The Co-development of Work and Place in a Company Town:
A Case Study of Newman, Western Australia

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Thesis Declaration

I, Tom Barratt, certify that:

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Abstract

This thesis investigates the co-development of work and place in the Pilbara mining town of Newman, Western Australia. In doing so, it considers how the erosion of collective agency has occurred in a particular place though changes in work, but also the re-making of place in accordance with neoliberalism by capital, the state and a section of the workforce. The town was originally co-constructed by capital and the state to afford management prerogative over both production and social reproduction. However workers, through trade unionism, were able to influence how and on what terms work was done as well as how life was lived in the town, effectively creating a 'union place'. In the 1990s capital successfully de-unionised the workforce and reconstituted the employment relationship. This occurred both at the mine sites and in the town itself, and has resulted in significant changes in work regimes and place making in the town. I show that changes in employment relations that have marginalised unions though individualising and fragmenting the workforce were effective due to changes both at work as well as in how the place was understood, replacing collective notions of community solidarity with an individualistic and marketised mindset. Informed by the spatio-temporal development of this particular place I apply a qualitative case study methodology to describe how work is organised and experienced in Newman, as well as how work and place have interacted to remake Newman’s local labour market.
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List of Abbreviations

BHPB  BHP Billiton Pty Ltd
FIFO  Fly-In Fly-Out
MNM  Mount Newman Mining
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Chapter One: Introduction

This thesis investigates the relationship between work and the remaking of place by examining changes in work and place over time in Newman, a Western Australian mining town. In this thesis I demonstrate that work and place are mutually constructive as changes in one domain reciprocally and iteratively change the other. Work occurs in place, and its terms and conditions are influenced by what happens in place and how place is conceptualised. Place is made and reshaped by the processes, practices and workers associated with local worksites, most especially in places dominated by one primary economic activity.

Analysis of the co-determination of work and place requires close, specific and sustained attention to local and regional context in a space- and time-sensitive manner. For instance, the socio-economy of the Pilbara region of Australia is centred on the extractive industry, so much so that it is often impossible to separate daily life from mining. This particular arrangement means that work and place are particularly intertwined. This is, indicative of a general point: that all places are shaped by the work that occurs within them, and all work is shaped by its location (Peck 2013a; Ellem 2015a). The characteristics of work in particular worksites, including factors such as unionisation versus individualisation, job security or insecurity, rates of pay, and even where and how workers live, are the product of the historical co-production of work and place.

By focusing on a specific place – a mining company town - over an extended period of time, this thesis seeks to understand the intricacies of how work and place mutually develop. In particular, it examines the research question ‘how are place and work mutually constructed in a company town over time?’ I answer this question using a labour geographies approach, based on interview data collected in 2012 and 2013, which in turn is informed by detailed historical study of work, place and space in Newman. Since extraction commenced in Newman in 1969, work and place have developed in a co-dependent way as changes in the institutional regulation of work have reinforced, and been achieved by, changes in how the place is subjectively understood. This, particularly since 1999, has resulted in the individualisation of employment relations, in workers accepting managerial prerogative and bearing the risk of fluctuations in commodity markets, the diminution and de-prioritisation of community in place and in place being re-conceptualised as perfunctory, temporary and transactional.

Employment relations scholars have devoted much energy to considering the individualisation of employment relations and especially the de-unionisation of workers (for an example pertinent to this case see Peetz 2002). This has been considered from an institutional perspective and also by considering managerial and worker strategies and behaviours. Further, labour geographers have argued that
geography, space and place shape employment relations (Herod 2001; Peck 2016). The general trend towards de-collectivisation has been considered a part of the neoliberalisation of space (Harvey 2005), place and employment relations (Peck 1996). Studies of neoliberalism have considered individualisation and how it effects communities, often considering institutional and ‘structural’ change (Peck 2016; Wilkinson & Wood 2012). I argue that these ways of understanding changes in work and employment relations have understated or overlooked the importance of place. By incorporating subjective understandings and experiences of place, changes in work can be explained with greater depth and precision. Thus questions of how individualisation occurs in place and how place supports the realisation of these changes are central to this thesis.

This thesis considers the role of wider shifts in capitalist space in changing work in particular places. Space and place play a fundamental role in shaping capital-labour relations and, dialectically, these capital-labour relations shape space and place (Herod, McGrath-Champ & Rainnie 2010, p. 10; Lier 2007, p. 815). Capital-labour relations are inherently spatial relations (Ellem & Shields 1999; Ward 2007), meaning the application of geography to traditional employment relations provides insights into the relationship between employers and workers. Geography is more than ‘background scenery’ as it continuously plays a constitutive role in the making of work and the terms on which it is done (Castree 2007, p. 855; Ward 2007). Labour geography, the sub-discipline in which this thesis is situated, considers the importance to geography within work and considers how spatiality influences employment relations. However even within labour geography, place, particularly when considered in a historically sensitive way, has been under-emphasised.

This thesis seeks to address this by considering the making and remaking of work and place over time in Newman. By focusing on a single town and its surrounding mine sites, I am able to clearly focus on the interplay between work and place over time in a detailed and rigorous manner. In addition to the depth of the description, I also consider in detail the particular development of Newman as a place by both contextualising the case and by considering how work relationships overlap with social relationships. This places work within its social context, which exists and occurs both at and outside worksites. Further, part of the uniqueness of Newman as a place is that capital has had a long-term relationship (over fifty years) with a largely stable workforce, providing a rich place-based labour history. The focus on a particular place allows me to address this under-theorisation of place’s importance to employment relations through close attention to a particular location.

Work, as I use the term in this thesis, describes non-managerial paid work done in the domain of the mine sites in and around Newman. While other work occurs in Newman, this is secondary to mining work insofar as the primary economic purpose of the town is resource extraction. Mining work, as described in greater detail in Chapter Five, is semi-skilled, relatively insecure and workers are very well remunerated. Work is
continuous, arranged around 12 hour shifts from 6am-6pm or 6pm-6am. Workers are either housed on a residential basis, where workers rent or own a permanent residence in town, or on a Fly In Fly Out (FIFO) basis (Storey 2001). For the latter workers are flown from their city or town of residence to Newman, housed in short-term accommodation known as villages or camps and work consecutive shifts of typically 14 hour duration before being flown back to their city or town of residence for a period of recuperation (typically 7 days).

Work in Newman, as in all places, is both regulated formally through legislation and industrial instruments and informally through everyday behaviours and social norms (Peck 1996). When extraction commenced in Newman in the late 1960s employment relations were formally regulated through a tripartite employment relations system underpinned by arbitration and collective agreement making (Dufty 1984; Ellem 2015a). This institutional arrangement empowered trade unions and facilitated the development of a militant union culture which allowed workers to successfully challenge managerial prerogative (Peetz & Bailey 2012; Ellem 2015a). Subsequently, institutional employment relations were reformed, redefining the role of unions, decentralising bargaining, reforming legislation and de-prioritising industrial institutions (Teicher, Holland & Gough 2006). These changes were exploited by BHP Billiton (BHPB), the dominant employer in town, to re-regulate work in Newman based on individualised employment arrangements (Ellem 2004; Veen 2015; Peetz 2002). In addition to changes in the formal regulation of work there have been changes in the informal regulation of work. These changes have occurred through changes in the community and in attitudes to work and to place. I demonstrate that the social meanings and norms attached to work and the town itself have changed over time. The place has come to be understood as an individualistic, temporary and functional location where one works, earns, saves and leaves. These changes, coupled with changes in how work is organised have seen Newman - and work within it - become more transactional and market based.

Labour geographies augments traditional employment relations scholarship (Ellem & Shields 1999). The study of employment relations considers

Study of the employment relationship, particularly the study of workplace interactions between managers and the managed (Teicher, Holland & Gough 2006, p. xxi)

Industrial relations (more recently re-framed as employment relations) has always had a particular focus on the examination of the processes and outcomes associated with collective bargaining between employers and unions as worker representatives, overseen by state legislation and institutions (Donaghey et al. 2014). Labour geography expands this view as it sees workers and their actions as central to shaping the geography of capitalism (Ellem 2003, p. 69; Castree 2007; Ward 2007, p. 268). Labour geography, as I outline in Chapter Two, seeks to understand and analyse workers’ role in the making of geographies (Castree 2007; Herod 1997). Labour geography is framed within economic geography and represents a broad and varied field which engages the
spatiality of work, employment and society and their formal and informal regulation (Peck 2016; Rutherford 2010). Despite plurality within the field, labour geographers are united by the common assumption that geography matters to workers’ lives; and that the actions, choices and behaviours of workers shape those geographies (Ellem & Shields 1999; Ward 2007). Labour geographers use social understandings of work and social reproduction to explain work, workers and changes in the landscapes of capitalism (McGrath & DeFilippis 2009; Peck 1996; Peck & Theodore 2010; Heery 2016).

This case study examines the co-development of work and place in the very remote iron ore-mining town of Newman in the Pilbara region of Western Australia. Newman was built as a company town to allow for accumulation and extraction of ore for export in this isolated place. This simultaneously met capital’s ambition for profit and the commitment of the Western Australian state to provide employment, increase government revenue and develop the region. Typical of company towns (Crawford 1995), strong, militant industry based, locally autonomous unions were established in Newman who pursued their claims through strikes that would become famous (Frenkel 1978). Supported by the industrial institutions of the time, these unions were able to assert control over both work and the town itself, effectively turning Newman into a ‘union place’ (Ellem 2004; Court 1976; Dufty 1984).

In 1999, the company and union engaged in an industrial dispute that would lead to the de-unionisation of Newman and the remaking of both work and place. The dispute was based around the introduction of individual employment arrangements, which was made possible by legislative changes (Amendola 1999). The dispute resulted in massive decreases in union density and influence. The decrease in union influence allowed BHPB to change working arrangements, introducing 12 hour shifts and increasing the number of contractors and FIFO workers (Peck 2013a).

BHPB’s success was both an industrial and geographical victory as the company transformed work through changes in employment relations institutions and also in place. Changing expectations and norms around work accelerated these processes, resulting in work becoming prioritised over aspects of social reproduction. I argue that this change in work relations was co-produced by changes in the place, which have been fundamental in the remaking of the town from a ‘place to live’ into a ‘space to work’ (Peck 1996). This remaking occurred via workers’ acceptance of (and often, agreement with) market logic as a way of regulating life and work in Newman. This has resulted in the diminution of community mindedness, the individualisation of the workforce, the decline in union density and influence over work and place, increased managerial prerogative and increased job insecurity.
1.1 Theoretical Contribution

The field of Labour Geographies has grown extensively since the sub-discipline emerged in the 1990s, both in terms of scope and of subject matter (Peck 2016). It has moved beyond strict analysis of employer/employee relations to incorporate gender, race and social reproduction (Castree 2007), and incorporated Marxist and post-structural approaches (Rutherford 2010). This growth has revealed a number of disciplinary weaknesses that require attention. These limitations include a narrow focus on manufacturing case studies, the biased selection of cases where worker action has proven successful, a limited consideration and conception of agency based around formal trade unions and the under-theorisation of the role of place, social reproduction and migration (Coe & Jordhus-Lier 2011, p. 213; Castree 2007).

This thesis, in exploring the mutually constitutive relationship between work and place in Newman seeks to partially address these limitations. I do this by selecting a case that is not a typical success story of collective action, by selecting a case outside of manufacturing, by developing a close examination of how changes in place impact employment relations and, finally, by considering how workers express limited agency in this place outside of trade unionism, including through migration.

The selection of Newman as a research site seeks to address the fact that many case studies within the labour geography literature have studied how workers (and trade unions) have successfully used spatiality to improve their working conditions or rebuild collective power. By examining a case where unions have lost both membership and influence in place I use labour geographies to instead examine how geography explains de-unionisation and the individualisation of employment relations. This is necessary to overcome a blind spot, where the discipline, with much hope and optimism in thinking about the potential recovery of collective agency, has emerged during a period where workers’ pay and conditions have generally declined (Coe 2013, p. 279). By examining how workers in Newman, who remain well-paid despite individualisation, I consider how geography has influenced a particular labour market in the absence of a successful spatial trade union strategy. Further, by selecting a primary industry (iron ore mining) to study, rather than manufacturing, I broaden the empirical scope of analysis of labour geography.

This thesis also contributes to the field of labour geographies through its deep examination of the link between place and work. This builds on labour geographers’ consideration of place, which acknowledges that place based culture influences work (Bauder 2001) and place is where work occurs (Halford, Leonard & Bruce 2015). Place is shaped by global space (Padmanabhan 2012) but when it is considered in a time-sensitive manner the concept of place is considered in a less specific and nuanced way (Ettlinger 2007). This thesis, through ethnographic observations and interview data, engages subjective interpretations of place and explores the endogenous and exogenous factors that have influenced it over time. This expands upon the work of
authors such as Herod (2001), Ward (2007), Ellem and Shields (1999), and Coe (2013) by retaining a focus on the specifics of a particular place and the importance of that place to employment relations. As such, this capacity to clearly understand place, and how workers’ lived experiences and choices are shaped by place inside and outside of work (Castree 2007) allows this thesis to move beyond a focus on work regimes and better develop understandings of employment relations. The original contribution made by this thesis does build on labour geography research already done in the Pilbara region, particularly by Ellem and Peck (Ellem 2002; Ellem 2003; Ellem 2010; Ellem 2015c; Peck 2013a; Peck 2013b). It expands on Ellem’s work by considering how work and place are socially constructed in a de-unionised Pilbara by using a place-rather than union-based perspective, enabling me to capture a richer understanding of contemporary Pilbara life and work. I also build upon Peck’s work by considering the ‘lived experience’ of workers and the place-specific consequences of the structural changes Peck describes.

Agency is a central concern of labour geography, as it is through agency that workers are able to exploit and shape the geography of work. The relationship between agency, place and worker subjectivity requires further examination. In examining the interaction between work and place, I also deepen understandings of agency within labour geographies. The term agency is almost universally used but remains underdeveloped within the field of labour geographies (Coe 2013; Castree 2007). Agency is often used interchangeably with any union activity, but this thesis argues that the exercise of agency is more complex than this. The project incorporates previous attempts to categorise and define agency to make sense of how workers exhibit agency and describe the effect this has on both the workplace and social spaces within the town. Traditionally, labour geographers adopting a critical Marxian perspective have subscribed to the idea that de-unionisation of workers disempowers workers and is either fought or submissively accepted, by workers. However, as I explore in Chapters Five and Six, in Newman workers have contributed to this transition to a market-regulated workplace and town, with some workers actively participating in the remaking of place. These workers provide their consent for a number of reasons, and are aware of their position within the global industry both in a physical (as a site of extraction) and a temporal (within the business cycle) sense. These workers actively exercise choice (albeit a constrained choice) in their work and life decisions to live and/or work in Newman.

An aspect of agency, which is central to understanding Newman, is labour migration or mobility as Newman is almost wholly composed of people who have moved to the town to work. The exploration of labour migration is also underdeveloped within Labour Geography, neglected in favour of study of particular places or workers in disparate places working together (Castree 2007). Migration is central to labour geography as it is a spatial strategy deployed by both labour and capital to create individual opportunity, exploit geographical unevenness and/or undermine workers’
power in particular places (Scott 2013). By considering the movement of people to and from Newman, and the impact this has had on employment relations in the town, I deepen understanding of the significance of migration for labour geography.

1.2 Methodology

This thesis answers the research question of ‘how are place and work mutually constructed in a company town over time?’ by using a qualitative, ethnographic, case study method, drawing upon Burawoy’s (2009) “Extended Case Method”. Whilst I deal with methodology briefly in this introduction, the substantive methods section of the thesis is located in Appendix One. The placement of this in an appendix is not intended to diminish the significance of methodological considerations that underpin this research, but to preserve the flow of the argument through the body of the thesis. As such I have placed this section where it can easily be found should the reader wish to refer to it.

Ethnography is defined by Burawoy as “studying others in their space and time” (2009, p. xi). The fundamental underpinning of ethnographic research is that people’s experiences shape their sense of meaning, culture and social consciousness which in turn shapes society (Thompson 1978). This approach rejects pure positivism, acknowledging that the researcher is a part of the world they study and as such necessarily impact on subjects through their research. A qualitative ethnographic method allows me to understand workers’ and residents’ subjective meanings associated with place and work, while personally developing a deep and contextualised understanding of the town (Friedman & McDaniel 1998; Yin 2003; Denzin & Lincoln 2011). Harvey (2001) emphasises the need to use a reflexive methodology which embeds case studies in the wider world, in part to mitigate the risk that stand-alone case studies may construct an overly simplistic and abstracted model of reality. I address this concern in my case study by adopting a reflexive methodology (Burawoy 2009) and triangulating interview data and researcher observations with secondary data to provide historical analysis of the town (Lincoln & Guba 1985) to develop a rich and detailed understanding the relationship between place and employment relations.

This thesis relies on primary data collected through semi-structured interviews, focus groups and researcher observation during two periods of fieldwork in Newman in 2012 and 2013. These periods were of 21 and 19 days respectively. The semi-structured interview schedule was designed after a survey of relevant literature, and then refined for the second fieldwork to substantiate the themes that emerged from analysis of the first round of interviews. My data set for this thesis is comprised of my observation over the time spent in the town, as well 42 semi-structured interviews and seven focus groups, a total of 66 individuals. 33 of these participants were workers, with 21 of these workers working for BHPB and 12 for contractors; 7 of these workers were union members and 26 were not. The other 33 interview subjects did not work in mining, and
either performed care work or paid work in non-mining industries. These interviews were conducted with individuals who had varying experiences, and levels of engagement, with place. Data analysis of the interview data and research notes was conducted during and after each round of fieldwork. After the second round of interviews detailed coding and analysis of the key themes was completed, which in turn led to the analysis within this thesis.

1.3 Newman As A Case Study

I have selected Newman and surrounding mine sites as the case for my study. The research site has been selected because of its significance to the Pilbara economy and BHPB’s global operations, its connectedness to the global economy; it’s history as a company town and the peculiarities of its labour history. In this section I first describe the town and work within it before explaining how it is connected within the global economy.

Newman is located over 1000km north east of Western Australia’s state capital, Perth. It was constructed as a ‘company town’ after negotiation between the Mount Newman Mining Co Pty Ltd (MNM) and the Western Australian Government (Iron Ore (Mount Newman) Agreement Act 1964 (WA)). The town and mine were built in order to extract and export the haematite ore from the Mt Whaleback mine to provide development, employment and profit. The town itself is tucked between a number of hills, the Mt Whaleback mine and the Great Northern Highway, in a landscape that is both isolated and beautiful.

![Figure 1: The town of Newman from Radio Hill (Author’s Photograph)](image-url)
The town is suburban, with majority low-density housing with a few apartments (Government of Western Australia 2012b, Part 3 p. 10). The town is split into three suburbs, and other than the red dirt and Pilbara hills in the distance, the town could be in suburban Perth. What is striking about the town is that there are no historic buildings, as before the 1960s the town was empty space. The development of housing, as materials and styles have been updated over time, is apparent in Figure 2 below.

Figure 2: Photos reflecting the development of housing in Newman (Government of Western Australia 2012b, part 3 p. 10)

There is a town centre, which is built around a shopping centre, which has shaded awnings for parked cars, a supermarket, café, take away food vendors, a pharmacy, post-office, newsagent, a bottle shop, pubs and several retail stores. Town amenities include a ‘community centre’ that acts as a crèche, the tourist centre and a number of sporting facilities including a gym, 50m swimming pool and two fully lit ovals. Services in town include Newman Hospital, two primary schools and a high school.

Before being taken over by BHPB in 1992 (Smith 2001), Newman’s mine and town were run by MNM. MNM was a joint venture 30% owned by Dampier Mining Company, 30% by Pilbara Iron Limited, 25% by Amax iron Ore Corporation, 5% by Seltrust Mining Co Pty Ltd and 10% the Mitsui-C Itoh Iron Pty Ltd (McIlwraith 1988). Dampier Mining Co was a wholly owned subsidy of Broken Hill Proprietary, while Pilbara Iron was a company whose largest shareholders were CSR (68%), and the insurers AMP (23.8%) and MLC (5.6%). Amax was a wholly owned subsidy of Amax Inc. which in turn was 20.4% owned by Standard Oil and 12% owned by British Petroleum.
(Dufty 1984). In its first 40 years the Mt Newman project had invested $A2.2 billion into economic and social infrastructure ('Celebration marks four decades of iron ore deliveries from Mt. Newman' 2009), highlighting the sunk costs paid by capital and the fixity of production in Newman.

The mining production process follows the following basic progression as described by BHPB (2011). After exploration, which identifies where and of what grade the ore is, holes are drilled in the ground and filled with explosive charge. This charge is detonated to dislodge the ore and waste from the ground, which is then excavated by diggers, placed in to trucks known as Haulpaks, which move the rock from the pit floor to the crushers. The ore then goes through three stages of crushing. After crushing, it is reclaimed and loaded into trains, which transport the ore to Port Hedland to be exported. The spatiality of this is visually represented in Figure 3 below. The processing of the iron ore into steel is almost wholly done overseas.

The research site remains central to the Pilbara’s economy, as it accounted for 30.3% of Western Australian iron ore production in the 2015 financial year (BHP Billiton 2015). The town and mines contribute to the Pilbara region being “an epicentre of the global resource economy” (Peck 2013a, p. 227). The town of Newman is categorised as a sub-regional centre, the third most significant settlement and the most significant inland town (Government of Western Australia 2012a).

Figure 3: Map of BHBP’s Western Australian Iron Ore Operations (BHP Billiton 2014, p. 40)
Today the Mt Whaleback mine and surrounding ‘satellite mines’ are operated by the global mining company BHPB (BHP Billiton 2013). Mt Whaleback was originally a mountain, however after almost 50 years the mine is now a hole in the ground, the single biggest open cut iron ore mine in the world (Newman Visitor Centre 2013). The satellite mines, as noted in Figure 3, are relatively close to Newman, and most are serviced by the Port Hedland-Newman Rail Line (BHP Billiton 2013). The lack of permanent settlements around these mine sites means that workers are either housed in the town or flown to Newman Airport and taken to ‘on site’ camps. Newman remains a significant site for the camps as its airport allows workers access to mine sites, and it is also a centre for services such as health care if they become unwell. Entry to the mine sites is strictly controlled and as such workers were approached for interview in the town site rather than the mine sites.

BHPB’s Pilbara operations produced 218Mt of ore in the 2015 financial year, accounting for 30.3% of WA’s iron ore production (BHP Billiton 2015; Government of Western Australia 2015). BBHPB sells ore from Western Australia to steel mills in China, South Korea, Japan, Singapore, Hong Kong, Taiwan, Switzerland and Australia (BHP Billiton 2015). The Newman Hub, which is central to BHPB’s iron ore operations, in the financial year 2014 provided BHPB with over $US 21 billion by selling 190 MT. This is slightly lower than the mines’ total production as BHPB are in joint-venture arrangements in some of their mines. In the June 2014 half year the cost to BHPB per tonne had reduced by 12% (BHP Billiton 2014).

**1.4 Outline of the Thesis**

In this final part of my introduction I outline the structure of the thesis. After this Introduction, I present Chapter Two, which outlines the theoretical foundation that underpins my investigation of the research question. This involves situating workers within economic space, which I do by describing the history of labour geography and considering the separate but not mutually exclusive theoretical approaches to the discipline (Peck 2016). After explaining the key concepts of the ‘spatial fix’ (Harvey 1982) and ‘local labour market’ (Peck 1996) upon which I rely heavily in my analysis, I show how workers’ actions within places and across economic space impact on employment relations. I then provide a detailed investigation of the geographical concepts of place, space, spatial praxis, scale and time and explain how these concepts can be used to understand the co-development of work and place in Newman. Chapter Three shows how these concepts apply in a particular spatial form, the company town. Company towns are settlements built around a single industry where employers not only provide employment for workers, but also housing and social infrastructure (Borges & Torres 2012b). While there are differences between company towns, they share similar basic characteristics that I consider in making sense of the co-development of work and place in Newman. Newman was constructed as a company town after collaboration between the state and MNM, and despite changes in the form of civic governance, the town retains the core characteristics of a company town,
as it has a single economic specialisation and a dominant employer who controls the majority of the housing stock. Company towns are of particular relevance to this study as they are places where the interaction between work and place are particularly intense. Residents in these towns are ‘in place’ to work, and work in these towns is dependent on having access to a labour force. Due to the intensely shared experiences of workers and residents, company towns often developed strong traditions of unionism and community. Often through the formation of locally based unions, workers would challenge capital’s dominance over work and place. Unions also developed outside of company towns, but I argue that the close proximity of work and place made the company town particularly amenable (or vulnerable) to workers organising into unions. As such, understanding of company towns as a spatial form is key to both understanding the development of a union tradition in Newman, but also how this was undone in place. In Chapter Four I describe the spatio-temporal development of Newman, placing the town in its spatial, historical, political, and employment relations context. I do this by tracking the development of the town through key turning points in the town’s history, explaining the origins of the mining industry, to its construction as a company town, to ‘normalisation’, where civic governance was transferred from company to the state, to the 1999 industrial dispute, which led to de-unionisation of the town and reconstruction of work and place. The particularities of the contemporary town are in part the result of this contestation, and as such the analysis drawn from my data collection must be informed by, and sensitive to, the history of the town and work within it (Ellem & McGrath-Champ 2012).

Having contextualized the study in Chapters One to Four, Chapters Five and Six describe empirically the co-construction of work and place in Newman’s local labour market. Chapter Five empirically investigates employment relations in Newman and reveals how work is done and understood by workers. Workers reported working long, intense hours but taking some satisfaction from their job. The experience of work in Newman varied with reference to the relative industrial instrument, employer (BHPB or contractor), residency status, and the job in question. By examining these segmentations within the workforce I describe employment relations and the local labour market in place. In particular, I examine the significance of the expansion of managerial prerogative and of labour migration for the remaking of work and contemporary employment relations in Newman. This reveals a pattern of employment relations that is largely based around classical economic notions of demand and supply, job insecurity and managerial prerogative. Workers, in the main, understand their labour market positionality in an individualised way and are willing to accept the risks of changes within the local labour market. I also examine the transition of Newman to a place regulated by market mechanisms, as understood subjectively by workers, who increasingly see themselves more as ‘micro-entrepreneurs’, seeking to make money for themselves and their families in the short to medium term, accepting rather than challenging management over the terms of work.
Chapter Six examines conceptual place and social reproduction in Newman. I commence by considering how social reproduction is limited in Newman’s local labour market, and how workers and their families prioritise work over other aspects of life while perpetuating a patriarchal gendered model of social reproduction. I then consider the particularities of the housing market and how this influences social reproduction and reinforces a work focused local labour market. Subsequently, I describe different levels of commitment to place in Newman, from the uncommitted workers who see place in purely instrumental terms, to long-term residents who are deeply and intimately committed to the community and the town. I then explore differing views over responsibility for place making, which is now understood as achieved via market mechanisms rather than social regulation. This, in turn, has led to conflicts over the meaning of place; as some see Newman as a ‘place’ to live in while other see it as merely a ‘space’ in which to earn a wage. I then conclude my thesis in Chapter Seven, while the methodology chapter is incorporated as Appendix One.
Chapter Two: Theorising Geography, Workers and Economic Space

This chapter provides the theoretical underpinning to investigate the central research question and conceptualise space, place and work regimes in Newman. It does so by introducing and exploring the theoretical terrain in which this thesis is situated, focusing on the conceptualisation of how work and workers shape and are shaped by geography. As noted in the previous chapter, geography is central to understanding employment relations. This chapter engages with the labour geography literature to assess its contribution - and limitations – for understanding how work, place and space inter-relate. In Chapter Three I examine how work and geography relate to the development of company towns, a particular type of place where an employer administers work, housing and community. In Chapter Four I explain the historical co-development of work regimes, employment relations and geography in Newman. This historical exploration, in turn, contextualises and informs my empirical discussion of work and place in Newman in Chapters Five and Six. As such this chapter provides the theoretical basis of the argument that I develop in these chapters that work and place are mutually constitutive and their relationship is dynamic over time.

In this chapter I first show how labour geography is situated within economic geography and expand on my brief introduction in Chapter One by describing two main approaches to conceptualising how workers are positioned within economic space (Peck 2016). I then define and introduce the concept of the spatial fix (Harvey 1982), a way of arranging particular places to facilitate work and accumulation. I show how spatial fixes are organised in relation to economic space and how the relative mobility of capital and labour influences the particularities of each fix. I then consider how spatial fixes can be contested and shaped by parties other than capital, particularly workers. I consider how agency is used by workers to make geography. I then describe a particular form of spatial fix, ‘Labour’s Spatial Fix’, where workers effectively and favourably shape geographies.

In considering the relationship between work and place, I also utilise the concept of the ‘local labour market’ (Peck 1996) to show that communities and places are made up of social actors who influence the terms on which life and work are done. This social regulation leads to differences between places. I show that this social regulation occurs at work and in spaces of reproduction, and is contested between workers and employers. As part of my exploration of the social regulation of work I consider the significance of social reproduction in the local labour market. These concepts are of importance in understanding the co-development of work and place in Newman as I argue that through the remaking of the local labour market and the social regulation of work, employment relations in the town have been fundamentally reconfigured. In the final section of the chapter I examine the geographical concepts of place, space, spatial
praxis, scale and time and explain how I use them to interpret and understand the co-development of work and place in Newman.

2.1 Workers and Economic Space

This section examines the role of work and workers within economic space. This situates my theoretical framework within economic geography, focusing on the sub-discipline of labour geography (Castree 2007; Peck 2016). By doing this I outline some of the assumptions I rely on in my examination of Newman and the theoretical contributions of the thesis.

Labour geography was created as a sub-discipline of economic geography in the 1990s (Rutherford 2010). It emerged in response to classical economic geography, which previously had understated the role of workers in making the landscapes of capitalism (Castree 2007; Herod 1997). As described in Chapter One, the field initially considered work narrowly, limiting analysis to workplace and institutional interactions between workers and capital. The field has subsequently expended to embrace a plurality of views, examining many aspects of the relationships between workers and geography (Castree 2007), and considering this relation from both post-structuralist and Marxist perspectives (Rutherford 2010). Reflecting this plurality, the field approaches questions of geography and work in two ways, ‘Labour Geography’ and ‘labour geography’. For the purpose of clarity, if I am referring to a specific approach I will refer to it in inverted commas, if I refer to the field generally I do not use these.

The first theoretical tradition, ‘Labour Geography’, looks at workers and trade unions’ actions to use and shape economic space (Herod 1997). These actions are often expressed in relation to corporations where workers target employers’ strategic weaknesses such as supply chains, transport infrastructure, corporate image and share prices to advance worker interests (Herod 2001). What separates ‘Labour Geography’ from other employment relations scholarship is that it examines the spatiality of strategies employed by labour, particularly trade unions, to influence what happens in workplaces and across economic space (Lier 2007, p. 821).

The second tradition, ‘labour geography’ looks at local labour markets, focusing on the relationship between production, social reproduction and the social regulation of work in particular places (Peck 2016). Small ‘I’ ‘labour geography’ argues that labour markets in particular places are socially regulated with reference to power, rather than the classical market conception of demand and supply (Peck 1996). Work is socially constructed in place specific ways, which influences both employers and employees in place. Further social reproduction, that is, those processes outside the workplace that allow workers to continue to reproduce their labour power so as to return to work, is highlighted as a fundamental part of understanding work in particular places.
Having explained these two theoretical ‘strands’ of labour geography, I now describe the concept of the ‘spatial fix’\(^1\) (Harvey 1982) to demonstrate how work in particular places is arranged in relation to geography. The spatial fix is defined as

\[
\text{T}hose\ places\ where\ capital\ embeds\ ('fixes')\ in\ particular\ ways\ at\ particular\ times\ to\ establish\ or\ maintain\ capital\ accumulation\ (Ellem\ &\ McGrath-Champ\ 2012,\ p. 356)
\]

Herod, McGrath-Champ and Rainnie (2010) expand on this by describing how capital organises places to facilitate this accumulation

Capitalists [ensure] - either individually or collectively - that they have workers on hand who can access a particular workplace, that raw materials can reach factories, that finished commodities can reach consumers and that information and capital can flow to where they are needed (p. 7)

Capital ‘fixes’ geography by arranging space in a way that facilitates accumulation. This ‘fixing’ includes the placement of infrastructure, securing a reliable supply of workers with requisite skills and particular financing arrangements to generate the most favourable conditions possible for making profit (Harvey 2000).

The geography of capitalism always has a tendency to change, as spatial fixes are inherently unstable. This instability occurs because the spatial fix simultaneously reflects past economic development and is a barrier retarding future accumulation (Harvey 2001, p. 247). In every spatial fix capital faces a tension between the need to seek the most profitable place for production and the need to be fixed in place to accumulate (Herod, McGrath-Champ & Rainnie 2010, p. 7). This tension is inherently geographical, as accumulation is based upon claiming, producing and reproducing economic space (Harvey 2001 citing Lefebvre 1976). Capital’s response to this problem is to repeatedly undo and remake spatial fixes in a way which is most conducive to accumulation in that particular place and time (Herod, McGrath-Champ & Rainnie 2010 citing Harvey 1978 p 124). In remaking spatial fixes capital has two choices. The first is to relocate by “[exiting] regions inculcated with socialized labour processes deemed inappropriate for accumulation” (Peck 1996, p. 133). Many reforms associated with neoliberalism, such as restructuring, outsourcing, offshoring and reshaping, reflect this first choice (Cumbers, Nativel & Routledge 2008, p. 372). The second is to reconfigure the local labour market \textit{in situ} (Scott 2013; Jonas 1996, p. 335) by changing the characteristics of work, employment relations and, perhaps less recognised, place.

Spatial fixes create a mutual if unequal dependence between workers and capital. Workers rely on capital for a wage and capitalists rely on workers as both a factor of production and as consumers (Lier 2007; Jordhus-Lier 2009, p. 815). This mutual dependence means that the characteristics of spatial fixes are not solely determined

\(^1\) The use of the concept of spatial fix in this thesis is one of many ways in which Harvey’s concept has been adopted.
by capital. In particular circumstances spatial fixes can be contested by workers (Lier 2007, p. 815). Workers, unlike other factors of production are sentient beings capable of agency who only partly rely on capital for their reproduction (Bezuidenhout & Webster 2010). Workers also play a wider role in society as organised labour in industrial politics, as consumers and as social actors in the relations of social reproduction (Lier 2007, p. 821). Capital, at least while fixed in place, relies on workers as inputs in a production process, as without consent from workers production cannot occur. Workers, their families and communities are thus able to act in their own interests rather than merely submit to capital’s vision of particular spatial fixes (Lier 2007, p. 815; Ellem & Shields 1999).

Workers are able to pursue these spatial visions through the exercise of agency (Castree 2010, p. 460; Harvey 2001; Lefebvre 1976). Agency is expressed through engagement with other actors, including segments of capital, other workers, civil society and governments to shape the geographies of capitalism (Ellem & McGrath-Champ 2012; Castree 2010, p. 459). Workers have the capacity to exploit vulnerabilities of capital across economic space or within place, and thus shape spatial fixes (Herod 2001).

Agency is what allows workers to challenge the spatial dominance of capital and shape or use economic space to their advantage (Herod 2001, p. 36). This is because

[W]orkers have the capacity – often stymied in practice to be sure – to realize their own geographical visions at home and abroad. When actualized, this capacity can have important consequences not only for workers themselves, but for other actors also, such as firms, states, families and communities (Castree 2007, p. 855)

Workers are able to express this agency individually or collectively through the aggregation of individual actions, normally coordinated by trade unions (Coe 2013, p. 272; Lier 2007; Peck 2016; Martin et al. 1994b pp.457-8 cited in Ellem 2010, p. 350). Ellem (2010) considers collective agency as being expressed in three ways: workers’ physical location and relocation, that is where they are acting; demonstration effects, that is where workers across economic space can learn from the effectiveness (or otherwise) of action elsewhere; and inter-place solidarity where workers are able to ‘scale up’ actions by forming alliances between places. Thus expressions of agency can occur within places, but be linked (either through design or otherwise) with agency across space (Nowak 2016).

