



# Blood, sweat and tears

BHP worker stocking furnace, 23 March 1942, by Ray Wolfe for *Pix* magazine. (Source: Mitchell Library, State Library of NSW)

# Blood, sweat and tears

**A 'coalopolis' in the nineteenth century, Newcastle developed into the largest coalmining and export port in Australia. BHP and a raft of associated companies transformed Newcastle and the Hunter Valley from a farming and coalmining region to a major centre of twentieth-century industrialisation in Australia. In so doing, they powered the nation's manufacturing efforts during two world wars and beyond. 'Steel City' was made possible by a huge influx of workers from all walks of life from around Australia and the world.**

## Coalopolis

Coal was unofficially discovered by the Europeans in the area in 1791, and officially in 1796 and 1797, foreshadowing the first export of coal from the colony in 1799.<sup>180</sup> John Thompson wrote to Captain Schanck on 8 September 1799:

We have also some hopes that coal with which the country abounds will be of much Colonial advantage. A ship lately returned to Bengal loaded with coals, and it gave no small satisfaction to every person interested in the prosperity of the colony to see this first export of it; and I am hopeful from these advantages that New South Wales, however contemptible it may at present appear in the list of our colonies, may yet become an acquisition of value to the mother country.<sup>181</sup>

The first coalmine in Australia was opened at Colliers Point (present Fort Scratchley) in 1801. This was a short-lived venture as the convict outpost was withdrawn in 1802; however, miners remained at Coal River. Coal was obtained by private vessels and, in small quantities, for government use. Miner John Platt, employed by John Palmer, was credited with having discovered a new mine, as reported in May 1803.<sup>182</sup>

When the penal settlement was re-established in 1804, all timber and coals of the district were declared to be the property of the Crown. Soon after, Lieutenant Menzies reported to Governor King on 19 April that 'an excellent mine has been opened'.<sup>183</sup> In the early years, coal was raised by convicts from two sites: beneath the present Fort Scratchley headland (formerly Colliers Point) and at the Government Domain. The output of coal varied from year to year until 1822 when Newcastle ceased to be a penal settlement.

In 1823 Commissioner Bigge recommended that the government mines in the former penal settlement of Newcastle be leased to private interests.

The AACo was formed in London in 1824 to cultivate and improve waste lands of New South Wales. Though it did not include coalmining among its proposed activities, the demand for coal for steamer navigation to India induced the company to negotiate with the British Government to obtain leases of the Newcastle mines as coals from Newcastle '... may be procured at one half the present expense in consequence of the short distance and the want of cargoes for convict and trading vessels.'<sup>184</sup>

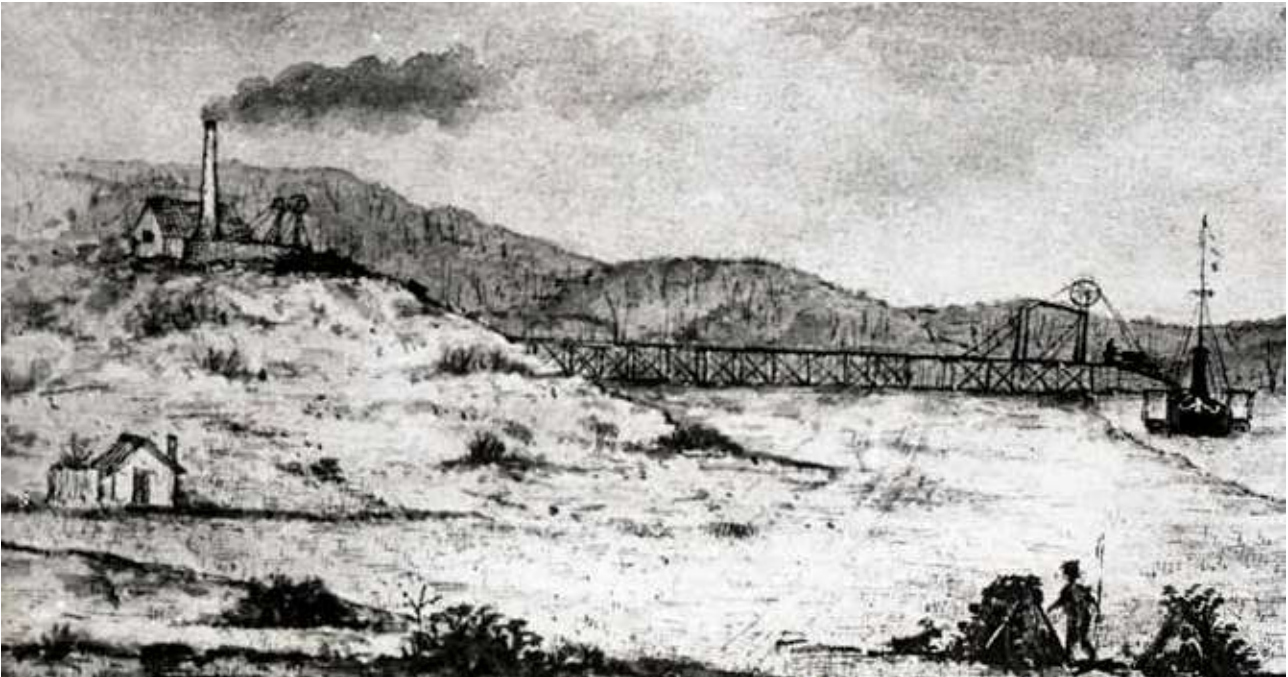
The company was originally assured a 31-year lease of the Newcastle mines in return for 5% of the output from the mines; however, the company charter precluded a lease. In its place the AACo was granted 2,000 acres (which had been reserved for expansion of the town) and the government handed over the Newcastle Coal Works to the company.

The AACo sunk a new pit, set up the engines and erected the inclined plane railway to a new wharf. The new mine was officially opened on 10 December 1831. The new steamboat Sophia Jane (the first of its kind in Australia) took on the first load of coal from the mine, heralding a new era in Newcastle's coal industry and the birth of the coastal steamer service to Sydney.

A labour shortage plagued the industry following the end of convictism, forcing the AACo to sponsor indentured British miners in the following decades. Continued shortages of skilled labour gave miners significant negotiating power for higher wages and better conditions.

Initial output from the AACo mine was small, yielding 7,000 tons in 1832. In 1836 the AACo exported about 12,000 tons, but by 1847 the figure was over 40,000 tons. In this period the AACo opened new pits around the district and sponsored the first British indentured miners.

The company's monopoly was challenged from the 1840s and onwards by the arrival of new coal producers including the Newcastle Wallsend Coal Company, the Scottish Australian Mining Company, the Minmi Collieries, and the Waratah Coal Company.



