

**Photography and the Extractive Gaze:
Visual culture and natural resource extraction on the Canadian Shield, 1900-1930**

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A dissertation submitted to
the Faculty of Graduate Studies
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

Graduate Program in Art History and Visual Culture
York University
Toronto, Ontario

January 29, 2020

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Abstract

While the Anthropocene is a relatively new concept, communities in extractive zones have already experienced the transformations, changes, and destruction brought by human activity and industrial development. Through archival research, my dissertation investigates how vernacular and survey photographs of mining from the early 20th century circulated to promote and occasionally challenge resource extraction. Taking as its case study the Timiskaming region on the Precambrian shield, I explore how photography chronicled the transformation of territory under extractive capitalism as photographs invited viewers to envision new futures, where commerce and art would come together to drive economic and industrial development. These photographs formed a site of knowledge production that shaped how people in the early 20th century understood industrial development. I situate contemporary experiences of climate change within these longer historical trajectories to trace the social and environmental legacies of resource extraction.

Once extracted from the earth, raw natural resources are transformed into consumer goods, which bear little evidence of the complex networks of human and non-human labour that brought them into being. Environmental art historians have addressed this disconnect by examining how human cultural production has unfolded within a broader ecological context, challenging the separation of art from the natural world. This dissertation makes a material link between silver and photography during a period where the demand for silver bullion exploded due to the rise of amateur photography. My research identifies connections between photographic technologies, visual form, and political activism. I conclude that photography can bring the often-invisible processes of extraction into view and document the historical production of environmental trauma. I read the histories that the archival photographs contain, and the histories that were foreclosed, as documents that can teach us something about hope, healing, and living in the Anthropocene.

Acknowledgements

I would like to express my deepest appreciation to the many people in my life who made writing this dissertation both possible and pleasurable. More than anything, this dissertation emerged from the guidance, care, and thoughtfulness of Sarah Parsons. The questions she posed and her insightful suggestions have greatly enriched my research. Her ability to find a solution to all challenges has been truly inspiring. Kevin Coleman provided crucial support and productive feedback while encouraging me to trust my voice. For his mentorship, friendship, and enthusiasm, I am eternally grateful. Anna Hudson's engagement with this project has been thoughtful and expansive; her attentive feedback has pushed me to consider all possibilities. The nucleus of this project emerged from insightful conversations with Ian Radforth several years ago at University College, and I am deeply indebted to his mentorship.

Several archivists and curators provided essential insight and assistance: Adrianna Link, Patrick Spero, and Brian Carpenter at the American Philosophical Society; Miranda Mims and Melinda Wallington at the Rush Rhees Library; Stephanie Hofner at George Eastman House; John Weatherburn at the TW Foster Archive; Peter Greyson at the Cobalt Mining Museum; Donald Rance at the Edward P. Taylor Library & Archives; and Agatha Barc at E.J. Pratt Library.

My research would not have been possible without the support of the Social Sciences and Humanities Research Council, the American Philosophical Society, York University's Zdenka Volavka Research Fellowship, Susan Crocker and John Hunkin Scholarship in the Fine Arts, and Susan Mann Dissertation Scholarship.

I am grateful to the participants of the workshop *Capitalism and the Camera* for generously engaging with what became Chapter One of this dissertation. My thinking on post-

extractive futures was refined during a research residency at the Center for Creative Ecologies at the University of California Santa Cruz. I am deeply thankful to T.J. Demos, as well as to A. Laurie Palmer and the members of the eco-socialist working group for providing a welcoming and politically engaged context to write and think. Finally, I would like to thank the photography department at MoMA, in particular, Roxana Marcoci for her mentorship.

I owe many thanks to the team at Ni Dakinan at Timiskaming First Nation. This research has been shaped by their generous world-building work and their patience in teaching me to identify at least a few varieties of mushrooms.

In my PhD cohort, I found a chosen family who provided input, cross-pollination, and encouragement. To Andrew Gayed, I am continually inspired by his warmth, enthusiasm, and drive; to Vanessa Nicholas, I would be lost without her remarkable rigor, mystical wisdom, and her depth of care. It has been such a gift to write with, travel with, and laugh with both of you. Jason Cyrus' energy and radiance has been indispensable; Erica Toffoli for her incredibly careful reading of my work and grounded advice; conversations with Vanessa Lakewood have been one of the most nourishing parts of my journey. And, of course, Marina Dumont, whose generosity of spirit provides a consistent reminder of the simple pleasures of life and research. In Sam Spady, I found a collaborator who has consistently enriched my thinking about images and post-extractive futures. The time we have spent reading, thinking, writing, and dreaming together has been a highlight of this journey.

Through the creative and activist practices of my friends, I am continually reminded of the strength of solidarity, the joy of existence, and the potentials of worlds yet to come. Thank you to Anastazja Krynska, Ashley Culver, Caroline Duffy, Dougie White, Johannes Krause, Jovana Randjelovic, Kalie Richardson, Martabel Wasserman, Marnie Bjornson, Mary Soroka, Megan

Davies, Michelle Sachar, Mike O'Brien, Nina Gheihman, Nathan Jackson, Patrick DeDauw, Stephanie Coffey, Stephanie Nakitsas, Steven McClellan, and Simon Cheeseman. And, especially, to Ivana Dizdar, for everything. There's so much more I could and should say about you individually, but for now, I will just say thank you for your collective wisdom, creativity, and the light you have brought into my life. I love you all.

Dawn Burns has ensured everything ran smoothly; Amber Joliat and the community at Misfit have provided a home away from home; Julia Wawrzyniak-Beyer has provided exceptional guidance; and the creative reimagining of labour's histories and futures at the Workers Arts and Heritage Center has been a continual source of inspiration.

Finally, there is no way to adequately thank Brit Griffin, Charlie Angus, Lola Griffin-Angus, Mariah Griffin-Angus, Anne Angus, and Alex Bird. I found myself in a rare and wonderful position where my family patiently read works in progress, contributed to the ideas that inform this project, and complicated, challenged, and expanded my thinking. More significantly, they remind me every day of the importance of community, love, and organizing. To Mr. Charles, thank you for the years of emotional support, intellectual growth, and the joy you bring to day to day life. I love you all more than you will ever know.

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Introduction: Mining the History of Photography

The word photography—from the Greek *photos* (light) and *graphos* (writing or drawing)—places light as central to the ontology of photography. This initiates a narrative in which the photograph is created when the shutter opens and light catalyzes a chemical interaction during which the scene is recorded as a latent image. The exaltation of light ties into the promise of photography to illuminate that which is hidden. Any history of light, however, is also a history of shadows; a photograph can obscure as much as it reveals.

The image itself emerges in the darkroom where the latent image is immersed in a chemical bath and the exposed silver halides are chemically reduced to elemental silver. It is these blackened traces of silver that make the image visible on the film. In this sense, photography is light drawn in silver. To place silver, rather than light, as a key component of photography's ontology emphasizes the labour of the darkroom instead of the mechanical reproduction of the camera. Photography's narratives of mechanical reproduction have a shadow history of labour: the miner, the chemist, the developer, the retailer, the photographer.

Photography's connection to silver, and therefore silver mining, demonstrates another kind of history that complicates the story of photography as either a history of technology or a history of art. [fig. 1] In this dissertation, I use silver and its light-sensitive properties as an entry point to think about photography through the lens of labour, industrial processes, and production. The material foundations of photography are deeply entwined with mining. An emphasis on metals reorients attention to geological time and the Anthropocene,¹ centering the destructive ecological effects of human industry while extending ethical considerations beyond human structures.

