

Ross Barnett (with assistance from John Reed), *Goldfield Entrepreneurs: The Norwegian Party of Waithuna Gully, Otago*, Lawrence Athenaeum and Mining Institute, Otago, 2016, pp. 3-216, Maps, photographs, diagrams, ISBN 978-0-473-35344-5.

This was a delightful book to review, with aspects of business history, mining history, local and social history all combined. It is well written and extensively researched, although the lack of detailed historical records surviving to the present day presents the author with some challenges, which are dealt in a thoughtful and interesting manner. The book starts with an introduction and some contextual thoughts and makes early reference to nineteenth and early twentieth century emigration from Norway, with some comments on the migrant experience. This is a mix of some evidence and some conjecture as to what motivated, as well as characterized, the three main waves of emigration from Norway, the extent of which made it second only to Ireland as a source of European emigrants in the nineteenth century.

The emotional experience as presented here is somewhat reflective of Vilhelm Moberg's Swedish novels, which relate to 19th Century emigrants to the USA, and particularly Minnesota, especially the 1949 classic: "The Emigrants". Whilst that work was fictional, Barnett's work is based on stories of real people, from an area to the north of Norway. The journey from Norway across the North Sea to Hull, across England by train to Liverpool and from there to Australia and finally on to New Zealand contained here, is geographically different from the journey of the fictional work, which was to America only. However, the difficult and dangerous aspects of the voyage are portrayed as vividly here as are the "Malthusian" nineteenth century conditions in both Norway and Sweden, and the change from landholder to leaseholder there that gave rise to push factors driving people off the land and to move, both into town and overseas.

Gold does not appear in the Swedish fictional works, but it is central to the pull factors operating on and attracting the Norwegian Party to Otago. Not part of the first wave of the rush, they were representative of the second group, who may have known how to use a pan, but favoured larger scale operations with a need for capital as well as commitment and labour. This type of gold, often embedded deep in the ground and in this case embedded fast in a concretion-type rock layer, required the Norwegian party to utilise hydraulic power to do much of the digging and initial smashing, in an effective, but highly environmentally unfriendly manner.

The book reveals the longevity of the operation and of the partnership, notable in an industry, place and era in which short-time horizons were the norm, where expectations were high, and failure to realise the expectations was also common. The more capital-intensive operations tended to last longer than small operations, but failure was still common for such operations. The book uses some very interesting attempts to reconstruct the business history side of the operation, in the face of difficulties derived from a paucity of financial and other business records. The value of the water rights and the distribution of the water over long distance and sometimes difficult terrain is revealed as an important element in the success of the operation, with an income stream coming from supplying other miners, as well as from their own gold production.

Page 9 suggests the book has 3 main aims: as a local history, intended to reveal something more of the area of the gold working and the surrounding Waitahuna Gully than is already known; to provide an examination of the mining activities involved; and to give some description and assessment of the infrastructure, including the water race and hydraulic operations the group constructed and utilised. In all respects the book is successful, with a feel for the mechanics of the operation, which sees the Norwegians as innovators rather than inventors, utilising some technology to produce an operating system that allowed for economic working of ground that was already well worked over. In a system sense their success was related to their ability to organise existing knowledge and use it to produce a successful working process of production. This was somewhat reminiscent of Edison's methods of electrical generation, distribution network and use in industrial or retail appliances, rather than inventing particular parts or aspects of the whole process.

The Norwegians' use of waterpower and the distribution network of the water as well as their sale of water and water power to others, gave them a base income level which assisted them in surviving some of the downturns in mining activity and profitability. Much of the capital seems to have been generated from retained profits rather than from borrowing, reducing the risks of loss of control and allowing the operation to last for the best part of fifty years. There is some discussion of disputes regarding water and land rights, although a fuller analysis of these is still to be done. The institutions and customs which were set up locally, as well as the Governmental role of wardens and others is reflected upon, which gives at least a glimpse of the various aspects and some of the weaknesses of the control systems of the time.

Similarly thoughtfully analysed and presented are the social aspects of the role played by the Norwegians in the locality, with reference made to their community contribution in sports, schooling and local development. The wages paid seem to have been relatively good by comparison with European standards pre 1914. In 1913 miners wages were said to be 9 shillings a day for an eight-hour shift. Life was hard, accidents occurred and entertainment was somewhat sparse and largely self-made. The contrast with pre 1914 Norwegian rural life, and especially the contrast with the life the Norwegian party left in the first wave of migration in the 1860s, means the party did well for themselves and for the area.