Labour can also seek to exploit power within place, exploiting the vulnerabilities of capital that is (at least temporarily) fixed in place

[B]ecause capital’s mobility is a source of power, immobility is often seen as a weakness for labour. However, the ‘rootedness’ of labour can, under some circumstances, become a source of power, when working people and their families create distinctive local communities, cultures and organisations... particular examples as part of this process (Ellem 2010, p. 352)
When particular workers create favourable geographies, either by allying with or opposing capital, they are able to create ‘Labour’s Spatial Fixes’ (Castree 2007).

‘Labour’s Spatial Fixes’, where workers are able to shape space or place to their advantage, are established through continuous social struggle and negotiation with and against sections of capital, other workers and other social actors (Lier 2007, p. 815; Nelson 2010). These contests occur at and outside of work, where workers use or shape economic and geographic circumstance to pursue favourable terms and conditions of employment. These actions in pursuit of their preferred vision for place intersects with much non-geographic employment relations scholarship (Ellem 2003, p. 70).

‘Labour’s Spatial Fix’ is often sectional, creating a favourable geography for certain workers or a certain segment of a labour force (Hastings 2016). This can lead to cooperative, contradictory and competitive relationships between workers and on the basis of place, race, gender and skill (Lier 2007, p. 816; Harvey 2001). Thus segments of labour have a hand in producing and reinforcing the uneven development created, supported and exploited by capital (Ellem & Shields 1999). Harvey (2001), using the term militant particularism, expands on this by examining how spatial strategies are often set up for the benefit of workers in a particular place and at a particular time, running contrary to sympathetic organised politics, other social movements, workers in other places and future workers, and various combinations of these.

The location and characteristics of particular spatial fixes are expressions of the power of actors across space and within place. A major source of this power is the relative mobility of capital and labour (Ellem 2010, p. 351). Mobility offers actors the opportunity to choose between places and utilise economic space to seek out or fashion favourable circumstances. Relative immobility leads to vulnerability as actors become locked into a particular place, and become disempowered relative to others who can move.

Under neoliberal economic development capital retains a relative spatial advantage over other actors due to the high levels of mobility of trans-national capital (Coe, Dicken & Hess 2008, pp. 280-281). Subject to certain industry specific constraints, for example the immobility of resources in the extractive industries, Multi-national firms can choose where they accumulate. This enables them to select between and influence a variety of locations as workers and various levels of the state compete with other places for investment (Nelson 2010, p. 133). States use compliant or cheap labour forces as a means of attracting investment (Padmanabhan 2012, p. 979). This mobility contrasts with states’ and workers’ circumstances. States are by definition territorially bound, while labour is relatively immobile as workers are often restricted in their ability to relocate shackled by their ‘local bonds’ to place, which include kinship ties, sunk costs (such as home ownership), regulations limiting mobility and their particular skills (Harvey 2001; Herod 2010a; Herod 2011).
Capital is not always more mobile than workers as the relative mobility of segments of capital and labour are variable depending on the place and industry (Fitzgerald & Stirling 2010, p. 312; Beynon & Hudson 1993, p. 182). Certain segments of capital are relatively immobile due to, for example, significant sunk costs in a place, particular regulatory requirements, limited access to particular inputs and the need for credit (Scott 2013). In these circumstances this relatively disempowers capital and leaves it vulnerable to the demands of states and actions of workers (Herod, McGrath-Champ & Rainnie 2010, p. 5; Berndt 2010). It needs to be acknowledged that workers are also able to become mobile through migration, something I return to later in this section.

Therefore any particular spatial fix is the product of the mobility of the particular segment of capital and the particular workers in that place. As such, the 'Labour Geographies' approach shows us that workers are positioned within, and can shape, economic space. This positionality reflects workers’ geographical power, which through agency they can shape or exploit spatial circumstances, thus influencing the terms and conditions of work. This condition only holds for a limited period of time, as the economic space, and actors’ position within it, always has a tendency to change.

The second tradition, ‘labour geographies’, seeks to understand what happens within these particular places by focusing attention on local labour markets where workers and community live, and do paid and unpaid work. ‘Labour Geographies’ and ‘labour geographies’ while distinct, are not mutually exclusive categories but retain different foci to answer similar questions. There is a porosity between the two categories, as they are mutually informative and remain mutually sympathetic (Peck 2016).

‘labour geographers’ argue that work is socially regulated, refuting the ‘powerful fiction’ that labour is a commodity governed the abstract notions of demand and supply (Peck 1996). Their frame of analysis is the ‘local labour market’, defined as

Institutional sites at which place and space intersect: they are social arenas in which the domain of capital comes into conflict with that of labour (Peck 1996, p. 16)

The nature of these intersections determine how and on what terms work is done who workers are responsible to and for and what institutions regulate their lives (Ward 2007, p. 269).

Work is a social process as well as an economic process and as such social conventions and norms influence the terms and conditions of work from place to place. This has real consequences in workplaces as in order for production to occur workers must cooperate with management, resulting in the constant need on the part of employers to balance worker consent and control (Peck 1996). The successful allocation of workers to jobs requires more than technical skills, but also social skills and networks within communities.

A major factor that determines how work is socially regulated is social reproduction. Social reproduction is defined as
Those social relations and processes whereby labour power is physically and culturally reproduced over time, including demography, family formation and structure, education, biological reproduction, health and welfare, education and training and labour migration (Ellem & Shields 1999, p. 546).

The relationship between production and reproduction is mutually dependent as social reproduction is reliant on workers earning wages (Lier 2007, p. 818), meaning workers' choices in regard to paid work are shaped within other structuring factors in their lives (Dutta 2016, p. 2).

This relationship between production and reproduction is not static (Dutta 2016, p. 3), both within local labour markets and across space. Peck (1996, p. 233) argues that shifts to neoliberalism erodes the importance of social regulation, by shifting the emphasis of society away from social regulation and towards market regulation of work and of social reproduction. One of the key features of this neoliberalism is that it has the capacity to normalise and legitimise the negative effects of this shift (Padmanabhan 2012, p. 972).

Social reproduction occurs within spaces of reproduction, which are the domains in which labour power is physically and culturally reproduced. Spaces of reproduction are found at a number of different scales, but are most influential within the household. Households fundamentally shape workers' decisions to enter, and experiences of, labour markets (Dutta 2016, p. 2). This is because decisions such as whether to participate in the waged workforce, whether to apply for a new job or promotion, whether to take on an extra job or sideline activity and whether to seek additional training are not generally made by individuals in isolation but in the context of household responsibilities and relationships (Kelly 2009, p. 167).

Households are thus central to the social regulation of work, as they influence whether and on what terms workers enter the waged workforce and who (and people of which gender) engages in unpaid work (Peck & Theodore 2010, p. 89; Mohammad 2010).

Beyond the scale of the household, the community is also a site of social reproduction as workers maintain family, community, locality and class based relationships (Stenning 2010, p. 197). These social relations occur in community where customs, laws and regulations influence the behaviour of both capital and workers (Rainnie, McGrath-Champ & Herod 2010, p. 72; Eklund 2012). Migration also influences this social regulation in communities, as migrants bring part of their ‘home’ attitudes to work to the ‘new’ local labour market, but the local labour market also influences how they adapt to their new place of work (Lier 2007, p. 829).

Having considered the central ideas of ‘Labour Geography’ and ‘labour geography’ discretely, I now consider the relationship between the two sub-disciplines. As discussed earlier in order to accumulate capital needs to fix itself in a particular place. Different segments of capital can be more or less attached to places (Peck & Theodore 2007), but even highly mobile capital such as finance capital chooses to at least
temporarily base itself in particular places to seek favourable taxation or regulatory arrangements (Christophers 2013, p. 218; Dixon 2011).

Thus place has different significance for capital and workers.

Locations that, for capital, are a (temporary) space for profitable production, are for workers, their family and friends places in which to live places in which they have considerable individual and cultural investment; places to which they are often deeply attached (Beynon & Hudson 1993, p. 182).

The location of production thus simultaneously represents a spatial fix and a local labour market.

Where capital is fixed in place workers and civil society groups may be able influence local labour markets to their advantage, effectively using the social regulation of work to create ‘labour’s spatial fix’. This can lead to the development of ‘union places’, a specific type of labour’s spatial fix, where trade unions exercise large economic, industrial and social influence over production and reproduction (Ellem & Shields 2000; Ellem 2004). The social regulation of work plays a central role in the development of union places, as class-consciousness and activism can become normalised as a part of that place (Rainnie, Herod & McGrath-Champ 2010; Stenning 2010, p. 198). This can also lead to workers developing a loyalty to place through building connections to other workers who share a vision of community and solidarity (Herod, McGrath-Champ & Rainnie 2010).

Activism and agency in particular local labour markets is one factor considered by capital when making investment (and disinvestment) decisions (Stenning 2010, p. 198). Workers’ place-based activism and agency thus shapes the development of economic space. This place-based agency can exploit capital’s relative immobility, resulting in either relocation or re-composition of the fix in situ (Scott 2013). While the geographic mobility of capital has been studied extensively by labour geographers over the past few decades (for a summary see Peck 2016) this thesis considers how work and place together are remade in order to recompose a spatial fix in situ.

Capital’s capacity to shape a local labour market occurs primarily through the provision of employment and wages but this can also extend to capital’s relationship with community (Stenning 2010, pp. 197-8). Capital may become directly involved in the sphere of reproduction as well as production, as is the case in company towns (Ellem 2003, p. 70; Lier 2007, p. 819). This involvement can include local recruitment and training programs, local commodity supplies, local charity, civic, cultural and welfare programs and creating a company identity around a place (Ellem & Shields 1999, pp. 550-1). Capital even has the capacity to draw boundaries around these ‘local’ workers, including some actors and excluding others (Bezuidenhout & Webster 2010, p. 368). Therefore capital, in addition to choosing where to produce, can also shape the social regulation of a place to its own advantage, a process known as ‘firming places’ (Coe, Dicken & Hess 2008, p. 279).
Capital also has an interest in replacing the social regulation of local labour markets with market regulation. Re-arranging places based on market relations can include applying market forces to areas such as housing, education, essential services including health care, all of which form part of the broader neoliberal project (Harvey 2005). Peck (1996) argues that separating workers from their social context results in ‘marketised’ labour markets, where workers become commodified. This relationship is more complex than merely capital determining the arrangement of space, as it requires control over or consent from (or usually a combination of the two) states, communities and workers.

Labour is also not always ‘place bound’ as workers can also become ‘uprooted’ through intra-national labour mobility and international labour migration. These are separate categories of migration but have a fluid and linked relationship (Skeldon 2006, p. 17; Dufty-Jones 2014; Ellis 2012; Baas 2016). In this thesis I use the terms ‘labour migration’ and ‘labour migrants’ to describe both types of movement, as both encompass workers choosing to relocate to access particular places of production. This mobility is a response to, and is reflective of, broader capitalist space (Scott 2013) and is both caused by and contributes to globalisation (Dufty-Jones 2014).

Migration, and the study of migration for work, draws from a number of perspectives and considers a variety of issues (Portes 1997) due the heterogeneity of migrant motivations, circumstances and experiences (Hopkins, Dawson & Veliziotis 2016; Baas 2016). Migration can be an individual or collective decision which is taken on the basis of time and place (Kelly 2009). There remains no single theory of migration, as there are a number of different disciplinary approaches to questions around migration (Massey et al. 1993).

Migration has measurable effects.

[International migration causes] the spatial separation of the site of the purchase and expenditure of labor from the sites of its reproduction, such that the local of production and reproduction lie in two different national spaces (Kearney 1991, p. 59)

The ‘push’ and ‘pull’ model of migration, where people are ‘pushed’ from a place or ‘pulled’ to a place is based around neoliberal understandings of what makes particular places and local labour markets desirable for workers relative to other places (Baas 2016; Eriksson, Henning & Otto 2016).

The position of labour migrants within labour markets is influenced by their mobility, governance and agency (Reid-Musson 2014, p. 162). This allows for understanding of labour migration as a spatial strategy where workers may benefit from the unevenness of different local labour markets (Lier 2007, p. 829) and act in defiance of hegemonic practices at ‘home’ (Reid-Musson 2014, p. 164). However, this agency can be used or constrained by state strategy and capital, and results in reinforcing or challenging fixes (Kearney 1991; Scott 2013; Preibisch 2010).
Capital can change the characteristics of local labour markets by using labour migration (Scott 2013; Peck 1996). Recruiting labour migrants expands the potential supply of labour and enables capital to choose workers who have more desirable characteristics, both in terms of skill and attitude, making workplace control more effective (Scott 2013). This importation of more ‘desirable’ labour migrants can fragment the working class, both in place and across space, reducing the capacity of workers to engage in resistance (Scott 2013). Mobile workers also shape and influence the characteristics and social norms of the place they arrive. They do this as they become socialised into new places, but are also able to reflect some of themselves into the new society (Kancs 2011). Migrants effect work performance due to having different skills and experience, different attitudes to work and different expectations around wages (Yaduma et al. 2015). The value of worker movement to employers of ‘new migrants’ may be the ability to disrupt an in situ spatial fix based around the social regulation of labour. This disruption is always temporary, as workers can become ‘normalised’ into the social regulation of the local labour market (Scott 2013).

This movement of workers therefore affects the formal and informal regulation of work in the ‘home’ community, the ‘host’ community and economic space (Rainnie, McGrath-Champ & Herod 2010, p. 63; Kelly 2010; Berndt 2010, p. 299).

‘labour geographies’ considers local labour markets with reference to the relationships between workers and managers, production and reproduction, workers and their families, and communities and capital. It considers how work is socially regulated in place, and, significantly for this study, how this social regulation might change when workers choose to let markets socially regulate work.

Despite the insights provided by labour geographies, there remain some disciplinary shortcomings (Castree 2007; Lier 2007). The major shortcomings, in part, addressed by the conceptual and empirical approach developed in this thesis include a lack of focus on place, particularly in a time sensitive manner, an imprecise application of the concepts of agency, an over representation of successful worker action in the literature and a productionist focus which fails to consider the importance of social reproduction for work. As outlined in Chapter One, this thesis begins to address these issues by considering place in a specific, rich and time-sensitive manner via my choice of Newman as a case study.

Labour geography, particularly ‘Labour Geography’, has retained a focus on successful spatial actions by workers who have shaped economic space to achieve short to medium term gains. This has been rightfully criticised as the study of isolated success stories, as it overwhelmingly looks at workers who operate in privileged positions in economic space who have been able to successfully engage spatial strategies. Coe summarises this in his statement

It remains something of a paradox that labour geographies has blossomed as a field of academic endeavour over a time frame that has seen the continued ascent of Neoliberal
Globalisation and worsening conditions and relative rewards for workers worldwide (Coe 2013, p. 279)

This focus on ‘isolated success stories’ leads researchers to overstate the capacity of workers to express agency.

Despite its utility, agency remains a problematic concept. Its use is often cumbersome, and fails to engage the complexity and contradictions associated with the concept. Agency, while often invoked, is imprecisely used in the labour geography literature to describe any worker attempts to use or shape space, no matter the circumstances, motivation or intended outcome (Castree 2007, p. 858). Different actors’ expressions of agency will carry different weights depending on who those actors are, how socially connected they are and how much influence they carry (Coe & Jordhus-Lier 2011). An understanding of these expressions of agency requires sensitivity to the different forms of agency expressed, the social structures in which it is exercised, existing power dynamics and whether it is exercised at work or outside of work (Coe 2013; Cumbers, Nativel & Routledge 2008; Bezuidenhout & Webster 2010, p. 370).

Coe and Jordhus-Lier (2011) further argue that understandings of agency have been based on generalisations focused on trade unionism, rather than looking at how workers’ lived experience is analysed and how agency actually manifests itself through workers’ work and non-work lives. Coe and Jordhus-Lier (2011) rely on Kats’ framework to define agency, which categorises agency as resistance, reworking or resilience.

Resistence: Where workers actively try to change the current, capitalist social relations.
Reworking: Trying to materially improve conditions without changing social relations.
Resilience: Small acts of getting by to cope with current social relations.

This view of agency is more nuanced than traditional understandings of agency within labour geography.

Agency, as conceptualised by Kats, can be exercised either by trade unions, as aggregations of individual acts, or by groups of workers independently from trade unions, or by individuals (Castree 2007). With the global decline in union density, the traditional conflation of agency and unions cannot be sustained (Herod 2001, p. 47). Agency, when used as a ‘catch all’ fails to consider that different sections of the labour force, or even different workers, can exercise agency differently to achieve different, sometimes incompatible goals (Coe 2013). It also considers the limited, individualised agency that workers express in Newman, which is considered within a market paradigm with workers seeking an individual, temporary spatial advantage by working in Newman in a period where they could earn high wages. I consider how the remaking of work and place in a neoliberal way has led to the erosion of collective agency, showing how workers no longer socially regulate work and place but have become participants in a market whose conditions are beyond their control.
This thesis examines the geographical reasons for, and consequences of, ‘unsuccessful’ action, as it tracks the unmaking of a ‘union place’. Unions were once significant spatial actors in the local labour market, but this has been remade with individualised employment relations and market relations dominating place. I address this issue with a level of complexity not always apparent within labour geography, where individualisation and the remaking of spatial fix are considered a part of capital’s spatial strategy. By showing how workers and residents have contributed to the remaking of place by accepting, or submitting to, marketization of the local labour market I show that workers’ actions and choices make the geography of work, even if these workers can be seen as undermining broader collective or class interests.

I argue that this thesis’ close focus on place, considered in a space-sensitive manner, represents a significant theoretical contribution. The thesis highlights how work, and worker attitudes to both their work and non-work lives, are influenced by place and how this in turn shapes employment relations (Coe & Jordhus-Lier 2011).

The state is also relatively under-theorised within labour geographies (Castree 2007), and this thesis considers the role of the state as a shaper of economic space and of the formal regulation of work, demonstrating that economic space is shaped by the compromise and contestation of workers, capital and the state, and various combinations of these. Another minor contribution is, through my investigation in Section 2.2 below, an attempt to reduce the disciplinary imprecision with which geographical terms are applied within labour geographies (Castree 2007).

Finally, the overt focus on production within labour geographies underplays the significance of consumption and reproduction when understanding work. This articulation between social reproduction and production remains under theorised within labour geography which I address through the thesis, particularly in Chapter Six (Coe & Jordhus-Lier 2011, p. 213).

2.2 Geographical Concepts

As outlined in Chapter One, geographic concepts can be used to better understand employment relations. In order to do this it is first necessary to outline the specific geographic concepts - place, space, spatial praxis, scale and time - I will use in analysing and explaining the co-development of work and place in Newman. This will help to overcome the disciplinary imprecision when using geographical terminology (Castree 2007).

Place has both objective and subjective components as it is simultaneously the location of objects and the subjective context of people’s actions (Kuhlenbeck 2010, p. 23). Individuals subjectively relate to places by developing a sense of place; defined as “[t]he actual experience of place in all its dimensions: physical, social, psychological, intellectual, and emotional” (De Wit 1997 cited in Post 2011, p. 113). This sense of
place influences how people behave within these places (Sack 1997 cited by Post 2011, p. 113).

An individual’s sense of place is understood simultaneously in two ways: as ‘experiential place’ and ‘conceptual place’. Experiential place develops over time spent in place as people develop intimacy, meaning, and familiarity. Conceptual place is understood through collective understandings of place and its purpose. Sense of place is not static, and is influenced by endogenous factors, exogenous factors and time (Tuan 1979, p. 136; Kuhlenbeck 2010; Ellem & McGrath-Champ 2012). Work contributes to the development of sense of place, as workers share experiences and understandings of place which influence both experiential and conceptual place (Lier 2007; Cross 2001).

The characteristics of places as they relate to work can be considered in two ways, that sites of production, workplaces, are places where workers spend much time and develop deep connection, and also that work exists within particular locales, which again are richly and deeply understood (Tuan 1979). The characteristics of work in place (in both senses) are determined by competition and cooperation between residents, workers, firms, the state and institutions, which, in turn, continuously remake place over time (Castree 2010, p. 464; Harvey 2001; Ward 2007). These dynamic understandings and experiences of place means that at a particular time, particular places are

[V]itally filled with politics and ideology, with the real and imagined, intertwined with capitalism, racism, patriarchy, and other material spatial practices which concretize the social relations of production, reproduction, exploitation, domination and subjection (Soja 1996, p. 68)

Each local place therefore represents the result of conflict, power, prior and contemporary regimes of regulation, institutions and uneven development within space (Peck & Theodore 2010, p. 87).

The type of work and the terms on which work is performed is a fundamental part of place; as place, particularly in reference to space, is the location of work (Lier 2007, p. 816). Place is therefore another way of considering local labour markets, as it is where production and reproduction intersect (Rainnie, Herod & McGrath-Champ 2010, p. 254).

Space, a corollary of place (Tuan 1979, p. 3), represents areas which are distant from individuals, either physically or emotionally, and is a manifestation of social, economic and political forces (Post 2011). Space, like place, is produced by social, economic and political forces (Castree 2010, p. 463) but is more abstract than place as it is characterised by the absence of relations and experiences (Tuan 1979, p. 119). Castree defines space as
Further, space also represents the relationships, distances and connections between places across economic space (Ellem & McGrath-Champ 2012, p. 356). Space and place consistently shape and are shaped by each other. Inter-place differences are both the product and cause of uneven development, as they influence where production and development occur. Space thus denotes these relationships, distances and connections that always but variably, act upon places. In Newman, space takes on multiple roles, including as a source of FIFO workers, as the creator of regulations and of market conditions and of the geographically spread but integrated processes and transactions which create the demand for iron ore.

Capital, in order to ‘marketise’ social reproduction, seeks to reduce place, with all its richness and experiential meaning into space devoid of any relationships other than market relationships. It is this transition, and the implications of the reduction of place to space for work, which I examine in detail in Newman. I show how Newman is an example of where “[p]laces to live seem increasingly to be reduced to spaces in which to earn, or strive to earn, a wage” (Peck 1996, p. 233).

Spatial praxis, the accepted practice and customs of particular spatial relations, both reflects the pre-conditions of a particular spatial form and shapes subsequent social and economic relations (Herod 2011, p. 22). This term captures how geography is actively made, which in turn determines how the built and social environments are constructed and how production and reproduction are delineated within a place. The active making of places reflect not just economic but also social and moral concerns (Hastings 2016, p. 311). This is fundamental to the remaking of work and place in Newman, as I argue that this has occurred though the remaking of praxis in place, thereby changing industrial relations, remaking social understanding of the town and the way geography is ‘done’.

Lefebvre developed a ‘triadic way’ of understanding spatial praxis, incorporating spatial practice, representations of space and spaces of representation (Lefebvre 1976). Spatial practice considers where and how production and reproduction occurs in particular places, as the conditions of production and reproduction give a place peculiarity and shapes how these behaviours and attitudes are materially produced (Herod 2011, p. 25; Lambert & Gillan 2010, p. 399). Representations of space describe how space is presented as an image and the outcomes of it being presented in a particular way (Lambert & Gillan 2010, p. 400). Examples of this include maps, publications, paintings and plans. These representations are dynamic, and their changes over time reflect changes in perceptions of space (Herod 2011, p. 26). Spaces of representation are the way that people live and understand the spaces in which they live, as this is shaped by images and symbols which denote these spaces (Lambert & Gillan 2010, p. 400). Spatial praxis in Newman has varied over time, and
understanding this is necessary for capturing the particularities of the co-development of work and place in the town.

Scale is fundamentally about size, which is deployed either relatively or absolutely to understand geographical phenomena (Montello 2001). Scale needs to be considered topographically, as geographical areas denoted by lines on a map, but also topologically as a network of nodes and connections (Herod 2010b, p. 24). The development and use of scale by geographers has generally divided into two camps, materialists who see scale as a real phenomenon, and idealists, who see scale as being subjective, with meaning ascribed by people (Herod 2010b, p. 13). Scale determines how space is both ordered and contested, and therefore is useful for explaining how places and social practices within those places relate to each other (Lier 2007).

Scale is both a spatial and a social process, Martson and Smith (2001, p. 615-616, cited in Herod 2010b, p. 29) argue

Scale is a produced societal metric that differentiates space; it is not space per se... [These ideas are related though, as the] production of scale is integral to the production of space

How scale is represented and understood is the result of contestation and power, and its representation impacts actors and their actions (Herod, McGrath-Champ & Rainnie 2010). It is problematic to privilege any particular scale as all scales are interdependent (Jessop et. al. 2008 p.389 cited in Herod, McGrath-Champ & Rainnie 2010, p. 13). As such, Castree explains this multi-scalarity as

[t]he global is in the local - so ‘place’ residents have only partial control of their locality, though they are obliged to feel the full benefits or costs of changes not entirely of their making (Castree 2010, p. 464)

Lier (2007, p. 824) argues that scale is of particular significance for labour geography for three reasons; that the construction of scale is contested, regulated and dynamic; that worker agency can encourage or resist scales being reconfigured; and that social actors can choose to (or not to) engage in particular scalar activities. Workers thus have the capacity to use scale as well as space to their own (unified or sectional) advantage (Herod 2001).

Understanding time is necessary for understanding the remaking of work and place. The relationship of place and time is understood in three ways: first with place as a moment in time, second that time allows individuals to develop a sense of place and third that place is “time made visible” (Tuan 1979, p. 179). This is because place and space develop relative to each other over time. Further, time and space are experienced simultaneously, even if this experience is often subconscious (Tuan 1979, p. 118).

Places are shaped over time through both economic and social relations. Harvey (2001, p. 169) states that places are received, made and remade, and this process is continual, pervasive and temporal. This is because
Neither nation states nor towns pre-exist the social practices which have brought them into being, and how they are brought into being can have dramatic effects upon how they subsequently shape the social relations that operate in them (Ellem & McGrath-Champ 2012, p. 359).

Time’s utility to geography is emphasised by historical analysis of place and of work, to which I refer explicitly in Chapter Three in my exploration of company towns and Chapter Four in Newman. History is fundamentally concerned with change over time, and labour history in particular has always contained an implicit and inherent spatiality as its examination of employment relations has always considered spatial actions (Ellem & McGrath-Champ 2012; Ellem & Shields 1999). This is because even though local labour based action has often been the focus of study, historical agency rather than geography has been used as the lens of analysis. Time has been privileged over space, even though to the geographer they are inseparable.

Time is also central to agency (Coe 2013). Agency, when expressed by workers in place, can be based on the development of worker attachment and loyalties to particular places where they and their families live (Ellem 2003, p. 282). Agency relates to time prospectively and retrospectively; because looking at the preconditions of any action can explain the reasoning behind it and looking forwards in time can explain the priorities and goals of the action (Coe 2013). In Chapter Four I explore the question of labour agency, especially collective agency, with reference to time, thereby both contextualising and explaining the co-development of work and place in Newman.

2.3 Conclusion

This chapter has provided the theoretical grounding to underpin subsequent analysis of the co-development of work and place in Newman. Various spatial fixes, which I describe in greater detail in Chapter Four, reflect the relative power of capital and workers over time. Throughout the thesis I invoke simultaneously the concepts of the spatial fix and the local labour market. The concepts are fundamentally interlinked, as the particular way local labour markets socially regulate work forms a part of the arrangement of space within the spatial fix. Examination of these concepts in relation to Newman is useful, as the combination of these ideas remains theoretically underdeveloped. In particular, I argue that the original ‘company town’ spatial fix in Newman led to strong social regulation of both production and reproduction by workers through militant trade unionism. However faced with this undesirable fix and unable to exercise mobility, capital, in collaboration with the state, refashioned the local labour market, and worker attitudes to place by redefining the terms of reproduction; aggressive de-unionisation; remade terms of work; changes to contracts and industrial instruments; and implementing FIFO work. These changes had the effect of remaking both the local labour market and the nature of the spatial fix in Newman. Explaining how these changes were achieved and are now understood demonstrates how work and place have co-developed within Newman’s particular circumstances.
By applying the geographical concepts of place, space, spatial praxis, scale and time to the case of Newman, I am able to explain how the local labour market, and the spatial fix, developed over time. The town is located within a number of spatial relationships, including BHPB’s global corporate activities, the global iron ore market, including those who purchase the ore and BHPB’s competitors, and the different places from which workers in Newman arrive from or commute between. As I explain in Chapter Three, spatial praxis, and particularly spatial practice, is significant within company towns as these places are characterised by a dominant economic activity and employer and so civic life in the town also occurs with close reference to that activity and company, in Newman’s case BHPB iron ore mining. Scale is pertinent to Newman as it is shaped by activity within a satellite mining site hinterland, a region (the Pilbara), and by its relations with state, national, regional and global scales. As already noted, time is also central to the thesis because in my exploration of Newman’s development in Chapter Four I track the temporal development of the town, and how work and place have co-developed over time.
Chapter Three: The Creation and Contestation of Place in Company and Mining Towns

This chapter describes company towns, a spatial arrangement where an employer houses, governs and employs its workforce. The company town represents a particular spatial fix and local labour market that was often adopted for resource extraction as it allowed capital to establish and retain a labour force in isolated places. Company towns were designed to allow capital to control both work and non-work life, compressing production and reproduction in these isolated, mono-economic and self-contained places (Borges & Torres 2012a). This spatial arrangement was critical to the expansion of capitalist economic development from the eighteenth to mid-twentieth centuries and allowed production to occur in new places and more intensively than previously possible (Crawford 1995). To construct these towns companies sunk huge investment into particular places, limiting their mobility and creating an inherent spatial vulnerability. Employers tried to overcome this vulnerability by governing both production and reproduction. Mercier (2011) argues

Companies controlled the workplace through a combination of paternalism and intimidation, which often included spatially arranging worker housing near mines or the smelter, maintaining political power, creating corporate welfare programs, sustaining local institutions and busting unions as well as controlling jobs (p. 158)

This control was always contingent, dependent on worker and community consent or contestation within the place. Over time in many company towns workers and communities (and combinations of the two) challenged the dominance of capital.

Company towns in practice did not provide employers with their desired control over production and reproduction, leading to their withdrawal in this particular form in the twentieth century in developed economies and settler societies (Crawford 1995). Despite the failure of the company town to meet this goal, the desire to control both production and reproduction remain. As such, capital has sought new spatial arrangements to meet this goal. The first part of this chapter considers traditional company towns, particularly through the late 19th and early 20th centuries in North America, and for a while longer in settler societies including in Western Australia. I then consider the shift in governance of isolated sites of extraction, which has moved from one of company administration of both work and place to one of neoliberal regulation of local labour markets, where companies are still located in place but have a much more diffuse and flexible way of controlling production and reproduction.

This discussion of the use and then disuse of company towns reflects the development of work and place of Newman. Newman was constructed as a closed company town, with direct and legally enshrined company control over entry and exit, housing, social
reproduction and work (McIlwraith 1988) meaning it shared many spatial similarities with the other company towns I describe here. Strong unions who derived their power from shared experiences and visions of place challenged BHPB’s control over work and place. This led BHPB to abandon the company town spatial fix in Newman to one where markets, rather than company paternalism, regulate the local labour market.

This chapter describes the co-development of work and place making in the company town with reference to relevant literature and studies of the topic, drawing attention where appropriate to the relevance of the concept and associated practices for understanding Newman as a company town. It does so first by defining company towns and describing how they have been described and conceptualised within existing scholarship. I then describe the role of company towns in the expansion and intensification of production across capitalist space. Second, I consider how the location, construction and regulation of company towns are often influenced by state policy, goals and interventions. Third, I describe how capital sought to control production and reproduction within company towns through physical and social design. These efforts, however, were not sufficient to overcome the vulnerability of company towns as a spatial fix. Fourth, I describe how capital’s immobility left it vulnerable to contestation at work and in place to workers, and often unions, who were deeply rooted in place. Drawing on a shared experience of and vision for work and place, workers were able to effectively socially regulate these local labour markets. Fifth, I examine the role of both intra- and inter-national migration on company town local labour markets, before concluding the chapter by examining contemporary iterations and variations that retain elements of company towns but compose place in a different manner. This has seen companies separate production and reproduction by space and time, allowing for social reproduction of work to be undermined and replaced by a market logic that effectively grants capital greater control over employment relations.

3.1 Definition and Role

Defining company towns in precise and consistent terms remains problematic due to the variety of settlements that share some but not all characteristics of the archetypal company town. Settlements can be considered company towns if they exhibit two characteristics; a single dominant industry and extensive company control over daily life (Dinius & Vergara 2011b). However company towns also often shared characteristics of isolation, residential segregation, a dominant employer, industrial specialisation, a dominant landlord and company governance over urban services (Dinius & Vergara 2011b, p. 7). Borges and Torres (2012b, p. 2) provide a more expansive definition, stating that company towns are

[R]esidential and service centres built by companies near or adjacent to the places of extraction or production in which companies operated not only as employer but also as landlords, as de facto enforcers of security and social harmony, and often as providers of services and goods for workers’ consumption.
This spatial arrangement was often used in extractive industries, meaning that in resource peripheries, such as in South America and Australia; mining towns often were company towns\(^2\). As such, in this chapter I shall refer to company towns as denoting both mining and company towns unless it is otherwise necessary to distinguish between different forms of towns.

Company towns have been studied for over a century yet the field remains disparate, characterised by numerous case studies without a unified body of theory (Borges & Torres 2012a). This occurred due to differences between towns (Borges & Torres 2012b) and how they have been studied (Dinius & Vergara 2011a; Crawford 1995; Borges & Torres 2012a). I consider the company town literature from the perspective of employment relations and labour geography, especially focusing on what these studies reveal about the links between work and place. This relation is particularly significant in company towns due to the presence of the employer in all spheres of life.

Newman was constructed and run as a company town (McIlwraith 1988) through agreement between Mt Newman Mining Ltd and the Western Australian Government (Iron Ore (Mount Newman) Agreement Act 1964 (WA)). This reflects the particular spatial form of capitalist development in the Pilbara during the 1960s and 1970s, where mining companies, after negotiation with the Fordist-Keynesian state, built company towns to attract and retain workers to very remote locations to facilitate the mining of ore. Despite ‘normalisation’ in 1981, as described in Chapters One and Four, contemporary Newman still retains many characteristics of a company town. It is still very remote and isolated, BHPB are the dominant employer of workers and contractors, the company still control a large portion of the housing stock and ore mining remains the industrial specialisation. It is for these reasons that understanding the nature of the relationship between work and place in company towns is fundamental to understanding the spatio-temporal development of employment relations in Newman.

Company towns facilitated capitalist development in two main ways, by intensifying production and expanding the geographic reach of capitalism. Their role in intensifying production commenced in the late eighteenth century (Herod 2011, p. 21) by concentrating capital and workers in a place and allowing for intense production around an industrial specialisation (Davis 1930, p. 119; Dinius & Vergara 2011a). Company towns also geographically expanded industrial capitalism into new and undeveloped places by enabling permanent workforces to live and produce in isolated areas (Borges & Torres 2012b, p. 1; Crawford 1995, p. 13; Esch 2011; Ball 2012; Teh 2011). The construction of Newman brought industrialised capitalism and suburbia to the desert of the Pilbara. Newman, and Mt Whaleback, were able to simultaneously meet the company’s objectives of attracting a stable workforce to profitably extract

\(^2\) Although not all company towns were mining towns, Pullman being a famous example (Baxter 2012)
the iron ore, whilst also meeting the state’s desire for development of an underdeveloped region (Dufty 1984), as explained in greater depth in Chapter Four.

3.2 The Role of the State

The state influenced the design, location, construction and running of company towns. States encouraged the construction of company towns as they were considered a means to generate employment and economic development. States have always had a central role in guiding regional development.

Central governments have maintained a degree of control over economic development through their decisions about which scales of policy intervention to favour and which institutions and approaches to support (Beer et al. 2005, p. 50)

Company towns required that states, in one form or another; partially relinquish their sovereignty over these places to create these spatial fixes. By definition, employers became responsible for social reproduction in these towns, particularly housing, but also education, health care and other public amenities. In Western Australia this was arranged by the signing of agreement acts which contractually bound the state and the relevant company (Horsley 2013). Agreement acts are “a contract containing financial and non-financial concessions granted by the state in return for project obligations accepted by capital” (Horsley 2013, p. 284), thereby allowing the state to shape space by negotiating the terms on which production would occur.

States are able to regulate company towns by setting out, often through negotiation, conditions on their construction and operation. These conditions thus facilitated accumulation but also reflected the state’s objectives, which were dynamic over time (Gomez-Galvarriato 2011). The importance of company towns to states’ objectives is alluded to in the Portuguese colonial government’s characterisation of Angolan company towns as “central to the historical mission of the Portuguese people” (Ball 2012, pp. 94-5), while states can even become involved as employer in these company towns to shape economic development (Simonassi 2011; Post 2011).

