"Masterpiece of Thought": Stories of the Blair Athol Coal Seam and Australia Open Cut

By
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Many factors influenced the transition to modern large-scale open-cut coal mining in Australia, one being the sheer scale of many Queensland coal deposits. These deposits were ready-made for the new method. In the first half of the twentieth century none was more important than the one at Blair Athol, a small town with a big coal seam.

Located in the north-eastern Australian state of Queensland, Blair Athol had a one-hundred-foot-thick black coal (anthracite) seam—many thought it a natural wonder of the industrial world. While early small-scale operations at Blair Athol allow the site to be declared Australia's first open-cut black coal mine, it took almost half a century for it to become a large-scale development. But, as this essay shows, Blair Athol was still very important. As the coal resources lay latent in the ground, the story of Blair Athol's coal was told throughout Australia by many people.[1]

The town of Blair Athol ultimately would be removed to make way for a larger mine. While the town has been the subject of other historical treatments—so too more generally has the notion of "lost places" been deployed in considering Australian coal mining towns—this essay is about the small steps of people seeing the coal seam and storying it, and how this occurred at the start of the change in the way coal was mined in Australia.[2] Between 1919 and 1949 the vision of open-cut coal mining entered the Australian imagination, and Blair Athol was in the centre of people's minds when they thought about the new quarry method.[3]

Over this period there are three significant themes: the early visions and natural abundance that influenced development at Blair Athol; the shift to open-cut mining activities across Australia; and subsequent feature stories in popular magazines that reproduced the developmental rhetoric of government officials. This article about Blair Athol focuses on the stories that were told about the coal mine and the town and the

Location of Blair Athol in Queensland, Australia. (Map by the author.)

consequences this had.

Often when thinking about coal mining in Australia there is either the underground shaft and tunnel method or the modern large-scale open-cut mine with enormous trucks and an even bigger dragline in operation. But there was a period between these two approaches when the natural abundance of huge coal deposits close to the surface in central Queensland's Bowen Basin, the premier Australian coal basin, permitted a technological shift in the Australian coal industry. This in-between period from the 1930s to the 1960s, when open-cut mining commenced but was not of a large-scale, was an important transition period for Australian coal mining. The turn to open-cut coal mining was a shift in mining that fundamentally changed the Australian landscape and the make-up of the Australian economy.

As a direct consequence of greater access to coal through open-cut mining, Australia is now one of the greatest coal exporters in the world. The large majority of this production comes from Queensland.[4] Between 1860, when the first records were kept, and 1966, the year when the first export of coal from open-cut mining occurred, Queensland produced 111 million tons of coal. In 2014, just one year, open-cut mining, which now accounts for nearly 85 percent of production, produced 246 million tons of coal.[5]

There are currently fifty-nine coal mines operating in Queensland, of which forty-six are open cut. Although now in a period of contraction, over the last five years Queensland coal exports have grown rapidly. The magnitude of these projects and the pace of change since the birth of open-cut mining have not been without consequence. Major protest against coal development has occurred across Australia and it continues to be a divisive environmental and social issue for the nation.

Early Development

James McLaren, the pastoral owner of the area, found coal in 1864 at Blair Athol, in what is now central Queensland's Bowen Basin, when he sank a well on his homestead block. Before McLaren's chance discovery there were no reports of any outcrop of coal. In 1879 the Peak Downs Copper Mining Company acquired rights to mine the area to provide coal for its nearby smelter at Copperfield. Through the late nineteenth century the area was mined by underground methods, ultimately leading to the formation of Blair Athol Colliery. In the 1890s, as demand grew beyond the copper works, more pits were opened in the area and a number of companies joined the field.

By 1910, the township of Blair Athol was organized to replace the tents and miners' huts. It had a rail link with Clermont, a school, a hospital, and a cemetery. It was around this time that the full extent of the coal deposit was assessed. All of the underground workings to this date had worked the top, five-foot coal seam, but deeper exploration revealed a very large "big" seam.

Small-scale open-cut mining commenced in 1936 and underground workings were phased-out by the 1940s.

Although the first to experiment with open-cut techniques in the 1920s and 1930s, Blair Athol was by no means the first modern large-scale open cut, of the style that we know today, to open in Australia; that honour goes to Moura, further to the south in Queensland, which opened in the 1960s. Between 1936 and 1984 Blair Athol was never really a major player when it came to actual coal production. Indeed, during some periods in the 1970s it produced very little coal.

At mid-century Blair Athol was widely known in Australia and throughout the world as a marvellous coal resource, yet the time it took to open up with modern mining was lengthy. This is a paradox: a resource that is well known but not physically developed. So how did Blair Athol maintain its place as an important Australian coal resource while not modernizing until much later?

Focussing on the years between 1919 and 1949, this essay points to a number of government and popular accounts that show how Blair Athol was such a large resource that possibilities for mining could be imagined onto the landscape. Sometimes just having a resource and being able to promote it in stories is also an important factor to consider for mining histories.

A "Woeful Waste of Good Coal"

