gradually modify their perceptions of what it takes to be a good man. These variables indicate that Papua New Guinean personnel are increasingly susceptible to the authority and influence of Chinese supervisors in ways that differ from working in Western mines.

Because two parties have dual identities, a capital–labour relationship based on a control–resistance dichotomy cannot fully capture the dynamic character of refinery work interactions. I argue, using Wright's (2000) compromise theory, that the control–resistance binary applies only to the first stage, during which two parties are ignorant of their mutual dependency. At that time, both sides functioned and interacted autonomously, without distancing themselves from prior understandings and striving to learn the other side's diverse views and behaviours. Borrowing the Chinese phrase *kaobenneng* ('by instinct') from Mr Xiang, we find that the two parties initially engage through responses rather than reflections. This type of work interaction culminates in a series of mutually damaging strikes. Through these lethal lessons, the two parties gradually realise that their differences result from work-related misunderstandings. Additionally, they recognise that extending antagonistic job relationships precludes future collaboration.

Chinese and Papua New Guinean employees learn to negotiate and compromise in order to work together. Simultaneously, their work relationships enter the next phase. For Papua New Guinean workers, the trade union's involvement and formal training show that they try to use Australian standards and values when negotiating with the Chinese company. At the same time, when they begin working with Chinese personnel, they are compelled to rethink their earlier perspectives on work influenced by subsistence farming and adapt to a new work

environment defined as the communication between Australian-style and Chinese-style labour. For the Chinese employees, communication with the trade union and setting up formal training shows that they have given in to the colonial legacy in PNG. As they engage with Papua New Guinean workers for a longer period, they are inspired to reflect on their earlier experiences in the PRC and to comprehend local employees' apprehension about waged labour as a result of their subsistence farming and community obligations. This mutual learning process suggests that work relationships during the phase of negative compromise are no longer confined to a control–resistance dichotomy. Instead, their interactions are more like a partnership in that they both have their concerns and may influence the ideas and behaviours of the other. This partnership is also unique to the refinery, where the work environment and the surrounding community are inextricably linked.

My advocacy of looking beyond the control–resistance binary is consistent with the views of some labour process scholars. Thompson (2003), for example, describes how employers' focus has shifted from technical control to cultural coordination and the importance of investing in employee training. Similarly, Ackroyd and Thompson (2016) recommend that we refrain from labelling all types of worker misbehaviour or disengagement as resistance. Instead, they state that some misbehaviour could be caused by a struggle with time or identities or that it was intended to test the boundaries of management, cheer, or relieve boredom at work. According to them, “misbehaviour is considered not as an alternative to or a new generic term to *replace* resistance or recalcitrance, but as a different kind of oppositional practice” (2016: 6). These findings are consistent with the establishment of formal training in the refinery and the previous chapter's discussions about Chinese and Papua New Guinean employees' timekeeping negotiations. Given the colonial histories and indigenous cultures, these perspectives suggest that studying work relations within CMC's mining operation in PNG may be more complex than reflecting the control–resistance binary.

By conceptualising two parties as both agents and subjects to unfamiliar rules, I want to emphasise that this partnership has the chance to return to the control–resistance stage. For instance, if Papua New Guinean employees find that the mechanism (e.g. the industrial award) signed by the trade union and RNC is no longer practical to constrain the Chinese management's behaviour, they might go on strikes again to struggle for their benefits and rights. For the Chinese employees, if they treat the mechanism or the trade union as a mere

matter of form and fail to consider local employees' welfare, their ignorance could collapse the concession made by Papua New Guinean employees. This precondition is vital for my thesis's labour process compromise theory. Maintaining the current work relation and eventually developing into the third level of stable cooperation requires further efforts from Papua New Guinean and Chinese employees. As emphasised in my thesis, further cross-cultural understandings and gender equity are also necessary for sustaining and improving the current compromise between two parties.