States are capable of shaping economic space and uneven development by encouraging or discouraging certain forms of investment. As described in Chapter Two, differences in regulations between places can influence investment and disinvestment decisions across space. The idea also applies to company towns, for example the Phelps Dodge Copper Company chose to establish the company town Tyrone in New Mexico, as a response to the neighbouring Arizona state government passing relatively ‘pro-labour’ legislation (Crawford 1995, p. 136). In Chile in the 1950s, the government actively sought foreign investment to develop industry with preferential taxation schemes. This policy was praised by the chairman of the mining company Anaconda, who invested in the region, who stated

[T]he contribution of the Chilean Government is acknowledged [in attracting our investment] in establishing a sound, long range policy governing the development of natural resources, an
investment climate conducive to making large risk investment possible (cited in Garces Feliu & Vergara 2011, p. 186)

These examples show that the state is fundamental to determining whether, where and on what terms company towns are constructed, and how the arrangement of local labour markets and spatial fixes are dependent on cooperation and competition between a number of actors including capital, labour and the state.

However, through the twentieth century changes in the role of the state eventually led to the withdrawal of the company town spatial fix. During the heyday of the company town, in the late nineteenth and early twentieth century, company towns were underpinned by developmental state ideology. Particularly in the United States and Australia (Post 2011; Horsley 2013), the state saw the construction of company towns as a way of attracting investment, providing jobs and securing regional development. It was also a way to generate long term revenue by committing employers to place (Dufty 1984). I argue that the shift to neoliberalism saw the eventual withdrawal of the company town. With a shift to neoliberalism, states’ institutions, powers and functions are built around privatisation, the free movement of capital and freely functioning markets (Harvey 2005). Regional development under neoliberalism is characterised by the desire “to mobilise communities to develop export-oriented regional economies that would generate employment and incomes and contribute to national economic growth” (Beer et al. 2005, p. 52). Company towns underpinned by agreement acts are an interference on ‘freely’ functioning markets. As such changes in the nature of the state, in pursuit of exports and employment, have accelerated the withdrawal of the company town as preferred spatial fix, as I discuss in greater detail below.

### 3.3 Physical and Social Engineering

Employers constructed company town with the objective of controlling production and social reproduction within particular places (Herod 2011). This was done through engineering both the physical and social aspects of these towns. Capital attempted to design places with the objective of “transform[ing] working class culture and impos[ing] work habits that could increase labour productivity and diminish social conflict” (Dinius & Vergara 2011b, p. 1). This design incorporated work and non-work elements of workers’ lives as companies tried to create local labour markets with spatial praxes that favoured accumulation (Herod 2011; Dinius & Vergara 2011b; Williams 1981). This section will outline how and why capital attempted to physically and socially design these towns to control work and place.

The first means by which employers sought to control spatial praxis was through the physical design of the towns. Towns were specifically designed to encourage desirable behaviours, unifying worker and company identity (Borges & Torres 2012a) and to establish favourable spatial practices. As company towns were commissioned and designed by capital their physical layout reflected the “geographic, social, economic and political objectives of the firm” (Post 2011, p. 114). Raymond Olsen, the architect
designer of the company town of El Salvador in Chile describes these dual aims of profitability and social engineering through urban design. He argued

That a model, rational and professionally designed camp would reduce social tension between employer and workers, create a social bond between the company and the workforce and above all increase productivity (Garces Feliu & Vergara 2011, p. 187)

These encroachments into the civic sphere added to the influence of the company’s role and behaviour in the workplace.

Beyond physical design of towns, employers also sought to socially engineer company towns. This, reflecting my discussion in Chapter Two, was an attempt to influence the social regulation of work (Peck & Theodore 2010; Jonas 1996). Companies did this in three main ways; by controlling entry to and from the towns, by regulating the terms of housing and by trying to shape society. These attempts were designed to control social spaces and thus spatial practice in the local labour markets to generate power, control and profitability in production.

The first way companies socially engineered these towns was through controlling who was allowed to be in the place. Company recruitment policies coupled with ownership of the housing stock gave employers de facto control of who could and could not reside in the town. Populations of these towns were often determined by race, skill and nationality (for examples see Dinius & Vergara 2011b, p. 2; Garces Feliu & Vergara 2011; Crawford 1995). This provided employers the capacity to socially engineer these places by excluding those with undesirable characteristics, attitudes (particularly pro-union attitudes) or relationships (Eklund 2012, p. 27). This is significant as the inhabitants of a place establish spatial practice at work and through community, friendship and family connections (for examples see Crawford 1995, pp. 82, 85, 90, 127).

Employers’ capacity to exclude workers from employment and social spaces was also used as an industrial tool. Powell (2011) and Crawford (1995) explain that at the Borderland Coal Company in West Virginia in the early 1920s the company would evict residents, as well as use violence, in order to avoid unions becoming established in place. The strength of housing as an industrial town was particularly highlighted in the case of the state owned company town of Kilometer 3 in Patagonia, Argentina. In response to growing labour unrest, attributed to migrant workers, the state passed a law in 1910 allowing for deportation of migrant workers who were considered to be troublemakers. This meant workers might not only be excluded from the town, but from Argentina completely (Borges & Torres 2012c).

Even where workers weren’t physically excluded from place, they could be excluded from certain rights and entitlements in the place. In Tyrone, New Mexico, for example, a copper town in the early twentieth century, unskilled Mexican migrants were paid a ‘Mexican wage’ which was less than half the wage of equivalent American workers, half of which was paid as credit at the company store (Crawford 1995, p. 132). This
racial division also was reflected in Fushun, China, where Chinese workers were always subordinate to Japanese managers (Teh 2011). As such a number of place-dependent preconditions shape the experience of new migrants to mining towns as they adapt to, and also themselves reshape, spatial practice in these towns.

The second means by which employers sought to socially engineer company towns was by using housing to include, exclude and divide workers. As described in Chapter Two, housing is fundamental to social reproduction of labour power, and as such control of housing stock gave employers a level of power over social reproduction. Housing was often contentious in company towns due to the overlap of employer/employee and landlord/tenant relationships. The quality, quantity, access, cost and terms of housing influenced the nature of social, work and employment relations.

Company housing was tied to employment and as such losing one’s job could result in eviction (Eckhart 1996, p. 3). The company’s position as landlord played a regulating role “as access to housing was tied to work, workers’ status as denizens of these towns was contingent upon their condition as company employees” (Gomez-Galvarriato 2011, p. 54; Post 2011; Crawford 1995, p. 30; Fishback 1992).

Employers also enforced strict social regulation over housing to socially engineer these communities. In Appalachian company towns, for example, leases were very restrictive, including conditions preventing non-employees from living in or visiting company housing (Fishback 1992). This was intended to separate union agitators from workers. Housing was also used as a means of worker retention, with employers typically offering discounted rents in order to attract workers to these towns and provide a disincentive to leave (Crawford 1995, pp. 9-10). Companies sought to retain workers for an even longer period of time by offering houses for sale, often by way of a mortgage owed to the company (Crawford 1995; Simonassi 2011; Thompson 1981).

The third form of social engineering in company towns I describe are the attempts of companies to shape civic activities and worker (and denizen) attitudes in the place, that is, spatial practice. This reflects my discussion in Chapter Two where companies engage with community to influence the social regulation of work. Working and spatial arrangements followed the logic of production but were also influenced by factors such as power relations, socio-occupational hierarchies, and the ethnic, racial and gender composition of workers and managers (Borges & Torres 2012b, p. 2).

This involvement in the sphere of reproduction included the ‘welfare work’ movement, which came to dominate company town planning in the early twentieth century. Early social reformers saw company towns as a means to overcome the social ills of tenements and slums in urban areas, allowing workers to aspire to a morally superior suburban, middle class life (Crawford 1995; Esch 2011; Post 2011). Companies would employ welfare officers to directly influence social regulation of workers and demand certain moral, hygiene and social standards amongst the workers (Dinius & Vergara
Companies saw this welfare work’s benefit as being “to gain control over what [employers] viewed as the most difficult and unstable variable in rationalising the industrial process: the worker” (Crawford 1995, p. 54). This encroachment into spaces of reproduction was considered in relation to work, as, for example in Queenstown, Australia, welfarism had its origins “in the industrial battle between management and unions for the hearts and minds of workers” (Eklund 2012, p. 121).

This social reform also incorporated religion, which had an important role in influencing the social and moral norms within the towns (Post 2011; Dinius 2011). There were also less subtle means of interference in social spaces by companies, such as banning alcohol, ensuring that gardens were tidy and the banning of single male lodgers due to their perceived pernicious social effects (Crawford 1995).

In Newman, despite normalisation in 1981, BHP still retains control as owner (and landlord) over a significant portion of housing stock (FW2I19 2013). Workers in company supplied housing in Newman continue to receive discounted rents and there are residents living in Newman who purchased company housing through a Home Ownership Scheme, where the company sought to secure long term residents, and compliance with managerial prerogative in the town by offering mortgages (Thompson 1981).

Companies used physical and social engineering to pursue a number of objectives relating to spatial practice in place, particularly to prevent or forestall the development of trade unionism in these places (Herod 2011; Eklund 2012; Borges & Torres 2012c). Anti-union ideologues were proponents of the company town and they considered that their paternalism, by providing well selected workers with good quality housing and placing them in a wholesome environment they would be able to avert unionism’s threat to prerogative and production (Crawford 1995). Work and place were interconnected both geographically and ideologically, and despite these anti-union intentions, company towns were the sites of contestation between capital and labour.

### 3.4 Contestation over Spatial Practice

Company towns, as described in Chapter Two and earlier in this chapter, are a spatial fix that enables intense production but creates an inherent vulnerability for capital. The investment of worksites and in constructing communities limits capital’s mobility. This creates an environment where workers can, within places and communities, challenge capital’s prima facie dominance over both work and place. Borges and Torres explain that “company towns [were] contested spaces in which diverse interests,

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3 For clarity, I have referenced primary data collected from Newman in the following way: FW1 and FW2 denote the period of fieldwork in 2012 and 2013 respectively. ‘I’ or ‘FG’ then represent whether the data was generated in an interview or a focus group, and the final number denotes the particular interaction. So FW2I19 here denotes the 19th interview of the second period of fieldwork, 2012
contrasting ideas of community and unequal power relations existed” (2012b, p. 4). This section seeks to describe and explain this contestation from workers, who usually through a trade union would contest capitalist control over both production and social reproduction.

In some company towns, goodwill towards the company was high as the provider of employment, housing and a higher standard of living than which could be attained elsewhere. However there was often hostility towards the company. Herod explains the failure of the social and physical engineering of towns where he states “in any kind of spatial praxis what is imagined ahead of time and how it is implemented and understood will always be somewhat different” (Herod 2011, p. 38). Most frequently there were dynamic and often contradictory relationships of conflict and cooperation between workers and the company.

Once the towns were built, working people attempted to improve their lives both inside and outside the workplace. This was an attempt to “build communities on their own terms” (Dinius & Vergara 2011b, p. 2) and create labour’s spatial fixes. Solidarity based around a shared vision and experience of place, coupled with the vulnerability of an unusually fixed capital led to successful opposition to capital in company towns. This action, by workers, in pursuit of a particular vision of place is why company towns are of interest to labour geographers who seek to understand the spatial causes and consequences of place based agency.

This shared experience of work and non-working lives was a major factor in the development of unions in these places (Herod 1991 p. 61 cited in Rainnie, Herod & McGrath-Champ 2010, p. 251). Sense of place, as explored in Chapter Two, is defined by Post (2011, p. 115) as the “actual experience of place in all its dimension: physical, social, psychological, intellectual and emotional”. In company towns workers and their families share similar experiences of place due to their productive specialisation and intense periods of time spent working and socialising together, which often leads to a strongly shared a sense of place (Dinius & Vergara 2011b; Ellem 2003; Borges & Torres 2012b, p. 19). Company town denizens were frequently able to forge an identity built from a deep connection to each other and to the place (Eklund 2012, p. 5).

Out of this shared vision and experience of place workers and communities contested company control of these towns (Esch 2011; Crawford 1995; Perry 2012; Williams 1981). This contestation led to the development of locally organised and locally loyal trade unions. The success of these unions was so marked that some company towns even came to be considered ‘union towns’. In these towns trade unions become a pillar of spatial praxis and were able to assert power to influence both at work and in place (Crawford 1995, pp. 41-43). These local, place-based forms of unionism appealed to workers’ shared understandings of these towns (Ellem & Shields 2000; Eklund 2012). This effective assertion of worker opposition to company control demonstrates
that company towns were conducive to the creation of labour’s spatial fixes (Oberdeck 2010, p. 179).

This contestation over both workplace and non-workplace issues is a longstanding feature of company towns, and is caused by workers developing a sense of community, cohesion and belonging (Williams 1981). This is particularly true in company towns due to not only shared living and working conditions, but also a shared employer. In company towns workers “actively participat[ed] in struggles to define their living and working conditions” (Crawford 1995, p. 7). These struggles were fought by workers who shared both work and social spaces because in company towns neighbours were also union allies (Teixeira da Silva 2011).

Workers also were able, in particular cases, to assert control over places through enforcing exclusions. This has parallels with employers’ ability to control recruitment. This reflects Harvey’s notion of militant particularism (Harvey 2001), where workers would act to defend their local interests against those of workers from elsewhere. In company towns workers sought to influence recruitment in pursuit of preferential treatment for those with family and personal connections. In Broken Hill, New South Wales, from the 1920s unions established a rule with the company that locals would be employed first in the mine, meaning “migrant workers were always on the fringes of the labour market and allocated the hardest, most dangerous work” (Eklund 2012, p. 51). These preferences, albeit in a weaker form, persisted into the 21st Century. However, as is consistent with discussions of agency in Chapter Two, workers did not have a complete control over these processes, as while able to reshape the towns in which they lived and worked, they always did so in a constrained manner (Dinius & Vergara 2011b, p. 4).

Worker contestation in company towns is limited by general acknowledgement that the spatial form of the company town, particularly in mining, is not built to be an enduring settlement. These towns are constructed to be temporary, to have a ‘use-by’ date, and this means that those who move to these towns generally have an understanding that they are not in ‘permanent’ places. As the Chairman of Mount Morgan Mining stated in 1960 – “Everyone knows, a mine is a wasting asset” (Eklund 2012, p. 97). The persistent threat or possibility of closure impacts upon how people relate to the place. The idea that a place is perfunctory and temporary has the possibility of influencing how people relate to that place, a point that I will return to in my empirical examination of work and place in Newman in Chapters Five and Six.

The idea of a mining or company town as a union place has implications for employment relations, as it demonstrates that workers are capable of exercising collective agency within place and across space. Effectively unionised workers with a spatial advantage can limit the exercise of managerial prerogative, challenge management in the workplace and have the capacity to extract better pay and conditions. However, the notion of company or mining town as union towns was never
universal, and employers, through history, have sought ways of ‘inoculating’ workers against the threat of unionism or de-collectivising unionised places.

Contestation of company control by communities of workers and their dependents in company towns was almost always sectional within labour and within communities. This sectionalism was based on divisions of race, skill and gender. Thus experiences of places are sectional, not universal, as they are shaped by the interaction of class, gender, age and ethnicity, and individual circumstances. However, most company towns shared sufficient common experiences of life, of work, and of employer, so as to encourage the development of a shared sense of place.

Despite a shared sense of place, company towns should not be depicted as some form of halcyon utopia of collectivism and solidarity. In many company towns, there was a strictly gendered division of labour, with a male mining worker and a female ‘homemaker’. Single men, or families, would relocate to remote locations with the primary objective of working and with other aspects of life becoming secondary (Lahiri-Dutt 2011; McDonald, Mayes & Pini 2012). Williams (1981) articulates the complexity of contestation when framed through class and gender analysis, in an era of complete male domination of mining work, where she stated

> The working class community is a vital cultural defence against capitalist exploitation. But it is also clear that such an environment is the least generative one for the articulation of grass-roots feminist consciousness… capitalism and the patriarchal hierarchy have intertwined themselves into a mutually dependent structure exemplified by the shift work system… these women … carry a double burden [of care work and exclusion from earning] (p. 190)

This idea that women were trapped between patriarchal structures of work and of unionism is crucial to understanding both gender relations and the relationship between production and social reproduction in company towns (Rhodes 2005). Although women have entered the mining workforce, particularly in non-production roles, this idea of masculinity and patriarchy still exists in contemporary mining towns (Sharma 2009). As I show in Chapter Six, this archetypical patriarchal conception of gender associated with mining towns persists in Newman.

### 3.5 Migration and Mobility

Labour migration is crucial for the development of local labour markets in company towns. Company towns were built by capital with the specific intention of attracting workers, necessarily from other places, to remote locations. For workers migration was a spatial strategy to pursue a better standard of living. Where workers were able to exercise mobility this was generally, but not always, in pursuit of higher wages (Eklund 2012, p. 189). As outlined in Chapter Two, decisions to migrate are contingent on the characteristics of the local labour market workers leave, that of the one they arrive at, the rules that govern the movement and the significance of the move for dependents, households and communities.
This movement between labour markets is common in mining; where workers with particular skills and experiences often move between different mines reflecting fluctuations in commodity prices, demand for workers and local labour market characteristics. An example of this labour mobility occurred in Queensland in the 1970s, where the copper price fell as the coal price rose. In response to this change, workers in the copper industry shifted to the coal industry, in sufficient numbers that “[former copper miners] more or less staffed the coalfields” (Eklund 2012, p. 100). Eklund (2012) and Borges and Torres (2012) highlight the importance of labour migration in mining towns, noting that migration, movement and workers’ development of attachment to place are central to the establishment of spatial practice within these towns.

The nature of company towns is such that workers migrate to places defined by relatively fixed capital (Eklund 2012, p. 71). The absence of a pre-existing residential population means that the workforce and population of these towns are migrants. As a consequence, those who move to such communities have a disproportionate impact in establishing spatial praxis. The experiences, rights, priorities, and commitment to place of labour migrants, coupled with prevailing labour market and commodity market conditions, played a key role in shaping the conceptualisation and experience of place in these towns. As described in the previous chapter, “workers do not arrive in such spaces without values and aspirations, nor do they remain as atomised individuals” (Ellem 2002, p. 70). They are socialised into new places, but also can reflect some of themselves in the new society, which can reinforce or challenge place based norms. These migrant workers are not unthinking inputs in a production process, rather they are sentient beings, with divided loyalties to company, to self, to family and to the various social groups to which they belong.

Migration can also change places over time as workers leave a place and are replaced by workers who may have a different vision of place. Eklund describes a general shift in spatial practice in Australian mining towns as “more utilitarian and even more focused on making money than those who rushed to the boom towns of the 1880s” (Eklund 2012, p. 6). I argue that this general shift is reflected in Newman. This contributes to a work-focused and money motivated spatial practice.

### 3.6 Contemporary ‘Company Towns’

In the United States, company towns were withdrawn as a preferred spatial form in the 1930s (Crawford 1995, p. 200). The company town’s rise to prominence in the early twentieth century, particularly in North America, came at a time where society was determining where responsibility for many social and civic services, such as

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4 This is not always the case, as sometimes mines and company towns are built ‘over’ existing settlements, although this was not the case in Newman.
housing, healthcare, workers compensation insurance and education should lie. Companies provided social benefits and entitlements as a means to generate social harmony between themselves and their workers and to attract and retain labour. In the 1930s, companies found cheaper and more effective ways to gain workers’ consent and head off unionism, such as pension plans, the introduction of personnel departments and the beginnings of industrial democracy (Crawford 1995). This, combined with the expanded role of the Keynesian-Fordist state, meant that the company town was no longer an effective method of gathering worker support.

However in Australia and Western Australia in particular, the extreme isolation of these towns meant that attracting a permanent workforce was more important to employers than controlling production and reproduction (Thompson 1987). This, combined with the state’s commitment to economic development meant that the company town persisted until the 1980s (Dufty 1984). However, after 1980, the trend to trade liberalisation and global production networks meant “capitalists were abandoning the spatial fixes that underlay the welfare capitalist company town... Firms were on the global move seeking ever cheaper sources of labour” (Oberdeck 2010, p. 194). This allowed for the development of FIFO work protocols, in Canada and Australia as prime examples, where temporary camps and airstrips, rather than company towns, are constructed to try and bring workers to these isolated places (Eklund 2012, p. 6).

The withdrawal of the company town model where an employer administers both work and place has seen other spatial arrangements emerge where industrial specialisation or remote extraction occurs. Crawford (1995) suggests that the *Maquiladoras*, which were at the time set up in Free Trade Zones in Mexico, maintained similarities with the old company towns, but had a much more commodified way of arranging work. Further, with the development of the Chinese economy and an expansion of outbound Chinese investment has seen the establishment of Chinese enclaves which build infrastructure in developing countries, but these projects are Chinese funded and built by Chinese workers who are often sequestered away from ‘local’ communities (Dinius & Vergara 2011b). These settlements share many of the characteristics of older company towns (Crawford 1995; Borges & Torres 2012a). In all of these places capital seeks to control production and reproduction, however they engage different spatial forms, away from ‘suburban community’ and managerial paternalism to a more disaggregated and separated form of social reproduction.

The governance of these new spatial arrangements is no longer based around company administration of work and place. A ‘social license’ model has, at the global scale, replaced this traditional model (Mayes 2015; Lyons, Bartlett & McDonald 2016). Social license is defined by Prno and Slocombe as “exist[ing] when a mining project is seen as having the broad, ongoing approval and acceptance of society to conduct its activities” (2012, p. 346). This is not a literal licensing arrangement but a vague
concept that commits the firm to meet minimum community standards of corporate behaviour (Bice 2014).

The agenda of a social licence, while defined in terms of community, is controlled by firms, giving them the opportunity to dictate how this social licence is attained. In practice this is often through vague and unmeasurable criteria (Bice 2014). The idea of social licence is also unevenly applied by different firms, and is applied differently in different spatial contexts (Zhang et al. 2015; Owen & Kemp 2013). Thus the idea of social licence was constructed to legitimise continued extraction while allowing mining companies to sidestep any responsibility for place (Owen & Kemp 2013). The use of the concept of a social licence in communities, in spite of frequent ‘expectation gaps’, provides a benefit in that it allows the mining company to claim latent or tacit public consent for the mining operations (Owen & Kemp 2013). This can be done in intricate and carefully staged ways which can conflate company and community (Mayes, McDonald & Pini 2014).

These new spatial forms reflect Peck’s idea of the market regulated local labour markets. Companies have remade these spatial arrangements in a way that diminish individuals’ attachment to place and allow social reproduction to occur elsewhere. I argue that mining camps and Pilbara towns reflect a new type of spatial fix for capital. This new form of local labour control, as described in Chapter Five, allows capital to control production with an individualised workforce who buys into short-term market based logic of employment relations. This spatial form also separates production from reproduction, a characteristic described by Peck (1996) as making local labour markets more closely resemble classical markets. As I describe in Chapter Six, FIFO and the remade local labour market contributes to the decoupling of work and place, making the employment relationship as well as relationships workers have with each other and the town increasingly fragmented. The outcome of this is that workers and community are no longer willing or able to contest capital’s vision of production and social reproduction, allowing capital to overcome the historic and spatial vulnerabilities of the company town as spatial fix.

3.7 Conclusion

The company town was constructed within a socio-economy based on employment security, standard employment and an ongoing company-worker relationship. As I will develop in Chapter Four, the Pilbara developed as a mining region in the 1970s, where capital and the state, and then unions, compromised over a form of capitalist and regional development that was based around company towns, accommodating mining workers who would extract iron ore. The ‘company town’ model was withdrawn through the 1970s and 1980s and iron ore companies passed on civic governance to the state. Despite this, companies often retained control over a large proportion of the housing stock, and as their role as dominant employer in these mono-economic communities they still retained a great deal of power over work and social life in these
towns. The company town has been replaced by other spatial arrangements where companies no longer administer the towns. By changing spatial praxis to one governed by market mechanisms they are able to control production and reproduction in a way that the company town never enabled them to do.

This discussion of the use and then re-composition of the company town model reflects the development of work and place in Newman over time. Newman was constructed as a closed company town, with direct and legally enshrined company control over entry and exit, housing, social reproduction and work meaning it shared many spatial similarities with the other company towns I describe here. Strong unions who derived their power through shared experiences and visions of place challenged BHPB’s control over work and place. This led BHPB to abandon the company town spatial fix in Newman to one where market, rather than company paternalism, regulated the local labour market. I argue in Chapters Five and Six that the movement of people into and out of the local labour market has been central to the remaking of work and place in Newman, which reflects general changes to the organisation of company towns I outline in the final part of this chapter.

This chapter, in describing the characteristics and development of company towns, provides insights into the development of Newman, which I am going to engage with historically in Chapter Four and empirically in Chapters Five and Six. In understanding the motivations, both of states and of capital in constructing company towns I will explain why Newman was constructed the way it was, as a stable, permanent settlement out of nothing in the desert for the extraction of iron ore. The state, as it does in company towns, played a crucial role in negotiation the terms of the town’s construction and operation through the Iron Ore (Mount Newman) Agreement Act 1964 (WA). The contestation over place and over control of work process, through robust trade unions with militant solidarities to place also emerged in Newman, and was gradually undone with the removal of company governance with ‘normalisation’ and then was remade fundamentally in work and place since 1999. The town, in its current form, also reflects the more modern iteration of company towns, where regulation of both work and of place are based around classical notions of supply and demand, rather than social regulation.
Chapter Four: The Production of Place Over Time: Newman in Context

This chapter examines the spatio-temporal development of Newman as a place of production and reproduction. Newman, as with all places, has developed in relation to changes in social, industrial and economic relations across space and within place over time. Therefore to understand contemporary work and place in Newman I describe how work and place have co-developed, with relation to space, since the town’s construction in the late 1960s. By describing this history I demonstrate how, and show why, Newman’s spatial fix, spatial practice within the town and worker attitudes to place have changed over time and why these changes are fundamental to contemporary employment relations and spatial practice in Newman.

The town was constructed to facilitate the extraction of iron ore and support worker reproduction. Since then capital, the state and workers have made, unmade and remade several spatial fixes that influence the terms of extraction. Capital in Newman is relatively immobile due to the fixedness of the ore body, profitability of the site, proximity to markets and the stable investment environment in Australia (Wilson 2013). This ‘fixed’ MNM to place, which disempowered capital first in relation to workers, and subsequently to other segments of capital within the global industry, initially the steel manufacturers in Japan and later iron ore miners in Brazil.

Unable to seek new fixes through mobility, Newman’s spatial fix was reconstituted in situ. This occurred through the remaking of the local labour market in place, and involved changing worker attitudes to place, restructuring the employee-employer relationship and by dislocating workers from each other and even from the place itself. Within Newman the concept of the local labour market is problematized by the fact that production and reproduction are not physically bounded (as reproduction can occur thousands of kilometres away), however given the significance of work to the place, and the fact that some reproduction occurs for FIFO workers in place, it retains great utility for my analysis. By detailing these changes and their effects I show that Newman’s local labour market has been remade at work and in place. In this chapter I provide the historical background to my later discussion and describe the co-development of work and place in a time sensitive way by referring to four historical periods in the development of the town.

This chapter divides the history of Newman into the various spatial fixes that have shaped place and work in the town.

- Pre-Mining and the Nascent Industry (Up to 1969)
- Company Town and Union Place (1969-1981)
- The BHPB-Union Dispute and Market Based Local Labour Market (1999-present)
I will describe the geology and pre-mine history of the town before examining Newman’s construction as a paternalistic and closed company town, in which workers were able to establish a ‘union place’. Faced with union power and a weakening market position, capital and the state remade the company town spatial fix. ‘Normalisation’, the ceding of civic governance of the towns to the state, occurred across the Pilbara from the late 1970s and occurred in Newman in 1981 (Thompson 1981). While Newman remained effectively unionised through this period, employment relations were being fundamentally remade elsewhere in the Pilbara. Reflecting the neoliberal turn, the generally aggressive employer action that came to be associated with mining in the Pilbara region was supported by the state in pursuit of international competitiveness and investment and when combined effectively de-unionised non BHPB sites in the region (Ellem 2015a).

In 1999 BHPB initiated a major dispute with the unions. This dispute commenced when BHPB offered individual agreements to workers, creating a schism between workers and within the town and eventually resulted in the employer implementing these agreements, effectively diminishing union influence. Once this had been achieved BHPB remade employment terms on a market basis (Peck 2013a). This extended managerial prerogative and fundamentally remade how workers related to both work and place, which I explore empirically in Chapters Five and Six. The organisation of work, and thus place, included a transition from eight to twelve hour shifts, individual contracts, increased use of contractor and labour hire workers and the introduction of a FIFO workforce working alongside residential workers.

4.1 The Pilbara Pre-Mining and the Nascent Iron Ore Industry

Newman is constructed in the inland Pilbara region on a 3.5 billion year old landscape (Buick et al. 1995). Indigenous people have sustained their socio-economy in the region for at least 30 000 years (Wangka Maya Pilbara Aboriginal Language Centre 2016; Peck 2013b). Europeans first visited the Pilbara in the seventeenth century, and settled in the 1860s. Sheep farming became the dominant economic activity for the next century. During this period the Pilbara remained economically undeveloped and sparsely populated. In the 1950s the estimated indigenous population was 2900 and the ‘European’ population was 3249 spread over an area of 440 000km² (Marshall 1968, p. 418).

The Pilbara’s history as a mining space dates back to the 1870s when small scale extraction of gold, tin and other minerals commenced (Mulvaney 2013). F.T. Gregory first discovered expansive reserves of iron ore in the Pilbara in 1861. In the first half of the twentieth century other ore bodies were ‘discovered’ by prospectors including Lang Hancock, Tom Price and Stan Hilditch (Peck 2013a; Lee 2013a). Hilditch’s

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5 Activity which also represented “de facto, a slave regime” for Aboriginal labour (Peck 2013a, p. 231).
discovery of ore at Mt Whaleback in 1956 and 1957 eventually led to the construction of Newman (‘Mt Newman: Progress of a Major Iron-ore Project’ 1968; Peck 2013a; Lee 2013a).

The Pilbara’s iron ore reserves remained unexploited due to the remoteness of the deposits from steel mills, markets and coking coal (Dufty 1984). By the early twentieth century advances in technology and potential customers in Japan meant iron ore mining was potentially viable (Wilson 2013). The ore remained unmined due to an export ban imposed by the Federal Government in April 1938 to protect domestic manufacturing and prevent Japanese expansionism (Lee 2013a; Lee 2013b; Tsokhas 1995, p. 888).

Mining companies opposed the ban for obvious reasons, as did the Western Australian Government. The export ban was lifted in 1960 as a result of intense lobbying, coupled with a federal balance of payments crisis (Lee 2013b). MNM was granted Federal Government approval to export ore, 210 million tonnes over 21 years, to Japan on November 11 1964 (Lee 2013a). This approval allowed the company to secure finance to build the Mt Whaleback mine and the town.

The State Government saw its role as an attractor of capital, evidenced by the then premier, Sir Charles Court, who stated in 1962

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\text{Capital will not come here of its own volition. We have to go out after it and convince them that we not only have some natural resources that are worth having, but that we have the stability and determination to develop and exploit those resources} \quad \text{(Horsley 2013, p. 291)}
\]

The state sought to create specific spatial conditions favourable for investment and extraction. The government believed an iron ore industry would benefit Western Australia by providing royalties, jobs and the development of the northwest of the state and \textit{actively sought} large private capital investments (Horsley 2013, p. 288).

The Western Australian government secured and influenced investment in the Pilbara by negotiating Agreement Acts with mining companies (Horsley 2013, p. 294; Lee 2013b). These acts are

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\text{Essentially [contracts] containing financial and non-financial concessions granted by the state in return for project obligations accepted by capital} \quad \text{(Horsley 2013, p. 284)}
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These acts, which bind both the state and the company, reflect the state’s pursuit of both full employment and regional development (Layman 1982; Horsley 2013). MNM and the Western Australian Government reached agreement on 26 August 1964, which became the \textit{Iron Ore (Mount Newman) Agreement Act 1964 (WA)} (Lee 2013a).

The act granted MNM exclusive rights to search for and extract iron ore, set out royalty rates and mandated that the sites of production would be accompanied by a company town (\textit{Iron Ore (Mount Newman) Agreement Act 1964 (WA)}; Court 1982). The act also committed the state to encourage the migration of a labour force to the Pilbara, to
market Western Australian iron ore and to upgrade facilities in the Pilbara (Dufty 1984, p. 24; Lee 2013b, p. 163; Horsley 2013, p. 294). Royalty rates were set deliberately low (7.5% for unprocessed ore) to offset the company’s upfront costs of building infrastructure and a company town and to ensure the viability of the projects (Iron Ore (Mount Newman) Agreement Act 1964 (WA); Dufty 1984; Court 1976; Wilson 2013, p. 67).

The extraction of ore at Mt Whaleback contributed to a period of massive growth of Japanese steel production; increasing from 4.8Mt in 1967 to 119.3Mt in 1972 (Thompson 1987). The Pilbara became a preferred supplier of iron ore to Japan, growing from almost zero in 1965 to 48% of Japanese ore imports by 1972. This placed great pressure on mining companies to prioritise output to meet burgeoning demand (Thompson 1987). It is within this context that Newman’s first spatial fix and first spatial praxis were developed.

4.2 Company Town and Union Place (1969-1981)

The period in which Newman was administered as a company town (1969 - 1981) saw the establishment of Newman’s local labour market. This spatial fix, negotiated initially by capital and the state, arranged capital intensive production, a skilled labour pool, towns and infrastructure to extract the ore as well as a legal system which alienated the ore from indigenous people6 (Sheppard 2013). The local labour market was formed in conditions of capital immobility, labour scarcity and company requirements for increases in output, enabling contestation over both work and place by militant, fiercely local trade unions (Ellem 2015b; Fells 1993; Thompson 1987). In this section I outline the physical construction of the town and describe the work that extracted the ore. I then describe how work was formally regulated under the conciliation and arbitration system and how unions were able to use this system, their spatial circumstances and place-based power to make the company town a ‘union place’.

In 1963 a ‘one star’ exploration camp was established on the site that would become Newman. This camp accommodated 20-30 men, housed in tents in temperatures of 40-45 degrees (McIlwraith 1988, p. 32). A construction camp was then built, housing the workers who built both the mine and the town. By December 1968 Newman had 600 workers, 6 streets, 16 houses and the construction camp. The town received twice-weekly grocery deliveries, had a bakery, a bank, a mess kitchen, a post office, police officers, a medical centre and a wet mess (Eckhart 1996).

Australian development by Europeans was underpinned by the legal doctrine of terra nullius, meaning that settlers claimed the land as empty space, rather than as occupied by indigenous people.

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Ore production commenced in April 1969, and the mine was officially opened by the Governor General two months later (McIlwraith 1988). In 1969 MNM’s total production was 3.97 Mt of ore, which grew to 21.23 Mt in 1972 (Dufty 1984). This expansion led to growth in both the town’s workforce and population. From the outset the workforce was very diverse, in the first few years of production Australians made up less than half the labour force, and West Australians made up less than a quarter (Court 1976). In 1969 Newman’s roughly 1000 residents came from over 40 countries (McIlwraith 1988; Eckhart 1996). The town had a very high male to female ratio of 1.51:1 in 1976 which reduced somewhat to 1.37:1 in 1981 as the town became more established (Dufty 1984). By 1972 the population of the town had grown to 5000 and the average age was just 11 years old, showing the youth of the workforce and the prevalence of young families as the dominant household type (Eckhart 1996).

The town was constructed several kilometres from the mine site and the built environment was designed to manage the relationship between company and workers both at work and in the community (Dufty 1984, p. 38; Rainnie et al. 2014, pp. 98-99; Peck 2013a). This was a response to the vulnerability of the company town, reflecting capital’s attempts to physically engineer these communities as described in Chapter Three. The control of the company extended beyond town design into town administration; an indication of MNM’s initial control of reproduction as well as production is the unofficial title of the mine manager when the town opened, that of ‘God’ (McIlwraith 1988, p. 76).