*Coal Works at Newcastle, NSW*, a sketch by Isabella Parry, 1833. Depicts the A Pit coal staithes of the AACo. (Source: UON, Living Histories, C919-0909, original sketch held at Cambridge University (Scott Polar Research Institute) as part of the Polar Art Collection, <https://www.spri.cam.ac.uk/museum/catalogue/article/y77.4.12/>)

**“When we view the opening of coalworks on so extensive a scale, in combination with the (now certain) addition to the number of our steam vessels, and the probable increase of other machinery, who can venture to say, to what extent these benefits may not ere long be carried?”<sup>185</sup>**

By 1890 the Newcastle district had 40 mines employing 6,873 miners. The AACo had the second largest coal output in the southern hemisphere with three working pits (No 2, Hamilton and Sea Pit) all connected by rail to three staithes (landing stages for loading coal directly into ships' hold) on the company's own wharf. The largest colliery in the district was the Newcastle Wallsend Coal Company, established in 1860, capable at full production of raising half a million tons annually.<sup>186</sup>

By the end of the nineteenth century over 60,000,000 tons of coal were raised in the district and Newcastle was the fifth-largest coal shipping port in the British Empire. The *Sydney Mail* proclaimed in 1900 'the present year has been one of exceptional activity in Newcastle'<sup>187</sup> and predicted the coal output to exceed the previous record set in 1898. Coalmining was the engine of growth in Newcastle in the twentieth century, especially after the establishment of the BHP steelworks and allied factories that were powered by coke from the valley's mines.



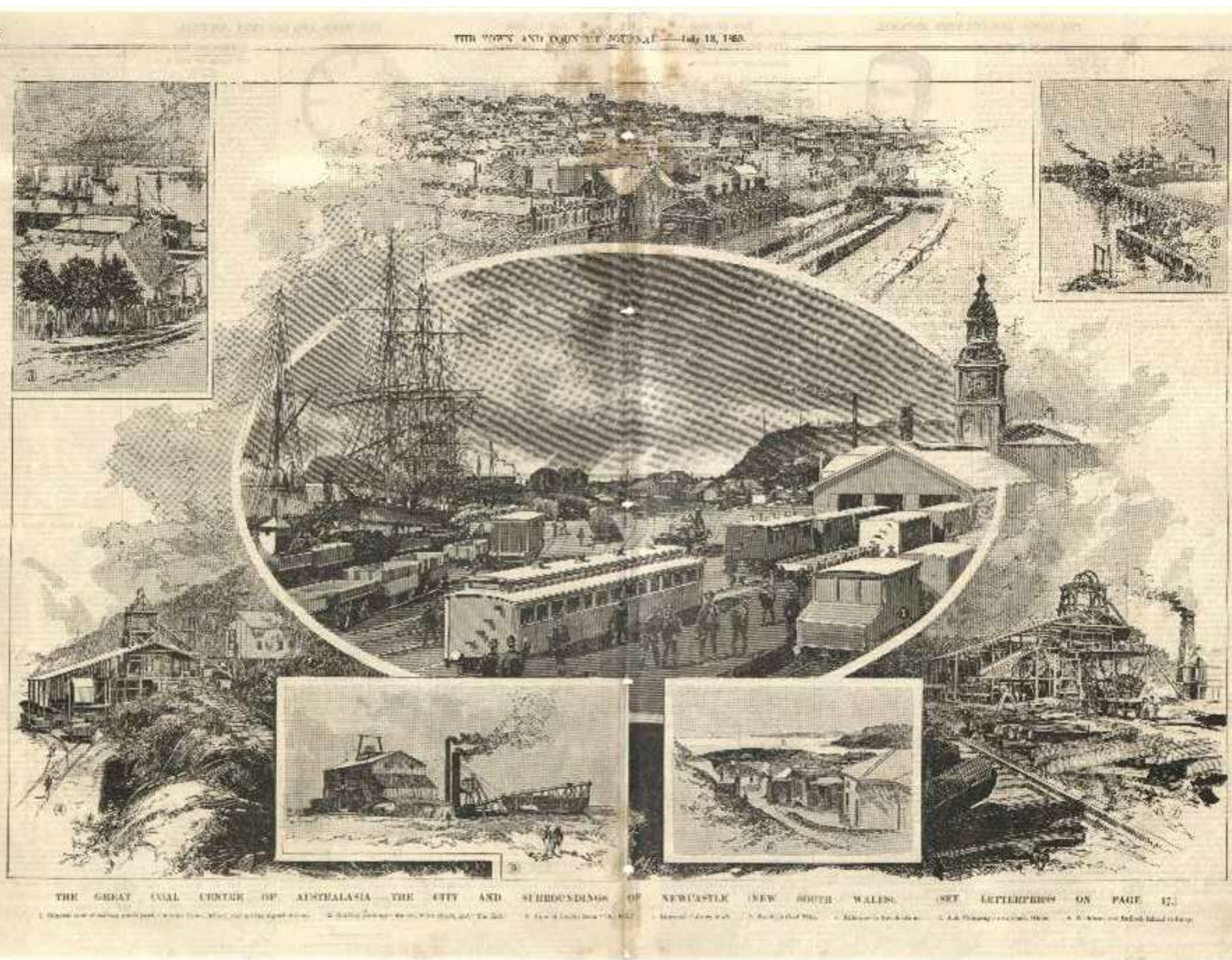
Glebe 'A' Pit Colliery, 24 February 1899. Photograph by Ralph Snowball. (Source: UON Hunter Living Histories, <https://www.flickr.com/photos/uon/3270567379/>)



Hetton Colliery, Bullock Island, with rail trucks loaded with coal, 1875. Photograph by John Henry Harvey. (Source: State Library Victoria, <http://handle.slv.vic.gov.au/10381/137239>)



Miners at Wallsend No 1 tunnel, Wallsend, June 1897. Photograph by Ralph Snowball. (Source: UON Hunter Living Histories, ASGN0179-B7)



'The Great Coal Centre of Australasia – The City and Surroundings of Newcastle', published in *The Town and Country Journal*, 13 July 1889. (Source: UON, Living Histories)

## City of steel

Ask steelmen throughout the world about Australian steel and they will tell you that it is of the highest quality. And go into any of the Newcastle works that produce this steel and you will know why.<sup>188</sup>

Between 1915 and 1950 Newcastle became Australia's first large-scale manufacturing centre, nurtured by federal and state governments. The Newcastle industrial hub comprised steel manufacturing, steel fabrication and heavy engineering companies, public utilities and associated supplier support services.<sup>189</sup>

Newcastle's steel industry was established by the Broken Hill Proprietary Co (BHP) when it erected steelworks at Waratah in 1915. General Manager GD Delprat was behind the 1909 plan to pivot BHP from mining to steel manufacturing. After touring America he engaged engineer David Baker to assess the best location for the new steel plant in Australia. Baker recommended

Newcastle as it was an existing coal port with good coking coal, suitable land to build the plant, fresh water and an adequate labour force available as well as convenient residential areas for workers nearby. He was also appointed to build the steelworks, manage its start-up and be plant manager.

Preparatory work on the 264-acre (106.8-ha) Port Waratah site commenced in January 1913. Almost simultaneously the NSW Government opened the Walsh Island State Dockyard and Engineering Works. The NSW Government facilitated the success of both of these endeavours by dredging the harbour to increase the capacity of the port for larger and heavier shipping.