¹ The term the 'Anthropocene' was first used by the biologist Eugene Stoermer and popularized by the chemist Paul Crutzen to describe an era in which many geologically significant processes have been profoundly altered by human activities, what can broadly be described as

Extractivism, the process of extracting valuable natural resources from the Earth to export for sale in global markets, has been identified as one of the driving forces of the environmental crisis facing the planet. Extractive industries are responsible for half of the world's carbon emissions and more than 80% of biodiversity loss.² Despite the increasing awareness of the impact of extractivism in contributing to climate change, the rate of extraction is rapidly increasing and this number continues to grow at the rate of 3.2% per year.³ Once extracted from the earth, raw natural resources are transformed into consumer goods, which bear little evidence of the complex networks of human and non-human labour that brought them into being.⁴ Scientist Stefanie Hellweg describes how consumer products hide the cost of resource extraction and processing, observing that “resources are hiding behind products. By focusing on them [extractive resources], their tremendous impact became apparent.”⁵ As Robin Kelsey notes, studies of photography and ecology emphasize the representation of environmental issues, but

anthropogenic climate change. In 2016, the Anthropocene Working Group formally designated the Anthropocene an epoch. In 2021, the proposal will be presented to the International Commission on Stratigraphy, which oversees official geologic designations.

² Extraction accounted for 53% of the world's carbon emissions – even before accounting for any fuel that is burned. “Global Resources Outlook 2019: Natural Resources for the Future We Want.” *United Nations Environment Programme*; International Resource Panel (2019) <https://wedocs.unep.org/handle/20.500.11822/27517>

³ While the population of the world has doubled since the 1970s, resource extraction has tripled. “Global Resources Outlook 2019: Natural Resources for the Future We Want.” *United Nations Environment Programme*; International Resource Panel (2019) <https://wedocs.unep.org/handle/20.500.11822/27517>

⁴ Jonathan Crary describes the “oppressive forms of human labour and environmental ravages on which our fantasies of virtuality and dematerialization depend.” (24/7: *Late Capitalism and the End of Sleep*, 49).

⁵ Hellweg is the co-author of a comprehensive study produced by the United Nations on climate change. Quoted in Jonathan Watts, “Resource extraction responsible for half world's carbon emissions,” *The Guardian*, March 12, 2019. Accessed on May 8, 2019.

they rarely explore the material effects that photography has on the environment.⁶ What human and environmental costs hide behind the photograph? [fig. 2]

In 1989, *The New York Times* described how “Pollution by Kodak Brings Sense of Betrayal.” Detailing how the communities around Eastman Kodak Company’s Kodak Park Plant in Rochester, NY were exposed to high levels of chemical contamination, the article lays out the environmental consequences of industrial photographic production. In response, Ron Roberts, a Kodak spokesman, suggested that the widespread understanding of photography as dematerial was part of the problem.⁷ Roberts suggested “We’ve never been thought of as a chemical company - we just made the yellow boxes, so there’s an element of surprise and unfamiliarity.”⁸ Despite the public perception of photography as something mechanical and, in many ways, dematerial, between 1980 and 2000, Eastman Kodak Company produced more toxic emissions than any other company in New York state.⁹

The emissions and pollutants—including methylene chloride, acetone, methanol and dioxin—that were released by the Kodak Park Plant into the local ecosystem are a tangible and

⁶ Robin Kelsey, “Photography and the Ecological Imagination,” In Karl Kusserow and Alan Braddock, *Nature’s Nation: American Art and Environment* (Princeton, NJ: Princeton University Art Museum, 2018) 394.

⁷ Dematerialization describes the “absolute or relative reduction in the quantity of materials used and/or the quantity of waste generated in the production of a unit of economic output.” Studies have shown that in recent decades, much less physical material has been required to fuel economic growth, despite rising populations. For example, digital music subscriptions have largely displaced the physical object of the CD or vinyl record. This entails a broader shift from products to services. (Cleveland and Ruth, “Indicators of Dematerialization and the Materials Intensity of Use,” 16).

⁸ Lisa W. Foderaro, “Pollution by Kodak Brings Sense of Betrayal,” *The New York Times*, March 8, 1989.

⁹ An \$185 million lawsuit was filed against EKC by Rochester residents in 1998. In 2014, the then bankrupt company settled with the Department of Justice’s U.S. Attorney’s Office for the Southern District of New York and the Environmental Protection Agency. The state of New York assumed half the costs for the remediation.

easy to trace effect of photographic production. However, products produced in EKC factories required massive amounts of raw natural materials. As a result, EKC also formed a complex network of links between extractive sites and Kodak Park in Rochester, New York. By 1929, for example, Kodak consumed hundreds of thousands of pounds of steel, brass, aluminum and leather for camera manufacturing while more than five million pounds of cotton were used in nitrocellulose film. This reliance on primary resource extraction has significant environmental consequences.

Despite widespread narratives of dematerialization in contemporary society, materials and their extraction remain a key concern, both environmentally and politically. However, this material truth is often overlooked in more general contemporary discourses around photography, which we often view through the screen of a smartphone and, therefore, consider the image to be dematerial.¹⁰ In this context, an emphasis on the materiality of production is significant. Rematerialized works of art draw attention to “the hard stuff out of which our world is built and the ‘shaping power’ that gives the world form.”¹¹ By contextualizing materials and materialisms within the history of extraction, new insights are gleaned into the ways in which extraction is embedded in our day to day lives and artistic culture.

Underlying the ease by which images that advance environmental activism are disseminated is the pressure to extract more resources from compromised landscapes in order to

¹⁰ Despite widespread narratives of dematerialization in contemporary society, materials remain significant in contemporary art and criticism. Ten years after Lucy Lippard and John Chandler described the dematerialization of the object that arose with conceptual art and the privileging of ideas over objects, the artist collective General Idea’s *FILE* magazine described how artists were returning to materiality and objects. As they concluded, “dematerialization was a kind of flight from reality, however utopian its goals, and the return to materials could now be critically explored.” General Idea’s discussions on rematerialization are described by Alex Kitnick in “A Questionnaire on Materialisms.” *October* 155 (Winter 2016): 64-66

¹¹ Kitnick, “A Questionnaire on Materialisms,” 66.

facilitate the desire to document our world. One of the great difficulties of confronting climate change is our own deep involvement in the activities that have led to this crisis. A critical exploration of the relationship between the materials from which these objects are made, and the social world within which they are created and function is essential. Connecting photography to its material foundations in mining directly links questions of environmental justice to art, opening up new avenues for environmental art history.

My dissertation establishes how photographs of resource extraction from the early 20th century circulated to promote, and occasionally challenge, industrial development and resource extraction. Early photography was an expensive and technically challenging hobby. However, as early as 1861, photography was identified as a major industry by Karl Marx, situating photographic production firmly within the economic and social changes brought by industrialization.¹² The parallels between photographic and industrial processes, which are “expected to reproduce in standardized, exact and ‘objective forms,’”¹³ suggest that the historical place of photography can be situated within modern forms of production. The standardization of photographic production was first implemented by Eastman Kodak Company (EKC). A series of technological innovations by EKC pioneered a simplified form of photography, streamlining the process of taking and developing photos.¹⁴ While EKC was only one of many organizations and

¹² Steve Edwards writes that Marx included photography in his list of industries, arguing that photography’s historical place lies within the new forms of production that emerged with industrialization. Steve Edwards, *The Making of English Photography: Allegories*. University Park, PA: Pennsylvania State University Press, 2006), 2. For further analysis of the connections between Marxist thought and photography, see Daniel Novak, “Labors of Likeness: Photography and Labor in Marx’s Capital,” *Criticism* 49, No. 2 (Spring 2007).

¹³ Novak, “Labors of Likeness,” 130.

¹⁴ For example, EKC introduced dry plates in 1880, transparent film in 1885, the first Kodak with pre-loaded roll film in 1888, nitrocellulose film base in 1889, daylight loading in 1891, the one-dollar Brownie Camera in 1900, and daylight developing in 1902.

individuals exploring the potential of photography, it was the first to recognize its potential on a large, vertically integrated industrial scale.