Initial mining work in Newman was very similar to the work regime described in Chapter One. Work was organised around three eight-hour shifts, allowing for continuous production (Frenkel 1978). Ore was mined on an open cut basis, a process described as large scale earthmoving mining (Marshall 1968, p. 416). Workers operated large-scale capital equipment, which could seriously injure workers if concentration lapsed, yet relatively little attention was given to safety (Kneeshaw et al. 2003, p. 41). Work was tedious, repetitive, fatiguing and dusty, with all of these conditions exacerbated by the extreme heat of the Pilbara (Frenkel 1978, p. 389; Court 1976, p. 79). Workers nonetheless reported having high levels of autonomy and a sense of meaning to their work (Dufty 1984).

Spatial practice, work and social reproduction were built around the male breadwinner with a family; single men were considered both a turnover and a moral risk, which reflected the patriarchal designs of company towns (Peck 2013a; Dufty 1984; Eckhart 1996, p. 53). This has much in common with the gendered nature of production and reproduction in other mining towns (Williams 1981).

Industrial relations in the Pilbara iron ore industry were formally regulated at the state level by the conciliation and arbitration system, a pluralist system that both recognised and empowered unions (Peetz & Bailey 2012; Fells 1993). After submissions from MNM and the unions, the Western Australian Industrial Commission handed down an
Interim Award covering iron ore workers in 1967, with a Comprehensive Award coming into force in 1969 (Thompson 1987). The 1969 Award set out the relevant trade union structures, a Pilbara specific grievance and dispute process and gave shop stewards standing to negotiate on matters of working conditions (Fells 1993, p. 12).

There were eight blue-collar unions in Newman, The Australian Workers Union (AWU), The Amalgamated Metal Workers and Shipwrights Union (AMWSU), the Federated Engine Drivers and Firemen’s Union (FEDFU), the Electrical Trades Union (ETU), Transport Workers Union (TWU) and the Building Trades Association (BTA). The two largest unions in Newman, both by membership and influence were the AWU and AMWSU. Workers generally arrived in the Pilbara from union backgrounds and operated in a union ‘closed shop’ system, which further entrenched the unions’ workplace and institutional power (Ellem 2015b).

A culture of unionism came to dominate the social regulation of work in Newman. Workers, through their unions, quickly exercised collective agency at work through industrial conflict with employers, most famously in the form of strikes (Dufty 1980). The early Pilbara labour market was characterised by labour shortages, meaning management prioritised output over other factors such as managerial prerogative (Thompson 1987). This aided the growth of institutionally protected, geographically isolated, powerful and locally distinct unions who were able to effectively challenge managerial prerogative (Ellem 2015a). This led to industrial conflict over control of the work process and remuneration (Thompson 1987, p. 66). Collective industrial disputes in the Pilbara were generally small scale, brief, and characterised by frequent intra-site stoppages between individual unions and management (Frenkel 1978, p. 396).

This contestation between workers and MNM occurred over both work and place related issues (Neilson 1983; Court 1976). The companies’ administration of civic as well as economic life gave workers a “focus for discontent” (Frenkel 1978, p. 398) as workers would challenge management over their administration of the town. Disputes arising from town amenities would spill into the workplace (Thompson 1981, p. 316; Dufty 1984). Industrial disputes, including strikes, were initiated by unions over both the workplace and the adequacy of housing and services in the town (Court 1976; Heath & Bulbeck 1985).

The problem for the company was that

[N]ot only does he who calls the tune have to pay the piper, he is held responsible for the quality of the music and any defects in the instruments (Carly 1977, p. 2 cited by Dufty 1984, p. 46)

This increased industrial contestation was linked to the connection of place and work in Newman. This eventually led capital to remake spatial arrangements, contributing to the shift to ‘normalisation’ described in the next section (Thompson 1981).
During this period unions effectively asserted agency to challenge company control over work and social spaces. The 1969 Award, and subsequent industrial conflict, enabled workers to win high wages, good overtime rates, a high level of control over the shop floor and ‘favourable customs and practices’ which ensured job security (Bulbeck 1983, pp. 432-433). The effectiveness of this is evidenced in the fact that real earnings, despite being deflated due to housing subsidies, increased 222% from 1968-1981 (Dufty 1984, p. 18; Kaempf 1989, p. 6).

The Pilbara’s reputation for being ‘strike prone’ was confirmed in 1977 where Australian Bureau of Statistic data confirmed that it was one of the most strike-prone regions in Australia (Frenkel 1978, p. 390). This shows a degree of universality in the Pilbara towns, despite their geographical isolation from each other. In 1973 in the Pilbara there were 59 strikes involving 18 000 workers, representing 57 700 days of work lost and costing workers $1 210 500 in wages (Court 1976, p. 29). The West Australian Newspaper emphasised this point in 1974, reporting that the Pilbara iron ore industry “employs 1% of the state’s workforce but is responsible for 60% of the state’s strikes” (Court 1976, p. 1).

Reflecting the particularities of unions at each Pilbara site, Newman’s unions behaved slightly differently to unions in other towns. Newman’s unions struck less frequently, but when they did strike the disputes involved more workers and lasted longer (Court 1976, p. 47). At MNM nearly 50% of strikes up to 1976 of over 5000 man hours were initiated over management policy, with 5% over town amenities, 7% over working conditions, 17% over trade union activities (such as demarcation disputes) and 17% over wages (Court 1976, p. 53). This shows that in Newman workers, through their unions, were willing to utilise their power advantage over capital to reshape the terms of both work and place in their favour, establishing labour’s spatial fix.

One of the particularities of Pilbara unionism was the leading roles played by convenors and shop stewards (Heath & Bulbeck 1985). These stewards played an important role in asserting agency on behalf of workers, challenging capitals dominance over space. The 1969 Award established that union members would elect shop stewards who in turn should elect convenors, with both these roles wielding great industrial and social power (Thompson 1987).

Shop stewards dealt with issues surrounding wages, compensation, award interpretation, dismissals, demarcation, and pastoral care and settling shop floor disagreements (Dufty 1980). The job of shop steward was taxing, resulting in high turnover, for as one steward noted

> There are shop stewards who stay the distance. Most, however, drop out, unable or unwilling to cope with the endless round of problem solving, nose wiping, bluffing, acting and anxiety about physical wellbeing (Dufty 1984, p. 98)

The typical Pilbara shop steward was described as “a militant negotiator strongly oriented to his own work group rather than the parent union” (Dufty 1980, p. 395), 60
reflecting a militant particularism in these Pilbara towns. Convenors would negotiate directly with managers, often independently of state and federal union officials (Thompson 1987; Kaempf 1989; Dufty 1984; Dufty 1980).

This strong, place based solidarity is typical of company towns. This occurred because the Pilbara towns were

[0]ccupationally homogenous, male-dominated isolated communities ... [where] work group or department is bound to play a larger role in workers’ current life experience (Frenkel 1978, p. 398)

This led to work issues spilling over into workers’ social lives, as these social lives are also inhabited by colleagues (Court 1976, p. 102). These links in place occurred through social institutions like sporting teams, local civic associations but overlapped with union militancy in the town, as union activity was often organised around ‘non-work’ issues (Ellem 2008).

This meant workers, collectively through unions, were able to socially regulate the local labour market, effectively turning Pilbara towns, including Newman, into ‘union places’ (Ellem 2015a). Ellem describes how

Almost immediately become a union space when exports began in 1966. Global employers worked within state regimes which afforded protection to unions and indeed could not function without them (Ellem 2013 cited in Rainnie et al. 2014, p. 109)

In this period Newman developed particular spatial characteristics that socially regulated work, as

[t]he scarcity of labour and the place’s physical isolation at first helped make unions powerful and weave them into other social forces... the unions were inseparable from the local social formation, and a place consciousness developed in which unionism was central... the Pilbara was a union place (Ellem & McGrath-Champ 2012, p. 362)

This strong local identity was based in a sense of loyalty to place, community and colleagues. This shared experience of place was a fundamental part of union culture in Newman. The establishment of labour’s spatial fix in Newman was therefore based not only in work, but also in place, as trade unionism came to dominate spatial praxis in the town. Organised labour, through expressions of collective agency, underpinned by a particular spatial advantage over capital in both work and place to strongly socially regulate Newman’s local labour market.

4.3 Newman and Normalisation 1981-1999

The problems posed for capital generated by the Pilbara’s first spatial fix - the company town - led to the development of the second, ‘normalisation’ (Rainnie et al. 2014). ‘Normalisation’ was a Pilbara wide process that saw civic governance transferred from company to state. This change was a reaction both to the militant workplace cultures that had developed in the Pilbara towns and wider spatial
conditions (Peck 2013a). This section is divided into three parts. First I describe how changes in economic space, primarily weaker market conditions, influenced worker-management relations and reduced unions’ bargaining power. Second I define and explain ‘normalisation’ and how it re-arranged Newman’s spatial fix. Third I consider how employment relations were remade at the Pilbara scale as capital de-unionised the workforce and reasserted managerial prerogative, focusing on the Robe River dispute.

In the first part of this section I describe how changes in the arrangement of economic space led to the remaking of work and place in Newman. Places do not develop independently of their spatial context, as described in Chapter Two, and this was the case in Newman. In this period relevant changes included stagnating Japanese demand for iron ore, competition between different segments of capital (miners and steel companies), changes in price, which all combined to weaken the Pilbara miners’ spatial and economic power.

In the 1960s and early 1970s high Japanese demand allowed the mining companies to negotiate favourable prices for ore. Once the industry was established the miners’ spatial power was limited by the fact that they had committed a large amount of capital to this fix (Lee 2013b; Wilson 2013; Dufty 1984). This fixedness in place, coupled with weakening GDP growth and steel production in Japan in the late 1970s, was used to drive down ore prices, with MNM’s iron ore production falling for the first time in 1976 due to decreased demand (Thompson 1987, p. 3). This shows how economic space is shaped not only by contests between capital and labour, but also segments of capital.

Economic space was also remade in this period, as Japanese steel manufacturers encouraged the development of an iron ore industry in Brazil. This led to a Brazilian iron ore boom from 1975-1985 (Wilson 2013) and shows how capital can pit places against each other to more effectively accumulate. This growth in supply outstripped demand. This removed Australia’s near monopoly on supply, further weakening the Pilbara unions’ spatial power. In response to these conditions and deflated prices, iron ore miners in Australia, aided by the state, sought to sell their ore into Chinese, South Korean and Taiwanese steel markets in the 1980s (Dufty 1984). However these markets would not become significant until the 2000s.

In the second part of this section I describe how MNM reacted to their weakened market positioning and militant local unions, MNM sought to remake their spatial fix. The fixedness caused by having massive infrastructure costs and a fixed factor of production meant that they had to remake their spatial fix in situ. MNM did this by ‘normalising’ the town.
‘Normalisation’ is a process where

towns owned and controlled by transnational joint ventures in the Pilbara will be progressively and selectively transferred to local government authority (Thompson 1981, p. 301).

This effectively transferred the costs of supporting social reproduction from the company to the state and created a new method of civic governance (Thompson 1981, p. 313; Peck 2013a). The terms of each handover were negotiated between mining companies and the state government, excluding unions and the public (Thompson 1981).

Normalisation was supported by the state, which had shifted from a developmental and interventionist Fordist-Keynesian approach described above towards a more laissez-faire neoliberal ideology, which sought to “favour... the institutions of freely functioning markets and free trade” (Harvey 2005, p. 64). The state thus enabled the change in spatial fix in order to attract and retain foreign investment. Then premier Sir Charles Court stated

[I]ndustrial investment[s] are very marginal with infrastructure thrown on top. I think it is time Government began to recognise that this is a community [i.e. state] responsibility (Dufty 1984, p. 24)

‘Normalisation’ effectively lowered the costs of extraction for the companies, enabling them to mitigate their weakening market position.

A part of ‘normalisation’ in Newman was the introduction of a ‘home ownership scheme’, where MNM sold company housing to workers. Workers could purchase the homes on a 15-year mortgage on condition that the worker remained a MNM employee (Thompson 1981, p. 317; Neil & Brealey 1982). In Newman the scheme was moderately successful when measured by the number of homes sold and the length of time these workers remained in the town (Neil & Brealey 1982; Dufty 1984).

The home ownership scheme remade the terms of social reproduction in Newman (Thompson 1981). It was assumed that workers who bought these homes would be less likely to strike for economic reasons as they became responsible for both mortgage payments and household bills. This was intended to curb the militant tendencies of unions and align worker and management interests (Neil & Brealey 1982; Thompson 1987; Dufty 1984). However, as Williams (1981) notes in her exploration of an Australian coal mining town, mortgages effectively committed workers more deeply to place, increasing their incentive to protect or improve their circumstances in the place (Lier 2007; Dufty 1984), reinforcing place based power. This occurred in Newman, as those who bought houses sought to defend ‘their’ place through industrial and social actions (Neil & Brealey 1982).

Newman’s culture of unionism meant that workers developed strong class-consciousness and maintained divisions between ‘wages’ and ‘staff’ workers. In Newman staff historically lived on a particular street, Giles Ave, which was colloquially
known as ‘snob hill’ (Eckhart 1996). Within the town this division manifested itself particularly when a wages worker was promoted to a supervisory or ‘staff’ role, as “some reported refusing promotion because they did not want to lose their friends” (Dufty 1984, p. 50). These divisions became most apparent during strikes, reflecting a local labour market where class divisions were well understood and continued to be an active part of spatial practice. The town remained a union place.

The final part of this section considers capital’s successful remaking of employment relations at the Pilbara scale. This shift commenced at the Robe River mine in 1986 when Peko Wallsend attempted to implement a new form of industrial relations in the Pilbara (Kaempf 1989, p. 6). The company instigated a dispute by unilaterally withdrawing from the existing industrial agreement, sacking workers who refused internal transfers and submitting a log of claims encompassing remuneration, leave entitlements, work practices and their intention to make 189 workers redundant (Kaempf 1989, p. 10; Smith & Thompson 1987). On August 11 1986, 1160 workers were locked out and operations were closed. After workers returned to work on September 3, shop floor confrontation was frequent and workers struck on 16 December 1986 (Kaempf 1989, p. 13; Smith & Thompson 1987). On December 31 the Company served writs on 10 unions as well as individual workers, circumventing industrial tribunals by pursuing workers and unions in the courts. A deal was eventually negotiated by the company and the ACTU which was accepted by workers on January 24 1987, with unions having to accept the majority of management’s demands (Smith & Thompson 1987). The final victory for management at Robe River came in 1993 when the state government of Western Australia created provision for individual contracts.

Indicative of the importance of place to work in company towns, management at Robe River sought to recast place as well as work. Shop stewards were denied social contact with workers and generous offers were given to militant workers to leave the towns (Ellem 2015b). Union influence over place after the dispute was slowly and deliberately reduced over time, a process Ellem characterised as a “war of attrition” (Ellem 2015b, p. 125). Within the town union activities were marginalised and union activists were targeted and 29 workers were dismissed for refusing to sign a ‘no strike pledge’ (Ellem 2015b). Striking workers were threatened with eviction, reflecting descriptions in Chapter Three of companies seeking to control their workforce through denying access to housing. The success of the de-unionisation is reflected in that by December 1996 97% of Robe’s workers were employed on an individual basis (Ellem 2015b). These outcomes had significance for the remaking of work across the Pilbara.

The outcomes of this dispute reflected a new form of employment relations in the Pilbara. The employer aggressively pursued de-unionisation and deviated from the established industrial tribunals by operating in the courts, thereby attempting to replace the pluralist status quo with a new unitarist way of doing business where management and employee interests are assumed to be aligned for mutual benefit
This was an attempt to re-take managerial prerogative through individualising the workforce (Smith & Thompson 1987, p. 304). While the industrial implications of the Robe River dispute have been well documented (for examples see Ellem 2015b; Yuill 1987; Kaempf 1989; Smith & Thompson 1987), I argue that it also recast the way ‘place’ was done in the Pilbara.

These changes to the institutions and practices of employment relations, in turn, enabled capital to divide labour both in space and in time to further re-assert managerial prerogative. This included the introduction of FIFO protocols that are examined more closely later in the chapter. Ellem describes how

Space was central to this re-shaping of local employment and social relations. The problems associated with the immobility imposed by mining have been met by the companies by challenging union control of the labour process from 1986, undoing place by imposing mobility on the workforce and ‘refixing’ the Pilbara less as a community and more as a globally determined resources site (Ellem 2013, pp. 19-20 cited in 2014, p. 109),

This period, particularly in the industrial relations strategy established first at Robe River, and then at Hamersley Iron in 1992, saw mining companies actively attempt to unmake ‘labour’s spatial fix’ in the Pilbara (Ellem 2004). From Robe to Hamersley, the new individualised form of employment relations became a part of non-BHPB sites across the Pilbara. It was accompanied by a move to 12-hour shifts, FIFO work arrangements, increased contracting and labour hire and a transformation in spatial practice that prioritised work over community.

This remaking was a spatial and social process, initiated by companies but supported by legislative reform. It pervaded the lives of those who worked and lived in the region. Capital successfully reasserted managerial prerogative and this ultimately led to the establishment of undiluted company control over space in the Pilbara (Ellem 2004; Peck 2013a). With the rest of the Pilbara de-unionised, BHPB sought to remake Newman’s spatial fix once more.

**4.4 The BHPB-Union Dispute and Market Based Local Labour Market (1999-present)**

This section outlines the process by which Newman was de-unionised, and the implications this has had for work and place within the local labour market. After providing wider consideration of the spatial context I describe the 1999 dispute between BHPB and unions in Newman that initiated the remaking of work and place in the town. The company’s victory led to the remaking of employment relations through four major changes to work arrangements: an individualised workforce; the increasing use of contractors; the change from eight to twelve hours shifts; and the adoption of FIFO work arrangements.

In the 1990s the structure of employers in the Pilbara changed. Due to a number of corporate takeovers, the exhaustion of some mines and the opening of others, the
dominance of BHPB and Rio Tinto allowed mining industry to organise an export cartel of sorts. The emerging duopoly of BHPB, who had taken over MNM, and Rio Tinto changed the iron ore market structure from a monopsony to a “monopoly monopsony negotiation” (Wilson 2013, p. 125). The dominance of BHPB and Rio Tinto is reflected in the fact that by 2012 they produced 70% of Australian iron ore, despite the emergence of junior miners such as Fortescue Metals Group Ltd (Yellishetty et al. 2012).

Within this duopoly, Rio Tinto’s de-unionisation had left BHPB at a competitive disadvantage. BHPB, through document exchange with Rio Tinto, discovered that their sites had higher running costs, lower productivity and more limitations on the exercise of managerial prerogative (Fetter 2002). In response to this BHPB sought to remake employment relations in Newman. BHPB already ran its Yandi mine on a contract basis, with a sub-contractor who implemented a FIFO protocol and independently recruited workers and achieved higher productivity than at Mt Whaleback (Way 1992).

In 1999, after redundancies had been accepted by union activists (Peetz 2002, p. 258), BHPB management offered individual contracts to 1100 workers. These agreements replaced a number of industrial instruments, including an award, enterprise agreements and an unregistered agreement between the company and the unions (Fetter 2002). Workers were offered incentives totalling more than $10 million, up to $20 000 per worker per year, to sign the individual agreements on a take it or leave it basis (Robinson 2000; Peetz 2002; Fetter 2002). The unions took BHPB to the Federal Court, which decided in favour of the company, a decision which was hailed as a “clear-cut win” (Way 2001). Union resistance in this case was multi-scalar, but grounded in place. This activism focused on the sustainability of community, place and family under the new system of industrial relations (Ellem 2005), but eventually was unsuccessful. This was an obvious attempt by capital to undo the collective, union centric spatial praxis in town and replace it with an ethos of “individual reward for individual performance” (Ellem 2004, p. 33).

The dispute had long lasting impacts on the town. Newman was described at the time as having “a workforce in a small isolated community split down the middle between unionised and individual contract workers” with this division manifesting itself both in the town (place) and the workplace (Way 2001, p. 16). As I describe in Chapter Five, union workers in the town remain bitter about the dispute. Despite some union resistance, individualisation continued after the dispute. Through the next decade

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7 Individual contracts were introduced in the West Australian employment relations system in 1993. They operated separately from pre-existing collective forms of agreement making. These contracts were seen as precursors to the Australian Workplace Agreements introduced to the Federal employment relations system in 1996. These agreements were contentious as they were seen as being anti-union, and were contested politically and industrially (Peetz 2002). For a detailed exploration of the implementation, continuing influence and impact of these agreements see Veen (2015).
union resistance to the individual contracts diminished. As union workers retired or resigned workers on individual agreements in the town replaced them, and further diluted union influence in the workplace and the town.

Having successfully marginalised unions and asserted prerogative in Newman, BHPB set about rearranging employment relations. They did this by taking advantage of legislative changes and reorganising work contractually, temporally and spatially. The reorganisation included employing a de-unionised workforce, the increasing use of contractors, shift rosters being changed from eight to twelve hour shifts and employing FIFO workers.

The 1999 dispute led to the individualisation of the workforce in Newman. By 2007 90% of the workforce were on individual contracts (BHP Billiton 2007a) and unions had little influence over work (FW1I13 2012; FW1I15 2012). This reflects management practice at the Pilbara and national scales in the mining sector, where managers have explicitly sought to decollectivize their workforces through a number of strategies to implement a unitarist approach to work and life (Peetz 2002). A Rio Tinto mine manager stated

> We actively go out to recruit people with no previous [mining] experience because it helps establish the culture we want to develop... we’re looking for people we can align to how we want them to work (Murray, Peetz & Muurlink 2012, p. 6)

The success of the alignment of worker and managerial goals (alignment on management’s terms) is reminiscent of what Peck (1996) and Burawoy (2012) considered to be the shaping of workers and local labour markets by capital through employing workers who had, or would adopt, favourable (for capital) characteristics.

BHPB also used its enhanced control over work in Newman to engage more contractors. By June 2007 BHPB’s Pilbara iron ore operations hired three times as many contractors as employees (BHP Billiton 2007a) and at times ran entire mine sites with contract workers (FW1FG1 2012). The increasing use of contractors has allowed BHPB to externalise employment relations to third parties and separate workers on the basis of their employer (see Chapter Five)(McIntosh 2012, p. 332).

In mining towns contractors are generally seen as being more contingently attached to community, less committed to shared visions of place and less likely to be union members (Murray & Peetz 2008). This increased separation between contractors and place is reflected in the fact that by 2005 in Western Australia 78% of mining contractors were employed on a FIFO basis (Sheppard 2013).

The change from eight to twelve hour shifts in Newman has drastically reshaped spatial practice and recast how workers perceive and experience both place and work. This change reflects general shifts in mining, especially declining influence of unions, and moving away from the 40, or even 35, hour work week (Murray & Peetz 2008). This was implemented in both the coal and iron ore industries after a combination of
legislative reform and depressed market conditions, both of which substantially weakened union capacity to oppose the change. By the year 2000, 93% of Western Australian mines used predominantly 12 hour shifts (Heiler, Pickersgill & Briggs 2000).

Changing to twelve hour shifts “transform[s] the mining towns and the lives of the people who live or pass through them” (Murray & Peetz 2008, p. 3). Twelve hour shifts, combined with increasing FIFO workers discussed later in this section, fragmented tightly woven mining communities (Murray & Peetz 2008, p. 25). These rosters also isolate work units, who work unsocial hours together and have shared, compressed time off. This can have the effect of excluding spouses in work and in social spheres, reinforcing patriarchal social reproduction in these places (Collins 1995 cited in Murray & Peetz 2008, p. 4). This also has damaging effects on community life as workers don’t have time to commit to community activities, organised leisure or sport (Murray & Peetz 2008), which has the effect of weakening the community ties which were the basis of union power in the Pilbara’s mining towns.

The next major change in work I address is the adoption of FIFO work arrangements, which have spatially realigned work in the Pilbara. FIFO work started in the offshore oil and gas industry, but has moved onshore (Storey 2010). By 2005, 45% of mining workers in the Pilbara were employed on a FIFO basis (Sheppard 2013). FIFO itself is defined as

All employment in which the work is so isolated from the workers’ homes that food and lodging accommodations are provided for them at the worksite and schedules are established whereby employees spend a fixed number of days working at the site, followed by a fixed number of days at home (Storey and Shrimpton 1991a cited in Houghton 1993, p. 281)

This has a number of impacts on both workers and worksites, but is fundamentally “viewed as an alternative to the construction of a more permanent community” (Houghton 1993, p. 281). The 1990s also saw new mines opening on a FIFO basis, with workers being housed in villages or camps rather than towns (Murray & Peetz 2008).

FIFO has become the dominant form of Western Australian mining employment. The Chamber of Minerals and Energy WA, the peak resources sector representative body in Western Australia, reported that in WA in 2014 60% of mine workers and 80% of mining construction workers are employed on a FIFO basis (Education and Health Standing Committee 2014, p. 8). FIFO brings a number of advantages for capital, as it decreases (or circumvents) the cost of building and operating towns, decreases time lags in construction, costs associated with town closure, removes the need for lack of government support for new towns and avoids environmental restrictions on town construction (Cliff and Roche 2001 cited in Murray & Peetz 2008; Education and Health Standing Committee 2014).

FIFO work separates peoples’ living arrangements from their work arrangements, which fragments workers’ reproduction of labour power over space, but it also
influences the local labour control regime and social regulation of labour markets in particular places.

FIFO outsources, individualises and marketises processes of social reproduction at a price lower (and more ‘manageable’) than the deeply sunk costs of maintaining company towns, the corporate sector’s previous spatial fix (Peck 2013b, p. 249).

Peck asserts that labour markets most reflect market characteristics when workers are separated from their social context (Peck 1996, p. 9), precisely what occurs in FIFO camps. FIFO work effectively individualises both work and living conditions, resulting in these workers taking a self-centred approach to work and place (Peck 2013a, p. 237).

FIFO has also been pursued as an anti-union strategy in the Pilbara, where “mining workers are hired as non-unionised independent contractors”, increasing managerial prerogative (Sheppard 2013, p. 274). Being able to recruit from across Australia, rather than from the limited population of Pilbara towns allowed managers to choose from a larger pool of potential recruits and make workers more easily replaceable.

The increasing prominence of FIFO work has seen a shift in the spatial arrangement of work in the Pilbara, preferring temporary camps to company towns.

Since 1980, very few towns have been constructed in the Pilbara and some of the original towns have closed down. The higher costs of town construction and maintenance, costs and difficulties of providing social overhead capital, industrial disputes, worker preferences for the opportunities offered by larger metropolitan areas, structural changes within the mining industry, and changing taxation arrangements have all contributed to making the FIFO alternative increasing attractive to mining companies (Horsley 2013, pp. 297-8).

Mining companies argue FIFO allows mining to be profitable in marginal sites, lowers costs to government in remote areas, stimulates investment for regional services, limits government expenditure on residential workforces and reduces the costs and impacts of closing sites of extraction (Rainnie et al. 2014). There are also tax advantages for FIFO operations (House of Representatives Standing Committee on Regional Australia 2013), showing how the state and capital have, together, overseen the spatial reconfiguration of work at the Pilbara scale.

The remade spatial fix of Newman is therefore something of a hybrid of the company town and the FIFO camp or village. BHPB uses both forms of work organisation in the town. The presence of the town allows FIFO and residential workers to continue to reproduce their labour power in order to work. The introduction of a FIFO protocol in the town has allowed for

Outsourcing, individualising and market-development process of social reproduction and at a lower price, and more manageable, than the deeply sunk costs of maintaining company towns (Rainnie et al. 2014, pp. 106-107).

In 2003 the Business Review Weekly summed up how this new way of organising work impacted spatial practice in the Pilbara when they described how
For nearly a decade, since non union individual agreements have been the norm at mine sites and ports, these operations have enjoyed a productivity surge. No longer did management have to contend with the union bastardy that caused endless strikes in the 1970s and 1980s. Managerial prerogative was established (Way 2003).

This reassertion of prerogative emerged as labour became internally divided within place and across space. Workers interacted less in work and social spaces, shifts and rostering arrangements led to fragmentation and resulted in the ‘hollowing out’ of towns (Ellem 2005).

This change to work and place in Newman, organised around market logic rather than social regulation, coincided with significant changes in the iron ore industry. The rapid expansion of steelmaking in China led to a massive increase in demand (Wilson 2013, p. 103). Iron ore prices soared, leading to rapid growth in the number of mines, in output and of the workforce in the Pilbara. Diminution of union power allowed capital the chance to exert greater freedom in both hiring and housing practices in town, enabling it to find market solutions to the need to scale up demand, most especially by means of the importation of numerically flexible labour which was uncommitted to place.

4.5 Conclusion

This chapter has described how Newman was made and then remade through a variety of spatial fixes, from the company town, to a ‘normalised’ town to one where management has taken near complete control over work processes. Newman has thus transformed from a ‘union place’ to a neoliberal place where management control work processes and workers interaction with place. This has allowed capital to extend control over production and reproduction by employing a workforce that consents to or accepts market regulation of work. This was achieved by reforming both the workplace and the town and changing how workers and residents subjectively understand Newman.

This division of workers, by time, across space and by employment relationship has managed to fragment a workforce that once shared spaces of production and reproduction. Beyond establishing that work and place co-produce each other, this chapter shows how a particular place is fashioned within space. Exogenous factors, including the behaviour of Japanese steel firms, BHPB and the state government and, within place, employment relations, workforce migration and social (union) regulation of the local labour market, interact or combine to make, unmake and remake spatial fixes. Place, both experiential and conceptual, was not solely constructed and reconstructed by capital and the state.

In particular, since 1999 spatial practice in Newman has become near unrecognisable from the ‘union place’ of the 1970s. This reflects wider changes at the Pilbara scale. FIFO camps have become the dominant spatial practice, with some towns closing and
others being used as a support centre for FIFO workers as well as supporting residential workers. In Newman, the town remains a hybrid of an established residential community and also a service hub for FIFO workers. BHPB now influences social reproduction via ‘social license’ and ‘Corporate Social Responsibility’ rather than civic administration. Further, the move to a twelve rather than an eight-hour shift roster has intensified work within the place. This has recast the local labour market around market-rather than socially determined mechanisms, and has established management as being the dominant force both at work and also in the regulation of work within the community. In this chapter I have shown how Newman has been made and remade, including changes in the governance of place, individualisation, and increased managerial control over work and place. These changes were accelerated with the onset of a mining boom in the 2000s and early 2010s. In so doing this chapter provides a context for the empirical exploration of work and contemporary understandings of place in Newman in Chapters Five and Six.
Chapter Five: Work In Newman’s Local Labour Market

This chapter empirically investigates employment relations in Newman and reveals how work in the town has been reorganised to be market-directed rather than regulated through (individual or collective) social agency. In particular, the formal and informal regulation of work has been recast to increase managerial prerogative, decrease union influence and allow for new spatial and temporal arrangements. This chapter shows how work is arranged in Newman and how workers subjectively understand work in place. By contrasting this to prior spatial fixes it will demonstrate that the local labour market has been remade by these changes to work regimes and place. Contemporary work and employment relations in Newman, as in all places, are shaped by prior social practices (Ellem & McGrath-Champ 2012). Thus the changed character of the local labour market - where work was formerly socially regulated through collective expressions of worker voice to a passive workforce that accepts managerial prerogative and submits to market logic - can only be understood through understanding the remaking of work and place.

This chapter first describes aggregate statistical and demographic data on Newman and considers how workers make sense of their place within economic space. I then consider employment relations in the town by demonstrating that mining work dominates the local labour market, and consider the commonalities shared by mining workers. I then highlight three divisions within the workforce, on the basis of industrial instrument, residential status and employer. These divisions demonstrate the departure from the residential and unionised company town as discussed in Chapters 3 and 4. This recasting of employment relations includes the expansion of managerial prerogative, as I investigate interviewees’ subjective understanding of management’s control over work. I also recount long-term residents’ description of work organisation and regimes over time, which further indicates how changes to work and place together have created a local labour market based on a market-driven logic. I then consider how the remade local labour market has increased job insecurity in the place, showing how the risk associated with fluctuations in commodity markets are now borne by workers. These workers either accept or fail to contest bearing these risks, in conformity with an individual subjectivity of employment relations. Finally, I consider the role of labour mobility in the making and remaking of Newman’s local labour market.

5.1 Contextual Factors Shaping Work

This section sets the context for my discussion on work by outlining the external factors that have shaped Newman’s local labour market. These external factors are more significant to workers in place as, since 1999, unions no longer mediate these
changes. With the transition to a more market based local labour market, workers bear
the brunt (and to an extent reap the rewards) of changes in wider economic space. Thus

[t]he global is in the local – so ‘place’ residents have only partial control of their locality, though
they are obliged to feel the full benefits or costs of changes not entirely of their making
(Castree 2010, p. 464)

I thus consider how workers make sense of their own positionality within economic
space.

In Newman, due to the mono-economy of the town changes in the global iron ore
industry have a disproportionate effect on work in place. Since 2000, global iron ore
markets have been in a ‘boom’ period due primarily to growth in the Chinese steel
industry (Wilson 2013). To meet this growing demand, BHPB increased its output from
its Pilbara operations from 61.7Mt in 1999 to 124Mt in 2009. By 2014 BHPB’s iron ore
output was 225Mt and the company planned to expand output to 290Mt (BHP Billiton
2014).

This expansion was felt both at work and in the town. A worker who had lived through
the relative doldrums of the 90s described the change

By 02-03 you start to feel that something is changing, and mining is picking up... you start to
see more contractors coming into town (FW2I24 2013)

One worker, who had worked in the Pilbara since the 1970s, both as a contractor and
currently for BHPB, described the scale of the increase.

Two years ago there were only about fifteen or twenty people on the actual shift that worked
the machines. Now there’s forty... That’s just the people driving the machines, not the backup
(FW2FG3 2013)

This boom increased demand for both iron ore and for workers to extract the ore. This
meant that there was a tight housing and labour market, where workers could
command high wages according to this market logic. This increase occurred at the
Pilbara scale, leading to competition for workers between BHPB, Rio Tinto and
Fortescue Metals Group. This had an accelerating effect on demand for labour; as one
resident described

There was a big push, probably 18 months ago, where people were leaving BHP for FMG
[interviewer: why?] Money I think. FMG was throwing money at people, so there was a big shift
(FW2I8 2013)

This, coupled with the mobility of workers through FIFO and relocation, shows a local
labour market that more closely resembles a classical market of demand and supply,
rather than a socially regulated and negotiated phenomenon. Workers would exercise
agency over their careers by leaving jobs for an increase in pay, which particularly for
FIFO workers was not a problem, as the location of the work was a secondary consideration to the income.

This increased production also led to massive growth of the town, leading the Australian Bureau of Statistics to classify Newman as a ‘Booming Mining Town’ in 2011 (Australian Bureau of Statistics 2013). The town experienced annual population growth of at least 2% between 2006 and 2011 (Australian Bureau of Statistics 2013). This growth put huge pressure on the housing market, with demand massively outstripping supply. The median rent paid for a private dwelling in Newman was $80 per week, which seems impossibly low; however this reflects the fact that employees of BHPB (and certain contractors) receive rent subsidies. Private rental prices during this period grew at an astonishing rate. In the December 2005 quarter the average weekly rent on a private dwelling in Newman was $483, by the December quarter of 2012 it had risen to $3086. The average house price had grown to a peak of $893 700 in the September quarter of 2012, an almost eighteen fold increase from 11 years prior when the average price was $51 270 (Pilbara Development Commission 2015).

It is within this temporal context that workers considered Newman’s and their own position within economic space. Workers understood that the extraction of ore was very important to BHPB’s operations and the global iron ore industry. A mining supervisor considered

>[Our jobs are] pretty important I think... to keep the dirt moving. If the trucks stop, the money stops (FW1114 2012)

The strategic importance of the work is underscored by the labour history of Newman, where long strikes were able to disrupt production and allow union workers to remake the local labour market to their advantage. Even though this industrial action was considered a thing of the past, workers saw the value of their work to BHPB and the global industry.

While they were aware of the global nature of the industry, and the importance and value of extraction, workers understood these economic relations in a varied way. Eleven interviewees described paying little or no attention to the iron ore industry. These workers were directly employed by BHPB or didn’t work in mining, so they were the least vulnerable to losing their job if the market conditions deteriorated. A resident described this feeling, stating “as long as we’ve still got work we don’t really care” (FW1FG2 2012). These workers reasoned that they weren’t able to influence the global industry, and it was factors beyond their control that determine the price of ore and their position in the labour markets, and they accordingly reasoned that there was little point paying attention to these matters.

