Exhibiting Settler Geology: Canadian Mineral Collections at the International Exhibitions of the 1850s

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Abstract

This paper studies the Canadian mineralogical collections sent to the 1851 Great Exhibition in London and the 1855 *Exposition Universelle* in Paris. These collections were curated by William Logan, the first director of the Geological Survey of Canada, which operated as a leading institution in mineral exploration, colonial expansion, and settler statecraft in Canada. The 1851 and 1855 exhibitions of Canadian minerals in Europe helped develop and fund the large-scale transcontinental Canadian geological surveys that followed in the second half of the nineteenth century. In this paper, I argue that the exhibitions opened pathways for international investment and marked the beginning of the planetary scope of the Canadian mining industry today.

Keywords: mineral collections; Canada; Great Exhibition; *Exposition Universelle*; settler colonialism; extraction; nation-forming

Hewing Out a Nation

After the popularity of the Canadian exhibit at the *Exposition Universelle* in Paris in 1855, *The Times* wrote with awe that Canadians had been able to "hew out wealth and independence for themselves from primeval wilds" (cited in Murray 1999: 40). The metaphor of 'hewing out' is fitting, as the Canadian contribution included a large selection of mineral samples. The mineralogical collection that Canada sent to Paris that summer had the explicit function of painting a picture of potential mineral riches to be found in the emerging Canadian state. As the Canadian committee's report on the 1855 exhibition reads: "It (was) of absolute importance to perpetuate the remembrance of the Canadian Exhibition, and to make known to the world such information [...] to advance the progress of emigration, commerce, and industrial pursuits" (Taché 1856: 60). As I will argue in this paper, the Canadian mineralogical collections from 1851 and 1855 on the European stage hewed out a nation, carrying the promise of Canada as an industrialized nation rather than a colony in 'primeval wilderness'. The mineralogical collections functioned as proxies for wealth, promise, industry, and nationhood itself; moreover, they signaled an emerging interdependence between mining industries and the concept of a Canadian state.

Aimed at workers and potential settlers, as well as the British upper classes, the Canadian mineral collections of the 1850s crystallized the colony's economic potential in the European imagination. The Canadian exhibition in London garnered great interest for its minerals in particular. A guide to the exhibition that was distributed on-site noted that "working men should not miss the lessons of the Canadian courts where modern science and skill had subjugated nature with a rapidity unknown in any past age of the world" (Short 1967: 356-7). While the Canadian displays were meant to have an educational purpose for the working-class man, and for the British elites, they also offered a distinctly political message. The Canadian contribution to the Great Exhibition inspired such elation among the British gentry that the *Montreal Gazette* remarked that some 'gentlemen of standing' who were initially opposed to the colony of Canada and "would have been glad to be rid of [it]" amended their positions after

visiting the Canadian mineral exhibits, observing for example that "Canada was an example to England and a credit" (cited in Short 1967: 356).

The much-hyped 1851 Great Exhibition at London's Crystal Palace was followed by the 1855 *Exposition Universelle* in Paris. The Canadian contributions to both of these exhibitions were curated by William Logan. Logan served as the first director of the Geological Survey of Canada (GSC), which had been founded nine years previously in 1842. With the GSC he conducted surveys across what was then known as the Province of Canada, spanning parts of what is now Quebec and southern Ontario. Logan's choice of Canadian exhibits contained not only minerals but also technological and industrial products, as well as items intended to show off wealth and social standing. Alongside these items, a canoe was exhibited prominently in the Canadian exhibits. The origin of the canoe is not listed in any official records, but the *Illustrated Catalogue* of the exhibition notes that it was "brought through lakes and rivers twelve hundred miles to be shipped to England" and is described as "an example of native ingenuity" (Great Exhibition 1851: 164).