Site works, dredging and construction of the steelworks continued through 1914 with upwards of 1000 men labouring on site. The BHP steel plant was completed in 1915 and officially opened on 2 June by the Governor-General of Australia. By 1920 the plant employed 4600 men, increasing to over 5000 within 12 months.



Group of workers, BHP steelworks, undated. (Source: UON Hunter Living Histories, Bill Ruddick, Ruddick\_bhparchives\_005)



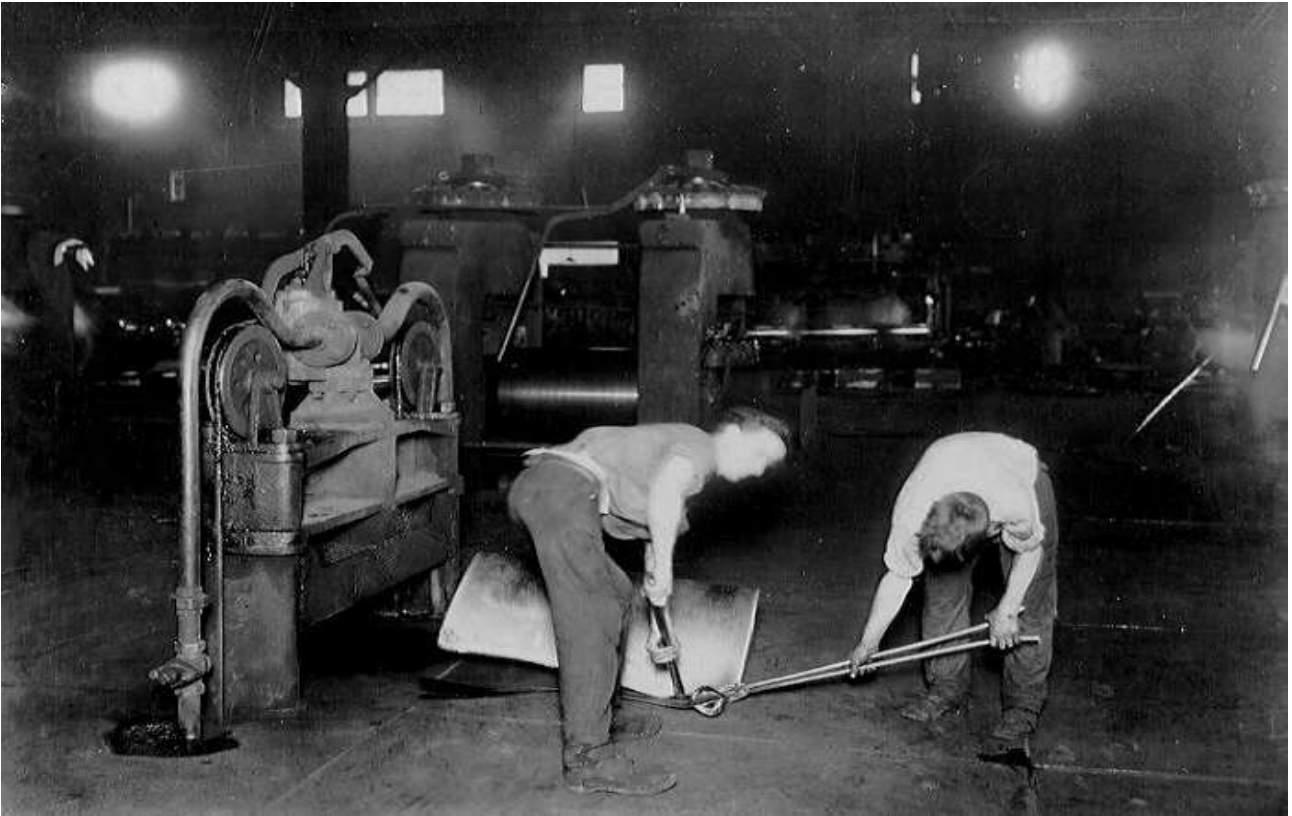
A Goninan & Co Limited, Wickham, on 21 April 1906. Photograph by Ralph Snowball. (Source: UON Hunter Living Histories, <https://www.flickr.com/photos/uon/3307233505/>)

Related steel fabrication companies joined BHP at Newcastle during the next few years, boosted by wartime shortages and a growing demand for goods. By 1921 Newcastle was the home of Commonwealth Steel Products Company, which manufactured forged steel products; Rylands Bros, which manufactured wire products; John Lysaght (Australia) Ltd, which manufactured flat steel sheet and corrugated iron products; and the Austral Nail Company, which manufactured wire and wire products.

On arrival at Stewarts & Lloyds Pty Ltd tube mills from BHP steelworks, coils of strip steel known as 'skelp' are brought end to end and welded. Interior of the factory showing the operation in progress, circa June 1942. Photograph by Clifford Bottomley. (Source: Australian War Memorial, 013136)



Rose Series postcard of wire drawing mill, Rylands Bros, Newcastle, 1910s. (Source: UON, Living Histories, A5194-025.5)



Newcastle plant of John Lysaght (Australia), pre-1929. (Source: Newcastle Region Library Collection, 072\_000004)



On arrival at Stewarts and Lloyds Pty Ltd tube mills from BHP Steel Works, coils of strip steel known as 'skelp' are brought to end and welded. Interior of the factory showing the operation in progress, about June 1942. (Source: Australian War Memorial, 013136)

The development of the Newcastle industrial centre was fostered by organisational changes within BHP, government protection through tariffs and the introduction of improved technologies. These factors combined to lower the manufacturing cost of steel manufacture and improve the Australian industry's competitive position.<sup>190</sup>

Steel production continued during the Great Depression, albeit at lower levels. It reached its lowest point of 179,312 tons in May 1932. The industry rebounded after the Depression with steel production rising to 1,000,000 tons by 1939. Steel tube manufacturer Stewarts & Lloyds began operations in Newcastle in 1934 while each of the other steel fabricators increased production of their products. In 1935 the industrial hub comprised BHP steelworks, its wholly owned subsidiaries (BHP Shipping, BHP Stevedoring, BHP By-Products and BHP Collieries), subsidiaries (Rylands Bros. (Aust), Australian Wire Rope Works, and Commonwealth Steel Co), associated firms (Lysaght Ltd, Stewarts & Lloyds (Aust) Ltd), heavy engineers (Goninan, Morison and Bearby, Cardiff Railway Workshops) and the public utilities (Port of Newcastle, Hunter Water and Supply Board, Newcastle Electricity Supply Council Administration otherwise known as NESCA, and Technical Education).

Steel production ramped up in Newcastle ahead of World War II, supported by public utilities such as electricity generation and water supply. Power for the manufacturing industries was supplied from Zaara Street Power Station, which grew by 80% by the end of the 1930s.