Other workers paid more attention to the industry, particularly if changes in the price of ore threatened workers’ job security. Two workers in the first period of fieldwork described how “I think we’re starting to plateau in regard to China” (FW1I6 2012) and
“obviously China now are starting to struggle a bit, that’s going to hurt us a bit” (FW1I13 2012), meaning that the result could be workers in Newman losing their jobs. I return to this theme of market conditions and job security in Section 5.4.

Workers who followed the global industry closely often did so out of financial self-interest. One worker explained

I’ve got a fair working knowledge of where it’s going and who is buying it and what the prices are and how they’re selling it... And what the future demand might be and might not be... Because I trade [options and shares] (FW1I11 2012)

Those who did follow developments in the industry were able to detail what was happening to demand and supply in North America, South America, Asia and Africa (FW1I16 2012; FW1I7 2012; FW1I11 2012; FW1FG1 2012).

Fluctuations in the iron ore market have, as described in Chapter Four, influenced both job security and aggregate employment in Newman. The impact of these fluctuations were particularly understood by long-term residents who had lived through both prosperous and fallow periods; one of whom who had lived in town since the 1970s explained

[We always had] three year cycles, boom bust things. Then all of a sudden the Japanese economy went down then we had a ten-year bust. That was right up to about 2000. Then from 2000 onwards it started to pick up again... with Chinese growth, then we had our resurgence (FW1I15 2012)

These forces caused Newman to have three big waves of redundancies since 1988 (FW1I2 2012; FW2I24 2013). As these changes occurred during the ‘union town’ period unions were able to mitigate the effects of global markets, meaning redundancies were voluntary rather than forced.

During 2013, in between the two periods of fieldwork, Newman’s local labour market transitioned from a ‘boom’ phase to a slowdown. In 13 interviews residents were pessimistic about the prospects for the local labour market, and in turn, for the town. This is evidenced by the job cuts in Newman described later in this chapter, as a religious leader explained

[We are] in for a slowdown...there are a lot of people leaving town, and a lot of [workers] not being replaced (FW2I21 2013)

This is a demonstration of the numerical flexibility now available to employers who are able to downsize their workforces in response to fluctuations in market demand.

In summary, workers are aware of their own situation and positionality within economic space and particularly the global iron ore industry. However, with a marketised understanding of employment relations and limited capacity to shape space to improve their position, workers remain exposed to fluctuations in global markets.
5.2 Employment Relations

This section considers employment relations in Newman; that is “[s]tudy of the employment relationship, particularly the study of workplace interactions between managers and the managed” (Teicher, Holland & Gough 2006, p. xxi). It considers these workplace interactions, specifically the performance of tasks and the terms, conditions, rules and norms that are associated with this performance. It considers the nature of work, outlining key mining jobs, before describing differences in the workforce on the basis of industrial instrument, residency and employer and how these differences have empowered BHPB relative to workers. This section describes the experience of workers doing three types of mining related work: operators, maintenance workers and those who work on the mine site in non-mining roles. Workers also describe changes in the comfort and size of machinery used.

The employment relations system in Australia was traditionally based around a system of compulsory arbitration and conciliation (Mackie 1987). The system which developed around this created a strong place for unions, who were institutionally protected and heavily involved in centralised agreement making. However, there has been a departure from the system of centralised wage fixing towards decentralisation and deregulation (Townsend, Wilkinson & Burgess 2013). Ellem (2013) argues that these changes are a direct consequence of the remaking of Pilbara employment relations as described in Chapter Four. The regulation of employment relations in Australia, as with other elements of governance (for an early example identifying this trend see Pusey 1991) have taken a neoliberal turn (Peetz 2002). This led to the introduction of decentralised agreement making, and even for a time individual-level bargaining, the removal of ‘closed shops’ which had operated in the Pilbara, and encouraged non-union wage determination (Peetz & Bailey 2012). A new legislative scheme allows for both union-led and non-union-led collective bargaining with some exceptions, however, the role of unions in this new system is severely limited and restricted (Peetz & Bailey 2012). It is this system which underpins mining work in Newman.

In Newman mining work is the primary source of employment, with 37% of workers in 2011 working in metal ore mining, while an additional 5.1% were employed in ‘other mining support services’ (Australian Bureau of Statistics 2011). Workers earn high wages, with the median income in Newman being $1538 per week, 2.66 times the Australian median and the participation rate is 88.3%, which is 33.3% higher than the Australian rate (Australian Bureau of Statistics 2011). 73.4% work over 40 hours per week, significantly more than the average Australian rate of 45.3% who work these hours. The work is semi-skilled, with only 3.9% of the population holding a university qualification, much lower when compared to 14.3% for the whole Australian population (Australian Bureau of Statistics 2011). These statistics reflect Newman’s local labour market and spatial practice in the town. Mining work is the primary source
of employment demonstrating the mono-economy of the town. The high participation rate, long working hours and high wages demonstrate how work dominates spatial practice and daily life.

The work process in iron ore mining in Newman, as described in Chapter One, involves drilling, blasting, excavating, hauling, crushing, reclaiming and transporting the ore. This process requires workers, known as ‘operators’, to drive the machines, as well as maintenance workers to service the equipment and those working in other supplementary mining jobs.

Mining work in Newman requires workers to gain a number of qualifications and accreditations; a need which developed with the increasing legislative influence over health and safety, and government regulation of mining (Galvin 2005). These requirements include vehicle licences, on the job or vocational training, safety training, medical and drug testing.

One operator who gained employment only with a driver’s licence explained the increased need for qualifications.

> When I first came here [in the 1980s], all you needed was a driver’s licence. Heavy trailer would get you through the door. And to be able to speak enough English... Now [the requirements are] much better, it’s higher class, they’ve got tests now, we’ve got psychological tests... I don’t know if I’d get a job now (FW1I11 2012)

Career advancement in Newman was dependent on gaining higher qualifications (FW1I6 2012; FW1I1 2012). Historically this was strictly policed by unions (Dufty 1984), however now training is undertaken on an individual basis either to progress within Newman’s labour market, or to work in other mining jobs (FW1I13 2012). One resident described their spouse’s reasoning for seeking additional training as an attempt to better position himself within the wider mining labour market.

> [They started] as a dump truck operator, but he wanted to get on all the other machines ... on more pieces of equipment. At the end of the day he walks out of here with more nationally recognised awards and tickets, to go elsewhere (FW1I18 2012)

This training reflects an individualised form of agency, where workers seek out qualifications to enable them to find better, more lucrative positions within the industry (for an analogous example of this see James & Vira 2012). This reflects a market-based logic of mobility where workers seek the best possible work arrangements at any particular time.

These workers are aware that they risk becoming ‘locked in’ to mining industry jobs. This exposes them to a particular type of labour market vulnerability due to the cyclical nature of mining work; where a downturn in the industry diminishes employment prospects in mining generally, not just iron ore (FW1I6 2012).
For those who work in mining in Newman there are some shared attitudes and experiences of work. These commonalities stem from the dominance of mining over the place. Workers generally took pride and satisfaction in their work. This was exemplified by two residential workers in Newman, one of whom stated “This iron ore here is the best in the world, it'll make or break machinery, or men, or women” (FW1I12 2012), and another

“I’m satisfied going in and doing a decent job where I’m happy with the job I do... I try and do it as safe and quick as possible. I take pride in saying ‘fuck, I’ve done a good job there’ (F1I5 2012)

Maintenance workers also described a level of satisfaction and enjoyment of the work, characterised by the statement

“I enjoy what I do, it’s satisfying to know that you can go around on a $28 million bit of equipment and fix it. That’s satisfying, to see that get back up and going and not have the same fault re-occur (FW1I6 2012).

Operators, those responsible for driving the equipment on the mine site, reported working long hours, doing relatively monotonous work and having little autonomy over what tasks to complete. A typical day was described as

Start work; hours are from 6:15 to 6:15, twelve-hour shifts, which consist of eleven hours working and one-hour break, and half an hour shift change. That’s the twelve and a half hours for the day... What do I do? I’m multi skilled so I can, basically in the mine where we pick up dirt, put it in the back of trucks and bring it to the crusher... anything that lifts dirt and puts it in the back of a truck or cleans up or pushes dirt, and trucks which convey the dirt. That’s me (FW1I11 2012).

The work itself was considered functional if boring, with one operator stating “[I] dig the dirt up, put it in the crusher, move it into the trains and stuff like that” (FW1FG1 2012).

Maintenance workers in Newman service and repair the machinery used on the mine sites. The mining machinery used by BHPB was primarily Caterpillar equipment and thus Westrac, the Caterpillar Dealer in Western Australia, employs workers in Newman to maintain this equipment (PR Newswire 2003; Westrac 2010). BHP and Westrac both employ residential maintenance workers in Newman. They went on to describe a typical day at work

“You travel into the workshop, receive your handover from the previous shift... then you’ll have a pre-shift induction, what’s happened onsite, any safety things we need to know, general awareness, what’s planned on site, is there construction or whatever. Then, basically, break into your teams which you get allocated to, go to your machine and crunch out the work (FW2I10 2013)

Maintenance work is broken down into two categories, maintenance, where the machinery gets regular servicing, and repairs, where broken down machinery is repaired (FW1I15 2012) so that production can continue (FW1I6 2012).
Other ‘on site’ workers interviewed worked on ‘road crew’, maintaining the roads on mine sites. This was described as

We do intersections, the windrows. The windrow is... piles of dirt on either side [of the road] so the trucks don’t veer off. We clean all the delineation – all the guideposts, signs, stuff like that (FW1FG1 2012)

Workers described improvements in the comfort of their work over time. Much of the operator’s work is done inside an air-conditioned cab, reducing the exposure of workers to heat and dust. One BHPB operator described how work had changed since the 1970s

[When I started] you were doing more outside work ... you’d be doing this up against the face, it’d be summer, 42, 43 [degrees], probably even hotter in the pit... You’d come out and almost look like a coal miner but you were red because all the dust stuck to you (FW2FG3 2013)

There have also been changes in the machinery’s power source, from electric and diesel to all diesel, and size. Over time the Haulpaks have ‘grown’ from 75t capacity, to 120t to 240t. These changes allowed BHPB to standardise work across sites (Evans 2014). BHPB at one time used ten different types of Haulpak in the Pilbara, which has been reduced to two. BHPB claim this standardisation has led to productivity benefits including faster shift changeover, keeping the machinery running for 1/3 more time and being able to compare productivity of machinery across sites (Evans 2014).

Having described the shared experiences of work, I now detail key differences in work in Newman. These differences stem from contract status, residency and employer. Workers employed on the union agreement or non-union instruments enjoy different rates of pay and these arrangements are perceived as a way of continuing to marginalise unionists in town. FIFO workers have a different experience of work than residential workers in terms of the intensity of work and the way workers relate to the town and each other. Finally, as described in Chapter Four, by engaging contractors BHPB have effectively distanced themselves from the employment relationship, decreasing their responsibility for workers in place. These divisions have played an important role in rearranging work in Newman’s remade spatial fix. By fragmenting the workers by industrial instrument, across space and by employer BHPB has reasserted managerial prerogative.

The first variation between workers I address is the employment instruments of BHPB workers, that is, the formal regulation of work. Given the history of union based industrial conflict in the town workers’ employment arrangements are steeped in history, conflict and contested collective memory. There are two collective agreements covering BHPB’s workforce in Newman, the general BHP Billiton Iron Ore Employee Workplace Agreement 2008, which underpins individual agreements, and the union members’ BHP Billiton Iron Ore Operations Union Collective Agreement 2012.
Workers who remained union members after the 1999 dispute are covered by the union agreement. Other workers, including union members who weren’t already on the agreement, are covered by individual agreements underpinned by the general agreement. The local union organiser, who lived in the town, described this:

The way it is structured up here we’ve got about 80 blokes on a union agreement up on the hill and the rest aren’t. The rest are basically on [Australian Workplace Agreements from] ... ‘99. Basically to compensate the AWAs BHP didn’t want to do another agreement; they wanted the union one and one common law contract... The 80 blokes who are on their agreement, that’s all they can be on. No one else can come across onto it. It’s locked into those 80 blokes (FW1I3 2012)

A union member who moved to Newman after 1999 corroborated this view. They wanted to join the union agreement but were told by local managers they could not (FW1I5 2012). While there is little substantive difference between the agreements when read side by side, there are both perceived and real differences in working under each instrument. While on the union agreement, workers are still ‘covered’ by the union, which may have benefits in terms of representation and protection (FW1I6 2012), however these differences were not strongly articulated in interviews.

The perceived differences relate to collective memories of place. As described in Chapter Four, the introduction of individual agreements led to strong divisions in place. The dispute remains in the memory of long term workers who were both pro- and anti-union (FW1I3 2012; FW2FG3 2013; FW1I1 2012; FW1I7 2012; FW2I24 2013). The union organiser in town described how this division persists:

You’ve got some old diehards up here as well. We’ve got some really staunch blokes who’ve been here for donkeys years now and there is a big divide up there on the hill from non-union and union. What happened back in ‘99 ... They remember every single face and every single name of those people that crossed that picket line (FW1I3 2012)

This animosity was sustained both on the union and non-union side of the dispute. One resident who did not side with the unions described how in 1999 “I was abused, spat at, everything [by the picketers] ... it was not a nice time, it was a scary time... [the union] had their issues and fair enough ... but the way they went about it was wrong” (FW2FG3 2013).

The tight interlinking of work and place in Newman, typically of company towns, meant that this conflict manifested itself both in work and non-work relationships. One unionist described how:

The major strikes that we had up here. The big one [in 1988] and the 2000 one... created really big hassles in Newman. You know, friends were against friends and brothers against brothers as well (FW1I1 2012)

The divisiveness is exacerbated by fact that this is a small town and these were divisions that cut through social, family, sporting and other community organisations. A unionist recalled “a lot of hatred and animosity around the town towards other
people” (FW1I7 2012). The divisions still persist, and are acutely remembered by unionists who saw the town as being divided into union and non-union workers.

Union workers reported earning substantially less than workers on individual arrangements. This difference stemmed from the payment of an annual bonus to workers on individual arrangements, the specific values of which were hard to ascertain, with estimates from $5 000 to $20 000 per year. This was resented by the union workers, one of who described

The other blokes who went through the picket lines, they've been getting $10k, $20k more wages than us, over the last 12 years or whatever, and bonuses and all that, and we've been getting nothing... you've just got to live with it I suppose ... Sometimes you feel like a second rate citizen, with the pay you get, because you know everyone is getting more than you.... for doing exactly the same job (FW1I7 2012)

This bonus system was interpreted as a reward for compliance in the workplace (FW1I1 2012; FW1I2 2012; FW1I7 2012).

Whilst this division remains significant and strong for those present in 1999, workers employed since 1999 reported little or no awareness of the town’s union past. Understandings of place are dynamic, and in Newman the period of labour’s spatial fix is becoming lost to collective memory. This means that even the idea that the town was a ‘union place’ is only retained by a small proportion of the reconstituted workforce (FW1I7 2012).

BHPB’s decollectivisation strategy, and the resultant atrophy in union influence, has resulted in a situation where no time has been lost to industrial action since 2000 (BHP Billiton 2007a; Ellem 2005; Peetz 2002). A union member still on the award explained the marginality of unions “I am still on an award... I’m still an award boy. I’m one of the, what do they call them? Dinosaurs” (FW1I15 2012).

This drastically changed the culture of work and place. One operator employed by BHPB since the 1980s stated

[From 2002-03] industrial relations changed... you know, offering the new contracts, the individual contracts ... most people took it at that time, so I would say the change of culture started ... It was the turning point... [of] the mentality of the workforce (FW2I24 2013)

The remade local labour market markedly limits unions’ capacity to socially regulate work and place. One unionist described how “[BHPB have] got [individual agreements] and [unionists are] in the minority now. So it is pretty hard to change much in there, very hard” (FW1I1 2012). Long-term residents remembered a powerful union movement who had a lot of clout in the workplace, one of whom recalled

When I first came up here [in the 1970s] it was very much a union town. Not that I’ve ever been sympathetic with the unions, because it cost us money [going on strike] because the FED were the big union up here and they called all the punches (FW2I17 2013)
Thus the introduction, acceptance and then dominance of individual agreements have reshaped both the local labour market and the spatial fix around individualised, market based employment relations. This marked a major change in the way work was regulated, as management won back control over the work process that had been ceded in the 1970s (Way 2003; Bulbeck 1983; Heath & Bulbeck 1985). The success of the decollectivisation is reflected in the undoing of Newman, and the Pilbara more generally, as a union place.

The second division, clearly a spatial division, in the workforce is between residential and FIFO workers. The introduction of a FIFO workforce reshaped both the local labour market and workers’ relationships with place. FIFO’s effectiveness as a spatial solution for capital, overcoming the vulnerability of the company town fix, is demonstrated by the fact that new mining projects now almost exclusively operated on a FIFO basis (Rainnie et al. 2014).

Residential workers are typically provided with housing subsidised by their employer. This subsidy means that the median rent in Newman in 2011 was $80 a week, which was inordinately cheaper than private rents described in Section 5.1 (Australian Bureau of Statistics 2011; Pilbara Development Commission 2014). The dominance of this company supplied housing is demonstrated in the proportion of rented houses in Newman, 76.8%, almost three times the national rate of 29.6%.

Subsidised housing is attractive for workers who come to the town as it allows them to save more money. One resident who enjoyed subsidised rent explained

[Housing is] the big draw card to coming here as well, because not only are the wages a lot higher, but you don’t pay for anything [such as electricity], so you’ve got all that extra money as well… We here don’t pay anything (FW2I14 2013)

FIFO workers were employed on more intense working hours than residential workers. FIFO workers in my sample flew to Newman from Perth and resided in Perth, South West Western Australia, Victoria, Tasmania and Queensland (FW1FG1 2012; FW2I2 2013; FW2I16 2013).

Typical FIFO workers’ accommodation was a single room, with access to a shared laundry as well as amenities such as a theatre room and pool table. Workers are provided with three meals a day from a communal canteen, two hot meals and a cold meal to take on to the worksite.
Despite differences in their work arrangements, there is little difference in the actual work performed by FIFO and residential workers. As BHPB maintenance worker stated:

> We’ve got about 70 or 80 people [on my shift] and we’ll say about 40 of that is [FIFO], 2 [weeks on] and 1 [week off]. So we rotate through. They do 7 days, 7 nights. [They work for a contractor] we’re working with them. Some of them are casual and some of them are full time and permanently contracted to the mine (FW11 2012)

Despite the similarity in the work, FIFO workers have less secure employment, something I explore in greater depth in Section 5.4. A long-term residential worker described how FIFOs provide BHPB with numerical flexibility.

> We have a base of 240 that will always be town residential, if you need anything above that it’d be FIFO, that’s the way they want to do it you know. I talk to a lot of guys that do the FIFO, I’ve known them for a few years, and they’re happy doing it. I couldn’t … but they seem happy (FW2I27 2013)

The defeat of unions in the Pilbara has enabled employers to introduce and increase the FIFO workforce over time (Ellem 2004). This has enabled the mining companies to search from a wider pool of applicants, allowing for a more selective choice, which elsewhere in the mining industry has included those with qualifications but without mining experience (Murray & Peetz 2008). These mobile workers arrived in Newman in order to work intensively, which contributed to normalising the spatial practice in Newman where workers worked long hours and prioritised production over social reproduction.

Despite initial resistance, FIFO workers have become accepted as a normal part of life in the town (FW2I8 2013). A residential BHPB worker who has worked in Newman since the 1980s described their experience of the introduction of FIFO workers
It was a bit unfriendly [at first], and a clash of ideas I would say, the perception at that time. So, yeah, and then people start to adjust, and now FIFO, I would say, they have become part of the operations... people accept them now as part [of work] ... mind you most of them are BHP, so they are under [the] BHP banner (FW2I24 2013)

This shows how FIFO work has become normalised into Newman’s spatial practice.

FIFO workers reported a utilitarian, money focused and short term attitude to work in Newman, and these attitudes stood in contrast to those of residential workers (FW2I2 2013; FW2I16 2013; FW1FG1 2012; FW2FG5 2013). This attitude, as I discuss in Chapter Six, also contributes to a money-focused and short-term attitude to place. The FIFO crew who participated in a focus group (FW1FG1 2012) described feeling separated from the community, despite living within it, as they spent very little time outside the caravan park where they were housed.

Newman’s FIFO workforce has remade both work and place. For FIFO work to be viable, work needs to be intensified to sustain the expense of flying and temporarily housing a workforce, and 12 hour shifts enable this to occur (Peetz 2008). Furthermore, FIFO workers are separated from colleagues in time and across space, as workers who share a worksite might be in different parts of the country at the same time, or at work or away from Newman at different times (Peck 2013a).

FIFO workers’ fragmentation across space means that the workers commit to fulfilling social reproduction outside of Newman, where their families reside (FW1FG1 2012), rather than developing a sense of place as described in Chapter Two. This has remade the local labour market into one where the workforce is fragmented and no longer has rich and deep understandings and personal connections to place of the type that formerly fostered strong expressions of worker militancy in Newman.

This physical separation of production and reproduction creates local labour markets regulated by market mechanisms (Peck 1996). As such, the introduction of a FIFO workforce has remade work, as FIFO workers have intensified and fragmented work and remade place, as the presence of these workers diminished the capacity to socially regulate work and worker engagement with place.

The third significant difference in mining work in Newman occurred on the basis of the direct employer: either BHPB or a contractor. Originally the overwhelming majority of workers were directly employed by MNM, creating a sense of shared experience of work and place through a common employer. This is no longer the case, as by 2007 BHPB’s Western Australian iron ore workforce employed 6115 contractors and 2097 direct employees (BHP Billiton 2007a). Some mine sites, such as Yandi, were entirely staffed by contractors, although some contract mines have been taken ‘in house’ since then (BHP Billiton 2007b; FW1FG1 2012). Both contract and BHPB employees staff other sites.
Again there was little difference in work performed by contractors and BHPB employees. One worker who had shifted from a contractor role to a BHPB employee described

You’re doing the same work. No difference in work, you’re under the same supervision... there’s no difference (FW1I15 2012)

In prior spatial fixes in Newman, there was animosity between BHPB (previously MNM) workers and contractors. One resident who had worked both as a contractor and BHPB employee since the 1970s described

Years ago it was BHP and contractors [that were divided], now the BHP and contractors are together because the FIFOs are screwing us. Then these contractors that have, not the contractors that are leasing land here, contractors that have bought their land here, they live in this town, their kids are going to school in town (FW2FG3 2013)

This quote highlights division over attitudes to place. Contractors were once more contingently attached to place, and were seen as a threat to the social regulation of work based on community, unionism and a shared employer. However, as contractors became integrated and normalised in the workforce and the town this animosity reduced as they shared spaces of reproduction as well as production.

These three divisions show how employment relations have been recast in Newman. In prior spatial fixes employees had a unified experience of work and place due to a shared employer, shared living spaces, shared time together outside of work and a shared culture of unions. Now these workers are fragmented, by industrial implement, employer, by time and across space. These divisions have disempowered workers in their collective capacity or desire to influence working hours, management’s control over the workplace and over their capacity to remain in their jobs, each of which are discussed below.

5.3 Collective Understandings of Work

Interviews revealed a dominant understanding of work in Newman as being about hard work, long hours and high pay. Workers saw themselves as ‘micro-entrepreneurs’ who engaged with place in an individualistic and opportunistic way. These workers believed that their own skills and knowhow had equipped them to make the most out of the boom conditions and to earn the rewards on offer. The old spatial practice based around solidarity and collective understandings of work had been remade, replaced by one that prioritised an individual mindset of earning while ceding - rather than challenging - managerial prerogative.

Workers, particularly those who arrived after 1999, come to Newman to earn, save and leave. A BHPB non-production worker described how

Everyone comes for the same reason. It’s all about dollars. BHP exists because it is all about dollars (FW2I18 2013)
This was both individually and socially understood as the dominant purpose of the town, reinforcing the dominant understanding of work as centred on maximising income.

Yeah, for a lot of people if you ask them [why they move here] they will say … the money is good (FW11 2012)

This pursuit of high wages has led workers to prioritise work over family lives and the local community.

The hours of work, particularly the implementation of twelve-hour shifts, has played a major part in the shift to a work dominated spatial practice. The majority of work in Newman, reflecting standard practice in Australian mines (Peetz 2008), is arranged through twelve-hour shifts. In mining towns the hours of mine operation dictate the rhythms of daily life (Eklund 2012) and the transition to twelve hour shifts has remade daily life in Newman. Production is relentless, as one BHPB operator summarised

You lose track of weeks, stuff like that, days, where you can’t ask me what the date is. That’s what I find, because they blend into one (FW1I27 2013)

The dominance of shift work and rosters in town was reflected in one worker who stated that their ‘standard’ Monday to Friday job was a “five and two” roster (FW2I3 2013).

The table below illustrates the different iron ore rosters worked by BHPB’s workforce (BHP Billiton Iron Ore 2014). These are production rosters, which are generally of shorter and less intense duration than construction rosters (FW2FG3 2013; FW1FG1 2012). The difference between shift length and average weekly hours occurs because it takes into account weeks off. During a ‘working week’ of 7 consecutive shifts a worker will work 88 hours.

<table>
<thead>
<tr>
<th>Roster</th>
<th>Shift Length</th>
<th>Average Weekly Work Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 weeks on (7 days, 7 nights), 1 week off</td>
<td>12.5 hours</td>
<td>58 hours</td>
</tr>
<tr>
<td>8 days on, 6 days off</td>
<td>12 hours</td>
<td>48 hours</td>
</tr>
<tr>
<td>8 days on, 6 days off, 7 nights on, 7 days off</td>
<td>12.5 hours</td>
<td>46.8 hours</td>
</tr>
<tr>
<td>5 days on, 2 days off, 4 days on, 3 days off</td>
<td>12 hours</td>
<td>54 hours</td>
</tr>
<tr>
<td>2 weeks on (7 days, 7 nights), 2 weeks off</td>
<td>12 hours</td>
<td>42 hours</td>
</tr>
<tr>
<td>2 weeks on (7 days, 7 nights), 1 week off</td>
<td>12.5 hours</td>
<td>42 hours</td>
</tr>
<tr>
<td>5 days of 3 days [off], 4 days on 2 days off</td>
<td>12 hours</td>
<td>54 hours</td>
</tr>
<tr>
<td>5 days on, 2 days off, 4 days on 3 days off, 9 days on 5 days off</td>
<td>12 hours</td>
<td>54 hours</td>
</tr>
</tbody>
</table>

Figure 5: Table of BHPB Rosters and Shift Lengths (reproduced from BHP Billiton Iron Ore 2014, p. 34)
Rosters in Newman influence the perceived desirability of particular jobs. The interviewee who worked for a labour-hire firm in town described workers’ priorities:

FIFO people would [prioritise] money, and then roster. Residential people, again money, but roster is the big one (FW1I16 2012)

Workers were able to express a limited, individualised, market based agency by changing jobs on the basis of roster. A FIFO worker said that they took their current job

Because of the roster ... I [date] a girlfriend who was working 2 and 1 out on one of the mines, with this company, because they’re so flexible, I was able to line up the rosters so we had the same week off together (FW2I16 2013)

However workers do not always have a choice between rosters due to market conditions and the demand (and competition) for labour.

Satellite mines are run predominantly with FIFO workers, meaning that rosters are quite simple. Workers are organised into three crews, meaning that at any one time one crew is on day shift, another on night shift and a third not working, leaving no time for workers to interact with colleagues who are not on their ‘crew’ (FW1FG1 2012). Each crew commences their ‘swing’ with seven day shifts, finishing at 6pm on day 7, then not working for 24 hours, a break named ‘shift change’ or ‘phantom’, before commencing night shifts at 6pm on day 8. They then work seven night shifts before moving on to their time off, which lasts for six and a half days, in which they fly home and then back to the Pilbara (FW1FG1 2012).

A combination of residential and FIFO workers staff Mt Whaleback. Residential workers work ‘four and four’ rosters, which are either four straight days, four off or two days, two nights and four off or four days, four off, four nights, four off. Each shift has a combination of FIFO and residential workers as these rosters overlap. Workers on both FIFO and residential shifts work similar aggregate hours, which results in similar pay (FW1I15 2012).

Residential Westrac workers were on an eight and four roster, which was more intense than, and misaligned with, other rosters. This resulted in social detachment from the general community and from workers who did not work for Westrac (FW2I10 2013) but it also resulted in the building of stronger relationships with Westrac colleagues (FW2FG4 2013).

Shift work in Newman is arranged into a day shift, running broadly from 6am to 6pm, and a night shift from 6pm to 6am. In practice this working day can be extended by up to an hour (FW1I2 2012). These hours were further extended for workers at satellite mines, as workers were driven by bus from their accommodation to the mine site, meaning they were away from their accommodation for up to 15 hours a day (FW1FG1 2012). The extreme end of this was explained to me as being
[Someone I know,] they’re out at Cloudbreak [mine site]. Their camp is 1.5 hours away. He’s up at 3am to go to breakfast...12 hour shifts are going to knacker you, let alone a bus ride each way to wherever it is, each way, that’s a 14 hour day, with stuff ups that can be 16 hours (FW2FG1 2013)

The exhausting nature of these hours is described by a religious leader in town, who argues

I think the mining companies have been given too much leeway in how they've set it up. I think there needs to be some more regulation ... the guys get up here, they work 12 hours a day, they do a handover before and after so there’s probably 13/14 hours in effect, they have to have 8 hours sleep, so there’s 2 hours left in the day (FW2I21 2013)

This reflects a more fatiguing arrangement of work when compared to the previous eight-hour roster. Eight our shifts were worked as day shift, 7am to 3pm, followed by afternoon shift, 3pm to 11pm, followed by night shift, 11pm to 7am, before two days off (FW1I11 2012). This system left workers more time and energy to socialise with colleagues and engage with community (FW1I2 2012), and the implementation of a twelve hour shift roster widely considered a significant change in work (FW1I2 2012; FW2I24 2013; FW1I1 2012; FW1I7 2012; FW1I11 2012; FW1I15 2012; FW2FG3 2013).

The fatiguing nature of twelve-hour shifts is compounded by the requirement for workers to change between day and night shift. The frequent changing of shift patterns compounded the difficulty of regenerating the necessary labour power in order to work for twelve hours. Workers had individual ways to deal with this, for example one residential BHPB operator described

2 day shifts are OK, no hassles, then we go on 2 night shifts. So I always go to bed I’ll get about 2/3 hours sleep before I go on the first night shift. Then I’ll go sleep the next day and then whatever time I wake up, I’ll potter round and then go back, so I get at least 8 hours sleep in between the 2 nights. Probably be broken up, as you get up and do your weeding, whatever, then you go back to bed. Then the last night I always go to bed and whatever time I wake up that’s it. I need that bit of sleep (FW2I27 2013)

The other side of this switch was between working night shift and coming back to day shift. This adjustment was done during workers’ days off. A residential worker described their fatigue after coming off night shift.

You’re just like a drunken zombie, you go to bed for another couple of hours, so you’re days off are gone [sleeping]. So you only get 3 days off instead of the 4 (FW1I2 2012)

This limits workers’ capacity for engaging with community and each other outside of work, as the change in work hours leaves them more tired and needing more time to recuperate to prepare for the next swing.

Despite the complaints that many workers expressed about shift work, particularly night shifts, there was an understanding that this is how work is done in place. This reinforces the idea of a work dominated spatial practice, where workers, upon moving to town accept the current arrangement of work.
The remaking of work in Newman has also changed the relationship between workers and their supervisors. Managerial prerogative has been established in place and is accepted by workers as ‘part of the deal’ of accessing Newman’s local labour market. The worker-supervisor relationship reflects BHP’s power over workers and limits their capacity to express agency because workers are required to follow instructions or risk losing their employment.

As described in Chapter Four, worker-manager relationships in Newman were once defined by militancy and contestation. Since 1999, as work was remade, this relationship has changed as workers descriptions of these relations generally reflected quiescence to managerial prerogative and a unitarist perspective on employment relations.

Workers described variation in management styles and relationships (FW1I15 2012; FW1I2 2012). Despite this variation, some general conclusions could be drawn about worker-supervisor relationships: workers are not consulted in workplace decisions; workers perceive a culture of favouritism; and management freely exercise prerogative, which extends to safety policy.

Workers complained that managers did not consult with workers over decisions in the workplace.

A lot of the new management aren’t interested in [workers’] views or experience (FW1I15 2012)

This was considered frustrating, particularly where changes were seen as detrimental to the work process (FW2FG3 2013). Experienced workers were the most frustrated at this lack of consultation (FW1I6 2012; FW1I2 2012; FW2FG3 2013). One of whom complained

There’s no input from the experienced operators, and drivers ... You’ve got experience sitting on the pit floor, and they have seen it time and time and time again, and what goes on every day, live (FW1I2 2012)

Despite this general frustration with the lack of consultation, workers respected supervisors who had been promoted from the shop floor (FW2FG3 2013). A supervisor who had been promoted from the shop floor stated “I think the workers respect me for that” (FW1I14 2012). This perspective is a stark contrast to the class consciousness which existed previously, where workers in the Pilbara refused promotions as it would see them joining the ‘other side’ from ‘wages to staff’ (Dufty 1984).

Workers also perceived a culture of favouritism at BHPB. A number of workers described that BHPB managers provide advantages to workers who are in the ‘purple circle’ (FW2I13 2013) as “if you’re in the purple circle [BHPB] will look after you” (FW1I2 2012). The purple circle is a term used to signify a group who often is given preference over those ‘outside’ it. This favouritism, coupled with increased job insecurity discussed in the next section, meant that workers often felt that if they
spoke out or disagreed with managers that they put their employment at risk. One worker described the work culture as being “Cliquey... If they don’t like you, you’re gone” (FW2I16 2013). Another worker described how

That’s the way [BHPB] are, if you’re not a yes man, if you’re not saying yes, yes, yes, instead of saying ‘no we don’t want to do that’ ... you would get [in trouble] (FW1I7 2012)

This demonstrates the change in workplace culture from one where management conceded prerogative in favour of output to one where expressions of agency had been suppressed and management assertion of prerogative unfettered.

Where previously workers would actively challenge management over industrial relations, workplace and town issues (Court 1976), they now accept management decisions without contest. This acceptance can be begrudging, but workers accede to management’s will.

I just go out there and repair what I’m asked to repair to the best of my ability. If they decide to make a decision that’s beyond me or beyond my capability with regards to making a decision, with regard to business decisions, that’s someone else’s responsibility (FW1I6 2012)

This culture of acceptance also meant workers were often reticent to offer opinions or disagree with management, for fear of losing their jobs.

People won’t [speak up], because they’d be frightened of sticking their head up above, so people just go and ... carry on doing their own thing... people just get browned off with it, so they say ‘if that is the way you [management] want to do it, we’ll just do it your way (FW2FG3 2013)

Managerial prerogative goes unchallenged in Newman in part because workers perceive their employment is insecure a point that will be explored in greater detail later in the chapter. The perception that bonuses are paid to compliant workers exacerbates this dynamic.

Another change in the workplace reported by interviewees was a major change in safety culture. Several workers, both union and non-union, described how safety culture was a tool that could be used by management to expand prerogative. One long-term union worker described

[Management] use safety when they choose to, and when they don’t choose to and you ask a safety question about a job, whether you’ve got the right equipment or doing the task the correct way, they’ll simply take you off the job and put someone else on the job who won’t ask those questions. That’s pretty scary (FW1I6 2012)

This was generally seen as a positive development however there remained a tension between safety and production, as one BHPB worker described

Work wise, up there, I suppose it is production over safety ... the gob that comes out, we need to make this amount of tonnage. ... It’s that almighty dollar everyone is chasing (FW2I13 2013)
Another aspect of safety culture was the implementation of a drug- and alcohol-testing regime, often referred to as D & A. This policy, which was implemented in 2000, subjects workers to random drug and alcohol tests. A BHPB residential worker described how

> You have to be ready for your work, especially doing almost 13 hours. So you have to be ready for your job. Like I know if I’m going on day shift, I make sure that I go to bed early… I get used to it. The main thing you have when you go to work you have to make sure that you’re fit and ready for it, because any single mistake, you hurt yourself and you hurt others (FW2I24 2013)

D&A testing was accepted as an individual responsibility and curtailed workers’ willingness to socialise over alcohol during non-working hours (FW2FG4 2013).