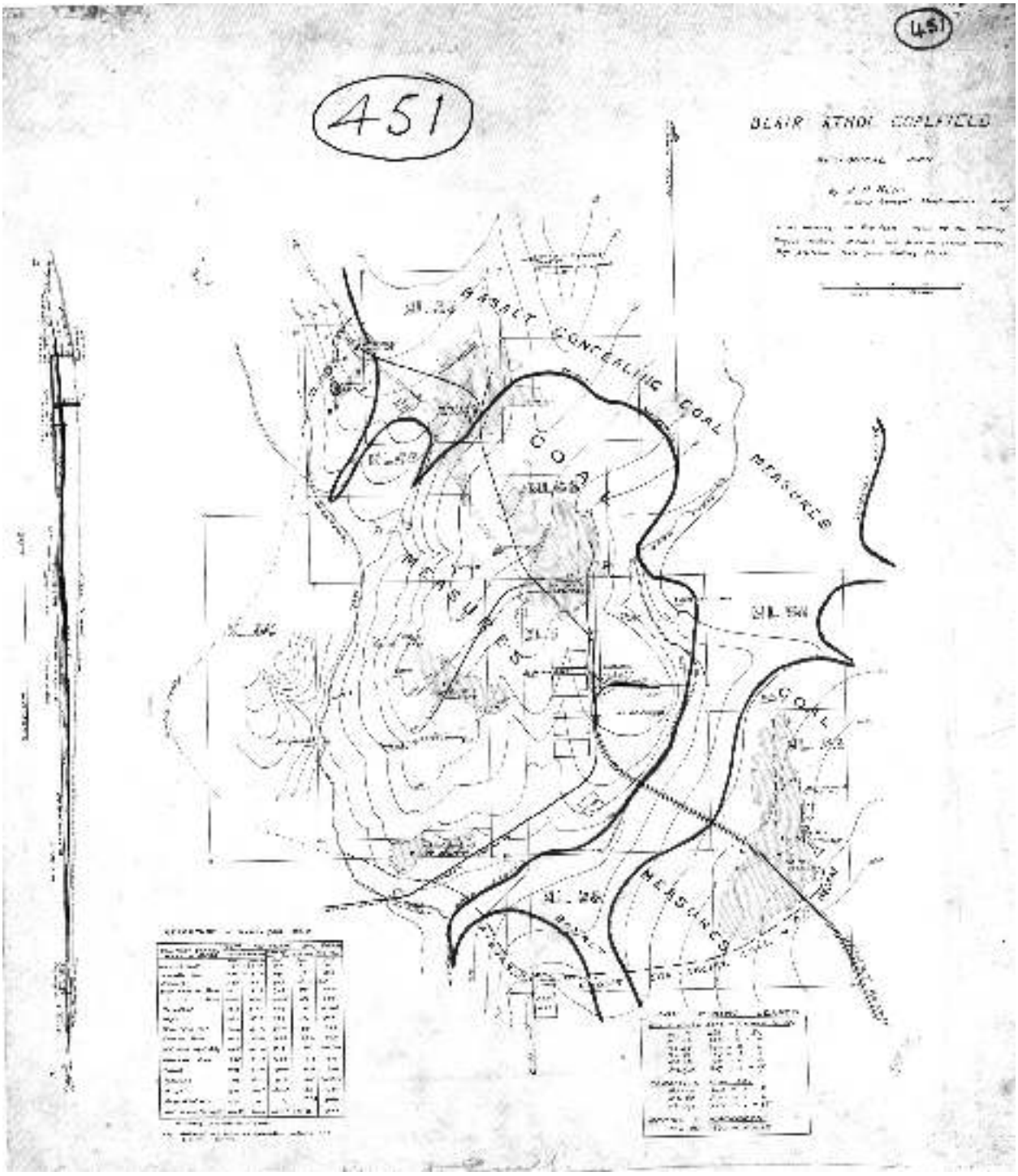
Blair Athol, the town, served the mine and had a population that never exceeded five hundred. The area's coal formed in the lower Permian between 270 and 299 million years ago. Over the top lay a more-recent, thin layer of sandstones and clay-stones formed about 60 million years ago. Blair Athol coal is dusty anthracite.[6] Over two hundred million tons of coal lay over a small three thousand hectare basin. At its greatest extent the 'big seam' was one hundred feet of pure black coal.

By the early twentieth century, two main companies operated on the Blair Athol coalfield: Newcastle Underground Colliers and Blair Athol Coal and Timber (Coal and Timber). In a lecture to the 1919 gathering of the Australian Institute of Mining Engineers, J. F. Hall, general manager of Newcastle Colliers, read some of his notes on the Blair Athol field. He discussed how the seam was being worked by underground methods and forecast the wastage that would result from continuing like that. He estimated that only about a third of the total coal available could be won by underground methods. Such a "woeful waste of good coal" was of great concern.[7]

Hall reviewed possible solutions to the problem and one method was received with enthusiasm throughout the room: the open cut. "This method is, in the writer's opinion, quite feasible, and from the standpoint of conserving a national asset . . . the best method of dealing economically with the problem of the total extraction of this huge deposit."[8] Hall's method for conserving coal at his mine was a step towards a major change of the entire central Queensland landscape.

In 1922 Edgewood David, a well-known Antarctic explorer and professor of geology at Sydney University, travelled to central Queensland to see the Blair Athol coal seam. At that time bores had drilled a clay-free, ninety-three-foot coal seam and David thought it was the thickest seam of black coal discovered anywhere in the world. After his tour, David agreed with Hall's assessment that the "quarry" system of open-cut mining was "by far the most economical method of working the seam."[9]

Supported by investors throughout Australia, between 1922 and 1923 development of an open cut at Blair Athol was attempted by a new consortium under the name Blair Athol Coal Company. M. R. Hornibrook—a Queensland engineer well known for bringing modern mechanised methods of civil-engineering construction to Queensland with schemes such as the William Jolly Bridge in Brisbane—held the excavation contract for the open cut.[10]



"Blair Athol Coalfield: Geological Plan," by J. H. Reid, 1936. Note the cross-section on the left side of the map. (Courtesy of the Queensland Department of Natural Resources Library, ms. Map 451.)

The overburden was removed down to the seam, but no coal was ever sold. One of the last reports of the early open-cut mine was of "cyclonic activity" in the town on November 30, 1923 causing the mine to fill with water and work to be halted. By 1924 work remained suspended. The hole stayed full of water and soon after locals began calling it "the washpools"—it became the main water source and swimming hole for the town.[11]

In 1936, J. H. Reid, the district geologist for Rockhampton, went on a "geological reconnaissance" to Blair Athol and conservatively estimated 116 million tons of actual coal reserves, and possibly another 90 million locked in an unproven "third seam."[12] Everyone knew that a large deposit existed at Blair Athol, but Reid's reports and maps provided a legitimate overview of the extent of the reserves. His estimates formed the basis of planning in the region for the next three decades.

Reid produced three major publications on Blair Athol and sketched at least eight maps of the region.[13] Two of his maps from 1936 formed the basis for all others that followed: "Blair Athol: Shewing Worked Areas and Surface Features" and "Blair Athol Coalfield: Geological Plan."[14] On his second map he drew a "section line" in blue ink indicating the path of an imagined cross-section. It started at the cemetery and ran north along the west side of the town, then trailed northwest towards the excavation of a new open cut.

In the same year that Reid was mapping the coal seam at Blair Athol, Newcastle Colliers—the company of J. F. Hall, who had first proposed the quarry method back in 1919—began digging the roadway into a new open cut. The following year, in 1937, Newcastle changed its name to Blair Athol Opencut Colliers (Opencut Colliers), Queensland's first open-cut coal mine.[15] Whether dated from 1923, when a hole was excavated down to the coal, or from 1937, with the formation of Opencut Colliers, Blair Athol was the site of Queensland's first open-cut coal mine and Australia's first open-cut black coal mine.

One of Blair Athol's major issues was getting its coal to a seaport. In 1937, to travel from the new port facilities at Mackay on Australia's eastern coast to Blair Athol required a 444-mile rail journey. From Mackay the line travelled southeast to Rockhampton, west to Emerald, then northwest through Clermont to Blair Athol. This route compared unfavourably to the 180 miles estimated for a railroad directly from Blair Athol to Mackay.

W. McMahon travelled as a representative of the Mackay Co-Operative Meat and Bacon Association, promoting the more direct route from Blair Athol to Mackay. He came to Blair Athol as a messenger. First he delivered a lecture at Blair Athol's recreation hall, and then he walked across Blair Athol's landscape to see the mine workings. On the southeast side of Blair Athol were Coal and Timber's mine workings. He also saw the washpools that were the first attempt at an open-cut working at Blair Athol.