However, while both photography and the factory were “expected to reproduce in standardized, exact and “objective forms,”¹⁵ the reality was more complex. For example, Marx’s analysis of the industrial production of photographs, and, by extension, their status as commodities, is nuanced by his subjective relationship to photographs as image-objects. The anthropologist Elizabeth Chin reflects:

He treasured his three small pictures in their frames, too, probably without thinking to damn himself or measure his culpability in the uglier parts of how they came to be. He kept these photographs with him all the time: one of his father, one of his wife, a third of his daughter Jenny. At night did he let them nestle together in his breast pocket? If he did, did he think of the photographer’s assistant breathing noxious fumes as the faces of Marx’s beloved family revealed themselves on the chemical-bathed paper? Or did he take the photos out and place them beside his bed so that they might sit closer to his dreams? His memories of those he loved was not enough. Their photographs, in their frames, travelled with him even into death, because he needed them and the comfort they provided, bearing witness to the love he bore them. His close colleague and friend Friedrich Engels placed those three pictures in their frames in Marx’s coffin before he was buried. It was the love that mattered, not the objects.¹⁶

As Chin reminds us, Marx decried the contradictions and exploitations of the social system that made things and gave them value, not the objects themselves.¹⁷ He highlighted the human pain

¹⁵ Novak, “Labors of Likeness,” 130.

¹⁶ Elizabeth Chin, *My Life with Things* (Durham, NC: Duke University Press, 2016), 33-4.

¹⁷ This is not to suggest that individual choices are the drivers of climate change. By identifying global warming with human nature, the historically specific economic and social relations of production that gave rise to climate change are obscured, and it leaves in place the thinking that produced those relations. To counteract this tendency, rather than *anthro-*, I opt to think about the ways in which climate change is *capital-*ogenic. The concept of the Capitalocene, which has been put forward by Andreas Malm and Jason W. Moore, suggests that climate change is driven by the demands and desires of capitalist growth at the expense of both workers and the environment. Malm situates the emergence of the Anthropocene with the transformations that accompanied industrialization in England. However, Moore compellingly argues that the historical patterns that link climate change and capitalism dates back to the primitive accumulation that drove early capitalism, including the Central European mining boom, the English and Dutch agricultural revolutions and the conquest of the Americas. In this analysis,

and suffering at the heart of capitalist modes of production, and Chin points to tension between the ways in which people use technologies or activate objects—and the positive effects these objects can have—and the exploitive economic systems that produce them. To draw attention to the “photographer’s assistant breathing noxious fumes,” or in this dissertation, the miners extracting silver, reveals something about how our world is made and the complex ways in which we move through it, what Warren Cariou describes as the “knowledge-but-not-acknowledgment” of the costs of extraction.¹⁸

To consider the complex links between labour, extraction, technology, and photography, I use a case study of Timiskaming, a region on the Precambrian Shield in northern Ontario, Canada: a site of large-scale mining and logging that was also a wilderness tourism destination. The region had a high ecological surplus: the towering pine forests of Temagami were linked to Cobalt’s rich silver ore bodies by extensive white-water rivers that fed into hundreds of lakes.¹⁹ As a case study, Cobalt reveals how photography was used to document extraction, as well as how extraction underpins photography as an industry. My study focuses on the years of peak extraction (1903-1919) when Cobalt was one of the largest producers of silver in the world. With rising production in photographic industries, Eastman Kodak Company (EKC) became the largest consumer of silver in the United States outside of the United States Mint by the turn of the 20th century.²⁰ [fig. 3, 4] With rising production in photographic industries, there was a growing demand for a cheap and steady supply of silver. In 1906, a Rochester-based company

Moore breaks from Malm by arguing that human activity is situated within nature, what he terms the web of life.

¹⁸ Warren Cariou, “Petrography,” Accessed on November 15, 2019

<http://www.warrencariou.com/petrography>

¹⁹ Temagami also had silver deposits, though the majority were concentrated in Cobalt.

²⁰ “Rochester: The City Photographic,” Eastman Kodak Co, 1909. 10.

owned by several directors of the Eastman Kodak Company purchased a silver mine in the Cobalt mining camp as an investment property.²¹

I read photographs as records of labour—both industrial and artistic—and the communities that develop around resource extraction. The question of labour is central to this dissertation, focusing on both exploited and appropriated labour. Most of the work that fuels capitalist growth is outside of traditional relationships between wage labour and corporations, and a more inclusive understanding of labour is critical to understanding how capitalism functions. Marx has written that capitalism “simultaneously undermine[s] ... the soil and the worker” through a push to growth that “shorten[s] the life of labour-power, in the same way as a greedy farmer snatches more produce from the soil by robbing it of its fertility.”²² As this analysis reveals, capitalist modes of production appropriate natural resources—such as silver—and other forms of “nature” as a productive force, in addition to relying on human wage labour.²³ This recognition necessitates a linking of labour and environmental histories for a more nuanced understanding of

²¹ Baldwin, *Cobalt*, 15; Harold Palmer Davis, *The Davis Handbook of the Cobalt Silver District: With a Manual of Incorporated Companies*. The Canadian Mining Journal, 1910, 8. George Eastman himself was not involved.

²² Karl Marx, *Capital*, vol. I (New York: Vintage, 1976): 637-638. For contemporary eco-Marxist and eco-socialist perspectives, see, for example, see John Bellamy Foster, *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000); Jason W. Moore, *Capitalism in the Web of Life* (London/New York: Verso, 2015); Kate Soper, *What Is Nature?: Culture, Politics, and the Non-Human*, 4th ed. (Oxford, UK; Cambridge, MA: Blackwell, 2004); Ashley Dawson, *Extinction: A Radical History* (New York: OR Books, 2016); Andreas Malm, *The Progress of This Storm* (London/New York: Verso, 2017); Ian Angus, *Facing the Anthropocene: Fossil Capitalism and the Crisis of the Earth System* (New York: Monthly Review Press, 2016); Paul Burkett, *Marx and Nature: A Red and Green Perspective* (Chicago: Haymarket Books, 2014); James O'Connor, *Natural Causes: Essays in Ecological Marxism* (New York: Guilford Press, 1998).

²³ Moore, *Capitalism and the Web of Life*. Moore suggests that the appropriation of ‘nature’ as a productive force has been central to capitalist development, what he terms the ‘cheap nature strategy.’ This does not propose an exact equivalence between forms of agency and labour in human and non-human actants.

how the capitalist drive to growth impacts society and contributes to climate change. The shared experience that links the diverse forms of work that are described in this dissertation is the extraction of value: the wage-labour by underpaid miners who worked in dangerous conditions; the under or unpaid domestic work by women and immigrant workers; the labour of Indigenous people who were displaced from their traditional territory to facilitate white settlement and unfettered extraction; the appropriation of nature as a productive force and the removal of precious metals. Each of these historical processes was then symbolically affirmed in visual culture.