Some workers also saw alignment between their and management’s interests where they held shares in BHPB. Profit sharing was started by MNM in the 1970s (Dufty 1984) and is maintained through BHPB’s share incentive scheme called ‘shareplus’. This program, with over 14 000 participants (BHP Billiton 2015), was introduced to develop a unitarist ethos at BHP where workers are encouraged to “share in our future” (BHP Billiton). All the workers in one FIFO focus group had exercised the option to purchase these shares (FW1FG1 2012). These workers saw the company’s profitability as being in both the company’s and their own interest.

The unchallenging acceptance of managerial prerogative, which is fatalistically accepted by workers, demonstrates clearly the changes in the regulation of work in Newman’s local labour market. This near complete reversal from the town’s history of contestation has contributed to, but also been caused by, the reshaping of work and place. As trade union activity declined, management have been able to assert unquestioned managerial prerogative over work. This has remade attitudes to both work and place; where Newman’s local labour market is considered as a place where workers look after themselves first as micro-entrepreneurs who earn, save, invest and leave (see Chapter Six). As such it is possible to understand this quiescence as workers are making a pragmatic choice not to challenge management’s prerogative to be able to remain as local labour market participants.

### 5.4 Job Security

A significant aspect of Newman’s remade local labour market is a decrease in job security. This is markedly different to the relative security of work when unions fiercely protected workers against dismissal, and reflects the transition to a local labour regime that more closely resembles a classical market. As such, it is now workers who bear the risks of employment and fluctuations in iron ore markets. This section defines job insecurity before considering how in Newman job loss is considered a function of market conditions. I then describe how job insecurity is experienced by segments of the workforce and how this allows BHPB control over its workforce to secure compliance and productivity. Subsequently I examine how the fluctuations in iron ore
markets can lead to job cuts, and how this is accepted without challenge. I then look at how individual workers experience and respond to insecurity. Finally, I consider the implications of investment in automation for job loss in the medium term.

de Ruyter and Burgess (2000) describe job security as comprising a number of components, including the probability of: job loss, income loss, satisfaction loss, successful job search and maintenance of income and satisfaction. Job insecurity is characterised by a high probability of these negative outcomes. This insecurity can be influenced by what happens at their job, broader labour market conditions and the employment relations system. In Newman workers could lose their job, and thus their income, in two main ways; the job itself could be terminated or an individual worker could lose their position in the job. Job insecurity was felt in a varied way, with residential workers reporting a higher sense of job security than FIFO workers or contractors. This segmentation of the workforce provides BHPB with control over the workforce, retaining a core of significant workers who are deeply attached and committed to place, while retaining flexibility with FIFO and contract workers who can be more readily hired and fired to meet fluctuations in demand.

Interview subjects considered job insecurity an integral part of mining labour markets. The insecurity was explained by a mining spouse, who described how “there is no security in mining, if you go talk to the old timers, there is no security in mining” (FW2I15 2013). This internalisation and acceptance of the insecurity in mining work demonstrates of how workers see Newman’s local labour market as ‘market driven’; BHPB are able to exercise numerical flexibility unchallenged in line with market fluctuations.

The workers who felt most secure in their jobs were residential operators who worked directly for BHPB. These workers considered themselves more secure than other workers, particularly relative to FIFO workers and contractors (FW1I9 2012; FW1I14 2012; FW2I1 2013; FW2I3 2013; FW2I7 2013; FW2I10 2013; FW2I16 2013). They felt this security due to the money BHPB have spent moving and housing the worker, the profitability of the operation and that these workers considered themselves the ‘core’ of the workforce (FW2I7 2013; FW2I27 2013; FW2I10 2013; FW2I4 2013)

For these workers the size and profitability of the mine was seen as a source of security. A non-mining worker described how

Whaleback is one of the richest iron ore deposits [BHPB have] got. As long as that is there, Newman is going to be around for quite a while (FW2I14 2013)

Another BHPB residential worker explained

I’ve just finished loading a train, with 25000t worth of dirt. [I'm] Pretty sure my job’s ok because there’s another three million tonnes of dirt [iron ore] in the stockyards (FW2I7 2013)

One worker described
[I've] stepped out of [my] comfort zone for them and they need blokes up here. In my mind, it seems harder for them to get rid of me where I am now, I don’t feel too unsafe (FW2I10 2013)

Further, living in the town provides workers access to a social network, as a mining spouse explained

[My partner] knows all the big bosses and stuff from playing [sport] and stuff like that, they know he is a good worker (FW2I9 2013)

Contractors, relative to BHPB workers, are inherently more vulnerable to losing their jobs. The introduction of contractors, and the use of labour hire firms, has created more contingent work arrangements. An interview with a worker for a labour hire firm in town explained the increasing use, and dynamics, of labour market intermediaries in Newman (FW1I16 2012). One interviewee worked for a labour-hire firm in town, who engaged workers on a casual basis to work for other employers in town (FW1I16 2012). These workers exhibit a marketised relationship with work, which is demonstrated in their willingness to change jobs for marginal increases in their hourly wage (FW1I16 2012).

Contractors are in the local labour market as supplementary workers who complement a core of residential workers. This was described by a supervisor, a BHPB employee, who stated they were

Reasonably secure, because [on our shift] we run labour hire... Yeah, we run 120 of them up there. So they’re the first that will go. Yeah, they’re a buffer ... So what they do is say ‘if someone leaves just don’t replace them’. So that was a year and a half ago we had a bit of a downturn, that’s what they did (FW1I13 2012)

A worker who had experience working for both a contractor and BHPB described the effect of the change

When you are contracting... you’ll soon know when the work starts to dry up, or is quietening down, [contractors] are the first to go (FW2FG3 2013)

One worker had exercised a limited form labour market agency by shifting employer from a contractor to BHPB to reduce this vulnerability. They told me

[I changed] Just because, pretty much, job security. You’re not working for a contractor where you could be there one day and not the next sort of thing (FW1I14 2012)

Contracting firms also engaged subcontracting firms in town, and employees of these subcontracting firms were seen as the most vulnerable in this hierarchy of insecurity (FW1I10 2012).

There was also a greater fear of losing one’s job for FIFO workers compared to residential workers. FIFO work was considered to be more temporary and FIFO workers were more numerically flexible than residential contract workers (FW2I7 2013; FW2I27 2013; FW2I102013; FW2I4 2013). One worker, who had the opportunity
to transition from FIFO to residential work, described the benefits of the change in terms of job security

When I [changed, the pay] was quite similar but [as a residential worker] you’ve got guaranteed money in the bank. When you’re FIFO there’s much less security … you put more value on being residential. It might be the same money but it’s worth more because you get a 2 year contract (FW2I7 2013)

In light of the slowdown this worker commented on the relative insecurity of FIFO work, as

I’m definitely a lot more comfortable in my house [as a residential worker] than a FIFO would be in a donga wondering what is going to happen tomorrow (FW2I7 2013)

As such, BHPB have segmented their workforce in terms of job insecurity, allowing them to retain long-term commitment of residential workers while still employing a numerically flexible workforce.

While all these workers feel a level of job insecurity, the cause of this is often based in market changes. Falling ore prices or falling demand for ore can see workers laid off as BHPB or contractors downsize. This is accepted as ‘part of the deal’ in working in mining, but does reflect a major change from when unions fought to protect jobs.

Residents and workers shared the belief that worsening market conditions would lead employers to downsize their workforces, which was explicitly mentioned in seven interviews. This was particularly acute in the second period of fieldwork, as a number of employers including BHPB had cut jobs in the previous year. This downsizing was understood as a logical consequence of the transition in the mining cycle; the result of reductions in the price of iron as well as the Jimblebar mine moving from the construction to the operations phase. A worker who had lived in Newman since the 70s explained this market logic and numerical flexibility

Where there’s a boom there’s always going to be a bust. I hope a lot of people prepare themselves, set their superannuation up so they can weather through it, I know a lot of people have overcommitted in Perth who are FIFO who are on big money (FW1I6 2012)

This quote simultaneously shows that workers are insecure in place, but also that it is individuals’ responsibility to prepare for job loss which is internalised as an inevitable part of mining work.

This insecurity was both evidenced and driven by a number of redundancies in 2013. A ‘mining wife’ explained how this market logic was applied in between the periods of fieldwork

[When the iron ore price dropped out there was a huge wipe out of staff. And everybody was just waiting to see whether they have a job or not, we all were. BHP, contractors, a lot of contracts got wiped out. They were all sent packing. ... Everywhere, just all the employment agencies, you know, that did the contracting, everybody just vanished, and it was very sudden for a lot of people. We’re finding, even now, people are getting a surprise letter, they’re going
by the way, and companies are looking for a reason to fire you… because the price isn’t as good anymore and there’s a lot of pressure economically (FW2I22 2013)

This growing sense of insecurity was particularly felt for those working for a contractor, as if their employer was to lose their contract with BHPB the worker may lose their job (FW2I10 2013). A BHPB worker in a non-production role gave an example of this

[BHPB have] just been downsizing in the business over and over again. Last month, 179 people it was … People don’t like that, but it is business (FW2I18 2013)

The idea that these job losses are just ‘business’ again demonstrates the effectiveness of the remaking of Newman’s local labour market.

Workers also felt individually insecure in their jobs, as they were aware that they could have their employment terminated with relative ease. Workers described BHPB as generous employers, but this generosity was predicated on workers being compliant and effective. A production worker who had been in Newman since the 1980s explained “you can be out the door in a heartbeat if you do something wrong” (FW2I24 2013). Doing something wrong was considered broadly, but interviewees’ definitions included a safety breach, failing a drug and alcohol test or having a bad attitude (FW2I24 2013; FW2I4 2013; FW1I1 2012). Another worker described the tenuousness of their employment as

You never know what is going to happen. It could be something that’s not your fault, and fucking bang you’re in the shit. Especially these days, they’re out to get people, the slightest fucking thing they’ll have you (FW1I5 2012)

A supervisor explained of his own position “any little mistake and you can be down the road” (FW1I14 2012), having formed this view through seeing other workers being dismissed.

Losing a job in Newman also can also lower the probability of workers being able to maintain their income afterwards. A religious leader explained how

They’re in a very competitive working industry, it is pretty cut throat up on the hill… you know, one, two, three strikes and you’re out. Depending on what that third strike is, you’re out of the mining industry. Not just out of BHP, you’re out of the mining industry (FW2I21 2013)

This puts people under more pressure to work harder. A long-term worker explained

Every time we have a performance review, absenteeism is getting less and less… people are getting more aware [work is] different from the past. In the past [workers were] totally too complacent… now I think they face reality more, you can’t play those games anymore… otherwise you’re risking your employment (FW2I24 2013)

One maintenance worker explained that employers’ access to an alternative workforce compounded the insecurity, particularly for less skilled workers.
If I was a truck driver or something like that, a dime a dozen, easier to get [a replacement] in [and despite their higher skilled role] I’m really just one of the cogs in the wheel if I fell out they’d just get someone else in to replace me (FW1I1 2012)

This shows how attitudes to work have been remade to align with management’s needs, as the local labour market has been remade according to market principles. Workers understand that if they do not submit to management’s authority they risk their employment, and with it access to housing (as I discuss in Chapter Six) and the potential to earn high wages in Newman.

While these workers felt individual insecurity, workers also took individual action to increase their job security. Three workers perceived increased individual security through doing a good job, maintaining a strong work ethic and receiving good performance reviews (FW2I4 2013; FW2I9 2013; FW2I16 2013). This mindset individualises job security, viewing it as a ‘zero sum game’ with other workers, reflecting and cementing individualism amongst workers. Two residents, whose spouses worked at Mt Whaleback, explained “The ones that work hard, do it by the book, things like that. They’re pretty well secure” (FW2I4 2013) and “If your department decides to downsize and … you’re one of the ones with the worst record [you’ll lose your job]” (FW2I9 2013). This reflects a general understanding that BHPB secures worker compliance through the explicit or implicit threat of job loss.

Increased job insecurity was accepted as normal, even desirable, in the remade local labour market. The ‘weeding out’ of poor workers is considered a regular occurrence, with interviewees explaining that “but around this time every year [early December] they have the cull, don’t they” (FW2FG1 2013) and that a downturn is a good chance for management to improve the quality, while reducing the quantity of the workforce.

[The town is] a lot quieter. They must have weeded out the riff raff. In a downturn you keep the good people and get rid of the shit (FW2I17 2013)

This powerful internalisation of managerial prerogative stands in stark contrast to how unions socially regulated work in the past, where all job losses as a matter of principle were opposed fiercely by unions (Dufty 1984).

A longer-term threat to job security for operators is the change to automated truck driving in iron ore (Bellamy & Pravica 2011). Workers asked about automation were aware of its inevitability, and understood that

[As automation] improve[s] we’ll be moved out. That’s the simple fact; that is what is going to happen… I know that I’m probably the last generation that probably will be doing this job – and that’s the fact of it. I’ve had a good run (FW1I11 2012)

These workers thought that automation would change the nature of the work (FW2I7 2013; FW1I14 2012). While automation was not considered an immediate threat to workers’ jobs, they had not considered challenging its implementation, as it was seen as an inevitable decision to be made by capital.
In this subsection I have shown how market logic and managerial prerogative have become accepted and normalised in employment relations in Newman. Workers understand that in order to keep their jobs they require favourable market conditions (although this varied based on the category of employment) and should exhibit desirable behaviours at work. This reflects Peck’s (1996) notion of a local labour market which is regulated not by social forces and community, but by classical market interactions of employers and employees. This particular spatial fix affords capital control over production as workers accept, rather than challenge, managerial prerogative as well as the risks associated with the fluctuations of commodity markets.

5.5 Mobile Workers and their Interaction with Place

Due to Newman’s isolation, its local labour market is almost wholly composed of labour migrants. These migrants, both international and domestic, have been central in establishing and re-establishing spatial practice. In 2011 33.2% of Newman’s residents had moved house in the year previous, and 69.2% lived at a different address 5 years before (Australian Bureau of Statistics 2011). This demonstrates the significant turnover in population due to labour migrants entering and leaving the place. These migrants move to Newman with an understanding of the characteristics of the local labour market, and as such are less likely to challenge these when they arrive. Given the difficulty in obtaining a job and housing, networks are central to accessing the labour market, but also play a key role in affirming remade attitudes to work.

BHPB is the major employer and landlord in Newman and thus has a disproportionate capacity to shape the local labour market through selective recruitment. One resident who had lived in Newman since the 1980s described

[The preference for residential or FIFOs] depends on who manages the mine, whether they like families or not. It changes every two years or so (FW2FG1 2013)

Traditionally, MNM preferred residential families, who were considered more desirable workers than single men (Heath & Bulbeck 1985). This attitude continues to be reflected in the high proportion of couple families with children, 59.6% compared to the than the national rate of 44.6% (Australian Bureau of Statistics 2011; Eckhart 1996).

People move to Newman primarily to work and earn high wages. With the remaking of the spatial fix, this has been reinforced as those who choose to move to the town make an informed (if not unconstrained) choice: if you move to Newman you work intensely but insecurely. As I describe in Chapter Six, this move is often short term and based around the desire to maximise income rather than trying to change power relations in the workplace (Coe & Jordhus-Lier 2011; FW2I8 2013).

The predominant factor that made Newman desirable for migrants is high wage work. Twenty-five of twenty-six residential respondents asked why they moved to Newman
explained that they migrated to Newman for work related reasons. This attitude was typified by the response of a resident who didn’t work in mining who stated “the wages are the ... big drawcard here” (FW2I14 2013) and this attitude was ubiquitous in town across all categories of workers. This type of migration has persisted since the construction of the town, where, even in the 1970s, a section of the workforce have always been in the Pilbara “with the pessimistic attitude of staying purely to save money” (Court 1976, pp. 109-110; Dufty 1984). High wages in Newman were considered “Anywhere from $160 000 per year up. That’s a lot of money for the [semi-skilled] work they’re actually performing” (FW1I6 2012). Workers reported earning between double and four times what they could earn in their home local labour markets (FW2I27 2013; FW2I10 2013; W2I22 2013; FW2I2 2013).

These high wages, particularly for FIFO workers, are earned by working very intense rosters and many hours. A FIFO worker on a 2 and 1 roster will work 168 hours in a two-week swing. The worker at the labour hire firm described a typical exchange, where a worker will say

‘I hear you need workers, and you pay good money’. Then you tell them what hourly rate they’re on and they say ‘is that all?’... A lot of people are [on $150 000 per year], but a lot of people aren’t as well (FW1I16 2012)

The attractiveness of Newman’s local labour market, particularly for workers who saw it in a functional, income maximising way, was heightened by the fact that the town was in a boom phase. Workers drew two conclusions from this: firstly, that the demand for workers and therefore their power in the labour market was high; and secondly, that this boom would last for a limited period of time, and would eventually end. Workers who accepted market logic thus felt obligated to make as much money as they could as quickly as possible. A BHPB non-production worker summarised this attitude where they stated

My other half... [also] works for BHP so it is pretty sweet. Some days I I’d love to [work in a less stressful job]. But ... I can do that later... at least I can say, while I’ve been here I’ve made the most of it (FW2I18 2013)

These migrants are thus making the most of being in place at this particular time.

To access the high wages available in Newman, workers need to be able to find a job. The desirability of the jobs and availability of potential workers is apparent in the town, as during my fieldwork I spoke to several ‘non-mining’ workers in town who were there trying to ‘get into the mines’ (researcher observation). Acquiring one of these desirable high wage jobs in the mines is often predicated on having access to the right social networks.

For workers looking to move to Newman, having family and friends already in the town made it much easier for workers to access Newman’s local labour market (FW2I18 2013). This migration, facilitated by family and friends, was common, as eleven
interviewees reported that they moved to Newman to work because of their personal networks. One worker who arrived in the 1970s explained “I had a lot of friends living and working here already” (FW1I6 2012). Another worker, who worked FIFO, described how they got their job because “A mate of a mate was a manager up here” (FW1FG1 2012), while another, semi-skilled worker on the same crew reported that they found work by having someone ‘vouch’ for them (FW1FG1 2012).

The importance of networks was intensified because of the high price of housing during the ‘boom’. The worker at a labour hire firm explained that having access to accommodation was essential in acquiring casual employment (FW1I16 2012). This was reflected in interview data, a resident explained

We couldn’t have come here [without family here]. Mind you, even us BHP employees, we had to do the same when we came here. You didn’t get accommodation here then either (FW1FG2 2012)

This networked migration has implications for the social regulation of the labour market. Workers often require access to particular networks to access the local labour markets, and these networks thus shape attitudes and behaviours in relation to work. Mobile workers have a preconceived understanding of work in the town, and there is also a social pressure in terms of the reputation of the people who facilitated their arrival. This means that labour mobility, both in terms of people who have moved to become residents, but also FIFO workers described earlier in the chapter, reflect the remade local labour market.

5.6 Conclusion

This chapter provides an overview of contemporary work in Newman, as subjectively understood by workers in town. It shows how the formal and informal regulation of work have, together, changed how workers engage in and understand work. Workers have internalised a unitarist approach, where they see that hard work can help protect their position against job insecurity, but also that this is what is expected of workers in place. The move to 12-hour shifts also means workers devote more of their energy to work and being ready for the next swing, ensuring that work is prioritised in place over other activities. Attitudes to work have become almost solely focused on individually working, earning, saving and leaving.

This re-assertion of managerial prerogative has been achieved through dividing the workforce, industrially, temporally and spatially. Divisions between union and non-union workers are still felt, while the move to twelve hour shifts limits the social time different workers can spend together. Workers spend more time within delineated crews than with the workforce more generally. Further, the spatial division of the workforce, where residential workers socially reproduce in place and FIFO workers do so elsewhere robs workers of the former opportunities presented to them in company towns to share common experiences of work and place. Contracting and
subcontracting further divides the workforce, meaning workers no longer have a focal point to challenge and assert class-based interests.

By rearranging the social regulation of work, so that unions and collective action no longer impede managerial prerogative, capital has successfully overcome the spatial challenge of controlling production and reproduction in place. It has done so by changing attitudes to work in place where workers internalise and accept that in Newman market logic determines the terms and conditions of work. This has allowed the company to manage through a period of unprecedented growth without falling victim to their spatial fixity. Changes in industrial instruments, work organisation and work practices do not, however, fully explain changes in worker attitudes. To do this, it is necessary to also understand how a sense of place and spatial praxis, which I turn to in Chapter Six, have reinforced these changes to allow capital to establish this new spatial fix.
Chapter Six: Social Reproduction and Place within Newman’s Remade Local Labour Market

This chapter seeks to understand conceptual place and subjective understandings of place in Newman. The changes in work I described in Chapter Five only go part of the way to understanding changes in Newman’s local labour market. I empirically investigate social reproduction in place as well as worker attitudes to, understandings of and experiences of place through interviews with both mining workers and non-mining residents in the town. Changes in social reproduction and conceptual place have reshaped the local labour market, recasting it to more closely align with a classical labour market, where work is determined by conditions of supply and demand.

Place, as described in Chapter Two, is a concept with many components, which is subjectively experienced. Place in Newman is composed of both worksites and the town site, as workers spend significant periods of time in each. As such, place is very important for the inter-relationship of production and reproduction, as it shapes how work is socially regulated. As Newman was constructed as a company town in an isolated place, the first section of this chapter I consider how social reproduction occurs in Newman in a limited way, but still functionally supporting production.

Sense of place is a subjective concept that is made up of conceptual and experiential components. In the second part of this chapter I look at how workers and residents subjectively understand Newman, how these subjective understandings have changed over time and how these changes have influenced employment relations in place. In the third section of the chapter I examine responsibility for place and, contextualised by my historical discussion in Chapters Three and Four, consider on what terms place develops and who shapes place. State and capital remain significant actors, however it must also be considered that workers, who accept a marketised version of place, also contribute to this remaking of place, reinforcing the changes to work that I discuss in Chapter Five.

6.1 The De-Prioritisation of Social Reproduction

The relationship between production and reproduction is fundamental to all local labour markets (Peck 1996), and in Newman the prioritisation of production over reproduction has been fundamental to the mutual remaking of work and place. The town’s high employment rate, over-representation of working age residents and high proportion of mining-related work demonstrate the dominance of mining and mining work over the place (Australian Bureau of Statistics 2011; Australian Bureau of
Statistics 2013). As such the mutual dependence of production and reproduction (Lier 2007) is fundamentally skewed towards production.

In Newman social reproduction has become constrained. Work dominates daily life, with shift cycles allowing limited time and energy for workers to engage with place. Further, limited housing stock and services for the elderly, the sick and for children restrict people’s capacity to fully socially reproduce in town. At times, these limits on social reproduction can cause exit from the town (a central idea to conceptual place in Newman which I explore in Section 6.2), leaving behind those who were happy with, or could endure, these limitations. This, in turn, reinforces the dominance of work over place and the shift from a socially regulated local labour market to a market regulated one.

The dominant understanding of the town revealed in interviews is that it is a functional place built for extraction, and that in order for this extraction to occur, workers worked hard and earned high wages (FW1I6 2012; FW1I12 2012). One worker described how “Newman is still just, basically, a mining town” (FW2I3 2013), demonstrating a perfunctory understanding of place. Residents had a limited imagination of place after mining (FW2I18 2013) with one describing how when mining stops

The town is finished…. It’ll disappear… You won’t have much here. You need people to have a town, to have a community, but those people need to be employed and engaged (FW1I15 2012)

This shows that mining and mining work are fundamental to conceptual place in Newman.

The dominance of production over social reproduction is demonstrated in how mining influences daily life. This affirms Eklund’s (2012) claim that in mining towns mining activities directly shape the rhythms of daily life. In Newman there were daily traffic jams at 6am and 6pm as workers went to and from work and busy periods in the town occurred before and after shift change (Researcher Observation). This is noteworthy due to the limited and atypical times of the rush hour and the minimal traffic at all other times during the day. This serves as a visible public reminder of the dominance of mining shift work in the town. Further, community and civic activities such as Christmas parties and sporting matches were arranged to accommodate shift cycles (Researcher Observation). For example, the start time for Australian Rules Football matches was changed to 7:30pm so that shift workers could play after day shift. This move was credited with preventing the league from dissolving due to lack of players (FW2I26 2013). ‘Country Footy’ remains a significant part of community life in Australia’s southern states (Tonts 2005; AAP 2004) and that it was rescheduled to accommodate work shows the dominance of production over place.

This reflects Ellem’s assertion that
The changes in the work regime... was premised on employees identifying with the company above all else... this relationship over-rode not only the worker-union relationship but worker-community and, perhaps, worker-family relationships (Ellem 2015c)

Families reported structuring their lives around shift work, both in terms of daily life and significant events. The prioritisation of work meant workers frequently missed significant life events such as Christmas morning, birthday parties and children’s musical performances (FW2I2 2013). One resident described how the subjugation of social reproduction and family life was accepted as part of living and working in Newman.

Here, I guess, if you’re on shift you miss out. That’s just... what happens. But the families are used to it (FW2I14 2013)

The ‘missing out’ was accepted by workers and their families who felt that they were compensated by the high wages they earned (FW2FG1 2013). A religious leader described how in Newman “[Life is] absolutely structured round work” (FW2I23 2013), a sentiment which was reinforced by other residents who described that production was the primary focus for those who live and work there (FW2FG1 2013).

Social reproduction was considered of even less importance in Newman for FIFO workers than residents. FIFO workers’ social reproduction is spatially segmented between Newman, where the priority is to recuperate their labour power in order to return for the next shift, and ‘home’ where more typical social reproduction could occur (Peck 2013b; FW1FG1 2012; FW2I2 2013). For these workers, as I explore in Section 6.2, Newman is an extremely functional and work-focused place. Full social reproduction occurs in a different place altogether and in concentrated periods of designated leave, where workers spend time with family and friends, as well as physically and mentally recuperate from a period of intense work to prepare for the next swing (FW1FG1 2012). This results in extremely limited capacity for social reproduction and engagement with Newman as place for these FIFO workers.

Long-term residents attributed the de-prioritisation of social reproduction to the change from 8 to 12 hour shifts and the shift to more ‘work focused’ understandings of place (FW1I2 2012; FW2I24 2013; FW1I1 2012; FW1I7 2012; FW1I11 2012; FW1I15 2012; FW2FG3 2013). The change to 12 hours shifts, and the dominance of companies and work over place is reflective of changes at the Pilbara scale and beyond (Peck 2013b; Peetz 2008; Ellem 2005).

Eight hour shifts meant work was less compressed, leaving workers time and energy to build social ties, volunteer and engage in community activities (FW1FG1 2012).

Speaking about the wonderful early days, 8 hour shifts... [People] speak about that, and the great social life... That’s long since gone (FW2I24 2013)

A worker recounted the result of this change’s influence on the town
Yeah, afternoon shifts were best; you’d knock off at 11, crank up the barbie, go swimming, out ‘til 4 o’clock, go to bed then back to work. Once twelve hour shifts came in... big problems, stuffed everything (FW1I2 2012)

Thus the changes to work described in Chapter Five, particularly the introduction of FIFO work protocols and twelve-hour shifts, also shifted the balance between production and reproduction to further reinforce the shift to a market based local labour market.

The prioritisation of work in Newman also influences how gender is understood and performed in place. Traditionally paid work in mining and company towns, including Newman, has been done by a working father/husband with the mother/wife staying at home engaged in care work and maintenance of the home (Eklund 2012; Eckhart 1996; Williams 1981; Heath & Bulbeck 1985; Rhodes 2005). Sharma argues that these gender roles continue in modern Australian mining towns

Studies that inquired into the relational position of female partners of mine-workers in Australia suggested that the economic base set by the predominance of men in the mining jobs resulted in and promoted a patriarchal culture in mining towns (2009, p. 265)

This culture, particularly the limited economic role for women in operator and maintenance type jobs, is reflected in Newman. One long-term residential ‘mining wife’ described women’s role in Newman as being subordinate to men’s

As long as our menfolk are happy in their workplace it is all we can ask for. It is up to us women to make this place home (FW2FG1 2013)

This classically patriarchal conception of gender simultaneously demonstrates that the idea of ‘two for one’ in company towns (Rhodes 2005) described in Chapter Three has continued in Newman, but also, again, how production is prioritised over reproduction. This understanding was dominant in the town.

Another mother described how

If you’re a working mum, that’s frowned upon, because you should be at home with your children, so you cop a bit of flak from them for that... A lot of women in town believe if you’re a woman you should stay at home (FW2I14 2013)

While this resident was critical of this patriarchal conception of gender, she also acknowledged that hers was a minority view. This dominant belief meant that many women in town put their own careers on hold or did not work to sustain the work of their spouse. One mining wife, who held a master’s degree explained how

It’s amazing the number of women I’ve met, who are stay at home mums like me, with 2 or 3 uni degrees and can’t use them because childcare is so expensive... [My spouse] was the first to get the job here so he’s numero uno (FW2I15 2013)

This demonstrates two elements of the local labour market: firstly the dominance of mining to the exclusion of other forms of work limits the capacity of residents,
particularly women, to pursue non-mining careers; and, secondly, that limited childcare services in place, combined with the presumption that care work is women’s work, limits female labour market participation.

Where women had found work, it was considered as secondary to their husbands’ work, with one ‘mining wife’ explaining “I do [my work] at night and I do it on my husband’s day off. So it is not a full time job” (FW2I5 2013). A further element of this gendered practice in Newman is that the ‘mining wife’ is dependent on her husband for income, but also for housing, as housing is generally provided by the company (FW2I4 2013). This creates a situation of dependency that can become catastrophic in the face of relationship issues. One interviewee explained a real issue is

Marriage breakdown, 2 of my friends have had marriage breakdowns and have had to leave [Newman] because it’s the husband’s house (FW2I14 2013)

The breakdown of the relationship, coupled with the gendered nature of work, means that often the ‘mining wife’ has to leave town

There is no housing for people that break up with their partners here … say you’ve got a BHP husband, it falls apart, unless you’ve got a job that can get a house [you have to leave] (FW2I15 2013)

The model of social reproduction in Newman therefore continues patriarchal gender divisions. Although this experience is not universal, the archetypal mining family is still common among residents in Newman, and therefore shapes both work and place in the town (researcher observation). This reflects spatial practice in typical mining towns, where gender divisions were sustained (Williams 1981; Rhodes 2005). This model of social reproduction in Newman thus continues to co-opt these patriarchal gender roles to sustain production.

The allocation of housing in Newman also shaped people’s capacity to socially reproduce in place, as this limited access to the place itself. The household is the primary site of social reproduction (Kelly 2009), and access to housing determines whether people can remain and therefore participate in Newman’s labour market if they have not been engaged on a FIFO basis. This is particularly applicable for people who were working for smaller subcontractors who were unwilling or unable to fly workers to or from Newman. The boom conditions, as described in Chapter Four, compounded the underlying characteristics of the housing market, including the limited housing stock and BHPB’s ownership of a large proportion of the houses in town. Private rents of over $150 000 per year contrasted starkly with BHPB worker’s

This section does not consider state housing, which exists in Newman but was not considered in the research as mining workers do not live in these houses and as such it doesn’t intersect with the research question or my sample. Only one participant lived in this housing, a focus group participant (FW1FG2 2012).
subsidised rents of less than $3,000 per year (Australian Bureau of Statistics 2011; FW1FG2 2012). BHPB workers’ electricity subsidy, which offsets the high air conditioning costs associated with Pilbara summers, exacerbated this difference.

Given the high price of private rent, the capacity to access housing, via a family member, was also an important component of being able to access the labour market. A worker for the labour hire firm, who as described in Chapter Five employed the most contingent workers, described how

   [F]or a residential position … we generally get people who stay with friends, or with family, those sorts of people, or partners of people who work up on the hill… [Housing] is the hard thing, especially trying to find… high quality skilled people. They are hard to come by in town, residential ones (FW1I16 2012)

This shows how the labour market was segmented, with highly skilled or in demand workers provided accommodation, whereas those who are not as in demand need to make their own arrangements. The cost of private housing increased insecurity in place, as when coupled with the increased job insecurity described in Chapter Five, this meant if a resident lost their job, they also lost access to housing and therefore were unable to remain in place. As one resident bluntly put it “we lose the job we lose the house” (FW2I9 2013).

This reduces commitment and attachment to place, because workers and their families always feel that there is the possibility of leaving at reasonably short notice. One long term resident stated

   [We are] temporary because when [our husband’s] work finishes we have no accommodation, so we have to go (FW1FG2 2012)

The allocation of housing in Newman also reflects the transition from socially controlled and regulated space towards marketised social reproduction. The household is the most basic place of reproduction (Peck 1996), and while housing stock in Newman was initially wholly allocated by the company, the release of land to the market has changed both who can, and how they, reproduce in place. Outside of BHPB supplied land, housing allocation was subject to extreme market fluctuation, as described by a real estate worker (FW2I20 2013). This ‘marketising’ of the housing allocation was understood and accepted as a result of the boom in the remade place of Newman. It further entrenched mining as the dominant spatial practice as only those who were earning mining wages (or whose employer was making ‘mining profits’) were able to access private housing in town.

Newman’s local labour market, as with other company towns, does not allow for complete social reproduction as the needs of workers, and of their families, cannot be totally met in town. Resources are devoted to production which means that the capacity for workers’, and workers’ dependents, to access education, healthcare,
disability services, childcare, aged care is limited and compounded by Newman’s isolation.

The work focus of town was reinforced by the desire of many workers to leave the place once they stopped working. All sixteen workers who were planning on retiring after they finished working in Newman reported they would retire elsewhere. This choice was related to a lack of aged care services and the cost of housing (FW1I1 2012; FW1I2 2012; FW1I5 2012; FW1I13 2012; FW1I15 2012; FW1FG2 2012), demonstrating that the place doesn’t allow for full social reproduction. One worker described how

But you know [your time in town] is coming to an end when you retire. But we can’t retire here; we have to leave to retire (FW1FG2 2012)

This reinforces the dominance of work in the town, as it is seen as a place to leave when work ends.

The quality of schooling, particularly secondary education, was another concern workers expressed over the quality of services in town. The overrepresentation of young families means schooling is a pressing issue in the town. Education is strongly linked to aspiration, and many of these workers, who Forsey (2015) characterises as being ‘blue collar affluent’, saw education as able to provide a better future for their children. However, the high school in Newman had a relatively poor reputation, with interviewees expressing concerns around an overt focus on mining (FW2FG3 2013), a lack of aspiration for its students to pursue tertiary education, poor quality teaching (FW2I22 2013), bullying (FW1I5 2012) and other social issues (FW1FG2 2012). This was considered sufficiently problematic that some workers felt compelled to leave town when their oldest child was 12 or 13 years old (FW1I5 2012; FW2I15 2013; FW2I7 2013; FW2I20 2013; FW2I23 2013).

Workers and their families weighed up the benefit of earning high wages in Newman against their desire to offer their children a good life through education. This dynamic was summarised by a resident

[People leave] as soon as the kids have to go on to high schooling…. It is a really bad perception that … it is not good in high school here. So, yeah, that’s the option then is to send them to boarding school which costs a fortune or leave town (FW1FG2 2012)

Another aspect of social reproduction which was shared between long term and short term residents was a lack of access to required medical services, both for mental

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9 Although Forsey’s study was situated in Karratha, another Pilbara town based on extraction, the parallels to Newman are very strong.

10 This view was contested, as the school also had some strong supporters and defenders (for example FW1I11).
and physical health (FW1I2 2012). Fifteen interviewees stressed it as the biggest drawback of living in Newman. One described how to access some services

You either drive up to Port Hedland or you go down to Perth. In either case you lose at least one day of work. You need to pay $600 for flights, or 8 hour round trip driving (FW1I2 2012)

These problems included the cost, access and quality of services (FW2I5 2013; FW2I22 2013), particularly for specialist medical issues (FW2FG1 2013). This lack of medical services clearly adversely impacts on the health and well being of workers’ and their capacity to socially reproduce in place.

Some residents also had a negative view of place based on the geographical isolation of Newman, which limited their ability to fully engage in social reproduction (FW2I14 2013; FW2I8 2013; FW2I1 2013; FW1I6 2012). The isolation was felt as other places and people are distant, requiring considerable time and expense to visit. One resident stated

At the end of the day, isolation [is the biggest problem], even though it’s improved with the technology and stuff like that, isolation is still it (FW2I11 2013)

By coming to Newman, residents lose a level of connectedness to those with whom they share kinship ties. This meant missing out on significant events at ‘home’

Even things like you might get an invite to a family birthday or a thing like that you’d just go. Now you have to think about that, and then you can’t really justify $600 on a flight, so maybe I won’t go (FW1FG2 2012)

Family commitments outside of Newman also influence workers’ decision to leave the town. Residents described how people leave town to care for, or spend time with, their parents, children and grandchildren (FW2I11 2013; FW2I24 2013; FW2I27 2013). One worker described how

[My] family kind of feel we tricked them... They think we don’t care (FW1FG2 2012)

Thus even though these workers have exercised temporary mobility in coming to Newman, they still are relatively bound to certain places due to their kinship ties (Herod 2010a). Thus the need to socially reproduce can limit worker agency even for those who have adopted the spatial strategy of accessing Newman’s labour market.