Stacking shells prior to dispatch, BHP, Newcastle, 8 February 1940. (Source: Australian War Memorial, 000654)

## Fortress Newcastle

On the eve of World War II, Newcastle industry was well placed to manufacture and develop a wide range of steel products required for wartime. Newcastle and the Hunter region were deemed of high strategic importance and critical to Australia's wartime efforts, hence the term 'Fortress Newcastle'.

The Newcastle district was Australia's major industrial production hub for manufacturing and supply before and during World War II. A shell attack by a Japanese submarine on 8 June 1942 raised fears for Australia's manufacturing war effort centred on Newcastle. For this reason, a military operation known as Fortress Newcastle secured Newcastle's vital wartime manufacturing hub with defence installations along the coastline and across

the region including four fixed coastal defence forts, two major air bases and four army accommodation and training camps.<sup>191</sup>

The war drove innovations in technology including 42 wartime products manufactured for the first time in Australia including armour plate steel and tungsten carbide tools.

Newcastle was heavily fortified during the war and tens of thousands of servicemen and women were stationed in the region.

Women were essential to Fortress Newcastle, volunteering in droves for a range of defensive and intelligence roles through the Australian Women's Army Services (AWAS) and Women's Auxiliary Australian Air Force (WAAAF).<sup>192</sup>



At the Commonwealth Steelworks, a subsidiary of BHP, employees prepare a bomb for air testing, about January 1940. (Source: Australian War Memorial, 000682)



'Before the war, this girl [sic] was a shop assistant. Now, after a short period of training, she is operating a lathe in a munitions factory. This picture shows her at work, turning the copper driving band on 20-pounder anti-tank shots. She has been identified as Elsie Myra (Judy) Richards of Newcastle, NSW.' Photograph by Clifford Bottomley, 4 September 1942. (Source: Australian War Memorial, 03178)



Women munitions workers stamping identification ciphers onto 20 pounder anti-tank shot, Newcastle, 4 September 1942. Photograph by Clifford Bottomley. (Source: Australian War Memorial, 013179)

During the war, labour shortages were filled by women recruited to work alongside men in the steel industry. BHP, Lysaght and Australian Wire Rope Works applied in 1942 to employ women in their plants. The following year a statewide conference of female delegates of the Federated Ironworkers' Association and Munition Workers' Union held in Sydney was attended by 26 delegates from Newcastle who represented almost 1300 female workers employed in the heavy and war industries in Newcastle and district.<sup>193</sup> The total number of women employed in the steel industry at Newcastle between 1942 and 1945 was approximately 2000.<sup>194</sup>

## The last whistle

After the war Australia's steel production dropped to 700,000 tons, resulting from the worldwide postwar shortage of plant coupled with a major industrial strike and coal rationing. Production did not return to pre-war levels until 1950 and the Newcastle Steelworks ramped up modernisation and expansion to meet the postwar demand. In the 1960s the BHP steelworks employed between 12,000 and 16,000 people and BHP was the largest single employer in Australia, apart from the public sector.

Global steel demand collapsed in the early 1980s. This, combined with competition from much larger integrated steelworks overseas, particularly in Asia, reduced the profitability of the Newcastle steelworks. In 1983 BHP commenced a restructuring plan. The company decommissioned more than half of its Australian blast furnaces (across three plants, including Newcastle), and started to reduce the workforce.

In 1997, BHP announced that it would close its Newcastle steelworks in 1999. BHP progressively reduced its staff from the date of that announcement until mid-1999 when the steelworks was to finally shut its doors.

The Rod Mill, Bar Mill, and the factory buildings, in conjunction with Stewarts & Lloyds, Rylands Bros and the Australian Wire Rope Works were all amalgamated as OneSteel.

# The day the BHP steelworks closed



**Between 1,500 and 1,800 workers lost their jobs and walked out of the steelworks on 30 September 1999, marking the end of 84 years of operation. The Last Day Marchout was captured by fitter machinist Bill Ruddick who worked at the BHP steelworks until the day the site closed. These images and more are held in the UON Hunter Living Histories.**

There was fear, there was excitement, there was trepidation, there was worry, anger and hate. All the emotions were there on that day. I seen [sic] grown men cry. When we walked out the gate I saw men propped up by other men. Men were walking out with their heads up, heads held high but broken inside. People who had been there all of their lives just didn't know what they were going to do. Even on the last day when we were marching out, I witnessed grown men crying.

**– Aubrey Brooks, shop foreman, employed 38 years<sup>197</sup>**



Well it's a sad day. They've reached into the hearts of the town and ripped them out.

**– Unnamed BHP worker<sup>198</sup>**

This was a boardroom betrayal of working class Australia.

**– Bob Carr, NSW premier<sup>199</sup>**



Nobody should pretend that the governments can intervene and reverse commercial decisions of that kind.

**– John Howard, Australian prime minister<sup>200</sup>**

In my view we are facing up to what needs to be done to have a viable business in Newcastle in the future.

**– Unnamed BHP worker<sup>201</sup>**



It's a bad day. It's a bad day, but oh well, that's the end of it.

**–Kev Legg, BHP worker<sup>202</sup>**

For me it's the break-up of a very large family.

**– Dano Rebronja, BHP worker<sup>203</sup>**

It's going to be tough for everybody. There's 12% unemployment in Newcastle.

**– Carol Knox, BHP Human Resources<sup>204</sup>**

If we laugh we don't cry, so we thought that might be a good way to go out.

**– Steven Skelton, BHP worker<sup>205</sup>**



Kuueeyung, a traditional bark canoe made in a traditional style from a sheet of bark folded and tied at both ends with plant-fibre string. The box (the front) is folded tightly to a point; the stern (the rear) has looser folds. The canoe was made on site at Newcastle Museum by Wylaa Buuranliyn (Luke Russell, Scott Luschwitz, Shaun Stowe, Shannon Thrift). (Source: Newcastle Museum)

## Shipbuilding

The original boatbuilders of the Newcastle region were the Traditional Custodians. They crafted Kuueeyung (canoes) using the bark from trees, ideally the Punnah (stringybark), Swamp She-oak (*Casuarina glauca*) or Bangalay (*Eucalyptus botryoides*). The bark canoes were used to ply the waters of the harbour, lake and rivers in Country, to catch fish and to harvest food. Rev Threlkeld witnessed Aboriginal people constructing bark canoes, writing: 'a fire is made upon the bark and being heated the steam of the sap softens it so as they can crumple up each end like a folded fan...'<sup>206</sup>

The colonists' early foray into shipbuilding in the Newcastle area experienced mixed results. From primitive beginnings in 1819, shipyards appeared in the harbour at Stockton and Carrington from the 1830s; however, shipbuilding was never a major industry nor big employer in the district in the nineteenth century.

The construction of the dockyard and engineering works at Walsh Island in 1913 by the NSW Government heralded a new era in shipbuilding and Newcastle's industrial progress. Opening in 1914, the dockyard had become the second largest employer in the district by the early 1920s, with upwards of 2500 workers at its peak. However, successive years of operating at a loss led to its eventual closure in 1933. In the intervening period the dockyard was converted to a general engineering workshop.