A newspaper article McMahon wrote makes it sound like a leisurely one-mile stroll as he walked northwest towards Opencut Colliers' works. McMahon was one of the first visitors to see the coal seam as an open cut. At this part of Opencut's mine the coal seam was seventy-two feet, six inches thick. Tom Jones, manager of the operation, met McMahon at the mine. He told McMahon: "There are huge supplies of coal here . . . we are making a huge open cut—that is, we are taking the top or overburden off so that we can get at it quarry-like." After seeing the open cut, McMahon wrote that "the work is a masterpiece of thought."[16]

Works of art, such as paintings and literature, are often described as "masterpieces," but rarely is the term applied to a hole in the ground. And the "thought" that McMahon wrote of was the leap of imagination required of the mine manager and engineer to turn drilled core samples into an image in their minds. They looked over a landscape with ideas of efficiency and production in mind and saw the potential for greater exploitation in

the form of an open-cut coal mine. This creation of a landscape, this "masterpiece of thought," was how Queensland arrived at its first open-cut coal mine.

Plans for a new railway to Mackay were put on hold during the Second World War. With the primary focus being maintaining production in the Blair Athol field, the existing rail route through Rockhampton was used. After the war, communities from Blair Athol to Mackay got together to agitate for a rail link between the two towns. One product of their work in trying to get a railroad, the *Mackay-Blair Athol Illustrated Record*, first appeared in 1946.

Although this publication began with much talk of "scenic attractions," Blair Athol entered the *Record* with the simple line: "Thickest seam of clean black coal in the world." The seam was an important industrial promotion for the *Record*: "Australia is a land of great and varied latent resources, but the Blair Athol coalfield in Central Queensland deserves a higher position in the industrial set-up of our country than it is at present placed." The section dedicated to Blair Athol concluded optimistically, with no doubts about the future of Australian coal mining: "Blair Athol will, however, soon come into its rightful place in the industrial life of our country, for the day of the open-cut is at hand." The time was "at hand" to develop this resource.[17]

"In 1946, Blair Athol was also of concern to politicians. In Canberra, the Australian federal capital, a government body labelled the North Australian Development Committee was deeply concerned about the "development and settlement of the northern portions of the continent."[18]

Australia is a large continent with a small population, and in post-war Australia it became a particular concern of the national government to stimulate industries in the northern and sparsely populated regions of Australia. One proposal was to increase production at Blair Athol coalfield, an initiative that could see the large-scale development of Blair Athol into an open-cut mine that might produce three million tons of coal per year."[19]

The committee noted that a railway from Blair Athol to Mackay would be the most efficient way to get coal to port, and—as McMahon had noted a decade earlier—that the rail link "would open up dairying and cattle country in the Mackay hinterland and facilitate the exploitation of the mineral resources of the area. It would probably cross coal bearing country, where coal has properties different from the Blair Athol Coal."[20] So, while Blair Athol was ready to be exploited, there were also "vast" and "latent" coal resources to be developed throughout Central Queensland.

Blair Athol was such a significant resource that it could stimulate a whole range of development throughout the region. There were costs to such development, however, as Queensland's representative on the committee commented in parenthesis: "(Open cut mining on a large scale on the sections leased to this company [Opencut Colliers] would necessitate the removal to a new site of the Blair Athol township and of some railway lines)."[21]

Surprisingly, with such a dramatic cost to development, local Central Queensland newspapers reporting on the prospects of development did not discuss the possible removal of the town. Indeed, the Rockhampton correspondent to the *Canberra Times* noted the removal of the Blair Athol town in almost the same words as the North Australia Development Committee.[22] As early as 1946, the town of Blair Athol was a by-product of the development of coal resources.

Australian Prime Minister Ben Chifley was enthusiastic about this proposal for Blair Athol's development. After he met Queensland's premier, Ned Hanlon, at the 1946 premiers' conference, the *Canberra Times* reported that "action by the Commonwealth and the Queensland Government for the development of this huge deposit is almost certain."[23]

The Open-Cut Mine Tour of 1947

Queensland encompasses a large geographical area. It is two and half times the size of Texas and has a fraction of its population. For the state and national governments to have a large-scale project in the northern bush would not only put more people out in isolated parts of Queensland but would also have economic benefits.

By the late 1940s interest in developing Blair Athol on a large scale had grown dramatically. Two decades earlier the first motions toward open-cut mining had been taken to the field. In 1923 an open cut commenced at the site but no coal was ever sold. Then, in 1937, Blair Athol Opencut Colliers commenced operation of what was Queensland's first open-cut coal mine and Australia's first open-cut anthracite coal mine.

In 1946, as described above, Prime Minister Chifley had thrown his support behind Queensland's Premier Hanlon to further development at Blair Athol. So the Queenslanders took up the cause the following year. Under instructions from the premier, Queensland's coordinator general, John Kemp, commenced work on what would become the *Report on Large Scale Development of Blair Athol Coalfield (With Some Notes on the Callide Field)*. The "Kemp Report," as it became known, was envisaged as an example of the State government's commitment to populating sparse Queensland as well as an encouragement to foreign investors.[24]

Around the time Opencut Colliers began operating, other coal mines around Australia turned to this method. In particular, many lignite coal mines in Australia's south had already begun using the open-cut method. And as will be seen in the following discussion, many of these mines in a short period of time had become much more advanced than Blair Athol. One important aspect of researching the Kemp Report was for senior Queensland government officials to tour Australia to see mine and port facilities that had developed over the previous two decades.

These officials travelled from Queensland to South Australia, Victoria, and New South Wales. The travellers were: C. M. Calder, chief engineer in the Queensland Department of Harbours and Marine; V. J. Hall, chief mechanical engineer and superintendent at the Ipswich Railway Workshops; and I. W. Morley, state mining engineer for the Queensland Department of Mines. By following the tour that these men took around Australia in 1947, we can begin to see the state of open-cut mining on the continent in the 1940s and how Blair Athol fitted into the Australian scene.[25]

Arriving first in South Australia, the three men and their escorts—G. G. Poole, the Leigh Creek mine manager, and L. W. Parkin, South Australia's assistant government geologist—took a charter plane from Adelaide to Leigh Creek on January 7, 1947. Together they toured the Leigh Creek open-cut coal mine.

Miners excavated the 800-by-350-foot open cut at Leigh Creek between 1941 and 1943. Production began in 1944, with nearly nineteen thousand tons. The purpose of Leigh Creek for the South Australia government was to limit the state's reliance on imports. Although the coal at Leigh Creek was of low grade, by the time the Queenslanders arrived in 1947 the mine was producing nearly 130,000 tons. The new, ten-cubic-yard dragline in operation was an English model, smaller than U.S. models but with greater control. The men watched some boring and toured the small power plant that provided electricity for the mine and town.[26]

The visitors also looked at more than mining; they examined a housing project and a hospital that had been constructed to service the mine operation. This was the beginning of an era of landscape-wide construction of "resource towns" to service the commodity and its workers.[27] After Leigh Creek, they travelled to Whyalla to see an iron ore open-cut, and then inspected the loading facilities and smelters at Port Pirie.

Visiting Victoria next, Calder, Hall, and Morley travelled from Melbourne to Yallourn and back

in one day. While Victoria had few high-quality black coal reserves, Yallourn was close enough to the city that developing its low-grade lignite coal resource was feasible for supplying electricity to the densely populated areas of southeast Victoria.