That these limitations of housing, health, education and other services can motivate some workers to leave Newman has helped reinforce an attitude towards the town that it is somewhere where production is prioritised over social reproduction. Residents and workers whose needs for social reproduction are not satisfied choose to leave and are invariably replaced with people who do accept these circumstances. This, especially for FIFO workers but also residential workers, makes a local labour market more ’market focused’ (Peck 1996) and contributed to changing attitudes towards place.
6.2 Sense of Place

This section outlines workers’ and residents’ sense of place in Newman. I do this by first describing and exploring a dominant work centred, individualistic sense of place, before considering how this has changed over time and alternative senses of place that exist in the town. As described in Chapter Two, sense of place is made up of both conceptual and experiential place, which are related concepts (Tuan 1979). Sense of place in Newman has been built around intensive work, earning and saving money and then leaving the place. This has fostered the creation of utilitarian and transient attitudes to place. While this remains the dominant sense of place, the subjectivity of place means that it is not the only way in which place is understood. As I describe later in the chapter, there are some people who retain rich and strong experiences of place, but these people acknowledge that theirs is a minority view.

Understandings of place in Newman are dominated by mining and mining work. This is typical of company towns, as the place is designed to facilitate production. Based on interview data and observations, the dominant (but not universally held) collective understanding of place in Newman is that the town is a place to work, earn and then exit. 26 of 27 workers asked said working was the reason they moved to Newman, and it was understood that this was a typical attitude (FW2I14 2013; FW2I21 2013; FW2I26 2013; FW2I18 2013; FW2I8 2013).

The high wages on offer in Newman under ‘boom’ conditions have contributed to, and intensified, the market based understanding of place, where workers would temporarily access Newman’s labour market with the intention of maximising their earnings. This understanding of place is best summed up by one resident who believed “We’re setting ourselves up, [because Newman] is where the money is” (FW2FG1 2013). A religious leader corroborated this:

My impression is that people put life as a secondary consideration to work, and earn money to get ahead... I think the benefits for the workers here at BHP are huge, I think they've got a really good salary package, but the company basically owns you. It comes at a cost (FW2I21 2013)

In pursuit of these high wages workers are willing to de-prioritise social reproduction in favour of production (as described above), meaning that this particular conception of place prioritises market exchange over social exchange.

This market-based understanding of Newman’s local labour market also leads to workers and residents developing functional relationships with place. A worker reflected:

I don’t think anyone is in Newman for the love of Newman... they’re here to make money (FW2I22 2013)

This contrasts to the deep affection for place described in historical accounts of the place, and later in this section.
Workers know that they can earn high wages in Newman (FW2I4 2013; FW2I18 2013; FW2I11 2013), but, as described in Chapter Five, they need to be compliant at work and willing to trade-off elements of social reproduction. This is now the dominant spatial practice. A BHPB non-production worker described how “[Everyone] knows what they’ve signed up for, same with [me]” (FW2I18 2013). This is accepted as ‘part of the deal’ to the extent where, as discussed below, even those who do not hold this view of place understand that it has become the dominant conception.

The presence of a FIFO workforce in Newman reinforces this work-focused conceptual place. As described in Chapter Five, FIFO workers’ intense rosters mean that while they are in Newman they are almost totally focused on work (FW1FG1 2012). FIFO work, with its organised transport, meals, housekeeping and other amenities alienates workers from their natural and social environments, and reduces the town to “a place to work” (Kuhlenbeck 2010, pp. 228-9). This results in Newman as place becoming near meaningless to these workers, where worksites become interchangeable with each other regardless of where they are located. One FIFO worker demonstrated this ambivalence to place where they described how “There was a job [in Newman]… I didn’t really mind where it was” (FW2I16 2013).

Interviewed FIFO workers saw Newman as a locale solely for production, where reproduction in place is strictly limited to reviving workers’ labour power as meaningful social reproduction occurs elsewhere. A resident described how FIFO workers do not get the opportunity to see Newman as a meaningful place

They [FIFOs] arrive with their boots, and uniform clothing … [residents] don’t get to know them. You do see them rushing into town in the evening, about 6:00, or 6:30 when the bus brings them in from the mine from the areas outside, and they buy some personal things and they’re off to the village where they stay, and you don’t see them (FW2I21 2013)

This reinforces the sense that Newman is primarily a place to work, squeezing civic life and social reproduction to the margins, or even completely displacing it. A FIFO focus group, when asked how much they felt a part of the town, responded “I don’t” and “not at all” (FW1FG1 2012). BHPB’s introduction of FIFO workers, who have a very shallow commitment to place, further ingrains the transition in attitudes to work and place. This leads to a workforce that is more compliant and more willing to accept managerial prerogative as long as they have access to high paying jobs (Coe & Jordhus-Lier 2011; Scott 2013). The increasing proportion of FIFO workers show the transition in the town from a self-contained and self-sustaining community towards a service centre for an extremely mobile and spatially fragmented workforce.

Another element of conceptual place in Newman is transience, which became evident as every interview subject reported his or her intention to leave town. Workers reported that they intended to leave town for two main reasons; because they had met their own financial goals or due to the inadequate social reproduction described above. This idea of Newman as a utilitarian, functional place was entrenched by the
shared understanding that everyone leaves. This transience contrasts with traditional company towns where residents, committed to place, would fight to defend or enact their vision for place (Dinius & Vergara 2011a), and suggests that market regulation of work has become dominant in place.

The dominance of this transient understanding of place was revealed in the interview data. When asked ‘when do you intend to leave Newman?’ only four of thirty-six were committed to stay in the ‘long term’ while twenty-seven had a precise time when they would leave Newman. This was summarised by one resident

*We’re all here for the same reason and that’s to better [our] lives … whether it be a 2 year plan or a 20 year plan, we’re all here for a reason* (FW2I11 2013)

Having a pre-planned time period to work in Newman was common, where residents referred to each other based on how long they intended to stay, such as ‘two year people’ or ‘five year people’ (FW2FG1 2013; FW2I14 2013).

This means that an attitude persists where workers endure the town, and its limited social reproduction, for a period of time to earn money and then leave. A resident summed this up

*[You] meet people and you [say] ‘how long have you been here and when are you leaving?’ … I do think people talk about it, almost like they ask that question ‘how long have you done’ like it is jail* (FW1FG2 2012)

The intention to leave Newman diminished both residents’ and workers’ willingness and ability to develop a strong sense of place through experience in Newman (FW2I11 2013). A resident expressed

*Not many people consider [Newman] home, because [their time here] is going to end* (FW1FG2 2012)

This is seen as detrimental to community, as

*People are coming here, earning all this money, none of it goes into the community. I’m the same* (FW2I18 2013)

This reinforces a transactional relationship with place, when people found a problem in the place they would exit from place rather than seek to improve it (FW2I21 2013; FW2I11 2013).

Workers in Newman approach the labour market and eventual exit from it, from an individualistic perspective, looking to assert individual labour market power. This meant that the workers would save (FW2I10 2013; FW2FG1 2013; FW2I22 2013; FW2I22 2013; FW2I8 2013), invest (FW1I11 2012; FW2I9 2013), engage in training (FW1I1 2012; FW2I1 2013; FW2I7 2013; FW2I16 2013) or run businesses (FW2FG3 2013; FW1FG1 2012; FW2I18 2013) to ensure individual prosperity after they leave Newman. Many workers saw themselves as micro-entrepreneurs, who would look
after their own interests, manage their own affairs and navigate labour markets as individuals. One worker described how

We saved a lot of money, we'll go [home] ... buy a farm... and pay for it in cash ... what we've done here has bought us a future (FW2I18 2013)

Workers pursued individualistic responses to the marketization of the local labour market and often that involved pursuing the goal of becoming their ‘own boss’. One FIFO worker even described how “I had my own business for 18 years, I've been out of it 2 years and I’m having a hard time taking orders” (FW1FG1 2012). Another FIFO worker described how

I actually put [my salary] on the mortgage. Everyone I talk to says they're saving [to work here] for as short as possible (FW2I16 2013)

This demonstrates how sense of place has been remade in Newman, with the absence of strong class consciousness and deep attachment to place that once was an essential element of spatial practice in the town (Dufty 1984; Heath & Bulbeck 1985). This class-consciousness has been replaced by an individual market based response, where workers effectively use their privileged position within the labour market to their own advantage, independently of their colleagues and neighbours.

This transformation in sense of place has been reinforced by labour migration. New residents influence places as they can either adopt or adapt to prior spatial practices (Kancs 2011), or generate new ones (Scott 2013). In Newman population turnover has contributed to the unmaking and remaking of spatial fixes. A long term resident described how this process occurs

[I]n any town there are people who really carry the tradition. Even though, in a mining town you don’t really get a lot of tradition because it changes so often (FW2I21 2013)

This again indicates how the breakdown of shared practices and experiences in both place and work allow for the remaking of Newman. This was acutely felt in the second period of fieldwork, where interviews identified a number of long term residents, deeply embedded in place, who had left the town in 2013 (FW2FG3 2013; FW2I23 2013; FW2I3 2013). One resident explained

A lot of people who have done 15-20 years have recently left. So that is going to be a big change for the town (FW2I21 2013)

This ingrained the remade spatial fix of place in Newman as the ‘old’ ways of doing things are lost to collective memory (FW1I7 2012; FW111 2012). Many of those with an understanding and experience of unionism, contestation and a rich community life had left, and were replaced by workers with a more individualistic and utilitarian relationship with place.

This reformed conceptual place is a cause and consequence of changes in the local labour market. I will now consider this change in conceptual place by drawing upon
interview data from 17 long-term residents, six of whom arrived in Newman in the 1970s, seven in the 1980s, three from the 1990s and one from 2000 who moved from within the Pilbara. These residents reflect on their experiences in the changes in place, particularly since 1999, and complement the discussion on the development of Newman’s local labour market in Chapter Four. The observations include a decrease in community and social closeness, an increasingly transient attitude to place, a greater focus on work in daily life and the withdrawal of trade unions as a counterpoint to managerial prerogative.

These workers described previous understandings of place in Newman being based around community and family as well as work. Community was developed both at work and in the town, because, in addition to the workplace unionism described in Chapter Four; strong social ties were forged in place.

So almost everybody used to know one another. You see, and activities were more vibrant at that time... Like everything, tennis, rugby, soccer, football (FW2I24 2013)

Workers described relationships in previous versions of place being based on strong social relationships, underpinned by long-term commitment to place and increased leisure time for socialising. One resident described how

Definitely through the early days and the 80s and 90s it used to be quite often, at least once a month we’d be out there, as a shift, doing some sort of sporting activity or drinking socially and that (FW1I1 2012)

Some residential workers still maintained social relationships with colleagues through activities such as catching up outside of work, having a beer and breakfast together after coming off night shift, going on fishing trips and travelling around the Pilbara together (FW2I4 2013; FW2FG4 2013). A long-term residential BHPB worker described these tight relationships

When you work with a crew of fifty or sixty people... of course some [have] left, some stay... you meet at certain social occasions, and there is a good spirit... sense of humour, people here are very friendly... you feel yourself connected with the [social] environment that you’re living in (FW2I24 2013)

However, remade spatial practice has seen this sense of community diminish, with long term residential workers describing more recently arrived workers as more individualistic, selfish and money-motivated (FW1I1 2012; FW1I2 2012; FW2FG3 2013; FW1I15 2012; FW2I8 2013). Another resident described how weaker social relationships existed because the town is

[V]ery transient. That makes it hard to make real friends... because people come, you can get very close to them and then they move on (FW2I14 2013)

However, this social closeness between workers was not universally experienced, particularly for those workers who maintained a perfunctory relationship with the place. For example, a residential contractor stated
I came over and I told myself, right, I’m not here to make a gazillion friends, I’m not here for the social side of it, I’m here for at least 2 years to set something up for when I want to leave... you’re not in everyone’s pocket... It’s mutual respect and we get on with it (FW2I10 2013)

Another resident stated they didn’t want to become too close to their colleagues because “they fall out [and] ... It always ends in tears” (FW2I26 2013).

A long-term unionist and resident described these increasingly distant relationships

[Now] you don’t see anyone. Before, you used to go in shift change, go in early, have a coffee, have a durry, bit of a yarn, sit down, have your meeting. Now you get there, get on a bus, gone again (FW2I5 2013)

This same worker had stated the year before

We used to sit down, have a smoke, have a joke and find out who was jumping the fence and all the rest of it, now people sit there in the smoko room and all they’re doing [is] playing on a mobile phone... they’re not talking to one another as much as they used to (FW1I15 2012)

This weakening of social relationships in Newman is significant as in company towns, and prior versions of Newman, shared experiences of work and life led to strong bonds between workers who expressed collective agency in place (Dufty 1984; Heath & Bulbeck 1985; Court 1976). This sense of community was based on a sense of isolation and shared experience (FW1I15 2012), and often manifested itself in acts of community solidarity (Eckhart 1996).

We used to always band together and help each other out. There was always a spirit of togetherness... it was fantastic (FW2I9 2013)

This shift was characterised by the de-prioritisation of family and community and replaced by a focus on production. This was summarised as

[Newman now] is more the amount of tonnage you could get out. ...That mentality has changed. It’s not so family orientated as it used to be (FW2I9 2013)

Remade spatial practice reduced the social connection between workers and residents, residential workers and FIFO workers.

It’s probably the people that come here for a short amount of time to make a quick buck and go, and FIFO people... that don’t really integrate with the longer-term residents (FW1I18 2012)

This demonstrates that place is now understood as somewhere to make money, not to build friendships or a sense of meaning.

These long-term residents also described the withdrawal of trade unionism as a major change in place. In the Pilbara’s company towns, including Newman, unions asserted power not only in the workplace but also in communities, allowing them to formally and informally regulate work (Ellem 2002). Unions exerted influence a considerable level of influence over both work and town (Heath & Bulbeck 1985; Court 1976), which was recounted by one long term resident and union member
[The unions] did a lot for the community in those days, apart from the industrial stuff. They had all sorts of things going for them, the social side, some of the welfare issues, some of those things (FW1I15 2012)

The successful unmaking of Newman as a ‘union town’ occurred at worksites, where union density and influence have been massively diminished, but also in place. Unionism, place and class solidarity in the Pilbara were always intertwined; but the new understandings have recast place in a way which marginalises unions. This has led to a utilitarian understanding of place that has left workers less willing and less likely to express collective agency both in the workplace and town, preferring to accept or submit to capital’s vision of place which is built around markets, flexibility, individualism and accumulation.

Although this utilitarian, individualised and transient relationship with place has become dominant in place, this was not the only relationship residents and workers retained with place. These different relationships with place reflect the subjectivity of place; emphasising that the same locale can mean and represent different things to different people (Kuhlenbeck 2010). Some workers and residents described maintaining a deep, committed long-term relationship with the place. These workers had formed a deep connection to the place and community and were generally those who were most critical of the remade sense of place and spatial practice. Other workers reported feeling ‘stuck’ in place, unable or unwilling to leave due to financial, familial or labour market reasons. Becoming ‘stuck’ reflects some of the limitations of engaging with place through economic exchange.

Those who retained a strong committed sense of place in Newman reflect previous iterations of place. This deep attachment to place traditionally emerged in both production and reproduction. This is typical of company towns where “[l]abouring in tough terrain and in isolated locales placed an important role in the creation of a community ... and a sense of place” (Finn 1998 passim. cited in Borges & Torres 2012a, p. 19). This attachment to place in Newman is drawn from the landscape, a sense of home, connections to family, friends and community, and the particular experience of life in Newman.

The Pilbara landscape is a significant part of living in the Pilbara, and maintains a remarkable and rugged beauty (Kuhlenbeck 2010; Heath & Bulbeck 1985; Duffy 1984; Ellem 2004). Unlike living in urban areas, which can isolate people from nature, Newman’s small size and presence within a vast largely untouched landscape makes its natural setting inescapable. Many of those who expressed a deep attachment to place considered the rugged beauty of the Pilbara a significant part of this attachment (FW2I3 2013; FW1I2 2012; FW1I2 2012; FW2I15 2013; FW2I11 2013; FW2I9 2013; FW2I21 2013; FW2I4 2013). The landscape was both passively and actively enjoyed, as some photographed or painted, others camped and went four-wheel driving in the bush (FW2I17 2013; FW2I15 2013; FW2I9 2013; FW2I21 2013; FW2I8 2013).
An employee of the Shire explained how the landscape is one of the attractions of the town.

[From a] landscape perspective, the uniqueness of it is we’re in a remote area, the hills and stuff like that… the remoteness and ruggedness of the area is attractive to some people (FW1I12 2012)

One long term resident, deeply committed to place, invoked the word ‘love’ to describe their relationship with the landscape.

I first came here when I was [a teenager]… I just loved the landscape and always wanted to come back and here I am, still here (FW2I3 2013)

A ‘mining wife’ described the landscape’s centrality to their family’s experience of place.

The other thing up here is just the beauty of the Pilbara. That’s what keeps my [spouse] here more than anything. He’ll say people come up for the money, but that’s a bonus to us, because he just loves the Pilbara area and the beauty it holds (FW2FG1 2013)

Longer-term residents who engage with community develop a biographical relationship to place, which leads to an attachment to place (Cross 2001). This sense, from long-term residents, of a shared experience of place exists within family and also within community.

[T]he longer you stay the more people you know… the guys who have been here for a while or… understand, this is what we do (FW2I7 2013)

Eventually residents who had spent a long time in place considered it ‘home’ (FW2FG3 2013), one described how

I think I’ve been here so long, this is my home, and I would say I’m a local (FW1I8 2012)

Those who develop a sense of ‘home’ here reported leaving the town but always being drawn back to the place (FW2FG1 2013; FW2I9 2013; FW2I17 2013).

For others, Newman represents a place of family. The workers who do have family in the town are therefore more able to fully socially reproduce and attach meaning to place (FW2I11 2013). This can occur through migration or over generations. One worker described how

Look at us, we’ve lived here, my oldest is 30, Newman is home [for her]… the next one is 28, Newman is home [for him]. My youngest was born in [the Pilbara] (FW2FG1 2013)

This strong commitment to place generates a strong commitment to community (FW2I9 2013; FW2I17 2013; FW1I11 2012).

Some residents also viewed Newman as a desirable place to raise children, particularly young children (FW2I3 2013; FW1I8 2012; FW2I23 2013). This view was often held until the children reached high school age (see discussion above), meaning Newman
was a good place to raise children, but not teenagers. The perceived safety of the town also allowed parents to give their children a richer childhood with fewer restrictions and greater freedom (FW217 2013), meaning workers would commit to raising their children in place. One mining worker described how

> It’s a great environment to raise kids in. They can get out in motorbikes and just ride around the bush... freedom (FW2121 2013)

The raising of children again committed these residents to place, allowing them to generate a sense of place and a deep commitment to their community.

Four residents, some long term, some short term, described an unhappy relationship with place, where they felt trapped in Newman. This was because workers had become reliant, either to service debt or maintain a particular material standard of living, on the wages they could earn in Newman. This reliance on the income in place is made more stressful due to the job insecurity in town (FW2115 2013). Cross (2001) refers to this as a dependent relationship with place, where people remain in place even though the place is inherently seen as undesirable.

Other workers felt trapped in place because they hadn’t reached their financial goals within their desired time period (FW118 2012).

> You find by 2 years you haven’t really recouped anything. I mean it all sounds good, and the numbers sound good until you get here and [the numbers] don’t actually work...Then you get hooked by ...the income (FW1FG2 2012)

This ‘dependence’ on the income is a major reason why some workers feel trapped in place (FW2117 2013; FW2122 2013). One resident described how

> We’re here because we haven’t found an exit strategy... We’ve been seriously talking about an exit strategy and we haven’t found one. We’re squirming. We really enjoy the amount of money we’re on; we’re saving heaps and heaps and heaps... We have no way of getting out of the town and making that kind of money (FW2115 2013)

These negative associations with place demonstrate the limited options to remake the local labour market. Workers are unable to express agency to improve their circumstances and as such are limited to two choices, remain or leave.

These varying senses of place develop through both individual experiences and collective understandings of place. Changes in how place is understood change peoples’ behaviours in place, and as the individualistic, functional and temporary understanding becomes normalised, people experience place in this way as well. This process develops over time through migration, as those with longer term understandings of place leave, to be replaced by both FIFO and residential workers who view place in more functional terms. This change has also occurred through direct place making activities, and a shift in the administration of the town that facilitates this marketised version of place.
6.3 Place making in Newman

In understanding Newman’s local labour market it is necessary to understand how social reproduction occurs in place and who is considered responsible for maintenance and governance of the place. Social reproduction in place is facilitated by a number of different actors, including the Shire, BHPB and the Western Australian Government; however the scope and forms of place making activities remains limited and primarily supportive of production. In this section I show how civic governance and place making have influenced place in Newman. I examine how dissatisfaction with place has led to conflict in place; however these issues no longer framed around issues of class but rather of community. The remade local labour market did not allow for those unhappy with place to assert collective agency in a meaningful way, rather there were sporadic - but largely ineffectual - expressions of discontent.

The transformation in place in Newman has also led to a transformation in who is responsible for the town, both in terms of production and reproduction. In addition to the formal changes in place making through ‘normalisation’ discussed above, the informal means by which place is sustained has also changed. This meant that place making in community became more fragmented and complex, with different responsibilities for place being shared amongst BHPB, the shire, residents and the state government and in practice trade unions. With the change in place since 1999, the de-prioritisation of social reproduction has limited the demand for rich community and social reproduction of the town, leaving elements of reproduction such as housing to market mechanisms.

The relationship between BHPB and place is still connected to both production and reproduction, as they house and employ (either directly or through contracting) workers in the town. Their responsibility for place, as I have noted in previous chapters, is derived from a legislative (Iron Ore (Mount Newman) Agreement Act 1964) and social obligations with the latter in the contemporary period predicated on the maintenance of a ‘social licence’ to mine. There remains a real difference between the two, as their obligations under the Agreement Act were clearly delineated, while their ‘social licence’ is much more ephemeral, driven by the company and reflective of the new neoliberal relationship between state and company, and company and place (Owen & Kemp 2013; Prno & Scott Slocombe 2012). This has led to the perception that their priorities lie with production.

As one BHPB worker explained

[BHPB] invest basically to keep our social license to operate so we can mine, we actually input 1% of our earnings before tax every year... a $70b investment across the Pilbara, so Newman, Port Hedland, and we do invest into the wider western desert, and then in Perth as well (FW2I18 2013)

[Because of] BHP, yeah, it’s all forced production now. They don’t care. Whereas Mt Newman Mining Co was about the town (FW2I9 2013)
This social licence demonstrates the remade relationship between capital and social regulation in place. BHPB is no longer responsible for sustaining social reproduction in place. This means that where BHPB invest in the local community, it is done in a way which does not commit the company to ongoing investment (FW2I18 2013).

BHPB was still seen to be contributing to place, albeit within the social license model. Some interviewees saw them as a ‘better’ corporate citizen than other mining companies, supporting production as well as reproduction (FW1I15 2012; FW2I8 2013). The shire’s acting president described

[The Shire and BHPB] have a very good relationship, [BHPB are] well. They are certainly always willing to come to the table and talk if we have got any issues. We don’t always agree, but we’ve got a whole different mandate. They’re a business and we’re here for the community. Having said that, they do put a lot into the community. You know, sometimes we do not completely agree, but I think generally we have a very good relationship. They give us a considerable amount of money every year, to assist with programs. They certainly do give a lot to different areas as well (FW2I19 2013)

This relationship with the shire, and the contribution of BHPB to the town, is viewed in a positive light by some.

The town is a great place because of BHP. The roads are good, the parks are good, the playgrounds are good, the walkways, and the bike riding, and the playgrounds for children and more and more things are happening all the time to keep the, the best thing to entertain young children (FW2I23 2013)

However other residents saw BHP’s role cynically, as an attempt to improve their corporate image (FW1I2 2012).

In general, the social licence model is a major deviation from the historical responsibility and defined obligations Mt Newman Mining had for the place during its period as a company town. This set of spatial relations is recounted by a long term resident

I know in the old days BHP would operate here, the government did a deal that said ‘you will set up a town and you will put schools, hospitals, doctors, you know improve it’. All of it was virtually run by BHP (FW1I15 2012)

As such, the responsibility for place making and facilitating social reproduction now falls between the shire and BHPB. This, when coupled with utilitarianism and transience, means that a sense of place, and sense of community is diminished, shifting the idea of place away from one of rich community to a ‘space to earn a wage’. The diminution of community in Newman has led, however, to a level of dispute and contestation over place and its meaning. There was a particular animosity between residents and FIFO workers over how FIFO workers engaged in place. Many residents who were relatively committed to place attributed negative changes in place to FIFO workers (FW1I2 2012; FW1I12 2012; FW2I17 2013).
This led to hostility from residents.

It sounds awful but I don’t like the FIFO, I don’t feel like they get the opportunity to be a part of the community, they bring their disease with them, when they get sick they still fly in... I think they cause a lot of fights and social problems at pubs and places you go to at night... I’d prefer it if there was no FIFO, it’d be ideal if everyone could be residential but that’s a perfect world (FW2I22 2013)

FIFOs were perceived as money motivated and parasitic, ‘using’ Newman to earn high wages without providing any benefit to the town (FW1I2 2012; FW1I15 2012; FW2I4 2013; FW2FG3 2013). One resident summed up this where they stated

We don’t like FIFOs...Because they don’t really do a lot for the income of the town (FW2I17 2013)

This parochialism also extends to services within the place. Residents considered services to be stretched because of FIFO workers, limiting their own capacity for social reproduction in place (FW2I1 2013; FW2I15 2013).

I think it’s put a lot of stress on the resources we have here, definitely... the thing is that the infrastructure here, like, doesn’t cater to the amount of FIFO we’ve got for a start (FW1FG2 2012)

Some local workers and residents, in response to the social damage they saw the FIFOs as causing, acted in defence of place. This included creation of a line of products (bumper stickers, stubby holders, t shirts) which state “FIFO: Fit In or Fuck Off “, this was the product of a local resident who told Australian Mining that

What they don’t realise is this is a home town for us... mining towns and communities play a role in supporting FIFO workers only to see them criticise the town and spend nothing on local business (Duffy 2011)

This limited form of place based assertion and agency was nonetheless diffuse and based around relatively vague notions of community. This stood in strong contrast to the militant, class based assertion of power in the ‘union town’ era, where workers would halt production in order to socially regulate work in the town.

The FIFO workers I interviewed experienced a bifurcated relationship between work and the place, where ‘work’ occurs in Newman, and ‘place’ is experienced during their week off. As noted in Chapter 5, FIFOs also do not engage with place in a deep way because they do not have the time nor energy to engage with the town (FW1I6 2012)

Half of them, they can’t [engage with the town]. They’re working too long hours. Most of them are doing 2 and 1 roster so they’re pretty knackered (FW1I1 2012)

One FIFO worker interviewed explained that there was a desire to interact with the place, but they are not allowed to because of their work

[O]ur supervisor made it clear not to ask him [if they could engage in the town]. That’s because if you are in that, you’re allowed to leave work early to go and play football and things like that.
We’re supposed to be allowed to, but then it comes down to your supervisor and if he thinks he can run the crew without you there you can (FW1FG1 2012)

This conflict between FIFOs and residents only manifests itself in the community, over issues such as volunteering, maintenance and behaviour in the pubs and public spaces. BHPB retains prerogative over work and the composition of their workforce. Thus, these grievances are not pursued through the workplace but ‘in community’, with limited effectiveness, demonstrating the transformation from ‘union town’ to a market regulated local labour market.

Those loyal to place also resent that Newman generates a lot of wealth but is not supported by commensurate resources. With the lack of company responsibility for place, custodianship of place is a contentious issue, with the sentiment existing that Pilbara mining communities create a lot of wealth but don’t see the commensurate support from either company or the state (Eklund 2012). This was viewed as a lack of political representation and financial support (FW2I11 2013). A long term resident complained

I think we miss out a bit being in Newman… Newman is such a great diverse place, and it just gets completely forgotten (FW2I18 2013)

This tension between mining companies, workers (particularly FIFO workers) and communities led to a Parliamentary Inquiry into FIFO work arrangements and their impact on regional Australia (House of Representatives Standing Committee on Regional Australia 2013). As a reaction to this, The Nationals, a Western Australian political party with a mainly rural constituency announced the Royalties for Regions program, which redirected royalties from mining back to regional communities (Peck 2013a).

Workers who were deeply embedded in place responded cynically to the Royalties for Regions program, as an inadequate, but well marketed, contribution. One stated “It should always have been coming here, then he says, we’ll give you ‘Royalties for Regions’. What a catch phrase. It’s bullshit” (FW1I11 2012), and another “The Royalties for Regions was a bit of a con, but it is putting in stuff the State Government should be putting in anyway” (FW1I15 2012).

Thus support for the community as not provided by the company, but in part by the state. Thus there exists a contradiction that the ‘social license’ model, where capital relies on place for production, but is only contingently and fleetingly responsible for maintaining the place. It is also significant that this issue, of support for place, is now framed as a state and community, rather than workplace issue. This again shows how BHPB have effectively placed themselves in Newman without being held responsible for the custodianship and support of community in the town.
This was understood geographically, as it was seen that money and wealth were flowing out of Newman with the town being ‘left out’. One resident, deeply connected to their community, argued

> If [we] got 1% of the royalties, 0.1% of royalties, whatever it worked out to, that would be more than ample to do all these things that we want to do for the community, but we get far, far less because a lot ... disappears into state, federal coffers. Look, we’re not begrudging them either, because the whole state and the whole country has to benefit from it, but the place that produces it should ... get a little bit more (FW1I15 2012)

This demonstrates an understanding of the weakness of actors within place in relation to broader economic space. This was compounded where residents viewed BHPB and other employers in the town as being unconcerned with the wellbeing of community, only with extracting profit from place (FW1I2 2012; FW1I15 2012; FW2I18 2013).

In remade Newman there was no effective outlet for these expressions of dissatisfaction. BHPB, with ‘buy in’ from most workers and encouragement from the state, created a place where individualised workers did not challenge the way things are done. Furthermore, BHPB have been able to recast place so that those who are dissatisfied with place are in the minority, accept that they are in a minority, and have little imagination and few options by which they could seek to create change in place.

However while company towns often provided workers with a shared experience of place (Crawford 1995), BHPB have undermined this by dividing the workforce by space and time (Peck 2013a), which in turn has divided the relationship workers have with place and each other. This turnover in population also ends or fragments social relationships. One long term resident, deeply committed to the place, described how the worst part of living in Newman was that

> For me, people keep leaving. The hardest part to deal with is you make wonderful friends and they just keep leaving... They come here, even people who absolutely love it and don’t want to leave, they still have a life elsewhere. Whereas I don’t, my life is here. People come here for money, they’ve got a plan when they come here, they’re here for the money then they leave. Even if they stay for 18 years they still will leave (FW2I3 2013)

As such, the shift from a community based company town to this market-focused, individualistic and transient sense of place has reinforced and been reinforced by the changes in work described in Chapter Five. This shows how work and place together in Newman have remade the local labour market, where most workers and residents see the town, or their FIFO camp, as somewhere functional and transient, where they can engage with work, earn their money and then go somewhere else, irrespective of the implications for community, place or other workers.

### 6.4 Conclusion

Conceptual place has been fundamentally remade in Newman, which, in turn, has co-produced changes in work described through this thesis. These changes in place
reflect, and have been reflected in, changes in social reproduction in Newman. The functional, utilitarian understanding of place, as described in Chapters Five and Six, mean that Newman is collectively understood as a place where production is prioritised over reproduction. This means that the town can only sustain a population of workers, which in turn reinforces this collective understanding of Newman as a place to work. In the past, the close community ties in Newman, where workers worked and socialised together allowed workers to develop strong, place based social bonds with others and these often manifested themselves in opposition to the company. Even though this social reproduction was gendered and reflective of different dimensions of patriarchy (Williams 1981; Sharma 2009), it also fostered and reinforced a level of class solidarity that manifested itself both in and outside of work. The marketization of these social relations made spatial practice passive and class-silent. This sense of unitarism, tied with the mono-economy of Newman, has allowed BHPB to control production and reproduction through market mechanisms, which, in turn, are normalised and largely accepted by workers, residents and the state.

The crucial shift in this remaking of place has been the change in the subjective understanding of place by a majority of workers and residents, who have come to view the town in a perfunctory way, as a utilitarian place to endure and earn, rather than as a space and place to live and engage with building a shared sense of community. This re-conceptualisation of Newman as a place by capital was achieved with state support, as the government moved from a policy of active intervention to support regional development to one that encouraged FIFO camps and ease of investment. Employment relations change allowed for the individualisation of the workforce, further undermining unions as a counterpoint to capital’s power in place. However, it was also a change in understanding of conceptual place, which allowed this transformation to be as extensive and successful as it was.
Chapter 7 – Conclusion

This thesis has considered the co-development of work and place in Newman with reference to secondary data sources on the town’s spatio-temporal context and empirical data on the experiences of workers. It shows that employment relations in the town have, over time, been made and remade through changes in the formal and informal regulation of work. The particular spatial circumstances of Newman, with institutions which legitimated unions, immobile capital, and workers who shared experiences of work and place, allowed workers to form trade unions and assert power over both work and place. After several attempts to remake employment relations in the town, and emboldened by successful reforms elsewhere in the Pilbara, capital succeeded in de-unionising the workforce during and after the 1999 dispute. This de-unionisation empowered capital to remake Newman’s local labour market. BHPB did this by changing the way work was institutionally regulated and changing how workers and residents came to understand place. These changes in work and place together allowed BHPB to profit from the sustained boom at the start of the 21st century while maintaining managerial prerogative. This chapter first contextualises and summarises the overall argument I have advanced in the thesis, before restating its theoretical contribution, especially with regard to the need to develop deeper understanding of how and why place matters in labour geography and studies of employment relations. Next I outline the limits to the claims made in the thesis and suggest directions for future research, before providing a final summary of the thesis.

De-unionisation, its causes and effects, has been widely considered by labour geographers (Peck 2016) as well as employment relations scholars. I position this individualisation of employment relations within the broader context of neoliberalism and its extensive remaking of economic space through the action of companies, states and some workers. This trend towards neoliberalism, particularly but not limited to the regulation of employment relations, has concrete effects on the regulation of work and social reproduction and shapes the subjectivity and actions of workers in place. In investigating the co-production of work and place, the thesis shows, in a particular context, how individualisation occurred and the impact this has had on employment relations and on understandings of place and place making.

Work has been organised in Newman via a succession of spatial arrangements, which have represented both capital’s and labour’s spatial fixes. The way that production and reproduction combine in place, which have been integral to each fix, has seen, in the contemporary period observed in this research, the workforce segmented and production prioritised over social reproduction. The town’s initial construction as a company town reflected an attempt by capital to control production and reproduction through attempts to physically and socially engineer employment relations, and then through the transition to unitarist employment relations and town administration. However spatial, institutional, legal and economic conditions led to expressions of
collective agency and a spatial praxis around unionism which, in turn, led to the establishment of labour’s spatial fix. Capital, relatively fixed in place due to the immobility of the ore body and huge costs sunken into place attempted to remake the spatial fix in situ by transferring civic administration to the state. This did not have the desired effect, as Newman remained a ‘union place’ with strong class-consciousness and continuing union influence.

Reflecting changes made to other spatial fixes at the Pilbara scale, BHPB were able to effectively de-unionise towns and workforces, remaking both work and place on an individualised basis. Using their newly won prerogative both at work and in place BHPB sought to remake Newman’s spatial fix once again by dividing and segmenting the workforce both spatially and temporally. Remade work in Newman is characterised by a high proportion of contract workers, FIFO work that divides the workforce and its social reproduction by space and time, and the change from eight- to twelve-hour shifts. Newman has characteristics of both the old company town, and newly remade mining camp. The remaking of employment relations over Newman’s history is an expression of the relative power and the various actions of workers, unions, management and the state. This was, and still is, simultaneously an industrial and spatial process. By understanding the making and unmaking of these spatial fixes I show that work and place together have shaped employment relations and remade the local labour market in Newman.

