This paper takes the industry of mining - gold mining in Victoria to be precise - and examines ways in which that industry has celebrated and been celebrated in the period since 1851. The forms of celebration under review are all direct representations of the industry, often in the form of models, illustrations, monuments or exhibitions. It is not my intention to survey the gold rush legacy of public works, such as trunk railway lines, court houses or the mansions of mining magnates. These I consider as secondary or indirect celebrations more closely allied to the long-term wealth generated by the industry than the prizewinners and commorative nature of the objects which I have considered within my scope.

The coincidence of local gold discoveries with colonial separation gave rise to a euphoric period in Victoria's history, an era which gave the colony an international significance. It was surely fortuitous that this rise in prominence also coincided with the 1851 Great Exhibition of Works of Industry of All Nations, an event which heralded a succession of exhibitions where Victoria could gain an opportunity to celebrate with an international audience. Whilst the public disclosures about gold discovery came too late for Victoria's meagre contribution of wool and flour to be supplemented by more than a token display of gold dust in the Crystal Palace, the colony was well placed to make a substantial contribution to future exhibitions.

The gold rush fuelled a huge exodus of British emigrants and this movement was given a boost by the display in London of tantalising Victorian gold nuggets. The nugget was a powerful symbol of the indiscriminate financial gain which early alluvial mining could offer and this was a strong lure for both emigrants and residents. Even when actual nuggets could not be displayed, casts, models or facsimiles were acceptable substitutes. At the National Museum of Victoria in the 1860s, for instance, director Frederick McCoy had to rely on gilded replicas and even used this mode of representation to display gold and platinum nuggets from the Urals, acquired from the Russian Mining Academy at St. Petersburg. Financial reward was possible not only for lucky miners but also through a series of officially sanctioned rewards to discoverers of gold fields. The quest to celebrate the discoverers - a mixed bunch of the fortunate, the pursuasive and the diligent - led to the payment of well over twenty five thousand pounds by the Victorian colonial government between 1860-66. The often farcical nature of this process was well illustrated by the trio of awards relating to Clunes, with each government enquiry finding an earlier date and new discoverer with financial rewards in inverse relation to the significance of the claim. The irony of this celebration of luck, at a time when official geological surveys were facing financial stringency, has not been lost on modern historians of science.

With the announcement of a large exhibition to be held in Paris in 1855, influential gentlemen sought to make a worthy contribution to show off Victoria's new found status as both a colony and a major gold producer. An exhibition in Melbourne was preceded by a local display at Sandhurst, where Victoria's nascent reef mining industry was afforded its first opportunity for celebration. William Watson displayed a model of his quartz stamping battery (one of the earliest such machines to be successfully used in Victoria), while the alluvial arm of mining was represented by models of gold digging tools and specimens of gold.

Such models, although displayed in both Melbourne and Paris, competed for attention at the 1855 Exposition Universelle by the New South Wales display of drift deposits, contributed by the Gold Commissioner at Sofala. The deposits showed actual samples of the gravel,

![Victorian mining tools drawn by Jacob Brache in 1854 Museum of Victoria Collection](image-url)
clay and rock encountered in alluvial mining with notes on their thickness and geological characteristics. In later exhibitions, when smaller mining companies could not call on the public purse for their display, more economical models and sectional diagrams provided the same information.

Frederick McCoy, paleontologist, first Professor of Natural Sciences at the University of Melbourne, and Director of the National Museum of Victoria from 1856 until his death in 1899, did more to celebrate gold than any other nineteenth century Victorian figure. His initial involvement with mining was as Chairman of the Mining Commission of Victoria, a government body charged with responsibility of enquiring into the state of colonial mining. Despite adverse criticism of its work and McCoy’s role in particular, the Commission succeeded in acquiring a substantial collection of models and tools which formed the basis of the National Museum’s earliest collection in the field of applied science and today forms the backbone of a world class collection held by the Museum of Victoria.

McCoy’s first task with the Mining Commission was to commission a series of watercolour sketches of typical mining tools and machinery to display with the mining collection at the National Museum. McCoy’s predecessors in the field of mining museums included the Museum of Practical Geology in London, mining museums of the great Bergakademien or mining schools in Saxony and the Harz Mountains and patent museums such as those in London and Washington. From the German mining academies McCoy acquired a vast collection of models depicting continental mining practices and these were supplemented by copies of models from London, mainly depicting Northern coal mines and Cornish machinery.

These overseas models were part of McCoy’s belief that Victoria should have a mining museum and mining school of international stature, befitting its role as a major gold producer. His early ideas about rudimentary technical education for the diggers (as demonstrated by the drawing of mining tools and the National Museum’s early collection of items forming the equipment of an alluvial gold miner) gave way to more sophisticated ideas of a museum and academy for educating potential mining managers. Hence, the models from Germany and Britain concentrated on universal mining processes, rather than didactic exemplars for diggers. This shift also celebrated the rise of a mining industry, with skilled managers and a paid workforce, which gradually triumphed over the individual miner and small co-operative party.