William Logan's first expeditions with the Geological Survey of Canada in the 1840s consisted of small-scale trips in which he and his assistant. Alexander Murray, collected rocks and made drawings of outcrops and rock formations. Only after the Canadian mineral exhibit at the 1851 Great Exhibition was the Geological Survey of Canada able to develop large-scale transcontinental geological surveys, in part because of the many distinctions Logan received for his work on these European exhibitions. After a parliamentary inquiry in 1854, Logan was granted a large increase in funding from the legislature. In other words, the enthusiasm generated by the exhibitions of the 1850s led to some of the financial, cultural, and scientific support for survey expeditions to the western part of the continent and far into the north (Zeller 1991; Harrington 1883; Government of Canada 1855).

In this paper, I argue that the Canadian mineralogical collection displayed at the European exhibitions of the 1850s marked a key moment in Canadian resource exploration. This argument builds on Suzanne Zeller's extensive work on the role of geology in colonization and Canadian statecraft, in which the practice of identifying and classifying rock formations contributed to the mapping and cataloguing of mineral resources. Zeller shows that this way of creating an inventory of the land gave rise to the idea of a transcontinental national existence and imparted to Canadians a sense of direction for the future (Zeller 1991; 2000: 9; 2009). This article takes the insights Zeller offers about geology and Canadian nation-building and hones in on the role of the international exhibitions of the 1850s in producing that future direction for the Canadian state.

The Canadian mineral collections sent to the European exhibitions of the 1850s are landmarks in Canadian settler geology, or a form of geology practiced with the explicit purpose of sustaining colonial settlement and creating a settler state. The science of geology was a key instrument of colonial expansion and development in the British Empire in the nineteenth century (Chakrabarti 2020; Stafford 1984; Zeller 1980; Yusoff 2019, 2024). Geological surveying expeditions and mapmaking created a knowledge base that infused the science of topography with the potential for mineral extraction.

Many historians and museum studies scholars have described the role of the international exhibitions of the nineteenth century in crafting ideologies relating to nation-building, heritage formation, colonialism, and industry (Bennett 1988; Greenhalgh 1988; MacDonald 1998; Auerbach 1999, 2016; Young 2009). Yet, few scholars have considered the role of mineralogical collections in these international exhibitions. In what follows, I show how the systematic ordering of geologic material made the potential for resource extraction in the British North American Colonies legible to the European public. Mineralogical collections tend to have an ordering or a structuring power. They are a way of narrating land, and a sense of belonging to that land, through an extractive lens. In this article, I will use Tony Bennett's foundational text 'The Exhibitionary Complex' (1988), and more specifically his understanding of museums and international exhibitions as events that were pivotal in the formation of the modern state. Bennett's description of the civilizing agency of public exhibition – an analysis that understands the public undergoing a process of interpellation as civilized subjects – helps to describe the interactions between geological knowledge, state power, and prospective settler citizenship that occur in the mineralogical collection's European exhibits.

The Great Exhibition of 1851: Winning Hearts and Minds

The Great Exhibition of 1851 was commissioned by Prince Albert and Queen Victoria to promote commerce and industrial education. Running from May to October 1851 in the Crystal Palace in Hyde Park, which was built specifically for the purpose (Auerbach 1999: 8), the exhibition was haphazardly led by Prince Albert, and produced a mix of exhibits. Receiving approximately six million visitors, the Great Exhibition was a landmark event in Victorian Britain that delivered technological innovations as well as exotic and orientalist spectacles. Exhibits catered to a burgeoning Western European middle class that was obsessed with the comforts, crafts, and economic prospects promised by modernity. On display were instruments, machines, and mineral samples, as well as silk tapestries, clothing, furniture, fabrics, machines for agriculture, soil samples, carriages, paintings, sculptures, and 'oddities'. Several nations, colonies, and territories were invited to create displays in their own sections: the British colonies of Canada, Australia, New Zealand, and India were represented, as well as Germany, Turkey, Russia, France, Belgium, China, and others. In a report following the opening, The Times described the event as "the first morning since the creation of the world that all peoples have assembled from all parts of the world and done a common act" (cited in Auerbach 1999: 1-2).