Photography in the Anthropocene

My study of extraction is situated in the context of the Anthropocene,²⁴ a term denoting the current geological age which recognizes human activity as a dominant influence on climate and

²⁴ As a term, the Anthropocene is contested. Scholars have argued that in ascribing responsibility to humans as a universal category, the systems of power that produced climate crisis and the unequal burdens communities have faced are erased. Donna Haraway has helpfully suggested we consider the Anthropocene a boundary, not an epoch. Throughout this dissertation, I use the term Anthropocene, but my use of this term roots climate crisis in the structural conditions of colonialism and capitalism. Several alternatives to the Anthropocene have been proposed, the most prominent of which is the Capitalocene, which describes capitalism as the primary driver of climate crisis. This term was first used by Andreas Malm and popularized by Jason W. Moore. Other terms include the Plantationocene, the White Supremacy Scene, the Misanthropocene. For an analysis of how capitalism has fueled climate change, see Demos, *Against the Anthropocene*, 2017; Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," 2015; Klein, *This Changes Everything*, 2015; Malm, *Fossil Capital*, 2016; Moore, *Capitalism in the Web of Life*, 2015. Other scholars have documented the disproportionate burdens faced by low-income, racialized, and Indigenous communities in the face of climate change. See Heather Davis and Zoe Todd, "On the Importance of a Date," *ACME: An International Journal for Critical Geographies* 16, no. 4 (2017): 761-780; Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham, NC: Duke University Press, 2017); Rob Nixon, *Slow Violence and the Environmentalism of the Poor*, 2012; Nicholas Mirzoeff "It's Not the Anthropocene, It's the White Supremacy Scene; or, The Geological Color Line," In *After Extinction*, edited by Richard A. Grusin (Minnesota: University of Minnesota Press, 2018); Kathryn Yusoff, *A Billion Black Anthropocenes or None*, 2019.

the environment. Throughout this dissertation, I attempt to think ‘climate’ and ‘climate change’ more expansively, arguing that it cannot be reduced down to global warming or melting ice caps. Rather, it is rooted in structural systems of political, economic, racial, and gendered injustice, systems that cannot be pulled apart. In responding to this crisis, therefore, it is necessary to recognize that the issue is not simply a political or scientific problem. A rich body of critical scholarship has demonstrated that climate change is a problem of both science and imagination.

Photography has emerged as an important, while contested, medium for capturing the effects of anthropogenic climate change.²⁵ The use of photography in promoting environmental activism reflects Aldo Leopold’s observation that “we can be ethical only toward what we can see.”²⁶ However, the indexical nature of photography is limited in its ability to reveal the structural causes that have contributed to the ‘catastrophic convergences’ of our present.²⁷ Photography’s limitations are representative of the larger challenges posed by both the cumulative nature of climate crisis and the scale of the problem. The eco-critical philosopher Timothy Morton describes climate change as a hyperobject: the magnitude of the crisis has such

²⁵ For an analysis of what she terms eco-photography, see Karla McManus, “Eco-Photography,” (PhD Diss, Queen’s University, 2015). Photography specific shows include *Anthropocene* at the Art Gallery of Ontario; *The Edge of the Earth: Climate Change in Photography and Video* at the Ryerson Image Centre, 2016; *Rising Waters: Photographs of Sandy* at the Museum of the City of New York, 2013. In contemporary art, notable exhibitions include: *Fragile Ecologies*, Queens Museum, 1992; *The Great Acceleration: Art in the Anthropocene*, 2014 Taipei Biennial; *Rights of Nature: Art and Ecology in the Americas*, Nottingham Contemporary, 2015; *Let’s Talk About the Weather: Art and Ecology in a Time of Crisis*, Sursock Museum, Beirut, 2016; *Paradise Lost: Art in the Anthropocene*, Minneapolis Institute of Art, 2015; *Welcome to the Anthropocene: The Earth in Our Hands*, Deutsches Museum with the Rachel Carson Center, 2014.

²⁶ Qtd in Nixon, *Slow Violence*, 14. Nixon notes that “Leopold was inconsistent on this point, sometimes emphasizing an ethics of sensory immediacy grounded in local knowledge and sometimes emphasizing an intergenerational ethics less rooted in the moment or in a visible locale.”

²⁷ Christian Parenti, *Tropic of Chaos: Climate Change and the New Geography of Violence* (New York: Bold Type Books, 2011)

vast temporal and spatial dimensions that it transcends understanding.²⁸ Linking environmental issues to their causes, and identifying the cumulative nature of their effects, is a difficult task which poses challenges for environmental organizing.²⁹ Scholars and scientists have struggled to establish and trace what Rob Nixon describes as the ‘slow violence’ that characterizes environmental damage, a “violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.”³⁰

This disparity between the difficulty in precisely locating the causes and effects of climate crisis versus the desire to *see* the Anthropocene raises questions about the effectiveness of photographic representation in both visualizing the historical processes and contemporary experiences of climate change. In his analysis of photographs of catastrophic wildfires that circulate in the news and on social media, art historian T.J. Demos highlights the insufficiency of images to reveal the structural causes and political inequalities of climate crisis.³¹ By and large, images of disaster, many of which can be broadly classified as sublime, circulate to sensationalize crisis. The repetition of these visual forms can have the effect of normalizing—or aestheticizing—catastrophe. The discourse around climate change too often fails to address or name the causes of environmental catastrophe and attritional violence, which consigns climate

²⁸ Timothy Morton, *Hyperobjects: Philosophy and Ecology After the End of the World* (Minneapolis: University of Minnesota Press, 2013)

²⁹ Nixon, *Slow Violence*, 1-2.

³⁰ Nixon, *Slow Violence*, 2.

³¹ T.J. Demos, “The Agency of Fire: Burning Aesthetics,” *e-flux* #98, February 2019, np.

change to the abstraction of ‘disaster,’ a category with limited political potential.³² For example, climate change’ was mentioned in less than 4 percent of mainstream news coverage of the deadly California wildfires in 2018, and 3 percent in 2019.³³ Yet Demos reflects that “[c]ritically reading these images does some work to restore hopefulness—provided by research, interpretation, writing, teaching, learning, building community. It grants new life, against all odds, even if against optimism and its cruelties, perhaps resulting in something like undefeated despair.”³⁴

In developing a historical analysis of climate crisis, I am interested in how we can utilize the archive to destabilize the inevitability of an extractive future. While the Anthropocene is a new concept, people have been living through the transformations brought by anthropogenic—or

³² The combination of warm temperatures, dry vegetation, and strong winds are the foundations of the California wildfires. However, Pacific Gas & Electric, the largest utility company which provides power to sixteen million Californians, was found liable for the deadly Camp Fire in 2018 which killed 85 people and burnt 153,336 acres. By failing to maintain safe power lines, the fires were started by brush sparking on power lines. PG&E is presently in bankruptcy. In 2019, PG&E implemented a policy of planned outages—‘Public Safety Shutdowns’—as a precaution against sparking wildfires. At the time of the planned outages, PG&E had not completed two thirds of the inspections and maintenance it told a judge it needs to make the system safer, including trimming trees, replacing transformers, and maintaining dilapidated towers. The 2019 fires in the Amazon Rain Forest, which produces 20% of the planet’s oxygen, are another example. The wildfires destroyed the equivalent of one and half football fields of rainforest every minute, an 80% increase over wildfires at the same time last year. The wildfires are not a natural disaster, but the result of human choices. The wildfires are believed to have been set by cattle ranchers and loggers who want to clear the land for development. Brazil’s pro-business president, Jair Bolsonaro, has actively promoted development in the rainforest. The black clouds that covering Sao Paolo and California reflect how political choices that prioritize economic growth over the health of eco-systems contribute to climate emergency. The fires in Brazil are not a regrettable but random act, rather they are consequences of choices. Identifying these choices and naming those responsible is integral to making more ethical and moral choices in the future.

³³ Ted MacDonald, “Just 3% of broadcast TV news segments on the California wildfires connected them to climate change,” *MediaMatters.org*, November 11, 2019. Accessed on November 14, 2019. <https://www.mediamatters.org/broadcast-networks/just-3-broadcast-tv-news-segments-california-wildfires-connected-them-climate>

³⁴ Demos, “The Agency of Fire: Burning Aesthetics,” np.

more specifically, colonial and capitalist—climate change for centuries. Climate change is often framed as an “emergency temporality but a forgotten history,” that obscures the record of choices that produced or exacerbated ecological crisis.³⁵ The Anthropocene has developed over centuries and these histories have wide-ranging implications and lessons. Tracing historical patterns also offers insight into which patterns of land-use and ways of consuming need to change for the more disastrous effects of climate change to be averted. Archival photographs are an entry point into this history. In contrast to spectacular images of disaster, photographs that document the changes to ecosystems, particularly under extractivism, can ground vast abstractions—such as capitalism, resource extraction and the Anthropocene—by capturing how they are entwined with the everyday lives of communities whose existence is fundamentally shaped by these processes.