Yallourn, like Leigh Creek, was owned and developed by the State Electricity Commission and, like Leigh Creek and Blair Athol, would eventually be demolished. Yallourn was Australia's first operating open-cut coal mine, with overburden removal commencing in 1922 and first production in August 1924 (later than the first failed attempt to extract open-cut coal at Blair Athol). In the year that the Queensland delegation visited, 1947, Yallourn produced over five-and-a-half million tons of coal, twelve times more than in its first year of production.[28] As the visitors drove around the Yallourn open cut, they saw enormous piles of overburden, at least nineteen million cubic yards of which had been moved.

After returning to Melbourne from Yallourn, Calder, Hall, and Morley flew to Sydney, the capital of New South Wales. After discussions in Sydney the men took a train to Newcastle. Newcastle has always been an important site of underground coal mining in Australia, but the touring party was more interested in the movement and preparation of the coal. The visitors wanted to see the loading facilities and screening plants.

On January 17 they drove from Newcastle to an open-cut mine at Muswellbrook. They toured the cut with the mine manager and representatives from Thiess Brothers, the operator. In 1947, New South Wales accounted for 56 percent of Australia's coal production.[29] Although the state produced most of its coal using underground methods, the increased efficiency of open-cut mining was proving important. In New South Wales, open-cut coal mining started in Lithgow in 1940, and the new mine at Muswellbrook continued this trend. The next day the three men left Newcastle and travelled north to Brisbane, Queensland's capital.

Calder, Hall, and Morley did not see one significant Australian coal mine on their travels. Collie, forty miles east of the port of Bunbury, was the only coalfield in Western Australia with mining operations on a commercial scale. Started in 1898, it was not until 1944 that some portions of the Collie field produced coal from an open cut.

If the men had surveyed Collie they would have seen a five-cubic-metre dragline in operation—a model similar to but a little smaller than the one at Leigh Creek. Collie's coal was used within Western Australia by the railway and at the powerhouses run by the State Eectricity Commission.[30] Like South Australia and Victoria, Western Australia was forced to develop this coal resource to limit reliance on imports from New South Wales and overseas.

Brisbane was a short stopover and here, for the Queensland leg of their journey, Calder, Hall, and Morley were joined by Queensland's Coordinator General Kemp, and by Thomas Platt, its chief inspector of coal mines. On January 20 the group visited the recently opened Callide open cut and talked to the leaseholders. The open-cut they saw was small, the seam barely exposed, and the leaseholders a small-time company with only possibility on its side. Tests estimated that the Callide seam of black coal might be forty feet thick, but extensive drilling had not taken place on the field.

The next day the party drove to Blair Athol. On January 22 they inspected the mine. The first thing they noticed was the significance of the Blair Athol coalfield in the Australian context—the greatest deposit of black coal anywhere in Australia, maybe, they thought, even the world. They observed the mining operations taking place. Coal and Timber was just getting its open cut under way and early signs of the seam were showing.

On the other side of town they stopped at Opencut Colliers. From the pit bottom they looked at the huge masses of coal ready for loading. The seam that they saw at this point was about

eighty feet thick. After looking up, they looked to the ground and realised they were standing on a floor of coal: the coal seam was not even revealed to its fullest extent. Two open-cut coal mines worked one giant coal seam that passed underneath the town. The coal was an exploitable wonder, like nothing they had seen before on their tour of Australia's open-cut mines.

The Kemp Report

Queensland's Premier Hanlon received the Kemp Report in April. He used it when he had further discussions about the future of Blair Athol with Prime Minister Chifley. By June the report was presented to the Queensland Parliament as an important project worth pursuing. It told the chamber of a unique coal resource unparalleled in Australia, and that this coal seam was suited to the modern method of open-cut mining. What was needed was both government support and private investment.[31] "In the Blair Athol coalfield . . . Queensland has the largest known deposit of black coal in the Southern Hemisphere, capable of being worked by open-cut methods. In addition the ratio of overburden to coal is low for a deposit of such magnitude."[32] The report was even leaked to the media to expedite federal-state government negotiations over how to fund further development.

Queensland's Coordinator-General John Kemp (centre in glasses and three-piece suit), flanked by government and mine officials, looks to the height of the Blair Athol coal seam in 1947. (Photo courtesy of Kevin McCarthy.)

An Artist's impression of working a large-scale open cut at Blair Athol. (From Report on the Large Scale Development of Blair Athol Coalfield *(Brisbane: Government Printer, 1947).)*

Looking at the Kemp Report, investors were encouraged in a number of ways. It began with a two-page summary, followed by Part A, which gave a general survey of Blair Athol Coalfield's location, operations, and exploration. Part B and Part C provided a calculation of costs for recovering the coal on a large scale and the cost of a more efficient railway to move the coal to port.

The appendices that accompanied the report are also interesting in showing how science facilitated investment. Appendix A reproduced reports by Reid from 1936 and 1946 on the Blair Athol coalfield, including the maps that locate the seam. Finally, Appendix B listed the authorities consulted, gave a bibliography, and provided the "Itinerary of Officers' Tour of Inspection." This final piece of evidence shows that the authors supported their consultation of the literature by touring the landscape.

North Queensland historian Dianne Menghetti has described the Kemp Report as "a remarkable document."[33] The report argued contrary to available evidence of the time that suggested that there were limited uses for Blair Athol coal and that developing the field would be very expensive and would require large government subsidies. What can also be understood in a larger sense is that Blair Athol was falling behind other Australian developments; both Leigh Creek in South Australia and Yallourn in Victoria had developed much more quickly. The Kemp Report advised that Blair Athol's large resources required concerted effort and development.

Feature Stories

Governments and businessmen exert influence over resources and encourage productive ways of seeing the land. Just as the Kemp Report was being considered in Queensland's Parliament a significant episode in the history of Blair Athol's development occurred. Surrounded by secrecy, in early June 1947 Electric Supply Corporation (Overseas), Limited, showed a keen interest in developing the coalfield. The *Canberra Times* reported "an English company has made preliminary overtures to the State Government for the right to build a railway line from Blair Athol in Central Queensland to the coast for the export of coal to the East."[34]

News that an overseas company might invest millions of pounds in a remote Queensland town was an exciting story for the Australian media.[35] In one year, November 1947 to September 1948, five articles about Blair Athol appeared in popular magazines with national coverage: *Walkabout*, *Pix*, *AM*, and *The Worker*. This 1947 episode located Blair Athol, a small central Queensland coal mining community, in the developmental

message that spread across Australia following the Second World War.

That message carried with it a whole range of developmental rhetoric and political positioning. In the wider Australian community, this was a time and place where the extraordinary reach of global capital was a cause for confidence rather than anxiety. If the large-scale development of Blair Athol was to occur, as the Kemp Report so enthusiastically desired, then the stories about the land needed to take that message to the people.

Robert Emerson Curtis' article "Blair Athol's New Opencut" in *Walkabout* was the first to appear. It begins: "I knew when I first looked down into this man-made open-cut seething with men and machines and finely powdered dust that here was a subject to challenge an artist's imagination—a subject that must be recorded."[36] The two sketches Curtis drew to accompany the short five paragraphs of text carried an image of progress to the Australian public.