The Great Exhibition of 1851 and the *Exposition Universelle* of 1855 have often been hailed by historians and museum studies scholars as a culmination of the grand narratives of modernity, industrialization, and globalization – narratives that conditioned the nineteenth century, offering a public spectacle of nationalism on the one hand, and exoticism on the other. Scholars have argued that these two exhibitions created prototypes for the modern museum (Greenhalgh 1988, 1989; Purbrick 2001). The exhibitions have also been described as engines for consumerism, exercises in nationalism and cosmopolitanism, and embodiments of the modern middle-class dream of comforts and luxury (Young 2009).

One of the economic incentives of the Great Exhibition was the introduction of the latest producers and manufacturers, and the introduction of raw materials and their applications that were being adopted within contemporary industrial practices. This occurred at the height of British industrialization, amid a growing sense of possibility and optimism about national industries becoming global. As noted by commissioners Prince Albert and Henry Cole – the latter a key figure in the organization of the Great Exhibition, who later became instrumental in the development of museums in the UK – an explicit purpose of the Exhibition was to demonstrate to British manufacturers the advantages of embracing free trade. Paul Young describes the Great Exhibition as the epitome of a Victorian new world order. It helped usher in a grand narrative of capitalism as an integrated modern liberal global economy that was "capacious and cogent enough to enable those with a range of political leanings, social backgrounds, and cultural influences to embrace and elaborate it" (Young 2001: 6). Young describes the exhibition as a humanist undertaking, expressing Victorian anthropological sentiments that were both highlighting difference – as applied to the orientalist tenets of the Indian and Turkish exhibits – while presenting those tenets together with Western European exhibits under the umbrella of a 'Great Family of Man' that was united through industry and free trade.

This modern cosmopolitanism helped to cover up the realities of labour exploitation and the colonial dependencies that made that free trade possible. As Louise Purbrick argues, the Great Exhibition presented an ideal industrial world (2001). An overwhelming quantity of products were presented alongside the machines that produced them. For example, a proto-agricultural combine was shown next to the wheat it processed, while spinning and weaving machines were presented alongside the array of tapestries and clothing they produced. The exhibition illustrated the achievements of industrial technology while omitting the conditions under which the source material was gathered (Purbrick 2001: 2-3).

Just as the presentation of materials obscured the forms of power that produced them, so did the architecture of the exhibition. In a Foucauldian analysis of the international exhibitions of the mid-nineteenth century, Tony Bennett describes an 'exhibitionary complex', a mode of deploying knowledge and power that use exhibitionary architecture to provide what at the time were relatively new political nation-states with an ideological backdrop. Bennett

demonstrates how museums, galleries, and exhibitions played a central role in the development of the modern state, and how they functioned as educating and civilizing agencies (Bennett 1988: 79). This civilizing agency produced 'uncivilized' peoples as objects of knowledge through exhibitions of their dress, customs, and traditions in a process of othering. At the same time, the Western European visitors to the exhibitions were constructed as subjects of knowledge or knowing subjects. Thus, the exhibitionary complex exerted a form of political power in its 'ability to organize an order of things and to create a place for people in society in relation to that order" (80).

In the Canadian context, this civilizing agency reverberates in the 'boosterism' that was practiced through the exhibitions which were organized to "win the hearts and the minds of the people" (Bennett 1988: 80). In other words, the exhibitionary complex of geology played an important role in the creation and sustenance of the Canadian settler colony by placing the audience – the visitors of the exhibition – within a narrative of progress. Visitors were invited to be participants in both the development of the Canadian resource industry and the Canadian state. What Bennett's analysis offers is a way of looking at the international exhibitions of the 1850s as symbols of how the empire thought about itself and wanted to represent itself. Thus the 'exhibitionary complex' provides a crucial lens through which we can understand the dynamics of display within international exhibitions as a major expression and influence upon mid-nineteenth-century nation-building, resource extraction, and race and class politics.