7.2 Compromises on various scales

This thesis has shown how manufacturing compromises are multi-sited in terms of individual employees' experiences in various workplaces, such as high-pressure acid leach department, limestone quarry and processing plant, township and refinery mess hall, and the confined space. By focusing on different labour processes, I have demonstrated the challenges workers face when embarking on various jobs. For instance, Nathan's experience attending training and learning the workplace pidgin in the high-pressure acid leach department, William's concern with cleaning and serving the food in the mess, and James's concern with safety in the confined space. To deal with these workplace issues, workers must compromise on different aspects, including the safety training offered by Papua New Guinean trainers, other local male employees' by-standing and cool shoulders, and language use communicating with Chinese employees. These factors show that in addition to the collective level, compromises are also grounded on the individual level when workers participate in different labour processes associated with various machinery, equipment and work procedures.

Manufacturing compromises in this thesis are also associated with the economic activities in Basamuk at various times. Starting with the arrival of Evangelical Lutheran missionaries and later the Australian administration, the people of Rai Coast, especially the Duman people, have participated in different capitalist economic activities introduced by Westerners. By planting coconuts and cash crops, people learned job skills, fulfilled material needs and picked up cultural values introduced by different Westerners. These examples include the gender division of labour based on the copra business, demonstrated in Chapter 4, and the understanding of development based on working with colonial patrol officers, illustrated in the introduction. Although colonial economic activities have been replaced by the Chinese-

owned and managed refinery, these imported ideas and values are still in effect in contrast and negotiation with beliefs and values imported by Chinese employees. Due to being half subsistence farmers and half workers, Papua New Guinean employees are experiencing the reorganisation of ideas and practices during working in the refinery. For Chinese employees, ideas and practices developed during the Australian administration continue to shape their behaviours and the refinery operation. These factors show that compromises in this thesis are conceptually multi-sited, juxtaposing the past and the present.

Finally, compromises in this thesis are multi-sited because of indigenous cultural values symbolised by different places or buildings in the village. For instance, when Papua New Guinean managers recruit local employees, their relations and communications with the limestone landowners affect their understandings of men's and women's jobs. This case indicates that the limestone area symbolises local male landowners' effort to maintain male identities by excluding women from working. Another example is William's adjustment of male identities while doing women's work in the mess hall. To him, the feeling caused by interacting with other male employees who did not want to do women's work contrasts with his experiences of assisting his wife and mother in preparing and cooking food in the village. In a similar vein, when James and Willy talk about masculinities, they also refer to the *hausman* as a place where they learned how to become a good man and the *hausboi* as another place where they temporarily leave local culture behind to work in the refinery. Notably, when Chinese employees visit different sites in the village, they also learn indigenous cultural values by talking with people in the village. These factors show that although places in the village are physically separated from workplaces in the refinery, they are symbolically interrelated during workers' compromises.

Putting these three aspects together, we find that compromises are physically, conceptually and symbolically multi-scaled. During compromise, employees' experiences demonstrate that workplaces, place-based ideologies and relationships between landscapes have different impacts on their changing behaviours and ideas. These factors deepen the discussion on the dual identity in the previous section. In place-human relations, refinery workers become subjects to geographical factors and agents when enacting compromises. This situation indicates that places are not merely containers or backdrops during workers' compromising. Instead, various place-related factors affect workers' compromises, including the used

machinery and equipment in a particular workplace, the previous economic activities in Basamuk and the relatedness of the workplace and other places in the village. These findings echo current labour process scholars' calls for examining the dialectical relationships between place and the socio-cultural values. These findings also reveal that scholars should not merely study how CMCs' overseas projects occur in different regions and countries. Instead, we also need to demonstrate how different places' histories and cultural values reshape CMCs' behaviours and ideas.