As photo theorist Allan Sekula observed, mining was one of the first industries to be pictured visually, an argument that makes a case for photography’s role in understanding resource extraction while suggesting that there is unique work that the visual performs in this context of capital development and extractivism.³⁶ The creation of symbols, motifs, and imaginaries shaped and informed ways of relating to land and labour under industrial capitalism. My project thinks both within and beyond the photographic frame to consider what cultural and political work images of resource extraction play in shaping what Jacques Rancière calls the ‘distribution of the sensible,’ or to put it more simply, the perception of reality and its possibilities for change.³⁷

³⁵ Demos, “The Agency of Fire: Burning Aesthetics,” np.

³⁶ Allan Sekula, “The Emerging Picture Language of Industrial Capitalism,” in *Mining Photographs and Other Pictures, 1948-1968*, edited by Benjamin H.D. Buchloh and Robert Wilkie (Halifax: Press of the Nova Scotia College of Art and Design, 1983), 203.

³⁷ Jacques Rancière, *The Politics of Aesthetics*. (London: Continuum, 2006)

Histories of the Present

This dissertation focuses on one historical case study to locate some of the larger global environmental shifts that are the culmination of a series of interrelated but hard to trace moments. Throughout this dissertation, I attend to what Raymond Williams described as “the close living substance” of the local to analyze the relationships that shape local and transnational economic networks and the circulation of commodities and labour.³⁸ The focus on a relatively small site of extraction that is peripheral to narratives of global capitalism may seem limited in its ability to provide insight into the complex challenges we face in the present. However, there are important lessons in smaller landscapes that receive less attention. If climate change is a hyperobject that confounds understanding, localizing environmental transformations makes the unfathomable more tangible. The politics of exploiting and protecting the earth begin on local levels. These histories are situated within what Mike Davis describes as “the dialectic of ordinary disaster,” a process by which disasters, both natural and economic, are forgotten as the burden of risk falls on low income communities.³⁹ Nixon articulates the links between “uneven economic development and the uneven development of official memory.”⁴⁰ Capitalism functions by “abstract[ing] in order to extract,” a process that disavows the messier and more damaging parts of our collective past.⁴¹ Returning to these forgotten or obscured histories is politically significant. In looking closely at these uncomfortable histories, lessons emerge.⁴² As Moore

³⁸ Raymond Williams, *Writing in Society* (London: Verso, 1983), 238.

³⁹ Mike Davis, *Los Angeles After the Storm* (Cambridge, MA: Blackwell, 1995)

⁴⁰ Nixon, *Slow Violence*, 66.

⁴¹ Nixon, *Slow Violence*, 41.

⁴² Kate Brown, *Dispatches from Dystopia: Histories of Places Not Yet Forgotten* (Chicago: University of Chicago Press, 2015) 149.

argues, in the context of climate change, “[h]ow we tell stories of our past and how we respond to the challenges of the present are intimately connected.”⁴³

The Anthropocene forces a reckoning with questions of land and catastrophe, but it also provides a renewed space to imagine futures that are different than our present, futures of social justice, equality, and a healthy environment. As Walter Benjamin argued, the past is incomplete, and there are tensions that surface in the multiple and conflicting temporalities of history, of the photograph, of the archive. I argue that the history charted in this dissertation cannot be isolated in the past as a regrettable scene of industry. Rather, it is a history that remains unresolved and as a result, continues to surface in the present. We see it in ecological damage, industrial disease, and income polarization, but it also emerges in Indigenous land claims and contemporary labour organizing. Massimiliano Tomba describes “the field of possibility in the tension between temporalities,” a tension that introduces the possibility of “extracting from the past futures that have been blocked,” opening up the possibility of pulling from the past to create new futures.⁴⁴ This suggests that the fragmentary and incomplete engagement with the past—like the histories that surface in the visual archive— is not a hindrance to the emergence of a political critique.

Throughout this dissertation, a linear history is not charted. Rather, I focus on several different sites where the visual intersected with extraction. The region can be described as a sacrifice zone, a landscape reduced to the value that could be extracted from it. The legacies of extraction in this landscape manifest in polluted waterways, forest fires, and other contributors to climate change.

⁴³ Moore, *Capitalism in the Web of Life*, 5.

⁴⁴ Massimiliano Tomba, *Insurgent Universality* (New York: Oxford University Press, 2019) 15, 11.

In the *Arts of Living on a Damaged Planet*, the editors bring into view the remnants of human intervention into the landscape, what they term the ‘ghosts’ of progress, arguing that “Whereas Progress trained us to keep moving forward, to look up to an apex at the end of a horizon, ghosts show us multiple unruly temporalities.”⁴⁵ These haunted landscapes—like Cobalt— reveal ghosts “that whisper tales of the many pasts and yet-to-comes that surround us.”⁴⁶ Using an analogy of weeds, they highlight

the small, partial, and wild stories of more-than-human attempts to stay alive. [...] Considered through ghosts and weeds, worlds have ended many times before. Endings come with the death of a leaf, the death of a city, the death of a friendship, the death of small promises and small stories. The landscapes grown from such endings are our disaster as well as our weedy hope.⁴⁷

While narratives of extractivism seem to displace other histories in a totalizing narrative of domination by capitalism and the state, there are histories that seep outside of these boundaries. These photographs link the past and present with an imagined future: a future that calls into question colonial cultural and knowledge production to envision a more ethical relationship to places of extraction. As Tomba argues, “[w]hat is at stake is not just excluded subjects and their stories but rather the tension generated when those political practices come into conflict with the judicial, political, and economic trajectory of the dominant modernity characterized by the nation-state, the capitalist mode of production, and private property.”⁴⁸ Returning to these histories is important because they “urge us to radically imagine worlds that are possible.”⁴⁹

⁴⁵ Anna Tsing, Heather Swanson, Elaine Gan and Nils Bubandt, eds, *Arts of Living on a Damaged Planet* (Minneapolis: University of Minnesota Press, 2017) G8.

⁴⁶ Tsing, Swanson, Gan and Bubandt, eds, *Arts of Living on a Damaged Planet*, G7.

⁴⁷ Tsing, Swanson, Gan and Bubandt, eds, *Arts of Living on a Damaged Planet*, G7.

⁴⁸ Tomba, *Insurgent Universality*, 15.

⁴⁹ Tsing, Swanson, Gan and Bubandt, eds, *Arts of Living on a Damaged Planet*, G12.

My study of the Cobalt archive, therefore, contributes to contemporary discussions of photography, labour, and ecology by exploring how resource extraction has been both visualized by and obscured in photographic representation. While paintings of the Canadian Shield have occupied a prominent place in Canadian art historical scholarship, the history of photography within the region is less developed.⁵⁰ I explore how photography chronicled the transformation of territory, documenting the historical development of processes which contribute to climate change. I trace how these photographs were produced, circulated, and interpreted by the public, asking how they might be relevant to contemporary studies of photography theory, environmental art history and visual culture. I conclude that photography can document the historical production of environmental trauma, forming an important, if limited, source of evidence.

History of the Territory

The region that survey photographers and landscape painters imagined as wild and untamed had been the territory of Algonquin and Ojibwa tribes for millennia. Before European contact, the traditional territory of the Teme-Augama Anishnabai extended 3,823 square miles, encompassing present-day Temagami.⁵¹ The traditional territory of the Saugeen Anishinabae slightly further north originally covered parts of Ontario and Quebec, including present-day Cobalt. Following European contact in the late 15th century, the territory was renamed Rupert's Land and was understood through European property regimes as the exclusive commercial

⁵⁰ Chapter Six discusses the prominence of the Canadian Shield in Canadian art history.