Presentation and production is of a high level with only a couple of typographical errors that were noted in passing, although the one on the title page "Typset" is rather striking. Such minor distractions are more than offset by the end product as well as by the heavy paper and gloss finish which combine to present the numerous illustrations to good advantage. Ross Barnett, with John Reed's assistance has produced a very good tale, well told, and an addition to our knowledge of Otago mining in the nineteenth and early twentieth centuries.

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Simon Cubit and Nic Haygarth, *Mountain Men: stories from the Tasmanian High Country*, Hobart, Forty South Publishing Pty Ltd, 2015, ISBN 978-0-0042527-9-1, xiii, 322 pages, index, bibliog., endnotes, photographs, maps, Price: \$50.

These two experienced Tasmanian professional historians, Simon Cubit and Nic Haygarth, have written a series of 10 intense and powerful biographies of men who worked from 1870 to 1990 in the mountains of Tasmania as mineral prospectors, hunters, tourism guides and as track cutters. They were: Dan Griffin, travelling highland journalist; William Aylett, career bushman; Gustav Weindorfer, King of the Cradle; Paddy Harnett, bushman and highland guide; Bert Nichols, hunter and overland track pioneer; Ron Smith, bushwalker and national park promoter; Lionel Connell, Cradle Mountain's first ranger; Dick Reed, highland horseman and hut builder; Ray Miles, battle scarred survivor; and Ray Steers, the last of the high country snarers. Nic Haygarth wrote the stories of Griffin, Aylett, Weindorfer and Smith, Simon and Nic jointly wrote the lives of Harnett, Nichols and Connell, and Simon wrote the other lives.

Mountain Men is a compassionate and encyclopedic assessment of the careers of men who as bushmen practised skills that have now largely disappeared. The book is extremely detailed in technical and human experience, intertwined by an analysis of the men's work set in the context of the landscape and the economy and local milieu of the time. The biographies are highly engrossing and captivating, and cover the emotional aspects of their lives; these were really lonely men who for various reasons left and then shunned their families and the towns.

William Aylett (written by Nic Haygarth) was a hunter-pro prospector who with Josiah Innes discovered the North Mount Farrell mine above Tullah in October 1897. He was dispossessed of the lead and silver mine, which embittered him, and stimulated much of his advocacy and petitioning. His prospecting covered the nineteenth century Tasmanian mining boom and the osmiridium mining between the two World Wars. (Nic has also written a journal article on the Tasmanian osmiridium mining industry.*) Aylett became a foot soldier in the Tasmanian Railway Wars. He was a guide, packer, and prospector to all government and private exploration schemes and surveys of the 1890s intended to bring railways to the mines of north and western Tasmania. These included the Stewart railway Survey (1890-91), Mole Creek and Zeehan Mineral Prospecting and Exploration Company (1891-94), Launceston and North West Direct Route Association (1896-97), and E.G. Innes' Mole Creek Track Survey (1897-98). He continued to work gold shows on the Lea River, Black Bluff and Vale River Gorge, and discovered coal at Pelion in the 1890s, although nothing came of it. In 1908 he was contracted to work on the Balfour mine transport problem, establishing a road and possibly a railway. He was involved with Melbourne speculator, BP Ekberg's proposed private railways from Stanley to Balfour via Smithton, but it was considered too circuitous. Aylett was constantly seeking shire council or state government funding for his proposals for tracks to his new mineral discoveries including those around Waratah. Nic Haygarth's assessment of Aylett's career in the mining industry and hunting, his personal foibles and achievements is a consummate success in the book.

Gustav Weindorfer, recognized as ‘King of the Cradle’, and renowned for his passion for the Cradle National Park, was an ascetic bushman figure of the type that Tasmanians seek out to lead them to ecological salvation (p. 57). He was in reality boosting tourism in the area where he had bought land and built a guest house, Waldheim, within the Cradle Mountain national park area. His life is celebrated in an annual event on New Year’s Day.

Among the other outstanding hunters are Ray Miles and Basil Steers. Ray Miles was a survivor of his prisoner of war experience in Singapore and the Burma Railway, and chose an absolutely isolated lifestyle on return to Tasmania. The monument and replica hut in Mole Creek are enduring memorials to Ray Miles, and become even more so after reading in this book of Miles’ experiences.

Bert Nichols, Ron Smith and Lionel Connell were the guides in the national park. Nichols played very significant roles in guiding famous visitors to the area. His parallel work was as a hunter – secretive, successful and profitable. His intuitive bush skills enabled him to travel without establishing recognizable tracks, which led to some criticism of his work.

Dick Reed, born in 1898, was a wealthy landowner, horseman and hut builder, who always wore a tie in the bush. He had a burning passion for wild places that consumed his life, that passion was stimulated by an epic three-week journey with his father and an employee at the end of World War I, to Fitzgerald in south west Tasmania. Reed did suffer financial disaster in the late 1920s with the failure of his New South Wales investments and just avoided foreclosure on those properties. He obtained employment with the Graziers’ Co-operative Shearing Company (Grazcos).