7.3 Compromises on multiple layers

Manufacturing compromises in this thesis are also multi-layered in relation to power, ethnicity, gender relations and time frames. To begin with, the compromise is related to the power relations between Chinese employers and Papua New Guinean employees. Chinese employees can maintain the refinery operation and decide Papua New Guinean employees' promotion and evaluation with the ownership of machinery and production know-how. Regarding regulating the production, Chinese employees become dependent on Papua New Guinean employees' proficiency in English, experience with working with Western enterprises and knowledge about rules and policies in PNG. Because of this reliance, the occupation of certain critical job positions offers certain Papua New Guinean managers the structural power to monitor Chinese managers' behaviours. Additionally, local workers' attachment to place and relations with other relatives in the village become useful recourses for forming a trade union to bargain with the Chinese management, whose original inclination was to control the operation arbitrarily. This factor reflects Papua New Guinean workers' associational power to collectively claim benefits from the Chinese management's profits. Based on these findings, we can find that reaching compromises in the refinery is associated with the power dynamic between employers and employees.

The cross-cultural work situation also relates workers' compromises to ethnicity relations. For instance, while working in the mess hall, Chinese chefs' willingness to clean with Papua New Guinean employees reflects their understanding of the ethnic boundaries associated with work. According to indigenous cultural values, different work relations also trigger Papua New Guinean employees' negative or positive feelings regarding working with Chinese chefs (e.g. sharing and reciprocity). In addition, intercultural work experiences animate the two

groups of workers' reflections on ethnic understandings during working in the confined space. Other than inward looking demonstrated by previous scholars, some Chinese expatriates are able to understand Papua New Guinean workers' hesitancy in working hard because of their dual roles as subsistence farmers and refinery workers. To Papua New Guinean workers, while learning hard work by working with Chinese, they also understand the money-dominated situation where Chinese employees live back home in the PRC. This situation differs from Papua New Guinean employees' access to land or sea resources. These factors show that workers' compromises represent different ethnic relations in various workplaces.

Because labour processes are gendered, workers' compromises are related to changing gender relations induced by the refinery operation. Working in a male-dominated work environment, Chinese employees note that this situation is similar to mining activities in the PRC and the global mining industry. Instead, interviews with Papua New Guinean managers have shown that gender stereotypes originating from the coconut plantation during the Australian administration play a significant part in the gender division of labour. Influenced by a similar idea, Papua New Guinean male employees working in the mess hall encounter challenges to male identities because some local male employees refuse to clean with women. These experiences differ from the cooperation between men and women in the village during preparing food, although there are women's and men's works. This case also shows that two understandings of gender division of labour exist in the refinery when workers compromise. By readjusting mentalities, workers' gender compromises reflect how relations with others determine individuals' self-identities.

Finally, compromises are also reflected in workers' new ideas about time. While working together, Papua New Guinean workers learn to work on time, inspired by Chinese supervisors. Work experiences with Papua New Guinean employees also help Chinese employees grasp the necessity of comprehending local employees' difficulties working on time due to their subsistence farming. Notably, these mutual learning experiences animate the reconfiguration of becoming a *gutpela man* for Papua New Guinean male employees and a *chenggong* man for Chinese employees. These cases show that two groups of workers can accommodate new ideas and challenges by referring them to different aspects of their daily lives. Based on these findings, we find that changing understandings of becoming

a *gutpela man* or a *chenggong* man reflect multiple temporalities associated with the different parts of workers' daily lives.

Based on these four dimensions, there can be different interplay and intersections in various workplaces, depending on the type of gendered labour process, the dialectical relations within subject–actor duality and the influence of place-related elements. These factors show that future studies regarding employment relations within CMCs' overseas mining activities should examine how various entanglements among gender, ethnicity, power relations and time frames manifest in different contexts.

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Appendix A

Worker Interview Form

Date _____

Venue _____

Interviewee number _____

Other participants _____

Miscellaneous _____

1. Basic information

Gender		Age		Employment situation		Province of birth	
Village name		Clan name		Language		Current home	
<i>Hausman</i> (location)		<i>Hausman</i> (year of completion)					

2. Educational Background

Formal school grades (1–12)? ☐ Yes ☐ No

Highest finished school grade _____; Year of completion _____; Place of completion _____

Undergraduate degree? ☐ Yes ☐ No

Type of degree _____; Year of completion _____; Institution's name _____.