⁵¹ Bruce Hodgins and Jamie Benidickson, *The Temagami Experience: Recreation, Resources, and Aboriginal Rights in the Northern Ontario Wilderness* (Toronto: University of Toronto, 1989) 10.

domain of the Hudson's Bay Company. After its incorporation by a royal charter in 1670, the company functioned as a de facto government in the region as the fur trade fueled exploration.

Extraction began in the Timiskaming region in the 1600s, when merchants based in Montreal established a trading fort at Obadjiwan, a site of inter-tribal trade on the narrows of Lake Temiskaming. A pattern was established that saw the removal of raw natural resources to be traded and sold in far-away metropolises which would define the settler way of relating to this territory. In 1867, when the region became part of the settler colonial state of Canada, there was a widespread belief that Northern Ontario held rich mineral deposits, but the silver veins sat largely untouched by white settlers despite the fact that Indigenous communities traded silver from Cobalt dating back at least two millennia.

With Confederation in 1867, and the passage of the *Indian Act 1876*, Indigenous people became wards of the state and the Federal government assumed control of most aspects of Indigenous life. In 1852, a reserve was established on the northern shore of Lake Temiskaming in Quebec, limiting access to traditional territory in Ontario, including the territory that would become Cobalt.⁵² Duncan Campbell Scott, the deputy superintendent of the Department of Indian Affairs (DIA) from 1913-1932, advocated for the assimilation of Indigenous peoples. Reserves were created in part to ensure development could occur unchecked: Campbell Scott selected reserve lands that would not interfere with "railway development or the future commercial interests of the country," while ensuring the reserve lands had no mineral deposits.⁵³ The Temagami Anishnabai in Temagami did not have a reserve or a treaty that defined their right to

⁵² The 69,000-acre territory was 'surrendered' repeatedly over the next several decades. Today, the reserve has been reduced through these surrenders to 5262 acres.

⁵³ Richard H. Bartlett, "Mineral Rights on Indian Reserves in Ontario." *Canadian Journal of Native Studies* 3, no. 2: 253.

live on their traditional territory. While the territory fell under the boundaries of the Robinson-Huron Treaty, for reasons that are not entirely clear, the Teme-Augama Anishnabai were not invited to sign the treaty. As a result, the territory is unceded.⁵⁴

In the 1890s, survey photographers began to systematically document the region, drawn by Temagami's red and white pine forests which were perceived as the best pinery in central Canada. This attracted the attention of the provincial government which began promoting the area for settlement as well as commercial purposes. In 1902, the Temiskaming and Northern Ontario Railway was chartered as a Crown corporation,⁵⁵ fueled by the rise of outdoor vacations, known as the summering movement. Temagami, located just under five hundred kilometers from Toronto, emerged as an early and significant site of Canadian nature, celebrated for forests, ancient rock cuts, and glacial lakes. While the railway brought an influx of tourists, it was also intended to open up the region for potential mineral exploration in addition to logging. In 1903, workers building the T&NO railway discovered silver at Mileage 103, one stop north of Temagami. A community was formed around the silver discovery. Within these veins, silver was bonded to cobalt and arsenic. Geologists named the town Cobalt, for the distinctive pink and purple bloom on the rock caused by the extensive presence of the mineral cobalt. The community was founded on the basis of its minerals, and as a result, developed around the demands of

⁵⁴ The community claimed 10,000 square kilometers as their traditional territory, which was not recognized by the provincial government. In 1943, a small island in the middle of Lake Temagami, Bear Island, was purchased by the Department of Indian Affairs from the Province of Ontario, in order to be designated as a permanent reserve. In 1971, the province of Ontario granted the Teme-Augama a reserve of one square kilometer on Bear Island. Crucially, the reserve land did not interfere with logging in the pine forests on Temagami's mainland.

⁵⁵ Crown corporations are established and regulated by the government. The initial interest in building the railway was to facilitate the agricultural settlement of the region and to develop the tourist industry.

primary resource extraction. Mineral deposits were also found in Temagami. As international investment and labour poured into the region, Indigenous access to territory was increasingly limited.

Literature Review: Environmental Art History

My research intervenes in the long-standing separation of cultural production from the natural world in art history. As society addresses the impact of human activity on the planet, environmental art historians have begun to analyze how human cultural production has unfolded within a larger environmental context, challenging the separation of art from the natural world. This dissertation advances recent scholarship in environmental art history, the history of photography, and labour history through an analysis of archival photographs that document resource extraction. In its specific focus on the use of photography on a remote mining frontier, this research contributes a specific case study to those wider discussions.

With the rise of environmental art history,⁵⁶ the ways in which nature has been understood, mythologized and represented by human societies has received much scholarly attention in

⁵⁶ The ecological turn in art history is situated within the environmental humanities, a diverse field which brings together various disciplines including history, geography, literature and the natural sciences. Environmental historians complicated the division between nature and human society that structured thought following the enlightenment. By placing nature and culture into dialogue, they document that nature was not a static or timeless backdrop to human society. Instead, scholars have shown how the environment is both shaped by, and shapes, human society. Important work by William Cronon, Richard White, Donald Worster, and Laurel Sefton MacDowell amongst others has revealed the centrality of the environment to discussions of colonization, industrial development, labour, social history, and racial inequality amongst others. See, for example, Cronon, *Uncommon Ground*, 1996; Laurel Sefton MacDowell, *An Environmental History Of Canada* (Vancouver: UBC Press, 2012); Donald Worster, *Nature's Economy: A History of Ecological Ideas* (Cambridge: Cambridge University Press, 1985); Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco, CA: HarperOne, 1983); Richard White, "Afterword Environmental History: Watching a Historical Field Mature," *Pacific Historical Review*, Vol. 70, No. 1 (February 2001), 103-111;

recent years. This is complimented by a focus on how cultural production has mediated and informed our understanding of nature. As art historian Robin Kelsey observes, our series of interrelated environmental crises is compelling art history as a discipline to reconnect natural and human history.⁵⁷ By considering how human creativity unfolds within and responds to particular environments, environmental art history argues for the centrality of recognizing the embeddedness of art in the material world.

Environmental art history is a fairly new field of inquiry. Art, artistic collections, and exhibitions have largely been left out of ecocritical discussions, despite their centrality to the humanistic tradition. Kelsey observes that the conceptual separation of art from nature is reflected in the division of the art museum from the natural history museum, through which “European civilization insisted that it had arisen out of nature and established itself on its own time.”⁵⁸ Critically, this division between culture and nature replicated in museum structures “relegated people of non-European cultures to the mind-numbing pace of sedimentation and glacial retreat.”⁵⁹ This divide had the effect of conceptually understanding much of the world as outside of the linear progress of European society.⁶⁰ Museums and art institutions helped lay the

Gregg Mitman, *The State of Nature: Ecology, Community, and American Social Thought, 1900-1950* (Chicago: University of Chicago Press, 1992)

⁵⁷ Robin Kelsey, “Ecology, Sustainability, and Historical Interpretation,” *American Art* 28, no. 3 (2014): 11.

⁵⁸ Kelsey, “Ecology, Sustainability, and Historical Interpretation,” 10.

⁵⁹ Kelsey, “Ecology, Sustainability, and Historical Interpretation,” 10.

⁶⁰ Part of the shift away from humanism as a concept is rooted in the recognition that the human as a category was constructed around whiteness, while other races are left outside of this generalized ‘humanity.’ See, for example, Katherine McKittrick (ed), *Sylvia Wynter: On Being Human as Praxis* (Durham: Duke University Press, 2015) and Alexander G. Weheliye, *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human* (Durham: Duke University Press, 2014).

groundwork of separating and isolating human society from the natural world under the guise of scientific and aesthetic categorization, a process that continues to be reinforced.