The result of BHPB’s remaking of Newman’s spatial fix since 1999 has been the replacement of union-led social regulation of the local labour market with one which more closely resembles classical markets. This means that most workers engage with Newman’s local labour market in a functional and transactional way, prioritising production over social reproduction. This also means that workers (knowingly) bear the uncertainty of market fluctuations, as this is accepted as an integral part of being a participant in Newman’s local labour market.

The remade workforce in Newman generally sees themselves as micro-entrepreneurs, accepting or embracing this market regulation of work and place. These workers, who were profiting from booming labour market conditions at the time that data was collected, enter the local labour market with an individualised mindset and seek to benefit financially from working in Newman. This, in effect, is the expression of a limited form of spatial agency, expressed outside of trade unions in order to maximise income. The remade town has attracted workers who ‘buy in’ to this logic, reinforcing the remaking of place and showing that worker actions shape the geography of work.

Despite this dominant conception, there are also workers who remain committed to trade unions and community activism, even if they refer to themselves as ‘dinosaurs’ (FW1115 2012), and who wish to see Newman retain a strong sense of community and union regulation of work and place. These workers are strongly integrated into the
sphere of social reproduction in place, however, they have been unable to arrest the changes described in Newman’s local labour market.

The change to a ‘market regulated’ local labour market in Newman has recast how workers perceive work and employment relations. Individualism, coupled with job insecurity, has seen the reassertion of managerial prerogative (Peck 2013a). The introduction of FIFO workers has geographically fragmented workers from Newman and each other. FIFO has allowed BHPB to recruit workers from across Australia, and even overseas, undermining the local power of workers. Further, the number of FIFO workers can be increased or decreased more quickly than residential workers, allowing BHPB increased numerical flexibility. The use of contracting and subcontracting arrangements has further marketised employment relations in place, removing in such instances the direct link between employer and employee in place and at work. The intensification of shift rosters also contributed to making the place more perfunctory, replacing the possibility of engaging with a rich local place to merely serving as a ‘space to earn a wage’ in.

Synchronously, and relatedly, conceptual place in Newman has been remade primarily through the remaking of unionism, work and the terms of social reproduction. This new conceptual place has limited meaning for residents, recasting Newman as somewhere to work long hours and arrange production and reproduction through market mechanisms. The transactional, utilitarian and functional attitude to place has reinforced, and is reinforced by, workers’ self-perception of micro-entrepreneurship and remade employment relations. The re-composition of the formal regulation of work, but also how work is socially regulated in place, has seen an individualised and market-based vision and understanding of place and place making prevail.

Having summarised the central arguments of the thesis, I now highlight its theoretical contribution. It has made contributions in three ways: first, and foremost, by elaborating on the insights that stem from focusing on a particular place to understand the co-development of work and place over time: second, by seeking to integrate ‘Labour Geography’ with ‘labour geography’; third, by examining the erosion of collective agency in space and place over time and the implications of individualisation for the form and expression of worker agency.

By focusing on a particular town I examine how work and place co-develop and influence employment relations over time. Place, and how it is understood and experienced, has been recomposed away from a ‘union place’ to a neoliberalised place, which is understood in a transactional and marketised manner. Changes in place have, through their co-development with changes in work, been significant for the remaking of employment relations in place. Changes in how the town is understood, as a transactional, functional place have contributed to the making of transactional, functional employment relations. Workers who do not feel close attachment to place approach the labour market in an individualistic manner, willing to cede prerogative
over production and reproduction in exchange for wages. This has allowed capital to overcome the vulnerabilities of the company town as a spatial fix and recompose the local labour market in a way that sustains accumulation.

This change has been achieved with agreement or quiescence from the state and workers by allowing the market, rather than the social, regulation of work to predominate. These workers, who have accepted and internalised market logic, see themselves as micro-entrepreneurs and in the main reflect a view that labour market participation requires the acceptance of the current work and place regimes. The individualisation of workers, both through limited trade union membership but also in subjectivity, means that these workers accept and reinforce the remade local labour market. This undermines the opportunities to challenge capital’s control over place and work either through collective expressions of agency through trade unions, or through place based defence of community, as they neither identify closely with their colleagues in a class-conscious way, nor the town as rich experiential place.

This thesis reinforces the significance of geography to work by linking concepts of ‘Labour Geography’ and ‘labour geography. This examination of a single place, invoking Peck’s notion of the local labour market (Peck 1996), complements ‘Labour Geography’ scholarship that focuses on the relationship between places. In Chapter Four I consider Newman’s position within economic space, and how workers, through place-based agency, were able to exploit capital’s vulnerability brought about by the immobility of the company town spatial fix. In my examination of Newman as a ‘union place’ I show how the local labour market socially regulated work so that class-consciousness and trade unionism dominated worker attitudes to place. I again use the concepts of the spatial fix and local labour market to consider how Newman was remade, specifically to understand how economic space was used to undo collective power, but also how the terms of work have been re-made to emphasise market rather than social regulation. This approach therefore incorporates elements of both ‘Labour Geography’ and ‘labour geography’ and demonstrates that both approaches together allow for the understanding of the co-development of work and place over time. Additionally, I have noted how place and work co-develop based on the interactions of capital, workers and the state and sought to provide increased nomenclatural clarity by precisely deploying geographical concepts through the thesis.

The thesis also examines how geography explains the creation, and then the undoing, of union power in place through the re-composition of spatial praxis. This case is particularly striking as the movement away from the ‘union town’ spatial fix that occurred in a company town, a spatial arrangement formerly conducive to expressions of collective agency. The intersection between work and place in company towns, where a unified workforce who shared experiences of work and place, combined with a common employer who was held accountable for both employment and place-making explains how unions were able to exert power both at work and in place. That this fix was undone so effectively by capital, with the powerful internalisation by
workers that market forces now regulate work in place, shows how geography can be used to explain unsuccessful as well as successful worker expressions of agency.

In this thesis I consider the erosion of collective expressions of agency, through diminished social regulation of work and place, over time. Workers in Newman adopt an individualised, market-oriented spatial strategy. By seeking out Newman’s labour market, either on a FIFO basis or through relocating their residence (through intra-national labour migration) to access high wages, these workers seek to individually maximise their income. These workers accept a market regulated local labour market in order to earn high wages in pursuit of other goals, such as retirement, savings or investment, as described in Chapter Six and their labour market positionality is therefore always subject to market fluctuations. As such, even though these workers are expressing this limited and individualised agency, it is wholly contingent on spatial conditions, rather than workers trying to fashion geographies in their own image.

The contributions to labour geographies in this thesis are necessarily limited on the basis of methodology, sampling and scope. Typical of qualitative research, I have taken a sample of Newman’s population in order to gather data for the thesis. As I describe in Appendix One, my sample covers many significant groups and divisions in the town, including mining worker/non mining worker, those who were/were not engaged in paid work, union member/ non union member, residential worker/FIFO worker, long-term/short term resident, those who were deeply engaged/unengaged with their community, workers in operator/maintenance/non production roles, directly employed by BHPB/contractor and private sector/public sector worker. However, due to the transience of the population, limitations in the collection of census data, and the number of employers in the town, it was not possible to obtain accurate data for the precise number of each demographic and social category in the town. As such, it is difficult to make claims as to how representative my sample is, and while I interviewed to saturation, where, as I describe in Appendix One interviews consistently fail to present new themes and observations (Ezzy 2002, p. 75), there is the possibility that significant observations and data were missed. As such, while I have made efforts to represent all points of view in my thesis, there is likely to be a level of sampling error that limits the generalisability of these claims.

In this ethnographic research, I examine the town by looking at ‘workers’, which I defined as operators, maintenance workers and first level supervisors. I did not seek to speak to higher level managers, as these fell outside the scope of the research design. Within employment relations it is accepted that local, regional and global management influence the local labour market. Management decisions, including how the labour force is segmented, the terms upon which workers are employed, as well as the size of the workforce all influence employment relations in place. While I have portrayed the view of the corporation through reports and official documentation, the absence of interview data generated from managers above the line supervisor level limits my exploration of work and place in Newman.
Further, this thesis almost exclusively explores non-indigenous place and work in Newman. Despite my attempts to speak to indigenous leaders in the town, they politely declined to be interviewed. Given my data set, research questions and the research I’ve undertaken I do not feel equipped to engage with issues of indigenous geography in Newman with sufficient depth, respect nor integrity to adequately engage with these issues or do them justice. As such this thesis deals nearly exclusively with non-indigenous Newman.

These concerns, as well as the limited scope of a PhD project, revealed the need for further investigation within Pilbara labour markets and labour geography. These include the need for the incorporation of indigenous perspectives on mining and community (a limitation noted above), the implications of automation, closer examination of mining ‘camps or villages’, examining the social reproduction of FIFO workers and investigation of different phases of the mining business cycle.

As I describe in Chapter Five automation is already being used by BHPB’s competitors in the Pilbara, and workers in Newman consider its introduction inevitable (FW1111 2012). As remote-controlled vehicles replace operators, this will cause a disruptive change to work organisation, Newman’s local labour market and the town itself. As such, this will bring further change to how work, place and particularly space - as the work can be done remotely- interact within Newman’s local labour market. Thus research based on the implications of automation will further develop the concept of how work, place and space interact to generate and regulate local labour markets and workers spatially distant from place.

It is possible to consider Newman’s town site as a historical anachronism, a holdover from a previous period of state development, where capital have sunk investment in the place which remains extremely profitable as a site of accumulation. This means that the town retains some characteristics of its previous iterations. As such, research of even more socially disconnected and spatially fragmented FIFO camps would provide further insight into this marketization of social relations in the Pilbara. Thus, if, despite the logistical difficulties, access could be obtained to these sites it would provide further and better insights into this re-composition of work, place and space.

The nature of FIFO work requires FIFO workers to ‘live’ in two places, their place of work (in this instance Newman) and their place of residence. As such, consideration of FIFO workers’ commitment and relationship to place both ‘on site’ and ‘at home’ would provide a better understanding of work and place in Newman. While there have been a number of studies looking at communities these workers ‘fly out’ from, and the impacts of FIFO on social reproduction (House of Representatives Standing Committee on Regional Australia 2013), there still exists a deficiency looking at the implications for work, and on the places where workers ‘fly out’ from, of this bifurcated relationship with place.
The conclusion that Newman has become less socially regulated and more regulated by markets, coupled with the exposure to market cycles of single industry towns, means that the state of the ‘mining cycle’ is particularly significant for understanding work in place. In this thesis, I examined Newman in a period following a sustained boom, which people in the town suspected, and were subsequently proven correct, to be about to end. My findings are therefore shaped by the town being at a particular point in the mining industry business cycle. As such, it is probable that findings taken at another period in the business cycle would have produced different results as the composition of economic space would determine both how many and which workers were in the place, and what relationships those workers had with place.

In summary this case study shows that work and place, together, shape employment relations. My findings demonstrate how place can be a source of union power, and that union power is developed through reproduction as well as production. However, when attachment to place becomes marketised, workers understand both work and place in a different way, one that becomes shallow, perfunctory and temporary. Capital in Newman achieved this by dividing the workforce across space and over time, while simultaneously de-prioritising social reproduction in place. These changes, together, have given capital powerful influence over both production and social reproduction in Newman, finally giving capital the power over work and place they envisaged when the town was constructed.

Newman’s current spatial arrangement, as described in this thesis, is not a permanent state of being. As with all spatial fixes, there is a tendency to change. The terms of production and reproduction are always being negotiated between workers, unions, states, communities and capital. I have shown this by documenting how work and place have co-developed over time in Newman, and it remains implicit that work and place will continue to remake each other so long as ore continues to be extracted in the Pilbara. While this thesis documents individualisation and marketization of Newman’s local labour market, it remains possible for workers to exploit capital’s fixity in place again and work towards reasserting labour’s spatial fix. Should this occur, it probably will not resemble the specific spatial form of the ‘union town’ of the 1970s as that was a product of a particular spatio-temporal circumstance. Rather, any new attempts by workers to contest capital’s dominance of production and reproduction would need to be developed in light of contemporary (or future) dimensions and actors relevant to the regulation of work, taking into account both sites of production and places of reproduction. All places and work regimes have a tendency to change and as such the future co-development of work and place in Newman depends on the choices of workers, whose choices and actions will continue to shape the geography of work.
Appendix One: Methodology

This thesis adopts a qualitative, ethnographic case study approach to consider the co-development of work and place in Newman. Qualitative research is an approach and framework researchers use to acquire and generate knowledge “consist[ing] of a set of interpretive, material practices that make the world visible” (Denzin & Lincoln 2011, p. 3). To answer the research question ‘how are place and work mutually constructed in a company town over time?’ I have adopted a qualitative methodology, combining aspects of interpretive, critical and ethnographic research to investigate workers’ and residents’ subjective understanding of their work and non-work lives in place. I use a case study approach to bound both data collection and analysis whilst embedding this local labour market in its spatio-temporal context. The case itself is the domain of the mine sites in and around Newman as a geographic location. I lived in Newman’s caravan park during two periods of fieldwork in 2012 and 2013, a year apart, for 21 and 19 days respectively. During this time I completed 41 interviews and 6 focus groups, speaking with 66 individuals. Interview data was supplemented by researcher observations and secondary data before being analysed and triangulated in order to reliably and validly answer the research question.

This appendix outlines the theoretical foundations of the research, describes and justifies the research design and outlines how data was collected, before describing the data set, the analysis completed and the ethical considerations of the research.

Appx.1 Theoretical Foundations of Methodology

This thesis uses a qualitative approach as this allows for the development of deep, rich and detailed understanding of people and how they interpret and ascribe meaning to their lives. Creswell (2013, pp. 20-22) explains that qualitative inquiry is based on ontological, epistemological, axiological and methodological assumptions. This section outlines the philosophical assumptions and techniques applied to this research (Neuman 2011, p. 70).

Qualitative research methods are suited to development of theory which relies on meanings and interpretations (Ezzy 2002). These meanings are subjective, generated over time based on the social situations individuals find themselves in and the context in which they occur. Understanding the meaning of participants’ actions requires development of a subjective understanding of the participant (Schwandt 2000). A qualitative methodology allows for the investigation of subjective understandings of work and place in Newman.

Theoretical development within qualitative research examines interpretations of social concepts (Ezzy 2002, p. 5). In qualitative study, theory is developed either by grounded, deductive or abductive means. Grounded theory is where researchers seek
to develop theory out of their fieldwork, rather than be guided by existing theory. Grounded theory is seen as beneficial as

Fieldwork allows researchers to plunge into social settings where the important events (about which they will develop theory) are going on naturally (Glaser & Strauss 1956b p. 288 cited in Ezzy 2002)

Alternatively deductive theory uses established theory to construct hypotheses and then tests them in the real world (Blaikie 2000, p. 25). This thesis combines elements of grounded and deductive theory by using an abductive approach, which asks open-ended research questions and uses data to inform the answer (Ezzy 2002). This matches up with elements of the Extended Case Method described below, which demands close attention to data in developing and improving theory (Burawoy 2009).

As this thesis is written from a labour geography perspective, it is situated within a critical social science paradigm. It therefore necessarily considers issues of power and justice and how the structures, behaviours, norms and cultures in society interact to construct the world (Kinicheloe & McLaren 2000). The critical paradigm takes into consideration the impact of structures (an objective but sometimes concealed reality) on peoples’ subjective experience and their attribution of meaning (Silverman 2000, p. 824). Critical social science assumes people are rational decision makers whose decisions are shaped by social structures, structures which shape how people attribute meaning and constrain their capacity for agency (Neuman 2011). Critical theory involves framing research within its political, social, economic and historical context in order to make sense of the data acquired (Kinicheloe & McLaren 2000, p. 280).

Research methodology is based upon ontology, which considers how reality is understood and constructed. Ontology is either ‘realist’, which considers that the world exists as is and ‘nominalist’ which considers reality as subjectively understood (Neuman 2011, p. 92). Critical research considers reality to be socially constructed in a way that generates, and can reinforce, social and power structures (Kinicheloe & McLaren 2000). This ontological approach complements my research, as this study understands the relationship between work and place is complex and is mediated by a range of social, political and economic relations that are both spatially and temporally sensitive, but not necessarily apparent.

Epistemology relates to the nature of knowledge and how people, particularly social science researchers, understand the world. My research is based on the presumption that knowledge, understandings, and therefore data are shaped by their context (Ezzy 2002, p. 6). Further, epistemology based on a critical frame acknowledges that ‘knowledge’ is influenced by the researcher, and researchers’ biases and contexts necessarily shape their interactions with research participants (Burawoy 2009; Neuman 2011). It is impossible to ignore these biases because both researcher and participants are unable to separate themselves from their context (Burawoy 2009; Ezzy
This section has addressed ontological and epistemological questions, whereas axiological and methodological questions are addressed later in the appendix.

**Appx.2 Research Design**

This research uses a ‘mixed-method’ approach, incorporating case study and ethnographic techniques, following Burawoy’s (2009) tradition of the Extended Case Study. The research question invites ‘messiness’, as there are varied and conflicting interpretations of work and place in Newman. Case study research is particularly suited to labour geography as it allows for multi-disciplinary research and for examination of “complex social phenomena” (Kitay & Callus 1998, p. 101).

Ethnography, which also has a long tradition in employment relations research, allows the researcher to develop a detailed understanding of the experiences, understandings and interpretations of workers (Friedman & McDaniel 1998). In following the Extended Case Method, the research design relies on case study research, ethnography, secondary data analysis, interviews and focus groups in order to answer the research questions in a reliable manner. By using multiple methods in the research design, responses can be considered in a contextualised manner to provide a more detailed and rigorous examination of the research question (Lincoln & Guba 1985, p. 305).

Burawoy’s Extended Case Method calls for theory to be considered, and then stretched and challenged by the selection of disruptive cases, which are likely to robustly examine the utility and applicability of the theory in order to reinforce or develop theoretical understandings of the world (Burawoy 2009). I argue that Newman is a disruptive case within labour geography as it focuses on individualisation and union decline whereas most cases in the literature, particularly the ‘Labour Geography’ literature, focus on successful expressions of collective agency.

A case study approach was adopted in this research. Case study research is defined as

> A research strategy or design that is used to study one or more selected social phenomena and to understand or explain the phenomena by placing them in their wider context (Kitay & Callus 1998, p. 103)

Case study research looks at cases through the particularities of each case’s nature, history, physical setting, position within other contexts and relationship to other cases. There exists a tension between particularity and generalizability of the claims about the case (Stake 2000).

Creswell (1994, p. 12 cited in Blaikie 2000, p. 215) describes a case as having five elements; a single entity, which is bounded, and studied in detail, using a variety of methods, over an extended period and with sufficient contextualisation. The capacity to utilise multiple sources of evidence and prior theory to guide both the collection and analysis of this data allows for cases to be rigorously examined (Yin 2003).
Newman is an attractive case for study because it a physically bounded geographical locale. Work in Newman is studied in detail using secondary materials, historical works, interviews, researcher observation and focus groups (Neuman 2011). The fieldwork was conducted over two periods, a year apart, but also informed by over four decades of history, conforming with Neuman’s (2011, p. 177) call for time sensitivity in case study research.

The case is examined using ethnographic methods to study “others in their space and time” (Burawoy 2009, p xi). The fundamental underpinning of ethnographic research is that primarily, peoples’ experiences shape their of meaning, culture and social consciousness, and thus shape societies (Thompson 1978). The advantage of ethnographic research is that it allows for personal interaction between the subjects of the study and the author (Friedman & McDaniel 1998). This allows the research to be able to understand the case from both the ‘inside’ (participants’ views) and ‘outside’ (as an external researcher), which in turn allows the researcher to challenge theory (Neuman 2011, p. 115).

An ethnographic approach acknowledges that the researcher influences the participant and that the researcher lives in the world they study (Friedman & McDaniel 1998). This should, reflexively, be incorporated into the research to provide better explanations of data, subjects and contexts. This is done to extend the theoretical understanding of our world by testing theories in reality.

Field research that emphasizes providing a very detailed description of a different culture from the viewpoint of an insider in the culture to facilitate understanding it (Neuman 2011, p. 223)

People display this culture through behaviour, and the role of an ethnographer is to uncover the meaning behind this behaviour through understanding cultural knowledge, in both its explicit and tacit form.

Ethnography allows researchers to be sensitive to participants’ temporal, spatial, emotional and social context, all of which are fundamental to shaping and constraining social action (Neuman 2011, p. 175). Ethnography puts

[S]pecific encounters, events and understandings into a fuller, more meaningful context [to generate] … Historically, politically and personally situated accounts, descriptions, interpretations and representations of human lives (Tedlock 2000, p. 455)

I apply ethnographic techniques in Newman in order to understand workers’ daily lives, and do so through observation, interviews and focus groups.

Interviews formed a major part of my data collection. Interviews are an active way of making data and thus the interviewer inevitably influences the data created. Holstein and Gubrium (1995, p. 4) state that “all interviews are reality-constructing, meaning-making occasions, whether recognized or not”. Ethnographic interviews are usually semi-structured with open-ended questions allowing participants to fully express their experience within their spatio-temporal and cultural contexts. Leech (2002, p. 665)
explains “The ethnographic style of interviewing... tries to enter into the world of the respondent by appearing to know very little”. In this case study semi structured interviews were used as they allow the interviewer flexibility to pursue and expand upon answers that are considered incomplete, ambiguous or stunted. It also allows the interview subject sufficient flexibility to steer the conversation and emphasise themes which are perceived to be of particular importance.

Interview data shapes theory, but this data, and data generally, is never able to fully understand peoples’ lives and lived experience. Thus qualitative data, which requires a level of interpretation from the researcher, does not seek to provide ‘absolute truth’, but rather progress towards this impossible endpoint, as

“Our interpretations are always somewhat provisional, somewhat uncertain, and the facts are always somewhat ambiguous” (Ezzy 2002, p. 25)

In addition to gathering interview data, I also conducted both formal and informal focus groups. Focus groups are informal interviews with multiple interview subjects that are conducted in an informal setting. In this research, focus groups were conducted in a café, barbeque area, public library, community centre and participants’ backyards. The practical advantages of focus groups are that the informal setting allows subjects to express themselves more freely, so that the researcher can observe the interaction between participants related to the topic, and so that participants may query each other and thus better articulate their opinions (Neuman 2011). However it also has drawbacks, including the ability to cover fewer subjects and the capacity to remove nuance (Neuman 2011, p. 460). Despite this, in this research focus groups were very helpful in understanding cultural norms and dominant understandings of work and place, because individual opinions were subjected to the group’s approval.

Ethnography has been criticised for having limited capacity for replication as there is limited capacity for other researchers to observe the same phenomena (Friedman & McDaniel 1998, p. 119). Further, ethnography has issues of reliability and representativeness; due to the limited and interpretive nature of the data set (1998, p. 120). Case studies also share weaknesses with representativeness and reliability. To guard against these potential shortcomings of this research type, I first have maintained prolonged engagement with the town, in order to learn the culture of the place, guard against misinformation from informants and building trust in place (Lincoln & Guba 1985, p. 301). Second, persistent observation, with the intention of identifying the most relevant or significant issues when answering a research question, was engaged in the examination of Newman’s local labour market (Lincoln & Guba 1985, p. 304). Third, I have adopted the technique of triangulation, by using different “sources, methods, investigators, and theories” (Lincoln & Guba 1985, p. 305)
The process of my data collection reflected my abductive approach. Prior to commencing fieldwork I consulted extensive secondary material in order to identify potential areas of importance. Shaped particularly by the work of Heath & Bulbeck (1985), Ellem (2008; 2013; 2004; 2002; 2003) and McIlwraith (1988), I sought to investigate how trade unions had reacted to the de-unionisation of the town and look at the trade union response in a spatially sensitive way. However, having conducted my first interviews the success of de-unionisation and change in place from how it was described in these sources led to the reframing of the research question to understand the co-production of work and place in Newman.

Before fieldwork, I met with a professional contact that had worked in Newman and been active in the union movement, who arranged for me to meet a former delegate who lived in Perth. From these two contacts I was able to arrange interviews with active union members in town, some of whom formed part of my interview sample. Before arriving in town I also arranged to join a cricket team and while in town played cricket, umpired a match, joined the gym and played ‘soccer’ in order to meet people, get a sense of community life and demonstrate that I was willing to contribute to the community while I was in town. This provided insights into how the community functions, helped me to develop a profile in town that allowed me to gain participants’ trust more readily and provided me access to a basic social network in town.

The first period of fieldwork occurred in November and December 2012. Due to the booming conditions in the Pilbara labour market, as described in Chapters Four, Five and Six, flights and accommodation in Newman were prohibitively expensive. This meant that in order to access the field site I hired a campervan, drove the 1195km from Perth to Newman and resided in a caravan park. This was fortuitous as, as described in Chapter Four, the caravan parks served as FIFO accommodation, granting me access to a traditionally difficult to access population of workers.

I conducted interviews with my initial contacts in town whom, in turn, put me in touch with other interviewees, leading to a "snowball" effect. Potential interviewees were generally willing to be interviewed when a friend referred them. This was due to a level of suspicion in the town as to why a stranger might want to interview a worker, whether this might affect their employment and indeed whether I was working for a university or for BHPB.

The interviews carried out in this research were semi-structured; draft interview schedules are included at Appx.8. The style of the interviews was conversationalist (Berry 2002, p. 279) to promote a fluid discussion of issues and to adapt to the insights and interests of each participant. I also conducted two focus groups in this fieldwork, which were conducted in the caravan park’s barbeque area and the public library.
After the first fieldwork, I transcribed all interviews and did preliminary data analysis. I discovered that union revitalisation was not fundamental to understanding work and place in Newman, but rather it was FIFO, community, job insecurity and attitudes to place that provided insights into how work and place interact. This meant that in preparation for the second period of fieldwork the interview schedule was revised, different reading was done and a less union-centric sample was desired. During this period, a contact had added me to the town’s Facebook group, where I identified myself as a researcher in town and requested interviews with residents.

The second period of fieldwork occurred in November and December 2013. During this period I interviewed a more diverse cohort including FIFO workers, residential workers, residents, community activists and ‘mining wives’. The town’s Facebook group provided a number of interviews, which again led to snowball sampling.

After gaining the written consent of participants interview data was digitally voiced recorded and length of each interview varied from between 15-60 minutes. The focus groups lasted between 50 and 180 minutes. The interviews were undertaken at a time and location convenient to the participant, typically in coffee shops and subjects’ homes. The researcher transcribed all interviews.

Places are dynamic over time, and as such in order to understand the data it is important to note the circumstances that influenced worker and resident attitudes during both periods of data collection. There was a difference in general responses between my periods of fieldwork, which were caused by BHPB’s corporate decision making and the conditions of the global iron ore market. The first period of data collection, November and December 2012, saw Newman in a boom (Australian Bureau of Statistics 2013). This was reflected in the large amount of mining construction work in the town as BHPB was expanded their Pilbara operations, including construction of the Jimblebar mine, located 40km from Newman. This was a response to the mining boom described in Chapter Four, as BHPB increased both their output and capacity as part of a growth strategy (BHP Billiton 2011). This manifested itself in a period of high growth; high rents, full occupancy of private rentals and very high wages being paid.

That said, the iron ore price had fallen sharply in September of that year, and although it swiftly recovered there was a level of tension about job security and the continued expansion of operations around the town. The second period of data collection was conducted in a period of ‘cooling off’ from the boom. Rents had fallen drastically over the previous 6 months, the Jimblebar mine had come ‘on-line’ and was operated by a FIFO workforce who had no physical interaction with the town.

**Appx.4 Data Set**

Data sampling should be purposeful, and not merely ‘snowball’ and ‘convenience’ sampling. The purpose of my sample was to get representative views of those who fall within significant categories within the town. These categories included mining
worker/non mining worker, those who were/were not engaged in paid work, union member/ non union member, residential worker/FIFO worker, long-term/short term resident, those who were deeply engaged/unengaged with their community, workers in operator/maintenance/non production roles, directly employed by BHPB/contractor and private sector/public sector worker. As these categorisations emerged through the fieldwork and allowed me to account for the plurality of subjective understandings in work and place in Newman. The ‘small town’ nature of Newman meant that an interview request accompanied by a name and recommendation was particularly helpful, and as such I remain thankful for the initial interviewees who assisted me in setting up subsequent interviews.

Sampling should stop when “the researcher decides the study has reached saturation” (Glaser & Strauss 1967 cited in Ezzy 2002, p. 75), where in interviews the researcher stops hearing significant new information. This occurred during the second half of my second period of fieldwork.

The sample for my research included 42 interviews and 7 focus groups. This involved speaking with 66 individuals. 33 of these were workers as described in Chapter One, with 21 of these workers working for BHPB and 12 for contractors, and 7 of these interviewees were union members and 26 were not. These interviews included mechanics, operators and those who worked maintaining the mine site so that production could occur. The other 33 interview subjects did other work in the town, or were residents in town, and included mining spouses, allied health workers, retail workers, religious leaders, care workers, public servants and workers for NGOs in the town. These interviews often touched on ideas of place, and many of these workers resided in town because of a spousal or dependent relationship with a miner.

**Appx.5 Data Analysis**

I transcribed all interviews and the resultant transcripts formed the subject of analysis of primary data. Analysis of data commenced during the period of data collection, as this allows for collection of better data as interviews can be more targeted and key themes that emerge during the research can be better explored. This process also allowed me to develop my interview schedule, based on key categorisations within the workforce and community, before the second period of research. Ethnographers are consistently revising their questions throughout fieldwork, as early data guides later questions as a part of ‘integrated research’. This is particularly significant in developing grounded and abductive theory, as the researcher is unaware of the important issues until fieldwork commences. Subsequent data analysis was done after transcription, where interview data was coded, which Charmaz (1995, p. 37 cited in Ezzy 2002, p. 85) defines as “the process of defining what the data are all about”. It is through coding, the categorising of data, when compared to existing theory, that novel theory emerges through research.
Informed by initial analysis, coding commenced with open coding, which was exploratory and identified themes that are induced from the data set. It is from the non-linear process of open coding that data is condensed into broad categories. After open coding, analysis progresses to axial coding, which organises and links the codes and places them in their categories based on preconditions, contexts, action and consequence (Ezzy 2002; Neuman 2011). Initial categories that emerged from my data set include the role of unions, work and the community, attitudes to work, the experience of work and attitudes to place.

Selection coding followed these initial categorisations, which examines the codes and identifies supporting data that enables the data to be considered in relation to theory. After the second stage of analysis was complete eighteen themes or nodes had been identified; BHPB’s relationship with the town, changes in the work, community work and leisure activities, defence of place, plans to exit the place, the experience of work, FIFO, the global industry, housing, insecurity, labour hire, negatives of place, qualifications required to be in Newman, reasons to come to Newman, responsibility for place, rosters, sense of place, changes in the town and unions. It is from this coding that data to support the analysis of the research question was drawn and utilised in the thesis. As described in the thesis, where I reference an interaction I refer to the period of fieldwork, FW1 in 2011 and FW2 in 2012, then to I or FG to represent if it was completed in an interview or focus group format, and then the number corresponding to that interaction.

Appx.6 Ethics

This research was conducted in accordance with the approval by The University of Western Australia’s Human Research Ethics Office. Interview data were collected with the knowledge of the participants, all of whom gave permission to be recorded. Participants completed a consent form and were given an information sheet as well as having the research verbally explained. The information sheet, which was provided to all interviewees, explained the nature of the research, the content and approximate timing of the interviews, as well as ethical issues such as confidentiality and data storage. Additionally, participants signed consent forms before commencing the interview, acknowledging that they were fully informed before the interview commenced, and that they were able to withdraw at any point. For certain participants who were interviewed on behalf of key stakeholders in the community there were separate information sheets and consent forms which stated that the participant may be identified, due to the position they held within the town. The risk of physical harm to participants during the study was minimal; however there remained the risk of employment consequences should workers be identifiable by their comments, and therefore confidentiality was crucial. I ensured this in the thesis by de-identifying gender and age where appropriate and categorising length of stay to the decade the worker arrived in Newman. Also, for participants who worked in identifiable positions in town, I specifically asked them how they would like to be reported in the study in
order for them to be de-identified, and some participants who were happy to be identified have been de-identified in order to protect the confidentiality of their peers. No problems were experienced or reported in the data collection process. The only time that participation in the study was revealed to other interviewees was where I was granted explicit permission by an interviewee to tell a friend or colleague that they had already been interviewed.

**Appx.7 Sample Interview Questions**

These interview schedules were the starting points for the semi-structured interviews. Different interviewees emphasised different answers, leading to variation between interview length and content. Further, different interviews required flexibility when considering the interviewee, such as between a mining wife, a miner or a public servant. As such these interview schedules are a guide and indication of the content of the interviews.

**Fieldwork 1**

- What job do you do?
- What company do you work for/do you work for yourself?
- What type of contract are you employed under?
- What is the nature of your work? Describe a typical day of work.
- What is your roster? How much say do you have in this roster?
- Why did you choose this work?
- What was your career path before this job?
- Did you choose this place? How much say did you have in this choice? [nb – employer, family, spouse]

  Why did choose this place?
  How long have you worked in this job?
  How have you seen work change in this time?
  Are you a member of a union?
  Are you a member of a local community organisation (Church, sporting club, parents association etc.)? At home (if FIFO)?
  How do you spend your non-working leisure time in the town? In Perth (if FIFO)?

- Where do you work?
- Where do you live?
- What place do you consider home?
- How much do you feel a part of the town? Of the local community?
- Describe the local community.
- What are the best aspects of working in Newman?
- What are the best aspects of living in Newman?
- What are the negatives of working in Newman?
- What are the negatives of living in Newman?
What is your experience of your employer? Supervisor, managers, executives?
To what extent are you controlled at work?
How is your personal life impacted by your work?
To what extent are you satisfied or dissatisfied in your work?
What do you do to deal with any dissatisfaction?
Do you do anything with fellow workers to deal with dissatisfaction?
How much control do you think you have had over your career path so far?
How well do you think you are placed to control your career path in the future?

What do you know about the global Iron Ore Industry?
How do you see your role in the industry?
How secure do you feel in your job? As an individual in this job? Working in this industry?
How much risk is attached to this job?
How do you interact with other workers involved in your place of work?
Do you know what the Iron Ore is used for?
What do you think about the mining boom?
Do you have any idea if or when the mining boom may stop?
What plans do you have for when that happens?
Are large corporations and Governments (local/regional/national) successfully managing the growth and the effects of this industry?
What are the places you find significant in the Iron Ore Industry?

Fieldwork 2

What job do you do?
Where do you work?
What company do you work for? Do you work for yourself?
What is the nature of your work? Describe a typical day at work.
What is your roster?
Why did you choose this work/this industry/this place?
How important is income to this choice?
How did you find this job?
What skills/qualifications did you need for this job?
How long have you worked in the job?
How have you seen work change in this time?
Are you in a union? Why/why not?
Are you a member of a community organization? Here or elsewhere?
How/where do you spend your leisure time?
Do you have a family/kids?
How does this work affect family life (+/-)?
Do you live in Newman? If no – where?
How long have you lived here/there?
Is your life here permanent or temporary?
Where do you consider home?
How much do you feel part of the community here?
How do you think the community and town have changed over the time you’ve been working here?
What do you think are the reasons for this change?
How healthy do you think the community is?
What are the positive aspects of living in Newman?
What are the negative aspects of living in Newman?
What are the positive aspects of working in Newman?
What are the negative aspects of working in Newman?
How do you find and cope with the weather?
How isolated do you find the town?
What is your experience of working for [employer]?
How is your personal life structured around work?
How much say do you have over your work?
To what extent are you satisfied/dissatisfied with your job?
What do you do to deal with issues?
What do you know about the global iron ore/steel industry?
How do you see your role in the industry?
Do you know what the iron ore is used for?
What do you think the most important places are in the industry?
How important is your job in the production of iron ore?
How secure do you feel in your job individually?
How secure do you feel in the industry here?
What contract are you working on?
How and how often do you interact with colleagues at work? Socially?
What do you think about the mining boom? Do you have any idea if/when it will stop?
What are your plans for if/when it stops?
For how long do you intend to do this job? What next?
For how long do you intend on living in Newman?
What skills/training do you think you’ll need for this next job?
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