The endnotes are extensive and effective, the bibliography being indicative of career long research programs, which have resulted in this excellent book.

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*.Nic Haygarth, ‘Pen-pushers with Pans: 20th century Tasmanian Osmiridium Mining’, *Mining History: the Bulletin of the Peak District Mines Historical Society*, vol.17, no. 4, Winter 2009, pp. 83-91.

Bradon Ellem, *The Pilbara: From the Deserts Profits Come*, UWA Publishing, Crawley, W.A. 2017, 256pp, Photographs. ISBN 978-1-742-58930-5.

Everything about this book makes for pleasurable reading. Its generous format combines with the author's succinct, clear prose to produce a veritable master-class in industrial relations history.

The author draws of course on an extensive, pre-existing journal literature about events in this isolated region of Western Australia but the previous few books have tended to concentrate on the giant mining companies and their entrepreneurs. In contrast Ellem centres his analysis upon the workers and industrial relations. He posits three different 'spatial fixes': From the 1960s into the early 1970s the Pilbara was 'a union place' but the next 20 years saw intensive conflict after which, with now less than 5 per cent of workers belonging to unions, the victorious employers 'redefined' the Pilbara in their own terms.

The bitter Robe River lock-out in 1986 prefaced 13 years in which the unions' power was wound back as anti-union offensives were mounted by Robe and the other two big operators, Hamersley Iron and BHP. The employers won hands down. Unionists were weeded out and individual contracts were introduced. Social change was hastened by most employees no longer residing on site but flying in from their homes - mainly in Perth - to work lengthy shifts for short periods before flying back for a few days R and R with their families. When Hamersley introduced individual employment contracts in 1993 they were accepted by 90 per cent of its employees. A few years later the Commonwealth government followed the example of most state governments in also legislating for individual contracts. BHP was by now the only unionised firm in the Pilbara and when, in 1999, it too offered individual contracts half its workforce quickly accepted.

Ellem vividly traces the dynamic essentials of the unions' rise and fall and the associated transformation of employment relations, concluding that 'the assault on [Pilbara's] particular kind of unionism has been matched by an assault on the memory and knowledge of it... What happened in the Pilbara was central to corporate and government ambitions elsewhere, to reworking what unionism means across the country ... From the deserts came not only profits but power across the Australian terrain.' This book is highly recommended.

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David Lee, *The Second Rush: Mining and the Transformation of Australia*, Connor Court Publishing, Redlands bay, Queensland, 2016, pp. 7-462, Maps, photographs, ISBN 978-1-925501-14-8.

In the historiography of Australian mining, Geoffrey Blainey's *The Rush that Never Ended* has deserved iconic status, running to five editions between 1963 and 2003. David Lee's book, as its title suggests, *The Second Rush: Mining and the Transformation of Australia*, is a deliberate following in Blainey's footsteps. Like Blainey's work, it covers a large sweep of time, covering the period between 1960 and 2012. Like Blainey's work, it covers a wide sweep of industries, most notably the mining for coal, iron, bauxite and gold. Like Blainey's work, it highlights how mining fundamentally altered our relationship with the world. As Lee indicates, in 1950-51, Great Britain "took a third of Australia's exports and Japan six per cent." By 1973-74, when Britain entered the European Union, "Japan took 31 per cent and Britain a meagre seven per cent."ⁱ Similarly, the Chinese demand for Australian minerals saw Australia's exports to this market almost treble in the five years from 2000.ⁱⁱ

In deliberating placing his work alongside Blainey, Lee makes himself a hard task-master. It is, however, a task that Lee generally acquits himself well. Not only is the book highly readable, it *does* achieve its central task of conveying the scale and transformative nature of the post-1950s mining booms. This is, perhaps, best captured in Lee's discussions of the Pilbara iron ore industry. Unlike in Queensland, where ports and railways were built by the Country (National) Party-dominated government – which then recouped immense riches in haulage charges – in the Pilbara everything was built by the mining companies themselves. In a harsh landscape, previously devoid of significant infrastructure, this involved the creation of what Lee refers to as a "State in Miniature".ⁱⁱⁱ Mines, ports, railways, towns and housing all had to be basically built from scratch. The scale of this project is indicated in Lee's descriptions of the port construction projects at Dampier, Port Hedland and Cape Lambert. At Dampier, the first iron ore port to be built, the exposed nature of the coastline meant that operations were exposed to cyclonic waves of up to 11 metres in height. To protect equipment and workers from these waves, the wharves were built at least 12 metres high, thereby allowing waves to pass harmlessly underneath the working platforms. Nearby Port Hedland was a similarly vast operation. Constructed between 1967 and 1971, Port Hedland was by the later date Australia's largest export port. At Cape Lambert, where shipping was curtailed by low tides and distance from open water, a 2.6 kilometre jetty was constructed. The water before the jetty was then dredged to a depth of 18 metres, meaning that the actual jetty infrastructure (which was also 12 metres above water level) totalled 40 metres in height, the equivalent of a 15-story building.^{iv}