Canada at the Exhibition

The official exhibition catalogue described the minerals in the exhibition as a presentation of Britain's efforts to "develop the mineral wealth of this colony' and the 'successes which have attended the explorers" (957). Unfortunately, there are no visual representations of the Canadian mineral collections at the international exhibitions. There are, however, many written records in exhibition catalogues and reports produced by the Canadian committee. These documents described the minerals sent to both the 1851 and 1855 collections. As curator, Logan wrote an extensive description that listed the minerals and the locations of the deposits. Among the minerals listed are the following:

- Specimens of magnetic specular and bog-iron ore
- Ilmenite and titaniferous iron
- Sulphurets of zinc, lead, copper, nickel, and molybdenum
- Native silver and gold
- Bog manganese
- Iron pyrites
- Uran ochre
- Cobalt bloom
- Chromic iron
- Dolomite and magnesite
- Iron ochres, barytes, and other stone paints
- Lithographic stone
- Agate, jasper, Labradorite, and ribboned chert
- White quartzose sandstone, for glass making

- Soap-stone, asbestos, plumbago
- Phosphate of lime, gypsum, and shell marl
- Millstone rock, whetstones, and Tripoli earth
- Roofing slates, granite, serpentine, and various qualities of marble and limestone
- Peat petroleum and mineral pitch

(Official Catalogue 1851: 958)

Iron deposits were put forward as the main source of economic and industrial potential for the colony. Indeed, Logan prioritized geologic materials for construction and farming, which included iron, roofing slates, marble, limestone, granite, stone paints, insulation, and fertilizer. The abundance of this material for building housing, infrastructure, agriculture, and crafts was promoted as an indicator of the potential of the colony and as an incentive to attract European settlers.

Minerals in the Great Exhibition were collected during Logan's early survey expeditions, which took place during the period between the founding of the Geological Survey of Canada in 1842, and Logan's curation of minerals for the exhibition in 1850. Each of these survey expeditions lasted a full summer and represented the culture and interests of exploration geology at this time. Relying on Indigenous labour and knowledge, Logan described and measured outcrops, rock faces, and cliffs in search of carboniferous rocks (Harrington 1883). Perhaps unsurprisingly, the conditions of labour for those Indigenous people involved, as well as other particulars about them as individuals, including their skills, their homes, or their connection to their land, are not detailed in his account, and barely present in GSC reports. Logan was unable to find coal in the places he had expected it, including Eastern Townships and the Gaspe peninsula. Since this search for coal proved fruitless, the imagined Canadian coal-powered domestic industry had to wait.

Perhaps it was in part because Logan did not find coal that the governors of the Province of Canada were motivated to take steps toward nation-building, to move from a resource state to an independent nation. One argument leveraged for the 1867 Confederation (the union of the British North American colonies) was Logan's discovery of carboniferous rock at the Joggins Fossil Cliffs (Rygel and Shipley 2005: 89).[1] The Province of Canada had iron ore, but at this time during the nineteenth century coal was needed to refine it. Therefore, to reach the level of industrialism spearheaded by Britain and the USA in the first half of the nineteenth century, and to secure a place in the transforming global economy, the British North American colonies needed each other – the Province of Canada for its extensive metropolitan connections and knowledge institutions as well as its iron ore, and the Maritimes for their fuel.

As a result of these circumstances, the Canadian exhibitions of minerals in Europe "involved a very practical purpose", as Logan put it. In his July 1856 address to the Natural History Society in Montreal, he wrote:

> seeing that what may be called mineral manufactures had extended but little in this country, I rejoiced in the opportunity offered of placing before the eyes of European judges some of the results of the Geological Survey, persuaded that although we could not show that we possessed the skill requisite to give all our metallic ores and useful rocks the various ultimate forms of which they were capable, we should at least convince the world that Canada contained in her subsoil vast stores of mineral materials that would hereafter become available for the support of native industry (Harrington 1883: 321).