Standing on the normal lay of the land and looking through a crack in the earth, the first sketch looked down into the open-cut and contrasts in shading showed a small overburden and abundant coal. The second sketch spread across two pages and showed the open cut as an open hole. Everything appeared in motion: industry at work. In the distance, as in the first sketch, remained low-lying hardwoods following the contours of the earth.

Influenced by the industrial modernism of American lithographer James Pennell and by the Ashcan School's gritty realism—especially evident in his charcoal sketch *The Coal Miner*—Robert Emerson Curtis is best known for his series of sketches of Sydney Harbour Bridge, one of the icons of Australia.[37] His work *Building the Bridge* (1933) brought him into close contact with the Dorman Long Company which was responsible for building the bridge.

Coincidentally, by the end of 1947 the original estimate for developing the Blair Athol coalfield had doubled from £12 million to £25 million and Electrical Supply Corporation had to find investment partners: one of which was Dorman Long.[38] As the same companies developed the cultural and industrial landscape across Australia, the same artists delivered images of these developments to the public.

The soft motion of men working at the seam in Curtis' sketches was very different from the flurry of activity in his prose. "[A] body of men had flung themselves with what seemed like fiendish delight as they worked and sweated and drove their machines in attack upon the buried treasure that lay beneath." Curtis contrasted that vast treasure with the town of Blair Athol, a "small name

Blair Athol Coal and Timber's new open cut, illustrated by Robert Emerson Curtis. (From Walkabout*, 1 November 1947.)*

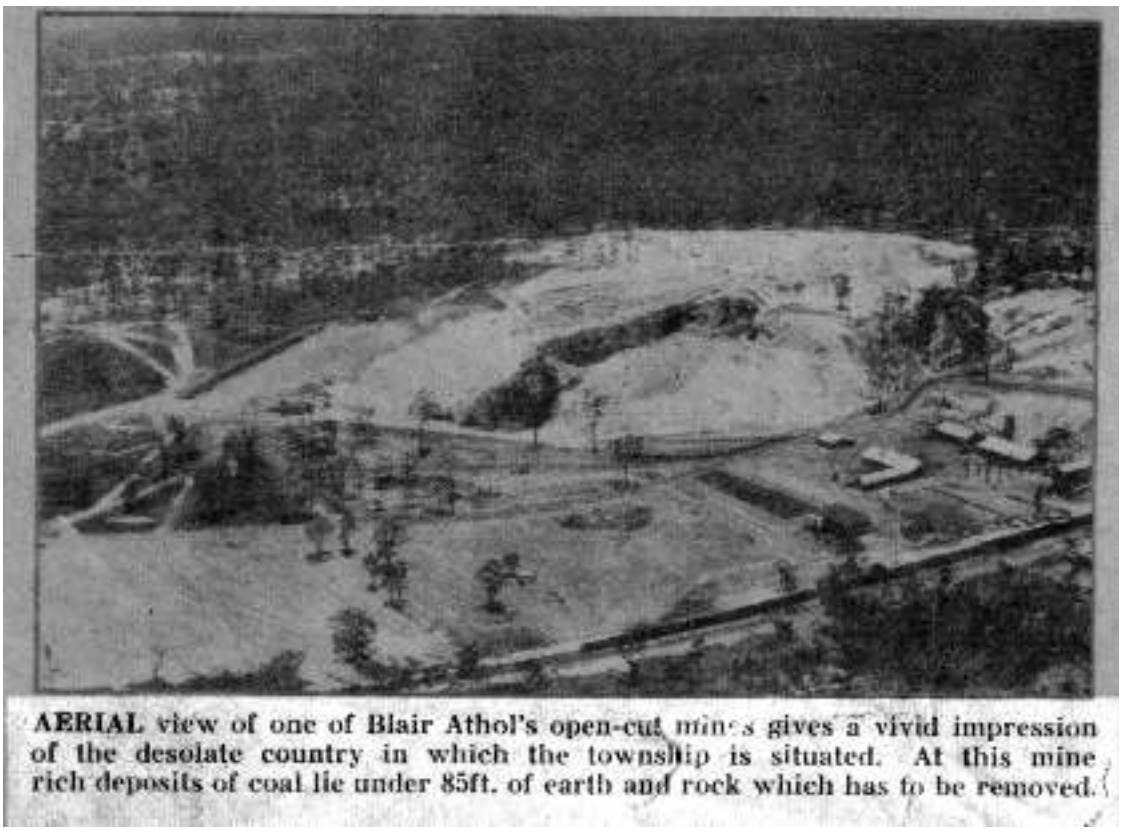
on the big map" and a "one-pub" town lying in "the dust of the surrounding cattle country." This contrast between huge coal deposit and dusty country town made a compelling case for development at Blair Athol to the wider Australian audience.[39]

The divide between mine and town was also evident in an article published in *Pix* at the end of November 1947. Opening the article, the first photo showed the open-cut with machines in the foreground and the pit and seam in the background. The caption to the photo read: "Open-cut mines bite deep into the countryside at Blair Athol, Queensland. Blair Athol is a tiny undeveloped township. . . . [The c]ash register in the local pub is festooned with cobwebs."[40]

The article began with the information that encouraged many reporters to visit this out-of-the-way, rural Queensland town. "Biggest black coal seam in the Southern Hemisphere, the fabulous Blair Athol deposit in central Queensland, will soon be the scene of operations for a big British company planning expansion in Australia." In the pictures accompanying the article the environmental transformation was in process with tree clearing and holes in the ground, but the captions directed the eye to the landscape context of the 1940s, where "lightly wooded" and "desolate" country were the harbinger of treasure.

The *Pix* article was attuned to Blair Athol the place. In the town the people were happy enough, but their living conditions would "appal ardent town planners."[41] The influence of the mine was never far away: "Now, thanks to the advent of the open-cut mines, Blair Athol has triumphed over this depression period, although . . . authorities could assume more responsibility in supplying water and electricity systems for the village."

On the last pictorial page the reader met the Hays, a "happy family" living in a "tiny shanty." In the small picture Hugh Hay, a coal miner who



AERIAL view of one of Blair Athol's open-cut mines gives a vivid impression of the desolate country in which the township is situated. At this mine rich deposits of coal lie under 85ft. of earth and rock which has to be removed.

Blair Athol Opencut Colliers. (From Pix*, 29 November 1947.)*

worked at Opencut Colliers and was the Blair Athol representative of the *Mackay-Blair Athol Illustrated Record*, told his daughters stories of Scottish Highland pixies. On the final page of the article appeared a large picture of the naked Margaret and Betty Hay with their backs to the camera having watering-can showers. The scandalous picture appearing in the national magazine shocked their aunties and uncles who lived in other parts of the country, but it remains an evocative image.