Institution's location _____; Subject of study _____

Postgraduate degree? ☐ Yes ☐ No

Type of degree _____; Year of completion _____; Institution's name _____;

Institution's location _____; Subject of study _____

3. Work skill certificate ☐ Yes ☐ No

3-1 First certificate

Type of qualification _____; Subject of qualification _____; Year of completion _____;

Institution's location _____; Institution's name _____.

3-2 Second certificate

Type of qualification _____; Subject of qualification _____; Year of completion _____.

Institution's location _____; Institution's name _____.

4. Previous work experiences

4-1 What was the title of your prior position before the current one?

4-2 What was the name of the company for which you worked?

4-3 When did you start and finish your prior job?

4-4 What were your previous job-related work experiences?

4-5 Why did you quit your job?

5. Current job

5-1 What is the title of your present position?

5-2 Which department do you work in?

5-3 Which division of this department do you work in?

5-4 When did you begin your present job?

5-5 Could you tell me how you apply for this job? (For example, how did you discover it? What did you prepare?)

5-5 Why did you apply for this position?

5-6 Did somebody assist you in applying for this job?

5-7 What did you say in your letter of interest?

5-8 Did you undergo any physical (medical) examinations?

Institution's name _____; Institution's location _____; Types of tests _____

5-9 Can you describe what you do at work every day?

5-10 Could you explain how you learned to conduct your job?

5-11 Do you have a specific workspace? Could you describe place or space to me?

5-12 Does the company provide you with relevant training for your position? What kinds of training?

5-13 How many Papua New Guineans are employed in your department? How many are hired from across the country? How many on a local basis?

5-14 What are your thoughts about your present job?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

5-15 What do you enjoy most about your present job?

5-16 What is your least favourite aspect of your present job?

5-17 How do you feel about your present job's pay?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

5-18 What do you have planned for the next five years?

5-19 What advice would you provide to your supervisor or this company if they asked?

6. Gender issues within the current job

6-1 How many men and women work in your division and department?

6-2 (If most of the personnel were men.) Why, in your perspective, are there mostly male employees?

6-3 Do you believe that women can do your job as well? (If yes, why? If no, why?)

6-4 What would you think if a female worker did your job?

6-5 (If there were women.) What has your experience been working with female employees?

6-6 (For female interlocutors.) What have your experiences been working with predominantly male employees?

6-7 (For female interlocutors.) How did you adjust to working with predominantly male work colleagues? Did you come across any difficulties or benefits?

6-8 (For female interlocutors.) How do you feel about working in an environment dominated by men?

7. Topics about Chinese employees in the current workplace

7-1 What was your prior impression of Chinese people in Papua New Guinea?

7-2 Do you have any Chinese workmates?

7-3 How many Chinese employees (including the manager and interpreter) do you have in your department?

7-4 Can you tell me how you collaborate with other Chinese employees (or how you learn to collaborate with them)?

7-5 Could you describe how you connect (or communicate) with other Chinese employees?

7-6 What are your thoughts on how Chinese workers differ from or are similar to Papua New Guinean workers?

7-7 How do you feel about your relationships with other Chinese employees?

7-8 Could you please tell me how you feel about the way Chinese people perform their jobs?

7-9 Could you describe your working relationship with your Chinese supervisor (or how you learned to work with him)?

7-10 Could you please explain how your Chinese supervisor communicates with and manages his Papua New Guinean employees?

7-11 How do you feel about Chinese people now that you've worked with them?

7-12 Do you think this company has a unique work culture (or work ethics)?

7-13 How proficient are your Chinese coworkers in English?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

7-14 How proficient are your Chinese coworkers in Tok Pisin?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

7-15 How do you feel about the work experiences and expertise of your Chinese coworkers in this field?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

7-16 What is your Chinese supervisor's level of English proficiency?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

7-17 What is your Chinese supervisor's level of Tok Pisin?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

7-18 How do you feel about your Chinese supervisor's work experience and competence in this area?