As a discourse, the Anthropocene acknowledges that the impact of human activity on the natural world has been immense. In this context, a deeper historical understanding of how we got here facilitates more informed decisions in the future.⁶¹ Ecocritical approaches to art provides a lens to explore the ways artists have imagined, interpreted, and borne witness to environmental change. Ecocriticism foregrounds environmental interconnectedness, sustainability, and justice in art historical interpretation.⁶² Art historians Alan Braddock and Christoph Irmscher point to the significance of historical analysis, arguing that “[b]y critically illuminating the environmental contexts of past cultural artifacts, scholarship in our view has the power to change the way we think about history while also contributing actively to current cultural conversation.”⁶³ Braddock suggests that in art historical case-studies, ecocriticism can illuminate “neglected evidence of past ecological and proto-ecological sensibility or it may cast canonical works and figures in a new light by revealing previously unnoticed complexity regarding environmental concerns.”⁶⁴

⁶¹ In addition to historical studies, contemporary art scholars have produced a rich body of scholarship that explores how contemporary art is engaging with ecological crisis. See, for example, Amanda Boetzkes, *Plastic Capitalism: Contemporary Art and the Drive to Waste*. Cambridge, MA: MIT Press, 2019); Amanda Boetzkes, *The Ethics of Earth Art* (Minneapolis: University of Minnesota Press, 2010); Mark Cheetham, *Landscape Into Eco Art: Articulations of Nature Since the '60s* (University Park, PA: Pennsylvania State University Press, 2018); Heather M. Davis and Etienne Turpin, eds. *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* (London: Open Humanities Press, 2015); T.J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016); T.J. Demos, “Blackout: The Necropolitics of Extraction,” 2018; McManus, “Eco-Photography,” 2015; Elysia French, “Transformations of Oil: Visibility, Scale, and Climate in Warren Cariou’s Petrography.” *RACAR* 42, No. 1 (2017): 64-72.

⁶² Alan Braddock, “Ecocritical Art History,” *American Art* 23, no. 1 (Summer 2009): 26.

⁶³ Alan Braddock and Christoph Irmscher, *A Keener Perception: Ecocritical Studies in American Art History* (Tuscaloosa: University of Alabama Press, 2009) 3.

⁶⁴ Braddock, “Ecocritical Art History,” 26.

The challenge to the anthropocentrism of art history has introduced complex questions about how artists have imagined and represented the world, and what material effects resulted from these cultural imaginaries. For example, scholarship in environmental art history has argued that landscape painting and photography has naturalized the understanding of humans as separate from nature. However, there are other ways of seeing, relating to, and picturing terrain. Art historian Ruth Phillips has observed that the concept of landscape art as it developed in Western art history is incompatible with Indigenous ways of seeing the land in the Americas, for Indigenous traditions understand the natural world as a site of meditation, and defined by mobility rather than a fixed vantage point and the horizontal, distant framing of territory that characterizes Western landscape painting.⁶⁵ Tuscarora art historian Jolene Rickard describes how the material culture produced by Indigenous communities, “molded in clay, carved in stone, stitched in animal skins, woven in fibers, etched on our bodies, and embedded in the environment as mounds or medicine wheels” reflects an ongoing visualization of relationships with land, other species, and the universe.⁶⁶ Rickard shifts attention from the finished object to the processes of making. The intimate nature of the labour between the artist and these materials prompts a consideration of relationality, situating material engagement as an important way of knowing and understanding the natural world. Rickard articulates the stakes in representations of land by noting that this artistry is “not only the visual, but also the overt integration of the responsibility Indigenous peoples have as ongoing stewards or guardians of the land.”⁶⁷ This conception of *responsibility* to land is a central difference between how land was understood by

⁶⁵ Phillips, "Indigenous Land/ Settler Landscapes: Art Histories Out of Joint," 93.

⁶⁶ Jolene Rickard, "Arts of Dispossession," In *Picturing the Americas: Landscape Painting from Tierra Del Fuego to the Arctic*, edited by Valéria Piccoli, Peter John Brownlee, and Georgiana Uhlyarik (New Haven: Yale University Press, 2015) 115.

⁶⁷ Rickard, "Arts of Dispossession," 119.

settlers and by many Indigenous communities. A deeper assessment of how the visual reflects and reifies our relationship to nature nuances art historical inquiry.

With the increased attention paid to the “geological force” that humans now produce, Dipesh Chakrabarty has written that the reality of the Anthropocene throws the entire project of history, a project rooted in humanism, into crisis.⁶⁸ Situating humans in nature poses conceptual challenges to humanistic inquiry. At the same time, perspectives from the humanities are essential to interpret and give meaning to a rapidly changing world. The humanities can help society understand the ‘why’ of our current crisis by analyzing the systems of power and the ways of knowing that have shaped the Anthropocene. To address the challenge to humanism posed by the Anthropocene, many scholars have expanded the scope of humanistic inquiry to consider the non-human webs of relations that humans are situated within.⁶⁹ My emphasis on silver in film processes is in line with this strand of thinking. However, to avoid the problematic tendency to focus on matter or ‘things’ at the expense of humans and human organization, I use labour as an entry point to analyze the dialectic between the co-constitutive spheres of nature and society.⁷⁰ Building from the material turn in art history, I situate cultural production as the result

⁶⁸ Dipesh Chakrabarty, “The Climate History: Four Theses,” *Critical Inquiry* 35, no. 2 (Winter 2009): 197-222.

⁶⁹ A wide range of recent scholarship decenters the human as the sole category of analysis and includes a growing body of literature that encompasses political ecology, speculative realism, assemblage theory, object-oriented ontology, neo-materialism, and some strands of eco-Marxism. These diverse and often contradictory set of methods include those that seek to transcend human-centered exceptionalism, to situate modernity in deep time or geological time, to apply Indigenous cosmologies, and propose a shift in focus from epistemologies to ontologies. For a survey of the field, see “A Questionnaire on Materialisms,” *October* 155 (Winter 2016): 3-110.

⁷⁰ Critics of neo-materialism have observed the inattention paid to structural questions through a withdrawal from the political sphere of human organization. See, for instance, Naomi Klein, *This Changes Everything: Capitalism vs. the Climate* (New York: Simon & Schuster, 2015); Slavoj Žižek, *Less Than Nothing: Hegel and the Shadow of Dialectical Materialism* (London/New York: Verso, 2012) as well as a problematic tendency to ignore the intellectual roots within

of a dynamic interplay between human labour and matter. Scholars have argued that materiality shapes the possibilities of artistic production by centering the physical object as a key category of analysis. However, with a few exceptions, scholars have not attended to the material infrastructure of artistic production, which is rooted in resource extraction.⁷¹

Methodology: Materiality and Photography

My methodology develops an analysis of the material production of photography by bridging art history (visual analysis) and media ecology (material analysis). My dissertation is situated within recent scholarship in photography that explores the materiality of the photograph. Elizabeth Edwards argues that “photographs are both images *and* physical objects that exist in time and space and thus in social and cultural experience.”⁷² Photographs have “volume, opacity, tactility and a physical presence in the world,” and the status of the photograph as an *object* is central to its social function.⁷³ This intervention does not dismiss the significance of image content, but it rather draws attention to how photographs move through the world and how the meaning of the photograph changes through mobility. New questions are introduced by “thinking materially about photography” which includes “processes of intention, making, distributing, consuming,

Indigenous epistemologies (Zoe Todd, “An Indigenous Feminist’s Take on the Ontological Turn,” *Journal of Historical Sociology* 29 no. 1 (2016): 4-22; Vanessa Watts, “Indigenous place-thought & agency amongst humans and non-humans,” *Decolonization: Indigeneity, Education & Society* 2, no. 1 (2013): 20-34). As T.J. Demos suggests, it is useful to bring materialisms into relation with political and social ecology for a more comprehensive critique of capitalism (*Decolonizing Nature*, 21).