Because Logan's collection was intended to fulfil the explicit purpose of Canadian nation-building, attracting settlers, and creating a domestic industry, he described it as 'practical' to set it against some of more phantasmagorical forms of geology that preceded it (Hearth and Robbins 2020: 4-5, Vogel 2015: 302-3). Logan's collection reflected the new genre of 'economic geology' that arose in the nineteenth century. Economic geology was seen around

that time as the 'practical application' of knowledge of the earth and extended beyond the mere study of rocks. Geologic surveying and practice in the British Empire included feasibility studies, as well as an evaluation of the possibilities for extraction and its cost.

For instance, in the Official Catalogue (1851: 956), Logan pays considerable attention to the location of mineral deposits, the underlying geologic structures, and to their proximity to towns and waterways. In other words, Logan's early geological surveys considered the spatial context of the construction of the means of extraction, and the logistical dimensions of creating an extractive industry. This attention to infrastructure was important for settler geology because in Canada, by contrast to Britain, mineral deposits could be difficult to reach, and building the infrastructure to get them out and into an industrial value system would be expensive and labourious. Today, the marriage of extraction and infrastructure still steers Canadian mineral development. For instance, in Ontario's proposed Ring of Fire project, a series of mining projects for the extraction of 'critical minerals' – minerals deemed necessary for the digital economy and energy transition technology – is a development that hinges on the construction of a main road through fragile peatlands that runs through the territories of several First Nations, such as Webequie First Nation, and Marten Falls First Nation.

During the Canadian exhibitions of the 1850s, however, the dominant narrative was characterized by a focus on potential wealth rather than attained wealth. These exhibitions carefully balanced objects that represented colonial exploration alongside material proof of the accompanying comforts of civilization and society that lived up to Western European bourgeois standards of that time. The Canadian sections showed both Indigenous artefacts as well as icons of British civilization – signaling diversity and harmony among the colony's inhabitants as part of a proto-multicultural narrative – alongside the colony's mineral potential. In fact, this period was marked by the intensification of violent invasions of Kahnakwà:ke for example (Rück 2021). As Queen Victoria commented:

> The manufactured articles sent to the Exhibition from Canada showed that the inhabitants, in general, pay more attention to the useful than to the ornamental; and it was somewhat curious to see the mixture of the works of a savage population with the clearest evidence of English civilization (Gibbs-Smith, 1950: 78).

The Queen's iteration of a binary between civilization and savagery not only testifies to the racism woven into colonial conquest but also to the relative surprise that the Canadian exhibit created in its audience that the resource colony was able to provide British comforts and 'English civilization'.

One obvious purpose of the Canadian exhibit was to create an image of the colony that appeared both profitable and comfortable for potential settlers. An anonymous pamphlet published during the exhibition states that "the minerals of Canada are both varied and important and offer considerable inducements to the scientific settler" (A Few Words Upon Canada 1851: 5), and further describes how the Great Exhibition offered a way for British settlers to see the potential benefits of settling in Canada with their own eyes (3). This perspective is crucial. Audrey Short explains the difficulty of attracting immigrants to the British North American colonies during the mid-nineteenth century. Europeans considered these territories backward and uncivilized, a resource frontier devoid of the entertainments and comforts that the Victorian middle class expected (Short 1967: 360). Understood through the lens of the exhibitionary complex, Canada's mineralogical collection was about rendering Canada visible and orderly, and at the same time rendered visitors to the exhibition as subjects rather than objects of knowledge, as potential participants in the colonial project.