Local invention was celebrated by McCoy with the commissioning of many accurate scale models of devices patented under colonial legislation. Such protection had been available as early as 1854, but the inadequate provisions restricted use of the legislation. With amendments in 1857, many more patents were issued (especially for mining machinery) and the National Museum was greatly enhanced by detailed models. McCoy’s idiosyncratic ideas on mining coloured his selection of patent models, seeking to have only proven devices in his collection rather than expose all new inventions to view.

Perhaps the most celebratory models acquired by McCoy for the National Museum, were a remarkable series of works by Carl Nordstrom. Nordstrom, a Swedish miner working at Ballarat, demonstrated his talent for model making by combining traditional materials (such as timber and metal) with local materials like gravel and sand, to ensure that the strata in his models accurately depicted local conditions. McCoy learned of Nordstrom’s skills whilst touring in 1856 with the Mining Commission and the first model he acquired was a section through Ballarat’s rich Gravel Pits Lead. With this commission satisfactorily fulfilled, McCoy sought a series of three models depicting all stages of alluvial mining as well as one large model of the Port Phillip Company’s works at Clunes, exemplifying the most advanced colonial reef mining and quartz crushing technology. Whilst primarily intended as accurate depictions of typical mining techniques, the models simultaneously celebrated the skill of the model maker, the excitement of the early phase of local mining and the triumph of technology over nature.

Nordstrom’s representation of Clunes, modelled in 1858 (and still the highlight of the Museum of Victoria’s mining collection), was complemented by several larger scale models of individual components such as the battery.
amalgamating machinery, stamping heads and metal gratings. The Port Phillip and Colonial Gold Mining Company was funded by London based capitalists and brought a note of stability and empirical innovation to Victoria’s mining industry. Manager Rivett Henry Bland was always quick to seize opportunities to celebrate his company’s excellent reputation and the 1862 International Exhibition in London gave him the first major opportunity to show off on the world stage.

A huge half scale model of the company’s battery was constructed on site at Clunes and following display at the 1861 Victorian Exhibition in Melbourne, this colossus was shipped to London with fifty tonnes of quartz for demonstration crushings. Local pride in the exhibit was high, but Robert Hunt, exhibition juror and Professor at the Royal School of Mines, commented wryly that it was ‘curious to see a machine brought from the other side of the world so similar to the hundreds of stampers which discourse their peculiar music in our Cornish tin districts’.

Less tangible, but equally powerful symbols of Victoria’s goldfields at the 1862 International Exhibition included a mosaic of Alfred Selwyn’s ‘quarter sheet’ geological survey plans showing central Victoria, rows of framed photographs submitted by proud local municipalities and a towering gilded obelisk. The obelisk, fifteen metres high and constructed of hessian over a timber frame, was the brainchild of architect John George Knight, Secretary for Victoria at the 1862 International Exhibition. The monument was imbued with conceptual relevance: the volume represented the mass of gold mined in Victoria during the decade 1851 to 1861 (over eight hundred thousand kilograms, valued at one hundred million pounds), the base was studded in low relief with models of famous nuggets and the positioning of the exhibit in the dome of the exhibition building, placed Victoria’s contribution on an equal footing with china from Worcester, Minton’s famous ware, Prussian arms and major contributions from the United States, Europe and the British Isles.

International exhibition halls were not the only British venue to celebrate Victoria’s gold mining industry. Behind Piccadilly in Jermyn Street, London, the Museum of Practical Geology displayed from the late 1850s onwards a selection of Victoria’s colonial mining equipment. Models depicting washing dishes, cradles and dippers sat alongside scale models of the Port Phillip Company’s battery and even a model of the whole Clunes works, half the size of Nordström’s treasured model in Melbourne, but so similar as to suggest a common modeller and identical date of construction.

Illustrations, especially prints and photographs, conveyed to a wide audience much of the working of mines and gold fields life. Far from being objective records, many of the views adopted a celebratory tone and highlighted certain aspects of their subject at the expense of others; the extraordinary was often presented as typical and the commonplace was frequently stereotyped in simple genre scenes. Hence, S. T. Gill’s drunken diggers ‘knocking down’ their fortune in the metropolis are today perceived to exhibit behavioural mores of the 1850s, the poignancy or subtlety of such scenes
understood by their contemporary audience often being lost on a generation whose knowledge of the gold rushes may be based on dramatic television portrayals. Gill’s scenes were by no means the only views of life on the diggings and more detached views, such as the drawings commissioned by McCoy or views of machinery published in periodicals like the Newsletter of Australasia, sat alongside precise photographic views by Richard Daintree and Charles Nettleton.