☐ Very good ☐ Good ☐ Intermediate level ☐ Bad ☐ Very bad ☐ No opinion

8. *Wantok* ('friends or relatives') in the same department or the refinery

8-1 How many workers at the refinery come from the same village (or province)?

8-2 Do you mingle with workers from the same village at mealtimes or after work?

8-3 Do *wantok* assist one another? (If yes, how? If no, why?)

8-4 What are your thoughts on the interactions between national employees from other provinces and local employees?

9. After-work activities

- ☐ Church activities ☐ Political parties ☐ Gambling ☐ Smoking ☐ Drinking ☐ Customary activities (e.g. *singsing*) ☐ Business activities
- ☐ Chewing betel nuts ☐ Sports activities ☐ Other activities

9-1 How frequently do you consume alcoholic beverages? (Gambling, smoking and betel nut chewing)

9-2 What types of business activity do you conduct?

9-3 What types of sports do you participate in?

9-4 Who do you stay within the activity (e.g. playing sports) in which you spend the most time?

- ☐ Workmates who are your *wantok*; ☐ Coworkers from the local area; ☐ Chinese workers;
- ☐ Workmates who are either Chinese, local or *wantok*; ☐ Workmates who are *wantok* or Chinese; ☐ Workmates who are *wantok* or locals;
- ☐ Workmates who are locals or Chinese employees; ☐ Other friends that aren't coworkers or *wantok*

10. Masculinities related to the present work

10-1 What does it mean to you to be a good man?

10-2 Could you explain me how you go about becoming a man (or a good man)? (Who instructed you? Or who or what affected you?)

10-3 What lessons did your elders teach you about becoming a good man at *hausman* ('male initiation')?

10-4 Is it vital to you that you finish *hausman* to be a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-5 Why is *hausman* completeness vital (or not) for becoming a good man?

10-6 Is it important to foster a garden to become a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-7 Why is gardening vital (or not) for becoming a good man?

10-8 Is it important to be able to go fishing and build a house to be a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-9 Why is it important to know how to fish and build a house to become a good man?

10-10 Is it important to have a strong body to work and become a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-11 Why is having a strong body vital for working (or not) important for becoming a good man?

10-12 Does gardening and working in a refinery (your current profession) need the same body type?

10-13 Is it important to be able to look after your family to become a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-14 Why is it important (or not important) to be able to look after your family to become a good man?

10-15 What lessons did your parents teach you about how to become a good man?

10-16 Is it important for you to complete secondary school or earn a college degree to be a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-17 Why is it (or is it not) important to fulfill secondary school or earn a college degree to become a good man?

10-18 Is it important for you to have a job to become a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-19 Why is having a work necessary (or not important) for you to become a good man?

10-20 Does your present employment have an effect on or alter your perception of what it means to be a good man (e.g. the ability to run particular machines)?

10-21 Is it important for you to be able to make money to be a good man?

☐ Very important ☐ Important ☐ Intermediate level ☐ Not important ☐ Not important at all ☐ No opinion

10-22 Why is the capacity to make money important (or not) in becoming a good man?

10-23 What is the similarity or difference between working in a Chinese company and tending to a garden?

10-24 Is working in a Chinese company changing or influencing how you feel about becoming a good man?

10-25 Does working with Chinese male workers alter or impact your perceptions of what it means to become a good man?

10-26 Does working for a Chinese supervisor modify or impact how you feel about becoming a good man?

10-27 What are your thoughts on the social status of Papua New Guinean and Chinese employees on the refinery site?

10-28 Do you think Chinese employees have greater power than you?

10-29 Is there anything in this company or at your present employment that contradicts your culture of becoming a good man?

10-30 How would you characterise the Chinese male workers at the refinery? Do you consider them to be good men in your culture?

10-31 Are there any additional factors that impact your definition of a good man?

11 Contact information for interviewees

First name _____; Phone number _____

Can you recommend any other employees who would be interested in doing my interview?