During its years of operation 47 vessels and a 15,000-ton floating dock were constructed at the dockyard. The engineering works fabricated bolts and castings, completed steel fabrication and assembled carriages and trams for the NSW Government.

The NSW Government revived the shipbuilding capability of New South Wales by re-establishing a State dockyard but relocating the facilities and equipment to Dyke Point. The floating dock was towed down river to Dyke Point and Carrington. During the war years 600 ships were repaired at the new works and completed 24 vessels of varying size. The State dockyard closed its doors in March 1987, having built many ships and repaired thousands of vessels. At its peak the dockyard employed over 2,000 workers including migrants, women and Aboriginal people.

The migrants came after the war. The workforce skills of my part of the world were always short, so the dockyard went over to England and they bought out English migrants, boilermakers, joiners, fitters, plumbers ... The Italians came after the war and all the other different nationalities [and] then there was Aboriginals worked over at the dockyard. The Sands brothers was one example, there's quite a few other ones ... There was a girl painter was put on ... and there were women employed in the office ... in the canteen. (John Aubin, interviewed by Mark Perriman, 1988)

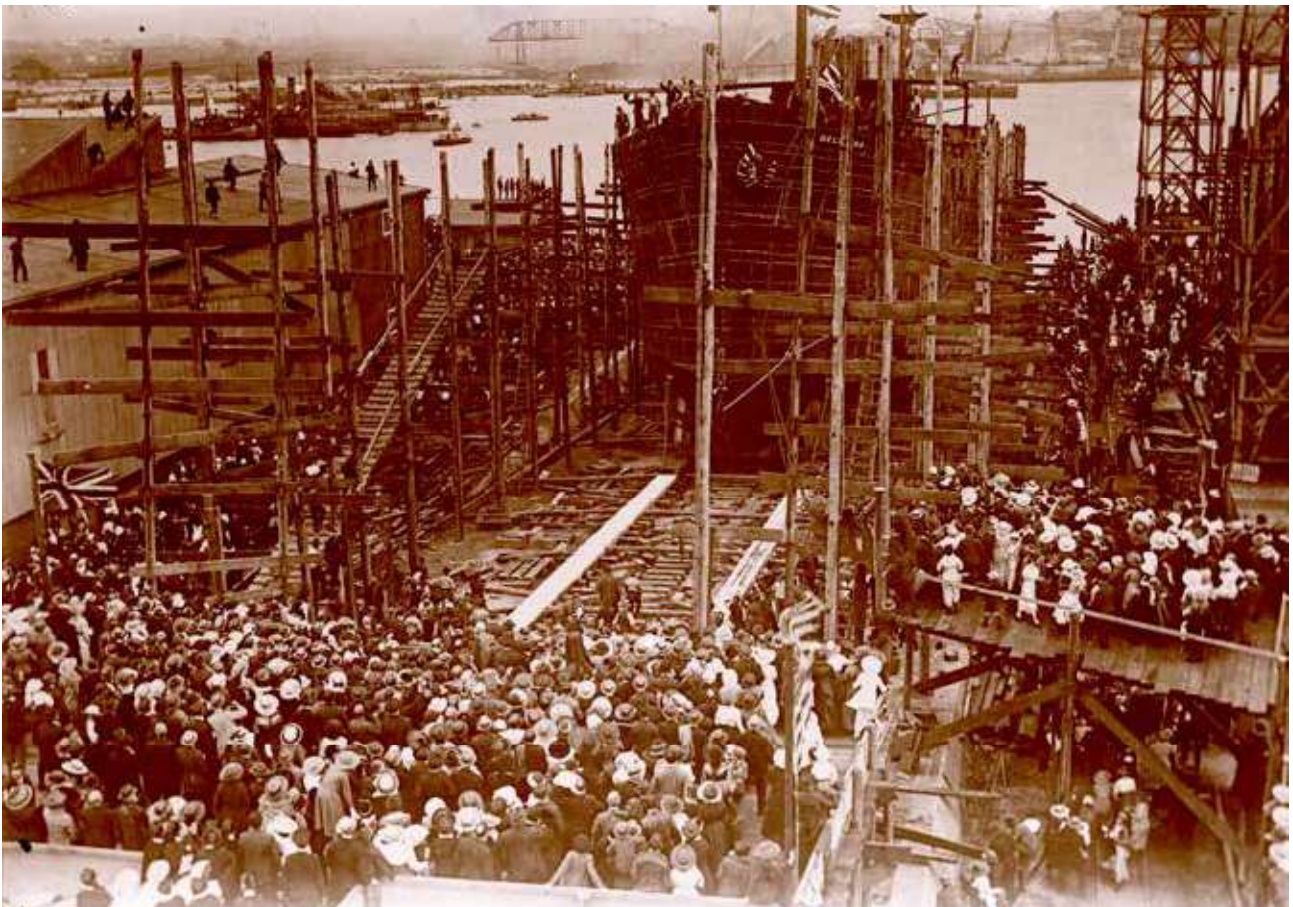
## Made in Newcastle

Newcastle's comparative isolation in the nineteenth century, coupled with the ready availability of coal, clay, fresh water and developing port and railway facilities, helped a raft of local industrial enterprises develop, albeit with mixed success. These included brickworks and potteries, a soap and candle factory, a cloth factory, boatbuilding establishments, flour milling and food processing.