Such early photographs, often intended for display in exhibitions, concentrated on mining scenes and individual buildings depicted as triumphs of man over his environment. If the chronological progression of visual images is analysed, however, it can be seen that the vantage point often shifted dramatically over the next few decades. If Clunes can be regarded as typical, then Daintree’s 1858 views of the mines and Nettleton’s 1865 views of the town and its attendant mining debris, gave way to William Tibbit’s more tranquil watercoloured views of the 1870s, where untidy mullock heaps became grassy knolls and the mines more closely resembled a landscaped English garden than an industrial wasteland. Whilst this may have been an isolated idiosyncratic treatment, there was a definite shift in emphasis in the views of the late 1870s and ‘80s. When the Illustrated Australian News visited Clunes in 1882, their artist chose the mining works as his vantage point and portrayed the burgeoning civic and commercial centre, rather than the mines which produced its wealth. Poppet heads and stamping batteries were no longer highlights, their place had been taken by avenues of trees, the newly straightened creek (now free of sludge), grand public buildings and rebuilt two-storey commercial premises.

Not all illustrations met with universal approval. The influential Dicker’s Mining Record considered many photographs of colonial mines ‘destitute of taste’, especially when miners lined up like clowns, rather than being at their positions attending to the task at hand. Even the Deutsch lithographs of Ballarat’s mines (where sketches and sectional views of prominent mines were surrounded by illuminated statistics) were castigated by the Record as glorifying only the shareholders. Yet today, these could be regarded as perhaps the most evocative celebratory mining scenes ever produced in Australia.

The notion of anniversaries was a strong theme in Victoria’s gold mining history and as early as 1859, the eighth anniversary of gold discovery in Clunes was celebrated by a dinner dance at the Scandinavian Hotel, complete with toasts to Esmond, the first to publicise the find at Clunes. Such sentimentality was invoked in later decades with the erection of memorials and monuments, physical reminders of the early gold discoveries. The Welcome Stranger monument, erected at Moliagul in 1897, commemorated Victoria’s largest nugget, unearthed in 1869, and this was the progenitor of many later monuments. With the first generation of miners approaching old age, many of their models in both museums and exhibitions celebrated the skill of the model maker and their products, sometimes demonstrating a naive sentimentality.

As the nineteenth century progressed, exhibitions continued to be a major venue for the gold mining industry to celebrate. With each successive exhibition, Victoria’s tally of gold production swelled and Knight’s gilded obelisk
was replaced by larger and more impressive conceptual volumes. In 1880 for instance, a massive rhombic decahedron supported on four stout pillars, was needed to represent the one million, four hundred thousand kilograms of gold mined during 1851 to 1880. With each successive decade, mining became more heavily capitalised and the industry more formalised. By the exhibitions of the 1870s and '80s the small digger was largely displaced by a paid workforce. Towns and cities depended on the stability of local mining industry and regional displays became more prominent as each locality sought to consolidate its reputation. Consider the contrast between a single model of the Clunes battery, representing the entire colony in 1862 and the huge saddle reef model which crowned Bendigo's parochial exhibit in 1880 and proclaimed the importance of that field. A successful exhibition display was viewed as a stimulus to local industry as well as to local pride.

By 1880, the National Museum had reluctantly ceded its treasured mining collection to the newly established Industrial and Technological Museum. McCoy's policy of acquiring overseas models had ceased a decade earlier and the new museum made a desultory effort to collect models of mining machinery, which demonstrated new advances. With the passing of legislation in the mid 1870s, new models acquired by the Industrial and Technological Museum included safety cages and similar devices aimed at reducing the risk of accident.

Collecting mining models and equipment continued sporadically into the twentieth century. In London, the Science Museum continued to collect models of Australia equipment and new goldfields, such as Kalgoorlie, were highlighted with acquisitions. With the removal of the National Museum natural history collection from the University of Melbourne to a new city site, however, the mining collection went into storage, 'subordinated to stuffed possums' as one commentator protested. Melbourne's collection remained in storage until after the Great War, at which date it was over half a century old and of more interest as a curiosity and historical display. Models were lent to outside organisations - Luna Park had a gold display in 1932, Vacuum Oil Company borrowed a stamping battery model for its exhibit at the 1938 Royal Melbourne Agricultural Show, and the Blind Institute staged a gold revival display in 1931, at a time when the depression was forcing many men back to the goldfields.

The centenary of Victoria's separation from New South Wales was celebrated in 1951 by a jubilee train which toured the state and a 'gold' carriage contained many models from the former National Museum collection. Ironically, only a year later, a new Director of the Museum of Applied Science (as the Institution was then known), discarded a major portion of the mining collection. Although such a wanton act was motivated by a lack of storage space - the director referred to his action as 'an amelioration of the space problem' - the lesson for administrators contemplating de-accessioning is starkly clear.

With a revival of nostalgic interest in Victoria's history during the 1960s and '70s, new forms of celebration were spawned. The recreated goldfields setting of Sovereign Hill drew on the artifice of previous generations and built large models of buildings, many at a reduced scale, so designed to make visitors a giant in Lilliputian surrounds. It is perhaps fortunate that in the 1980s and '90s, new effort has been put into conservation of actual gold mining sites in the field, to quote Phillip Venning, a celebration of 'the importance of the real'.