First name _____; Phone number _____; Department _____

First name _____; Phone number _____; Department _____

Appendix B

員工訪談問卷

日期 _____

地點 _____

受訪對象編號 _____

其他人員 _____

其他 _____

1. 基本資料

性別		年齡		受僱狀態		籍貫	
居住城市		語言					

2. 教育背景

高中教育? ☐ 完成 ☐ 未完成

高中名稱 _____ ; 完成年 _____ ; 高中所在城市 _____

大學教育? ☐ 完成 ☐ 未完成

學位類型 _____ ; 完成年 _____ ; 學校名稱 _____ ; 學校所在城市 _____ ;

主修專業 _____

研究所教育? ☐ 完成 ☐ 未完成

學位類型 _____ ; 完成年 _____ ; 學校名稱 _____ ;

學校所在城市 _____ ; 主修專業 _____

3. 相關工作繼承證照 ☐ 有 ☐ 無

3-1 第一張證照

證照內容 _____ ; 機構名稱 _____ ; 完成年 _____ ; 機構地點 _____

3-2 第二張證照

證照內容 _____ ; 機構名稱 _____ ; 完成年 _____ ; 機構地點 _____

4. 之前的工作

4-1 在這之前您做過哪些工作？

4-2 能不能跟我說那些公司的名稱？

4-3 從哪一年您開始以及結束在那些公司工作？

4-4 能不能跟我分享您從事這些工作的經驗？

4-5 為什麼您離開了這份工作？

5. 目前的工作

5-1 您目前工作的職稱是？

5-2 您目前工作的單位是？

5-3 您目前工作的部門是？

5-4 哪一年您開始這份工作？

5-5 能否跟我說您應徵這份工作的過程？(例如：如何找到這份工作？您當初準備了哪些資料應徵？)

5-5 為何您決定應徵這份工作？

5-6 有任何人幫助你應徵或是得到這份工作？

5-7 應徵工作時，您需要完成身體檢查？

檢查單位名稱 _____；檢查單位地點 _____；檢查的種類 _____

5-8 能否跟我說您每天工作的情況與內容？

5-9 能否跟我分享您怎麼學會做這份工作？

5-10 您是否在一個特定的地點或是空間裡工作？(您能不能跟我描述這個工作空間或地點的特徵？)

5-11 公司有提供您相關的職業或技能訓練？(哪種訓練？)

5-12 在您所任職的單位或部門，有多少位國內員工？有多少位巴新員工？

5-13 對於目前的工作您的感受是？

☐ 非常滿意 ☐ 滿意 ☐ 尚可 ☐ 不滿意 ☐ 非常不滿意 ☐ 沒意見

5-14 您有這樣感受的原因是？

5-15 有關目前的工作，其中您做喜歡的部份是？

5-16 有關目前的工作，其中您最不喜歡的部份是？

5-17 對於目前工作所發給的薪資，您的感受是？

☐ 非常滿意 ☐ 滿意 ☐ 尚可 ☐ 不滿意 ☐ 非常不滿意 ☐ 沒意見

5-18 能跟我分享您未來五年的計畫？

5-19 如果公司或主管向您徵詢相關的建議，您會建議什麼？

6. 目前的工作中與性別相關的議題

6-1 在您所任職的單位中有多少位女性及男性員工？

6-2 (都是男性) 針對在您單位工作工作人員均為男性，您的想法是？

6-3 您認為女性也可以從事您目前所做的工作嗎？(可以，為什麼？不可以，為什麼？)

6-4 假如今天是一位女性員工做您目前所做的工作，您的感受或想法是？

6-5 (假如有女性) 可以跟我分享您與女性員工一起工作的經驗？

6-6 (針對女性) 可以跟我分享您與多數為男性員工工作的經驗？

6-7 (針對女性) 可以跟我分享您如何適應與員工(多數為男性)一起工作？

6-8 (針對女性) 有關工作環境中多數員工為男性，您的感受是？

7. 目前的工作中有關巴新當地人的議題

7-1 您都怎麼稱呼當地員工？(土人、黑人或他們的名字？在與華人聊天時怎麼稱呼？在與巴新員工交談怎麼稱呼？)