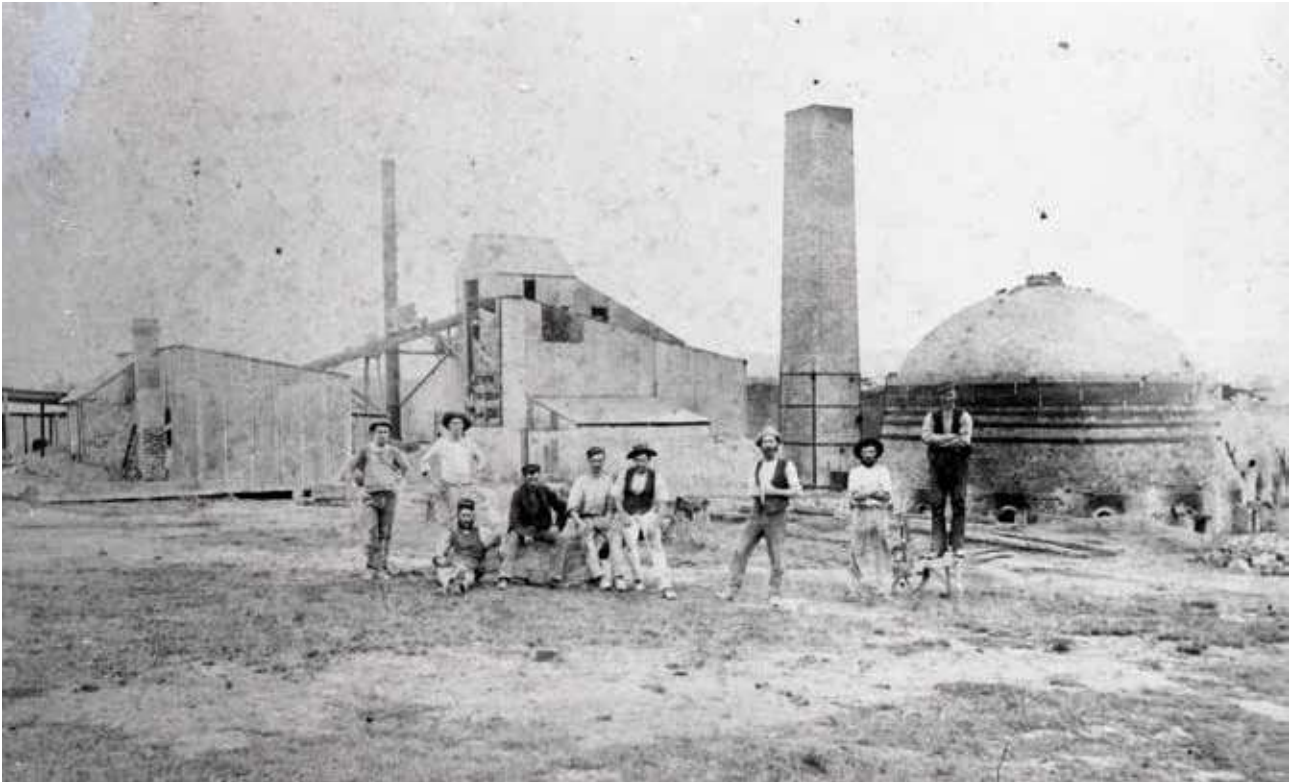
One of the most successful enterprises from the nineteenth century was Hughes and Drury's Newcastle and Burwood Fireclay and Brickworks, established in 1866 near present-day The Junction. Though not the only pottery located in the district, it came to dominate the colonial market in the second half of the nineteenth century. The company supplied firebricks, tiles and

drainpipes to many industries and builders in Newcastle, Sydney and north of Newcastle. After abandoning production of firebricks, the company continued to manufacture drainpipes in the Newcastle district until its closure in the early 1980s.<sup>207</sup>

Another entrepreneur to make a success of his business in the district was Charles Upfold, who relocated his Sydney Soap and Candle Company's plant and machinery from Johnstons Bay, Sydney, to the site of its branch works at Wickham in 1882. Three years later the company built an extensive new factory on a 23-acre (9 ha) site at Calcina Flat, North Waratah, opening in February 1886. By 1895 the factory employed over 500 people. Later renamed J Kitchen and Sons, the business effectively ending manufacture of its products in the district in 1934 when its land at Newcastle was sold to BHP, though it maintained a presence after this date.



Launching of steamer *Delungra* at Walsh Island, 25 March 1919. (Source: The Rodoni Archives, UON Hunter Living Histories, <https://www.flickr.com/photos/uon/16786792470/>)



Sydney Soap and Candle Company, undated. (Source: Mrs Faulkner, UON, Living Histories)

The industrialisation of the Greater Newcastle area in the twentieth century supported a broad range of manufacturing enterprises apart from coalmining, steel manufacture and related industries. Electric Lamp Manufacturers (Australia) Ltd (ELMA) was established in 1930 (finalised in 1931) by the amalgamation of the world's largest lightbulb manufacturers to take over the new incandescent lightbulb factory under construction by the Australian General Electric Company Ltd in Clyde Street, Hamilton. This was a new industry in Australia with production commencing in April 1931. By 1933 the factory employed 164 people, which was expected to increase to closer to 400 when the plant reached capacity. At its peak, however, the plant employed over 1,000 workers.<sup>208</sup> Cheaper imports, declining market share, financial losses and falling world prices led to the closure of the ELMA factory in 2002.

Food processing became an important industry in the district from the late nineteenth century, providing employment and locally grown and made produce. Several food producers in the region became household names including Arnott's, Oak Dairy, YY Cordials and John Bull.



Workers at ELMA Group factory, 1961–1969. (Source: Electric Lamp Manufacturers (Australia) Pty Ltd (ELMA), UON Hunter Living Histories, A8519\_(viii)\_Elma\_Group)

William Arnott opened a bakery at Maitland in about 1856 but relocated to Newcastle in 1865. He expanded his business premises in Melville Street, Cooks Hill in 1875 under the name William Arnott's Steam Biscuit Factory. He shipped biscuits to Sydney, initially by ship then by road, and his products were found throughout the colony. In 1889 the factory contained nine ovens and employed



Arnotts Steam Biscuit Factory, undated. (Source: Damaris Bairstow, UON Hunter Living Histories, C919-0773)