The 1851 Great Exhibition was the first occasion in which Canada was included and represented as a unified nation, even if this was not the case. Stuart Murray argues there was a clear sense of unity and identity derived from the particular modes of land use in Canada at this time: the production of raw materials, agricultural civil society, and the political economy that wove together raw materials, workers, the family farm, and the British Empire (Murray 1999: 12). Murray argues that the Canadian collection at the Crystal Palace Exhibition, with its raw minerals, agricultural equipment and garments, canoes, and moose heads, derives abstract notions of political selfhood from the economic shift from the production of raw materials to a civil society based on self-sustenance and industrial development (12). Sylvi Johansen

has argued that the Great Exhibition equated industrial development with the development of the state and nation, showing how "industrial production was not a strictly sectoral activity but was beneficial to everyone not only in Britain but the whole world" (Johansen 1996: 61). Equating the technologies and products of industry with carefully curated iconographies of nationhood, industrial development became synonymous with national development.[2]

Expansion of the GSC after Logan's successes and its museum legacy

The Canadian contributions to the Great Exhibition of 1851 and the *Exposition Universelle* in Paris in 1855 were incredibly popular. In 1856, after Canada's success at the 1855 *Exposition Universelle* in Paris, Logan was knighted by Queen Victoria for "services rendered at the Exhibitions of 1851 and 1855" (Harrington 1883; 308). Emperor Napoleon III made him a Chevalier of the Legion of Honour, and Logan received the Wollaston medal from the Geological Society of London. These European honors and awards changed Logan's standing in Montreal society and secured the Geological Survey of Canada's future. The Report on the Select Committee on the Geological Survey cites two reports from England and France that recognized the London exhibition as "showing the estimation in which our survey is held by men of science in England and France". (Government of Canada 1855: xi) For instance, the report from England explains that "in Canada especially, there has been proceeding for some years one of the most extensive and important Geological Surveys now going on in the world". Similarly, a report from France states that "of all the English colonies, Canada gives us the most interesting and most complete. We can even say that it is superior to the mineral exhibitions of all the countries which have sent products to London" (my translation). The report then goes on to describe the Committee as 'mortified' by the lack of availability of this knowledge to the public, and recommends increased funding for the Geological Survey, as well as for the creation of a map of the geology of Canada and a public museum. Indeed, in 1854 the Legislative Assembly in Canada officially granted Logan and the GSC funds to extend and expand the survey, to maintain a public museum in Montreal, and create a comprehensive map, the Geology of Canada (1863).

These mapping projects ensured that the future of the Canadian economy and society could be based on an itemized knowledge base of the land and its contents (Murray 1999: 21-22). In other words, post-1855, the settler geology practiced by the Geological Survey of Canada became a driving force in continued colonization for extractive purposes; what Suzanne Zeller called Logan's 'inventory science' became a key facet of Canadian self-understanding. Logan's geological inventory, she argued, "crystallized the abstractions…of a British North American nationality; it kindled the faith that this new nationality could actually be realized" (Zeller 2008: 52). The idea of a transcontinental nation, Zeller contended, came into focus through the establishment of a nationwide geologic inventory.

The Montreal museum, which consisted of a small collection on the third floor of what at the time was the Geological Survey of Canada's headquarters on Rue Saint Jacques, was intended to speak to the imagination of Montreal settler citizens about the land that they had occupied. This particular collection was motivated by economic geology, in so far as it advertised potentially available minerals, but it also had a more poetic function. In a letter to his assistant, Murray, in 1846, Logan argued for the need to create a museum after failed attempts to find evidence of coal:

> The object will be to produce an effect on the members. With the same view, I must get a house or a set of rooms for our collection. Managing this, we must put our economic specimens conspicuously forward; and it appears to me that in the exhibition of these, large masses will make a greater impression on the mind than small specimens. A sort of rule of three processes seems to go on in the minds of the unlearned when they examine minerals in which they are interested. They are much addicted to judging of the value of the deposit by the bulk of the specimen shown. (Harrington 1883: 180)