7-2 在這工作之前，你對巴新或是巴新當地人的印象是？

7-3 在您的單位，您有與其他當地人一起工作？

7-4 在您的單位，有多少位巴新員工或管理者？

7-5 您能否跟我分享您是如何學會跟巴新員工一起工作？

7-6 您能否跟我分享您是如何學會與巴新員工互動與溝通？

7-7 您是否感覺巴新員工與國內員工工作方式有哪些類似或是哪些差異的地方？

7-8 您對於您與巴新員工關係的感覺是？

7-9 根據您的觀察，您能跟我描述巴新員工工作的方式或是態度是怎樣？

7-10 您能否跟我描述巴新員工怎麼跟您溝通？

7-11 在與他們一起工作之後，您對於巴新或是當地人的想法或感受是？

7-12 根據您的經驗，巴新或是當地人是否有一種獨特對於工作的態度或是文化？

7-13 您認為您與和您一起工作的巴新員工是朋友嗎？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常同意 ☐ 沒意見

7-14 針對上一題，為何您有這樣的感受？

7-15 您認為與您一起工作的巴新員工了解國內的情況、社會或文化？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常同意 ☐ 沒意見

7-16 針對上一題，為何您有這樣的感受？

7-17 您認為您了解巴新文化或是當地人嗎？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常同意 ☐ 沒意見

7-18 針對上一題，您認為您了解哪些當地的文化？

7-19 您曾經透過哪些管道了解當地文化？

7-20 這些管道提供了您哪些有關當地的資料？

7-21 您覺得當地員工英文口說的水平如何？

☐ 非常好 ☐ 好 ☐ 尚可 ☐ 不好 ☐ 非常不好 ☐ 沒意見

7-22 您覺得當地員工中文口說的水平如何？

☐ 非常好 ☐ 好 ☐ 尚可 ☐ 不好 ☐ 非常不好 ☐ 沒意見

7-23 您覺得當地員工的工作表現如何？

☐ 非常好 ☐ 好 ☐ 尚可 ☐ 不好 ☐ 非常不好 ☐ 沒意見

7-24 針對上一題，為何您有這樣的感受？

7-25 您覺得當地員工的工作態度如何？

☐ 非常好 ☐ 好 ☐ 尚可 ☐ 不好 ☐ 非常不好 ☐ 沒意見

7-26 針對上一題，為何您有這樣的感受？

7-27 您覺得當地員工相關的工作技能或是知識水平如何？

☐ 非常好 ☐ 好 ☐ 尚可 ☐ 不好 ☐ 非常不好 ☐ 沒意見

7-28 在有巴新員工的工作環境，國內員工之間的關係或是相處的方式是否跟在國內時都是國內員工有些不同？

8. 目前的工作中的同鄉

8-1 就您所知道，在冶煉廠有多少員工是來自同一個地區？

8-2 在下班之後或是吃飯時，您會與來自同一地區的國內員工聚在一起嗎？

8-3 來自同一地區的員工會特別照顧彼此嗎？(會, 為什麼？; 不會, 為什麼？)

9. 工作以外的活動

☐ 宗教活動 ☐ 賭博 ☐ 抽菸 ☐ 喝酒 ☐ 文化活動 ☐ 商業活動 ☐ 嚼檳榔 ☐ 體育活動 ☐ 其他活動

9-1 您喝酒的頻率是？(賭博, 抽菸, 與嚼檳榔)

9-2 您從事哪些商業活動？這些商業活動跟您在國內的家庭有關？

9-3 您參與哪些體育活動？

9-4 在巴新，當您從事工作外的活動時(時間花費最多的)，您是跟？

☐ 工作夥伴來自國內同一個地區；☐ 工作夥伴是當地員工；☐ 工作夥伴是國內員工(來自不同地區)；

☐ 工作夥伴或者是來自同一個地區、當地員工或是來自其他的國內員工；☐ 工作夥伴是來自同一地區或是當地員工；

☐ 工作夥伴是當地員工或是來自其他地區的國內員工 ☐ 工作夥伴是來自其他地區或是同一地區的國內員工

10. 目前的工作中與男性身份認同有關的議題

10-1 您覺得目前您扮演了哪些男性的角色？(例如：丈夫、女婿、兒子、員工、管理者等等)