Of all these articles, D. L. Thompson's "Coal to Burn" in *AM* stands out as the story most keenly pursuing development. For Thompson, the exploitation of Blair Athol would significantly increase Australia's supply of coal. In the late 1940s Australia experienced a coal shortage and there were fears of a coal crisis if Chifley's plans for massive development in secondary industries were pursued. These fears were compounded by coal strikes throughout Australia in early 1948.

Standing in the centre of town at the Blair Athol railway station, Thompson imagined the possibilities; "you realise that you are now standing squarely over the centre of 200 million tons of coal, and that this wretched railway is the only means of bringing that coal to the starving cities down south."[42]

One of the distinct features of the Blair Athol landscape was the birds, and they captivated both locals and travellers.[43] But Thompson was not interested: "A few fowls and sometimes a turkey scratch hopelessly among the dust and old tins on the landscape." With little hesitation Thompson paired the natural desolation with the desolation of the town. "Here we are at Blair Athol, a township of about three hundred people. It will all be swept away eventually. Every building in it is sitting on top of ten thousand times its value in coal. That won't be any great loss to posterity." Thompson told his stories in the national interest and as such he elided the human dimensions held within the town.

In September 1948 a longer article by Robert Emerson Curtis appeared in *Walkabout*.[44] He included no sketches this time and his prose began in an objective and factual tone. Since his first article there had been a flurry of activity in Blair Athol and Curtis felt it necessary to document the quantifiable resources of the field.

But then he described arriving at the Blair Athol open cut: "It was something of a revelation to us to come suddenly out of a belt of cattle-grazing country one Friday afternoon and behold a great cut in the earth's surface sprinkled with men and machines. It was a vast excavation. It looked as though some giant with an enormous cleaver had slashed the earth for the very joy of it." Curtis concluded the article: "Blair Athol's Open-Cut, which promises a vast new source of easily won coal, can furnish Australia with tremendous qualities of power." And so the very "joy" of digging a hole in the earth was to obtain power—both electrical and political.

While *AM*, *Pix* and *Walkabout* were more development-focussed magazines, Blair Athol also appeared at the same time on the front page of *The Worker*, the publication of the Australian Workers' Union.[45] It might be expected that this union publication would privilege some imagery of workers, but once again the seam appeared. One picture showed men piling out of the car to look at the workings at Coal and Timber. The other picture showed cars dwarfed by the coal seam extending up and up.

The rhetoric of development also continued; the article concluded by estimating that it would require sixty years to "exhaust" the coal. This estimate proved surprisingly accurate considering the ill-fated development future that faced Blair Athol after 1949, when the Electric Supply Corporation abandoned plans to develop the field.[46]

These popular magazine articles document some of the dramatic shift towards "developmental" thinking in Australia in the late 1940s, thinking that was instigated by governments but carried out to the landscape by journalists in search of copy. Such thinking existed in Australia in the

1920s and 1930s, but in this later period the degree of government backing had a substantial impact on the stories told.

These stories told of a tiny Queensland town that had a huge resource of benefit to the national economy. Even when the people of the town were pictured, they were captured as quaint and in need of saving. These stories were highly evocative and projected a vision of landscape that looked towards an economically prosperous future.

The use of landscape imagery was a common feature of all the articles. Not only were these journalists telling a particular developmental story, they displayed highly visual aspects of the landscape in service of their stories. Curtis most artistically captured this, but the other articles also carried photographs that evocatively showed Blair Athol as a town unable to develop a coal seam that was a national asset. It is this insistence on economic development at the cost of environment and of people's attachments to places that continues to dominate the ways of seeing any open-cut coal mine.

The stories from the popular magazines from November 1947 to September 1948 that featured Blair Athol show how the cultural landscape was interpreted using the development rhetoric that followed the Second World War. This rhetoric was multi layered. First, it projected into the future to describe how a backwards country town would prosper from large-scale investment. Second, it held that the continent's vast and latent natural resources encouraged large-scale global capital investment in Australia. That the English Electrical Supply Company was even interested in Blair Athol was both surprising and a cause to tell stories about the land.

This interest became an important element in the magazine narratives, both to persuade readers to adopt this developmental thinking and as a testament to more development of Australian resources. The mine in the land challenged so many writers—as Emerson Curtis said "here was a subject to challenge an artist's imagination"—yet the popular magazines printed cliché after cliché, and relied on imagery as opposed to content. This passive treatment of the landscape reified the developmental rhetoric that the government and big capital investors needed to maintain public acceptance of socially and environmentally destructive large-scale projects.

Developing a Nation

On September 22, 1949, Allan Morrison delivered the presidential address to the Historical Society of Queensland. He lectured about Queensland historiography and the relationship of the historical society to the specific places that make up the state. He told the people gathered: "We must never forget that each area, while important in itself, is only part of the greater area of the whole State, and that is again part of the whole nation."[47] Morrison turned to discussing a particular Queensland place to highlight his point.

The story that Morrison told was about the development of Blair Athol. He gave a brief historical overview: a pastoral station that sunk a well in brigalow grazing country to find hidden wealth, the advancement of the railway towards the treasure, the inefficiencies of the railway, the shift in thinking from pastoral to mineral, the failed open cut in 1922, the investment of international capital, the Kemp Report, the national interest in coal. He concluded: "What has happened since then is a story itself and one that is far from complete, so we must leave its full telling until another time."[48] The optimism in Morrison's lecture made his brief history sound much like the popular magazine articles that appeared in the previous year.

Recently anthropologist David Trigger has discussed this type of developmental thinking that continues to be present in the Australian mining industry, where economic development is conceived as moral progress.[49] At Blair Athol, for outsiders and businessmen, the development of coal was synonymous with the progress of the

town. Indeed, for Morrison, the economic development of Blair Athol was a critical issue for the state and nation; it stood as a symbolic study, a story, of other places in the state that would add to the progress of Australia.

In a very different perspective from the same period as Morrison's address, Alan Walker's *Coaltown* (1945) was a pioneering work of social anthropology that centred on the study of industry and place. The study was set in Cessnock in New South Wales and surveyed the coal industry, the town, and how they had grown up together.

In his final chapter, Walker insisted that overcoming the artificial stimulus of war was of critical concern for the community. He wrote, "war conditions, with their absorbing of the people's thought and time, have obscured the need for non-economic development in the community."[50] In the introduction to the book, influential Australian anthropologist A. P. Elkin noted that the rapid development in many industrial towns had left its mark on the community, but that now "progress and change should be accompanied by, and indeed based on, an increasing self-knowledge." [51]

Walker, a Wesleyan priest, wrote at the conclusion of his book: "Cessnock will not become the community it deserves to be because of the quality of its people and the wealth of its natural resources until it escapes from its isolation and finds its soul."[52] Elkin and Walker were looking to the future and asking people to consider that economic development was not an end in itself. Their anthropological insights drawn from on-site work challenged readers to seek a deeper understanding of resources, an understanding with which Australians still grapple to come to terms.

The Significance of Blair Athol

After 1949, when the Electric Supply Corporation pulled out of plans to develop Blair Athol, many people remained optimistic about the future. However, in the 1950s, when the diesel engine took hold in Australia, demand for Blair Athol anthracite dropped. Over this decade many miners were laid off and the companies struggled to find new contracts.