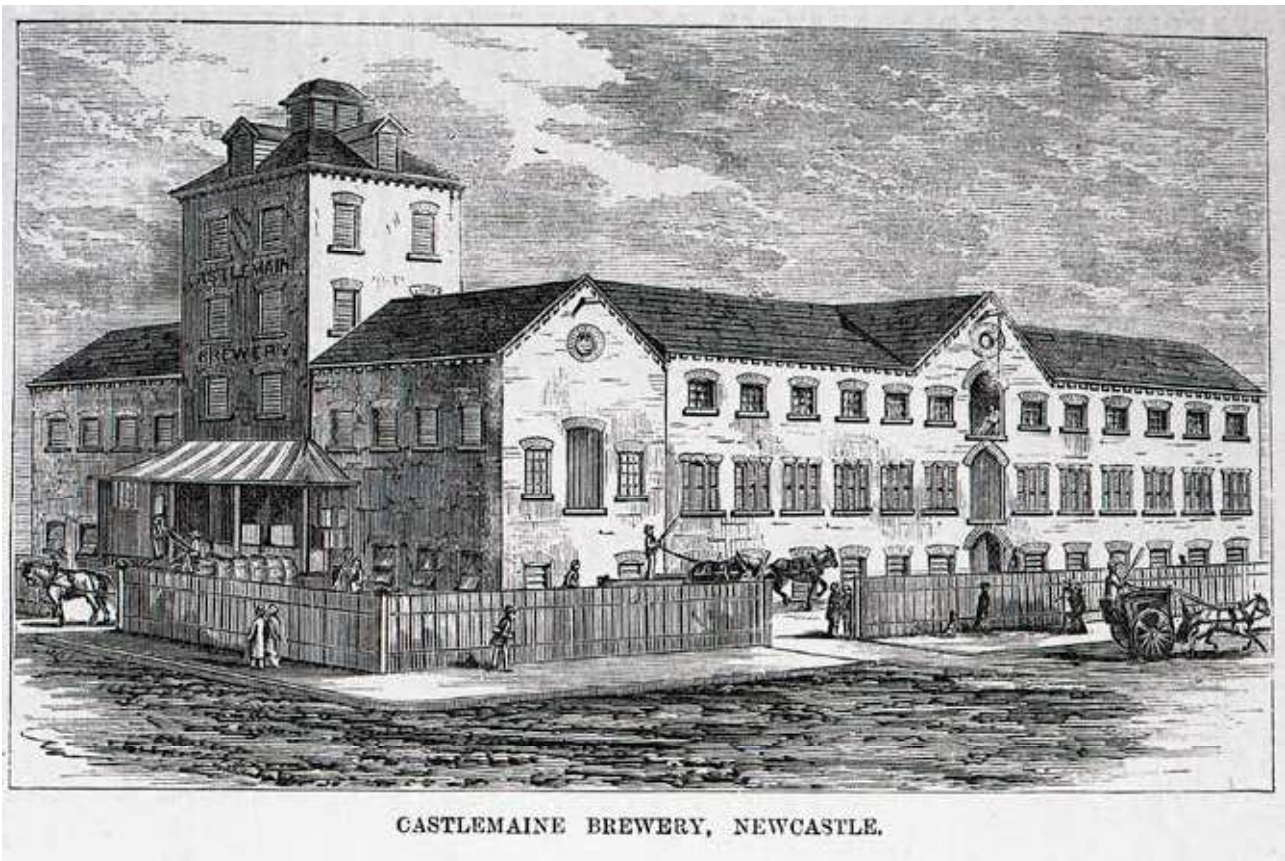


Arnotts Biscuits advertisement, undated. (Source: UON Hunter Living Histories, A5194-010.6)

300 people. The number of employees grew steadily throughout the next decade reaching 700 in 1904. By 1892 the range of biscuits exceeded 80 varieties.<sup>209</sup> He established a new main factory in Sydney (Homebush) in 1907-1908. The Newcastle factory was closed in about 1933 (demolished in 1949) and production moved to Sydney. The property was sold to a timber merchant in 1935.

JA Bull and Co Ltd moved the whole of its production of the John Bull Pure Food Products from Sydney to Newcastle to a mill in Military Road, Newcastle, in about 1924. Production ceased locally and the main factory was established in Sydney.

Beer and cordials were produced in the Newcastle district in small quantities for local customers prior to the development of large-scale production concentrated the industry in the hands of a few large companies. For instance, the NSW Aerated Waters Pty Ltd was taken over by Schweppes while Castlemaine Brewery was absorbed by Tooth & Co in 1921. Prendergast, Woods & Co established a brewery in Hunter Street, which in 1887 became Castlemaine & Wood Bros & Co Ltd. Brewing at the site continued until 1931 when it closed. Later, from 1988 to 2000, the brewery was the home of Newcastle Museum.



CASTLEMAINE BREWERY, NEWCASTLE.

Castlemaine Brewery. (Source: *Illustrated Sydney News*, 13 July 1878, John Turner Collection, UON Hunter Living Histories)

In 1950, the National Bottling Company Newcastle Pty Ltd acquired the business of AF Moore's in Darby Street, Newcastle, which had been established in 1867. YY Cordial factory was started by George Edward Redman who opened a cordial factory in Blane (later Hunter) Street, Newcastle, in 1862, later moving to larger premises in Newcomen Street, and Wickham. The business was absorbed in 1896 by the NSW Aerated Waters Pty Ltd. Going strong in the postwar period, NSW Aerated Waters built a new factory at Orlando Road, Lambton, in 1954, replacing its two factories in Hunter Street, Newcastle, and Wallsend respectively. Production ceased in the 1980s, part of a broader local phenomenon as the local manufacture of beer and soft drinks had largely ceased by this time and the remaining companies had become distributors of product made outside the region.

Locals were well-catered to in respect of baked goods, notably bread. The Store (the Newcastle and Suburban Co-operative Society) owned the biggest bakery in Newcastle (and at one time the biggest in Australia). The first bakehouse was built in 1908 and produced about



Redman's Cordial Manufactory, Wallsend, c1880s, photographed by Ralph Snowball. (Source: Newcastle Region Library Collection, Hunter Photo bank 0001 003240)

4,000 loaves of bread each week, increasing to 20,000 loaves per week in 1923. A new modern and state-of-the-art factory opened in 1939 in Clyde Street, Hamilton, that was capable of producing 100,000 loaves a week. The Store had also established a separate pastry bakehouse in 1914.

By the mid-2010s Newcastle's industrial landscape had changed and the focus of labour and production veered towards the glass manufacturing, home building, and automotive industries.

# Chinese market gardeners

Newcastle was home to a small but vibrant community of Chinese market gardeners and grocers in the last decades of the nineteenth century. Newcastle's Chinese population originally clustered near Watt Street in Newcastle East.

By 1901 about 300 Chinese people lived in the city and suburbs, generally occupied as hawkers, market gardeners and storekeepers, though two worked as cabinetmakers and upholsterers. The Chinese community was concentrated in Watt and King streets, Devonshire Street, Auckland Street, Dawson Street (west of the gasworks), Kemp Street (The Junction) and Lower Church Street. Many of the gardens were in the vicinity of the gasworks.

The concentration of Chinese residents in the Newcastle LGA declined in the twentieth century. The bulk of Chinese residents were engaged in gardening or hawking. Garden plots once proliferated at places like Cooks Hill, Waratah and Hamilton before the spread of suburbia. By the end of the 1930s just a handful of Chinese market gardeners worked on the outskirts of the district. Although rare, there remained a handful of Chinese market gardens in the area in the 1930s and 1940s such as one close to the administrative offices of Stewarts & Lloyds.



Chinese market gardener at Ralph Snowball's home in Clarence Road, New Lambton, September 1886. (Source: Ralph Snowball Collection, UON Hunter Living Histories, <https://www.flickr.com/photos/uon/3964534583/>)

Tong Sang of Bull Street, Mayfield, collecting a bunch of soup vegetables in his garden. (Source: *Newcastle Morning Herald and Miners' Advocate*, 16 May 1946, p 1)



## Key References:

- Bairstow, Damaris, Hunter Region Heritage Study: Industrial Archaeological Sites, prepared for the NSW Department of Environment and Planning.
- Doherty, JC 19, Newcastle: the making of an Australian City, Hale & Iremonger,
- Electric Lamp Manufacturers (Australia) Pty Ltd (ELMA), University Library Special Collections, University of Newcastle Living Histories <<https://livinghistories.newcastle.edu.au/nodes/view/54?type=all&lisk=6aa8498476e79ddd1aa5fd17ca828959>>.
- Eather, Warwick Albert 1986, *The Trenches at Home: The Industrial Struggle in the Newcastle iron and Steel Industry 1937-1947*.
- Flynn, E, *A commercial and industrial handbook of Newcastle*, NSW,
- *Fortress Newcastle Collection*, Special Collections, Hunter Living Histories, University of Newcastle, <<https://livinghistories.newcastle.edu.au/nodes/view/114581?type=all&lisk=6aa8498476e79ddd1aa5fd17ca828959>>.
- Kear, Robert Martin 2018, *The making of the Newcastle Industrial Hub 1915 to 1950*, a thesis submitted in fulfilment of the requirements for a degree of a Master of Philosophy in History, University of Southern Queensland.
- Kingswell, George H 1890, *The coal mines of Newcastle*, NSW, their rise and progress, printed at the Herald Office, Newcastle.
- Maynard, John, 'Muloobinbah (Newcastle) an Aboriginal and industrial presence: past and present' in
- NBN News 20 years on, 2019, *Closure of the BHP Steelworks, Part Two*, viewed 15 June 2024 <[https://fb.watch/sIO8B\\_jToE/?](https://fb.watch/sIO8B_jToE/?)>.
- Newcastle Industrial Heritage Association Inc webpage, niha.org.au.
- Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- Stories of our town 2019, BHP Newcastle: *A City within a City*, viewed 15 June 2024 <<https://youtu.be/Khun-ZY3Srw?si=PspTBoORepbidIL6>>.
- Solimon, H A1973, *The location of industry in the Newcastle region*, submitted in fulfillment of the requirements of the Degree of Master of Science in Applied Geography, University of New South Wales.
- Turner, JW 19877, *Coalmining and manufacturing in Newcastle, 1797-1900*, a thesis submitted in fulfillment of requirements for the degree of Doctor of Philosophy at the University of Newcastle.
- Turner, JW 1980, *Manufacturing in Newcastle, 1801-1900*, Newcastle Public Library.
- War Memorial Cultural Centre, *Newcastle Souvenir...1954*.
- Zierer, Clifford M, 'Industrial Area of Newcastle, Australia', *Economic Geography*, January 1941, Vol 17 No 1, pp 31-39.