Logan went on to instruct Murray to send to Montreal as soon as he could a "thundering piece of gypsum. And let it be as white as possible". Economic geology at the time needed

to hone in on the spectacular and cosmic character associated with geology. A 'thundering piece of gypsum' would be more impressive in a public setting than a small piece of iron ore, regardless of the economic potential it signified. This is part of what Bennett described as the tendency towards the 'auto-intelligibility' of an exhibition that abounded in the second half of the nineteenth century (Bennett 1997: 26-7). He describes a new exhibitionary principle that emerged around this time in which displays were intended to be immediately legible to a large public who do not require previous knowledge or training to understand. This 'thundering piece of gypsum' might, through Bennett's framework, 'speak to the eyes' of a general public and deliver some form of instruction or amusement (29).

These principles of transparent display had a political function. Logan's recommendation for the development of a museum of economic geology would, in his words, "not only display the rocks and minerals of the Province but would also show the human purposes for which they might be used" (cited in Vodden and Dick 2007: 10-11). The museum was intended to excite public interest in the potential of domestic industry, but also to have an educational purpose. He described his museum as a "school of mineral arts" that would help stimulate the development of the Province (10-11). Thus the rock collection of the GSC became an important cultural technology for crafting citizenry, national identity, and a workforce.

In 1877 the Montreal Geological Museum was moved to Ottawa, the new Canadian capital. And in 1910 the Victoria Memorial Museum was built to house the Geological Survey of Canada's mineral collection. Problems were encountered in the opening of the museum because the heavy sandstone building was built on slippery clay – an architectural problem that, ironically, would have easily been avoided by conducting a geological survey of the site (Vodden and Dicks 2007: 24). Nevertheless, the Victoria Memorial Museum building now houses the Canadian Museum of Nature, and much of the Geological Survey of Canada's collection has moved to the archives of the Canadian Museum of History and the new Geological Survey of Canada building on Booth Street. The Geological Survey of Canada did not officially sever institutional ties with the Ottawa museums until the 1950s. For a hundred years, mineral exhibitions played an important role in the imagination of the Canadian state, representing the joint development of geological science, mining, and Canadian identity.

Conclusion

The Great Exhibition represented an ambitious ordering of objects that implied a public (a 'we'); it told a story of the world and promised a certain future – one in which we are perhaps now living, or one which has left us to deal with consequences of its growth. The Great Exhibition of 1851 expanded the perceptual horizons of the Geological Survey of Canada. It testified to the survey's reliance on mineral displays to support the economic and colonial interests of the nation. Canadian national and economic development relied on the Geological Survey of Canada's public life and, in turn, the public nature of the exhibitions became an institutionalized feature of the Geological Survey of Canada.

The Great Exhibition of 1851 was an event of cultural contact that brought together the metropole and the colony, the colonizer and the colonized, into one analytic field. The function of the mineral display was to establish the rocks as stand-ins for mineral potential, nationhood, and political subjectivity. In considering how Canada developed an international mining industry, the mineralogical collection played a central part. This helps to explain how Canadian identity remains so wrapped up in the mining industry, and how shifting away from mining – fossil fuels or otherwise – will require a massive disentangling of one of the core operations of this country.

Notes

[1] Government of Canada, 'The History of the Geological Survey of Canada in 175 Objects', Government of Canada 2017. https://science.gc.ca/site/science/en/educational-resources/history-geological-survey-canada-175-objects, accessed 23 August 2024.

[2] This settler-geological imaginary of place-making can still be found in mining towns and communities around Canada and is promoted by local mining or geological museums.

For instance, in Cobalt, Ontario, settler geological place-making is apparent in the town motto, 'nestled in the heart of the Canadian Shield'. The geological is supposed to signify wealth and warmth, suggesting that settling in the colony is a move to a more enlightened, scientific, modern place, even though (or because) it is based on an ancient, epochal solid rock foundation.

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