In 1965 the two companies on the field, Opencut Colliers and Blair Athol Coal and Timber, merged to form Blair Athol Coal and turned to operating out of only one pit. Finally, in 1968 the Blair Athol field was bought by a consortium of big multinationals, led by Conzinc, Rio Tinto, and Clutha Development, with the promise of large-scale development. But still the field lay idle. For over a decade older, out-of-date, quarry-style open-cut mining was still practiced. Indeed, in the late 1960s miners were still breaking coal lumps with picks for $56AU a week.[53]

The multinationals waited, and while they did the town died. Then a Japanese electricity company signed an enormous contract for Blair Athol's steaming coal. To expand the pit, the new coal company announced the town's removal in 1972 and the last homes were moved in the following years. In 1981 the last dance was held in the Blair Athol hall.

The modern open-cut operation commenced in 1984, and with it the Blair Athol mine finally got a new rail-link with Mackay—the rail link discussed nearly half a century before in the *Mackay-Blair Athol Illustrated Record*. Blair Athol's production peaked at 11.3 million tonnes in 2009 and by 2012 Rio Tinto declared the site mined out, although 2015 saw Linc Energy purchase the mine for only one dollar, with plans to reopen it. Queensland now has forty-six operating open-cut coal mines. Blair Athol, along with a number of other Queensland open-cuts, paved the way for Queensland to become Australia's premier coal producer.

Blair Athol's story is ultimately one of delayed starts and developmental hype, yet it is also an important part of understanding Australia's shift to large-scale open-cut mining. In the late 1940s, other coal mines were under development across Australia, as Calder, Hall, and Morley's tour

shows, but Blair Athol was the most important because of the sheer extent of its coal seam. Quarry-style open cuts were attempted in 1922 and achieved in 1936, followed for nearly two decades by people coming to see the seam. The 1950s and 1960s saw the development of large-scale projects in other parts of the Bowen Basin.

Coal mining at Blair Athol did not develop on a large scale until the 1980s. The mine's significance, however, lay in an earlier period and in a material presence that inspired the developmental imagination of a nation. From the 1920s through the 1940s Blair Athol drew many people to see it—geologists, developers, government officials, and journalists excited about the possibilities for a fantastic resource. The consequence was the stories that they told when they returned home.

How people saw and interpreted Blair Athol in the first half of the twentieth century was critical in setting the tone for development of the entire Australian coal industry. Open-cut mining is now the dominant method in the industry and managing its expansion is an important issue facing Australia. Some current environmental critiques have argued that many Australians cannot see past a "quarry vision."[54]

Much of the present debate is about the symbolic nature of coal and how natural resources are exploited and the impact that this has on Australia's landscape and people. In the first half of the twentieth century, imagining the potential of resources always came first; subsequently, these developmental visions were carried to the wider public through stories. In that context none of Australia's resources was more significant than Blair Athol. It may seem contradictory that a resource can be significant while remaining undeveloped, but the importance of Blair Athol lay in the possibilities that people could imagine and promote.

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Notes:

1. In Australia "black coal" is used to mean sub-bituminous, bituminous, and anthracite, while "brown coal" means lignite. In fact, Blair Athol's black coal was anthracite.
2. Blair Athol's history has been explored in: Kerry Killen, *Drovers, Diggers and Draglines: A History of Blair Athol and Clermont* (Queensland: Pacific Coal, 1984); Diane Menghetti, *Blair Athol: The Life and Death of a Town* (Townsville: Pacific Coal, 1995); Diane Menghetti, "'Sleeping Giant': Selling Blair Athol Coal," *Australian Economic History Review* 35 (1995), 57-82. The loss of places has been explored in Australia particularly at the open-cut coal mine in Yallourn, Victoria, see: Peter Read, "Remembering Dead Places," *Public Historian* 18 (1996): 33; Peter Read, *Returning to Nothing: The Meaning of Lost Places* (New York Cambridge Univ. Pr., 1996); Meredith Fletcher, *Digging up People for Coal: A History of Yallourn* (Carlton: Melbourne Univ. Pr., 2002). Recent debate on mining landscapes has noted the "mining imaginary." For an overview of the issues see: John Sandlos and Arn Keeling, "Claiming the New North: Development and Colonialism at the Pine Point Mine, Northwest Territories, Canada," *Environment and History* 18 (2012): 5-34 (in particular pp.7-8).
3. For example, see: H. R. Sherwood, "The Development of Strip Mining," *Queensland Government Mining Journal* 47 (1946): 130-3. This paper was originally read before the American Mining Congress in 1945 and the optimism about mechanisation made it an important one to reproduce in the Queensland mining journal. For the British context see: Kenneth Charles Appleyard and Gerald Curry, "Opencast Coal Production in Wartime," *Journal of the Institution of Civil Engineers* 26 (1946): 331-66. Through oral history records from Blair Athol, historian Dianne Menghetti has also noted some of the impacts from open-cut mining on workers: Diane Menghetti, "From Underground to Opencut: The Deskilling of the Coal Miner?", *Journal of the Royal Historical Society of Queensland* 16 (1997): 353-70.
4. Calculated from figures in: World Coal Association, "Coal Market and Transportation," (http://www.worldcoal.org/coal/market-amp-transportation/, accessed 12 Jan. 2016); Queensland Department of Mines and Energy, "Coal Statistics," (http://www.dme.qld.gov.au/ mines/coal_statistics.cfm, accessed 3 Sep. 2010); Australian Coal Association, "The Australian Coal Industry—Coal Production," (http://www.australiancoal.com.au/the-australian-coal-industry_coal-production.aspx, accessed 4 Sep 2010).
5. Figures calculated from: Queensland Department of Mines, "Queensland Department of Mines Annual Report," in: *Queensland Parliamentary Papers* (Brisbane: Government Printer, 1974 to 1990); Queensland Department of Resource Industries, "Queensland Department of Resource Industries Annual Report," *Queensland Parliamentary Papers* (Brisbane: Government Printer, 1991 to 1993); Queensland Government, "Annual Coal Statistics. 2014 Calender Year Coal Statistics" (https://data.qld.gov.au/dataset/ annual-coal-statistics, accessed 3 Jan. 2016).
6. A. H. Osman and R. G. Wilson, "Blair Athol Coal-Field," in: D. M. Traves and D. King (eds.), *Economic Geology of Australia and Papua New Guinea: Coal* (Parkville: Australasian Institute of Mining and Metallurgy, 1975), 2: 377.
7. J. F. Hall, "Notes on the Blair Athol (Queensland) Coal Field," *Queensland Government Mining Journal* 84 (1983): 389. (Reprinted from volume 20 (1919) of the same journal.)
8. Hall, "Notes on Blair Athol," 389.
9. *Peak Downs [QLD] Telegram*, 7 Jan. 1922.
10. R. L. Whitmore, "Hornibrook, Sir Manuel Richard (1893-1970)," *Australian Dictionary of Biography* (http://adbonline.anu.edu.au/biogs/ A140563b.htm, accessed 20 Oct. 2010).
11. *Peak Downs Telegram*, 20 May, 2 Sep., and 23 Dec. 1922, and 31 Mar., 30 June, 4 Aug., 29 Sep., 27 Oct., and 1 Dec. 1923; "Mining News," *Queenslander* (Brisbane), 20 Sep. 1924.
12. J. H. Reid, "Blair Athol Coalfield," *Queensland Government Mining Journal* 37 (1936): 339-42. Rockhampton, a much larger community located on the coast in central Queensland, was headquarters for many government officials, including the district geologist, who oversaw many mines in the region. The town also had a thriving port to which Blair Athol's coal was sent by rail.
13. In the late 1940s Reid updated his 1936 record: J. H. Reid, "Blair Athol Coalfield," *Queensland Government Mining Journal* 47 (1946): 270-3; J. H. Reid, "Blair Athol Coalfield Drilling," *Queensland Government Mining Journal* 49 (1948): 76-8.
14. J. H. Reid, "Blair Athol: Shewing Worked Areas and Surface Features" [1936], MS Map 450, and "Blair Athol Coalfield: Geological Plan" [1936], MS Map 451, Coal Files, Queensland Department of Natural Resources Library, Brisbane.
15. R. L. Whitmore, *Coal in Queensland: From Federation to the Twenties, 1900-1925* (St Lucia: Univ. of Queensland Pr., 1991), 381-4.
16. W. McMahon, "District Development: Blair Athol and District," *Daily Mercury* (Mackay, QLD), 26 Jan. 1937.
17. John Mulherin (ed.), *The Mackay-Blair Athol Illustrated Record* (Mackay: Mackay Printing and Publishing, 1946), 5, 43.