A central theme of Lee's book is the relationship between government and the various mining companies. For much of the period that Lee discusses, governments are revealed as more hindrance than help. Although it seems hard to believe today, in the mid-1960s scientific opinion – most particularly that received from the CSIRO – convinced government that Australia had limited reserves in the way of coal, iron and

bauxite. With regards to iron ore, the CSIRO confidently believed that two-thirds of the world's iron ore lay behind the communist "iron curtain". Most of the rest was believed to be buried in the United States. Australia, it was estimated, possessed no more than one-third of one per cent.^v Mindful of maintaining reserves of (supposedly) limited deposits, governments banned exports until the early 1960s. Only through difficult and protracted negotiations were the mining companies able to get these lifted. When mining boomed in the late 1960s and early 1970s the windfall profits of the miners, many of whom boasted substantial foreign ownership, made them a target for government action. In the 1970s the Australian Industry Development Corporation, the Petroleum and Minerals Authority and the Foreign Investment Review Board all sought to increase Australian share ownership in the sector while maintaining government's capacity to direct output. During the Whitlam administration (1972-75), the Resources Minister, Rex Connor, infamously plotted to "buy back the farm" with borrowed Middle East "petro-dollars". During the post-2000 "China boom", windfall profits were taxed to fund economy-wide tax reductions and increased social welfare; measures that rebounded on governments once prices started to fall.

While commending Lee's to readers, I feel compelled to make a few criticisms. First, Lee indicates that one of his goals is that of tracing how mining was responsible for the "transformation of Australia". This is done largely by describing, (a) the scale of regional development, (b) how governments used mining expansion – most particularly with regard to bauxite, where energy-intensive alumina and aluminium smelters were constructed – to facilitate local manufacturing, (c) how the destination of exports shifted the focus of foreign affairs from Britain and America towards Asia, and (d) how windfall profits during the mining booms boosted national income (including per capita income). What is missing from this is a discussion of its overall effect on employment and society. On this level, the effect of the "second rush" was far more modest than the "first rush", where one-sixth of adult males in 1900 worked in either a mining town or a smelting town. By comparison, the Australian Bureau of Statistics (ABS) indicates that as of May 2016 the mining industry employed a mere 214,500 people; a figure that represented 1.8 percent of the workforce. Among the industries listed by the ABS, only utilities employed fewer.^{vi} The small employment of mining is, of course, an economic strength. It employs few people because it is highly capitalised and thus highly productive. However, the small scale of employment in the sector means that the industry has relatively few "natural" defenders. In the press, notably the ABC, this causes constant dismissal of the industry as insignificant. The ill-consequence of this is today seen on every side as governments, appeasing "green" constituencies, impose bans on gas and oil extraction and ever increasing restrictions on other forms of mining. A second criticism of Lee is that he often fails to capture, as Blainey did, the "mystique" of the industry. Thus we find comparatively few descriptions of what it is to work as a miner, the type of equipment used, the conditions experienced, the physical landscape and mining workforce's relationship with it. This is not to say Lee's book is devoid of such descriptions. In discussing the Pilbara, in particular, we are provided with accounts of working life amid the dust, heat and humidity. We are also told how the gangs that built the Pilbara railways, comprising disproportionate numbers of Torres

Strait Islanders, drank “the equivalent of 1.5 million middies of beer”.^{vii} However, the reader could have had more of this. For there is no doubt that one of the transformative effects of mining has been its effects on the Australian psyche, wherein the creators of wealth, the “real” Australians, are still seen by many as those on the frontier; a frontier that mining has always helped to define.

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ⁱ David Lee, *The Second Rush: Mining and the Transformation of Australia*, Connor Court Publishing, Redland Bay, 2016, p. 215.

ⁱⁱ *Ibid.*, p. 343.

ⁱⁱⁱ *Ibid.*, p. 134.

^{iv} *Ibid.*, pp. 137-40.

^v *Ibid.*, p. 34.

^{vi} Calculated from, Australian Bureau of Statistics, *Characteristics of Employment Australia, August 2016*, Australian Bureau of Statistics, Cat. 6333.0, Canberra, 2017, Table 18.1.

^{vii} Lee, *Second Rush*, pp. 143, 135.