## Endnotes:

- 180 Special Collections, 2016, 'The Convict Coal Mines of Newcastle (Coast Series 3 Filmshoot Backgrounder)', University of Newcastle Hunter Living Histories, viewed 3 October 2024, <https://hunterliving-histories.com/2016/04/15/convict-mines/>.
- 181 Mr John Thomson to Captain Schanck, *Historical Records of New South Wales*, Vol. III, pp.716–718.
- 182 'Sydney', *The Sydney Gazette and New South Wales Advertiser*, 8 May 1803, p 2, Trove, National Library of Australia, viewed 11 April 2025 <<http://nla.gov.au/nla.news-article625557>>.
- 183 Lieutenant Menzies to Governor King, King's Town, Newcastle, 19th April 1804, reproduced in Iaden, FM Britton, Alexander and Cook, James, *Historical records of New South Wales Sydney*: Government Printer, 1892, Trove, National Library, viewed 11 April 2025 <<http://nla.gov.au/nla.obj-380756710>>
- 184 Turner, JW, *Newcastle as a convict settlement*, Newcastle history monographs no 7, pp 19–20.
- 185 'Opening of the new coal works at Newcastle', *The Sydney Gazette and New South Wales Advertiser*, 17 December 1831, p 2, Trove, National Library of Australia, viewed 29 May 2024 <<http://nla.gov.au/nla.news-article2204070>>.
- 186 Kingswell, George H 1890, *The Coal Mines of Newcastle, NSW: their rise and progress*, Newcastle Morning Herald and Miners Advocate, pp 5-9.
- 187 'Newcastle', *The Sydney Mail and New South Wales Advertiser*, 27 October 1900, p 983, Trove, National Library of Australia, viewed 29 May 2024 <<http://nla.gov.au/nla.news-article163695981>>.
- 188 The War Memorial Cultural Centre 1954, *Newcastle Souvenir...1954*.
- 189 'The Making of the Newcastle Industrial Hub', p 2.
- 190 Kear, Bob 2020, 'The Making of the Newcastle Industrial Hub', UON, Living Histories, viewed 30 May 2024 <<https://hunterlivinghistories.com/2020/03/23/fortress-newcastle/>>.
- 191 The Fortress Newcastle Project 2020-2021, UON, Living Industries, viewed 30 May 2024 <https://hunterlivinghistories.com/2020/06/12/fortress-newcastle-project/Well>
- 192 'Fortress Newcastle Collection', UON, Living Histories, viewed 28 March 2025 <https://livinghistories.newcastle.edu.au/nodes-view/114581?keywords=&type=all&lsk=71fd95ddcdd3f0f291c27a-f836591ad2>.
- 193 'Discuss Women in Industry', *Newcastle Morning Herald and Miners' Advocate*, 2 July 1943, p 4, Trove, National Library of Australia, viewed 30 May 2024 <<http://nla.gov.au/nla.news-article133425259>>.
- 194 Eather, Warwick Albert 1986, *The Trenches at Home: The Industrial Struggle in the Newcastle iron and Steel Industry 1937-1947*, p 130.
- 195 Atteridge, Aaron and Strambo, Claudia 2021, 'Closure of steelworks in Newcastle, Australia: Lessons from industrial transitions', *Stockholm Environment Institute*, viewed 15 June 2024 <<https://www.sei.org/wp-content/uploads/2021/06/closure-of-steelworks-in-newcastle.pdf>>.
- 196 Atteridge, Aaron and Strambo, Claudia 2021, 'Closure of steelworks in Newcastle, Australia: Lessons from industrial transitions', *Stockholm Environment Institute*, viewed 15 June 2024 <<https://www.sei.org/wp-content/uploads/2021/06/closure-of-steelworks-in-newcastle.pdf>>.
- 197 NBN News 20 years on, 2019, *Closure of the BHP Steelworks*, Part Two, viewed 15 June 2024 <[https://fb.watch/sI08B\\_jToE/?](https://fb.watch/sI08B_jToE/?)>.
- 198 Stories of our town 2019, *BHP Newcastle: A City within a City*, viewed 15 June 2024 <<https://youtu.be/Khun-ZY3Srw?si=PspTBoORepbidL6>>.
- 199 Stories of our town 2019, *BHP Newcastle: A City within a City*, viewed 15 June 2024 <<https://youtu.be/Khun-ZY3Srw?si=PspTBoORepbidL6>>.
- 200 Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- 201 Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- 202 NBN News 20 years on, 2019, *Closure of the BHP Steelworks*, Part Two, viewed 15 June 2024 <[https://fb.watch/sI08B\\_jToE/?](https://fb.watch/sI08B_jToE/?)>.
- 203 Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- 204 Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- 205 Remembering Newcastle's BHP Steelworks 2023, *The Last Whistle – a look at BHP's Newcastle Steelworks*, viewed 15 June 2024 <<https://youtu.be/c4G08yO5aI0?si=tRGpPfyIOBeYmd-K>>.
- 206 Gunson, Neil (ed) 1974, *Australian reminiscences & papers of LE Threlkeld, Missionary to the Aborigines, 1824-1859*, Australian Institute of Aboriginal Studies, p 54.
- 207 Ringer, Ron 2008, *The Brickmasters 1788-2008*, p 54.
- 208 Janelle Schmidt, Transcript of Interview with Ken Millington, 2 August 1989, UON, Living History.
- 209 'The shops at Christmastide', *The Daily Telegraph*, 20 December 1892, p 5, Trove, National Library of Australia, viewed 13 April 2025 <<http://nla.gov.au/nla.news-article235963581>>.
- 210 Newcastle Printmakers Workshop in conjunction with the Newcastle Regional Museum 1988, *The Store: A Co-operative Phenomenon*.