18. H. C. Coombs to J. B. Chifley, 14 Aug. 1946, in: Northern Australia Development Committee, *Report on Blair Athol Development* (Canberra: 1946).
19. *Canberra Times*, 19 Aug. 1946.
20. Northern Australia Development Committee, *Report on Blair Athol Development*, 4.
21. "Appendix I: Submission on Blair Athol by Queensland Representative on Northern Australia Development Committee," 1, in *Report on Blair Athol Development*.
22. *Canberra Times*, 11 Sep. 1946.
23. *Canberra Times*, 23 Aug. 1946.
24. Joanne Scott, Ross Laurie, Bronwyn Stevens, and Patrick Weller, *The Engine Room of Government: The Queensland Premier's Department, 1859-2001* (St Lucia: University of Queensland Press, 2001), 274.
25. The journey in this section is taken from "Appendix C—Part B: Itinerary of Officers' Tour of Inspection, January, 1947," in: Department of the Coordinator General of Public Works, *Report on the Large Scale Development of Blair Athol Coalfield (with Some Notes on the Callide Field)* (Brisbane: Government Printer, 1947), 44-5.
26. Ministry of National Development, *Report on Prospects for Development of Open Cut Coal Mining at Blair Athol Queensland* (Canberra, 1952), 10; The Coal and Lignite Panels of the Power Survey Sectional Committee, *A Report on the Coal Resources of the Commonwealth of Australia* (Sydney: The Standards Association of Australia, 1955), 61; G. G. Poole, *The Leigh Creek Coalfield: History and Development* (Adelaide: Government Printer, 1946).
27. See: H. J. Summers, "Let's Clear Our Mind on Australia's Open-Cut Coal," *Courier Mail* (Brisbane), 3 Aug. 1949. As Leigh Creek developed, as at Blair Athol, the original town was demolished to make room for the expanding mine.
28. Coal and Lignite Panels, *Report on the Coal Resources*, 79.
29. Calculated from figures in: Coal and Lignite Panels, *Report on the Coal Resources*, 34.
30. Coal and Lignite Panels, *Report on the Coal Resources*, 91-101.
31. Ministry of National Development, *Prospects for Development*, 23.
32. Department of the Coordinator General, *Development of Blair Athol,* 7.
33. Menghetti, "'Sleeping Giant,'" 71.
34. *Canberra Times*, 5 June 1947.
35. Menghetti, "'Sleeping Giant,'" 71.
36. R. Emerson Curtis, "Blair Athol's New Open-Cut," *Walkabout*, 1 Nov. 1947, 25.
37. Robert Emerson Curtis, *Building the Bridge: Twelve Lithographs with Introduction and Supplement* (Sydney: Simmons, 1933); Peter Spearritt, *The Sydney Harbour Bridge: A Life* (Sydney: NewSouth Publishing, 2011).
38. *Canberra Times*, 29 Nov. 1947, 9 Sep. 1949.
39. Curtis, "Blair Athol's New Open-Cut," 25.
40. "Coal Eldorado," *Pix*, 29 Nov. 1947, 8.
41. "Coal Eldorado," 8.
42. D. L. Thompson, "Coal to Burn," *AM*, Sep. 1948, 4.
43. R. G. Hay, *Iris, It's Finished! A Childhood in Central Queensland* (Rockhampton: Central Queensland Univ. Pr., 1994); *Clermont [QLD] Telegram*, 28 Oct. 1960.
44. R. Emerson Curtis, "Blair Athol's Steaming Coal," *Walkabout*, 1 Sep. 1948, 22-3.
45. "Blair Athol Gives up its Riches," *The Worker*, 7 June 1948, 1.
46. *Canberra Times*, 9 Sep. 1949; Mary E. White (*Listen . . . Our Land Is Crying. Australia's Environment: Problems and Solutions* (Kenthurst NSW: Kangaroo Press, 1997), 254) gave an estimate for coal to be exhausted by 2010. This proved quite accurate, but with the rising price of coal, the mine extended operations until 2012 and may possibly be reopened.
47. Allan A. Morrison, "The Historical Society and the Regional Study, with Special Reference to Blair Athol," *Journal of the Historical Society of Queensland* 4 (1949): 138.
48. Morrison, "Historical Society and the Regional Study," 148.
49. David Trigger, "Mining, Landscape and the Culture of Development Ideology in Australia," *Ecumene* 4 (1997): 161-80. See also: Doug McEachern, "Mining Meaning from the Rhetoric of Nature—Australian Mining Companies and Their Attitudes to the Environment at Home and Abroad," *Policy Organisation and Society* (1995): 48-69.
50. Alan Walker, *Coaltown: A Social Survey of Cessnock* (Carlton: Melbourne Univ. Pr., 1945), 126.
51. A. P. Elkin, Introduction to *Coaltown* by Alan Walker (Carlton: Melbourne Univ. Pr., 1945), viii.
52. Walker, *Coaltown*, 134.
53. Menghetti, *Blair Athol*, 235.
54. Guy Pearce, "Quarry Vision," *Quarterly Essay* 33 (2009). Other recent examples include: Sharyn Munro, *Rich Land, Wasteland: How Coal is Killing Australia* (Sydney: Pan Macmillan, 2012); Paul Cleary, *Mine-Field: The Dark Side to Australia's Resources Rush* (Collingwood: Black Inc., 2012).