10-2 您覺得在這些角色中哪些是您目前感受最深的？

10-3 您可以跟我談談您在工作中怎麼扮演這個角色？

10-4 您覺得您是一個成功的男人嗎？您會怎麼定義一個「成功的男人」(或好男人)？

10-5 在學習扮演男性的角色的過程中，誰曾經教導或影響您學習成為一個成功的男人？

10-6 您覺得要成為一個成功的男性又具備哪些人格特質或條件？

10-7 您覺得一位成功的男性是要像溫文儒雅的「紳士」(gentlemen) 或是要具備類似「王進喜」如「鐵人」(iron men) 一般特質？

10-8 您可以跟我說說您對於這幾位全國勞動模範的想法？(例如：王進喜、雷鋒、郭明義)

10-9 您覺得王進喜與郭明義等人的特質或精神適用於目前您所面對的工作情況(異文化)嗎？

10-10 您目前所從事的工作幫助您成為一位成功的男人？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-11 您可否跟我分享您目前所從事的工作在哪些方面幫助您成為一位成功的男性？

10-12 在巴新工作的經驗改變了您對於成功的男人的想法？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-13 您可否跟我說說在巴新工作的經驗在怎麼改變了您對於成功的男人的想法？

10-14 與巴新當地員工一起工作的經驗改變或影響了您對於成功的男人的想法？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-15 您可否跟我說說與巴新當地員工一起工作的經驗在哪些方面改變或影響了您對於成功的男人的想法？

10-16 根據您對於成功的男人的想法，您可否跟我說說您對於巴新工人的想法或印象？(人格特質、工作態度等等)

10-17 您覺得具備一個強壯的身體(能夠勝任在這的工作)對於身為一個成功的男性是重要的嗎？

☐ 非常重要 ☐ 重要 ☐ 尚可 ☐ 不重要 ☐ 非常不重要 ☐ 沒意見

10-18 您可否跟我說明為何一個強壯的身體對於成為一個成功的男性是(或者不是)重要的？

10-19 您覺得肯吃苦的人格特質對於成為一位成功的男性是重要的？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-20 為什麼您覺得肯吃苦的人格特質對於成為一位成功的男性是重要(或不重要)的？

10-21 您覺得獨立自主的人格特質對於成為一位成功的男性是重要的？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-22 為什麼您覺得獨立自主的人個特質對於成為一位成功的男性是重要(或不重要)？

10-23 您覺得一位成功的男性需要具備說多種語言的能力？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-24 為什麼您覺得具備說多種語言的能力對於成為一位成功的男性是重要的？

10-25 您覺得一位成功的男性需要具備認識並尊重他國文化的能力？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-26 為什麼您覺得尊重並認識他國文化的能力對於成為一個成功的男性是重要的？

10-27 您覺得有賺錢的能力對於成為一位成功的男性是重要的？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-28 為什麼您覺得賺錢的能力對於成為一位成功的男性是重要的(或不重要)？

10-29 您覺得有能力照顧家人是作為一個成功的男人的條件？

☐ 非常同意 ☐ 同意 ☐ 尚可 ☐ 不同意 ☐ 非常不同意 ☐ 沒意見

10-30 為什麼您覺得照顧家人的能力對於成為一位成功的男人是重要(或不重要)的？

10-31 您能否說明一下您對於巴新工人與國內員工之間社會地位有怎樣的看法？

10-32 當地是否有些文化或現象是抵觸您對於成功男人的定義？

11 受訪者資料

姓 _____；電話號碼 _____；微信帳號 _____

您是否能推薦其他受訪者？

姓 _____；電話號碼 _____；微信帳號 _____

姓 _____；電話號碼 _____；微信帳號 _____