⁷¹ A notable exception is the exhibition catalogue, *Nature’s Nation: American Art and Environment*. Karl Kusserow and Alan Braddock, eds (Princeton, NJ: Princeton University Art Museum, 2018).

⁷² Elizabeth Edwards, “Material beings: objecthood and ethnographic photographs,” *Visual Studies*, 17, no. 1 (2002): 67.

⁷³ Geoffrey Batchen, *Photography’s Objects* (Albuquerque, New Mexico, University of New Mexico Art Museum, 1997) 2.

using, discarding and recycling.”⁷⁴ Materiality involves the technical, chemical and physical choices in making the photograph that result in the material object, as well as questions of display.⁷⁵ While scholarship on materiality has nuanced how we think about photographs, there has been less analysis of how the material object is made through human and non-human labour.

To extend these interventions on photographic materiality into the field of environmental art history, I turn to media theorist Joanna Zylińska. In *Nonhuman Photography*, Zylińska puts forward a theory of photography that moves beyond humanism to consider how photographs conjoin human-nonhuman agency and vision. In her analysis of Nicéphore Niépce’s *View from the Window at Le Gras* (1826 or 1827), Zylińska argues that due to the eight-hour exposure time of the image, the scene captured is one that the human eye could never see, as the shifting place of the sun created a visual paradox. Zylińska concludes that “the first image in the history of photography therefore presents a distinctly nonhuman vision, while also enacting a nonhuman agency at the heart of its production,” introduced through both light and bitumen.⁷⁶ Zylińska attends to the geology of photography by suggesting that photographs form fossil records which “can be said to bear a material record of life rather than just its memory trace.”⁷⁷

To do so, I explore three temporal registers that co-exist within analogue photographs, approaching the image itself as a simultaneous environment. Simultaneity acknowledges the coexistence of the past and future within both the present and the photographic image. The index, which has dominated studies of photography, introduces questions of representation,

⁷⁴ Elizabeth Edwards and Janice Hart, “Photographs as Objects,” in *Photographs Objects Histories: On the Materiality of Images*, edited by Elizabeth Edwards and Janice Hart (Routledge, London, 2004) 1.

⁷⁵ Edwards and Hart, “Photographs as Objects,” 3.

⁷⁶ Joanna Zylińska, *Nonhuman Photography* (Cambridge, MA: MIT Press, 2017) 21

⁷⁷ Zylińska, *Nonhuman Photography*, 10

focusing on the subject within the frame and the histories that emerge or are precluded.

However, I also explore the *geological*, assessing the relationship of deep time to photography. I read photographs as geological archives embodied in the blackened silver halides. Finally, I consider *relationality* in photographs to explore how the optical or haptic encounter with the image-object can enable the activation of the image by the viewer. In the following sections, I unpack these registers.

The Index

In the context of ecological crisis, where events from the past shape our present and future in ways that are hard to trace, photography is a limited medium. The indexical nature of the photograph links the image to a definite time and place. In photography, the index describes the physical relationship between the object and the trace of the object which is recorded on film. In photography, this occurs when light enters the aperture and the scene captured by the camera's lens is set in emulsion. Unlike an icon which represents the object through resemblance, the index is a trace of, or mark made by, its object. The index refers to the process in which a trace or mark is made by an object. In contrast, climate change is the result of cumulative disasters that are hard to trace. The flash of light which sets the image in the photographic emulsion reduces time to a singular moment, one that Roland Barthes reads as "a reality that once existed, even though it's a reality one can no longer touch."⁷⁸ The temporal paradox of authentication is at the core of Barthes' famous observation that the photograph is *here-now* that was *there-then*.⁷⁹ Yet

⁷⁸ John Tagg, *The Burden of Representation: Essays on Photographies and Histories* (Minneapolis: University of Minnesota Press, 1993), 1.

⁷⁹ Roland Barthes, "The Rhetoric of the Image," reproduced in *Image, Music, Text*, trans. Stephen Heath, (New York: Hill and Wang, 1977), 44. As Edwards and Hart observe, Barthes' famous description of the Winter Garden photograph engages with the image as a material

photography's relationship to time is more complicated than documenting something that has passed. As art historian Steve Edwards observes, Barthes' reading has the consequence of isolating the present from the past, "at the cost of blocking the image from entering into our time."⁸⁰ While the photograph introduces something as *here-now*, it is infused with loss and nostalgia for a moment that cannot be recovered. In this reading, the photograph becomes "*without future*."⁸¹ This idea of the photograph as lifeless is rooted in the ways in which the photograph is seen to "convert the dynamism of vision into two-dimensional flat impressions of the flow of time."⁸²

In contrast, Walter Benjamin argued that the traces of the past never fully disappear. By arresting time, moments from the past could 'blast forward' into the present, introducing the possibility of future action. Photographs become an analogy for a historical project that sought to challenge the conception of time as linear and progressive. Benjamin sought to make the past active in the present as a method to rewrite history from below.⁸³ In his analysis of Barthes and Benjamin's perspectives on photography and time, Steve Edwards concludes that "[i]t seems important, in these dark times, to emphasize the possibility that the image can bring past events to life for contemporary viewers, to stress its ability to testify, or bear witness, for us."⁸⁴ While the belief in the objectivity and authority of images has been called into question, the ability of

object, "a photograph that carries on it the marks of its own history, of its chemical deterioration." ('Photographs as Objects,' 1).

⁸⁰ Steve Edwards, *Photography: A Very Short Introduction* (Oxford University Press, 2006) 119.

⁸¹ Edwards, *Photography: A Very Short Introduction*, 119.

⁸² Zylinska, *Nonhuman Photography*, 18.

⁸³ Benjamin, "Theses on the Philosophy of History," In *Illuminations*, edited by Hannah Arendt, 253-264 (New York: Schocken Books, 2007)

⁸⁴ Edwards, *Photography: A Very Short Introduction*, 120.

an image to arrest a moment for later reflection and contemplation can form a crucial form of evidence.

I approach the photograph as something that contains multiple and unruly temporalities, and crucially, is *with future*. The singularity of the photograph is supplemented by a notion of simultaneity: the multiple temporalities of experience that exist both within the photographic frame and through the haptic or optical encounter with the photograph as a material object.⁸⁵ As Elizabeth Edwards observes, “[i]f the photo-object engages with the body, it also retemporalizes and respatializes the photograph.”⁸⁶ Material objects form a tangible connection between the past and the present, forming “a double link as image and as material, two ontological layers in one object.”⁸⁷ Further, as Zylinska argues, the indexical nature of the medium “slows down time and can teach us humans to look at ourselves and our environment differently.”⁸⁸ In this framework, photography is a “quintessential practice of life” and a potential site of political activation.⁸⁹

⁸⁵ My use of the term differs from Esther Gabara, who argues that double exposures challenge the viewer through the merging of multiple temporal moments, reorienting attention to multiplicity. See Esther Gabara, *Errant Modernism* (Durham: Duke University Press, 2008) 114-115. I use simultaneity more broadly to question notions of linear temporality, acknowledging the coexistence and entanglement of multiscale levels of experience. My thinking about photography and time is deeply indebted to Samantha Spady, whose challenging questions about what role photos play in understanding resource extraction have shaped my thinking. I am thankful for her insight into the importance of ‘simultaneity’ as a way of contesting damage narratives and her insistence on the importance of taking place seriously as a category of analysis.

⁸⁶ Elizabeth Edwards, “Photographs as Objects of Memory,” *Material Memories* ed. by Marius Kwant, Christopher Breward, Jeremy Aynsley, (Oxford: Berg, 1999) 230.

⁸⁷ Edwards, “Photographs as Objects of Memory” 236.

⁸⁸ Zylinska, *Nonhuman Photography*, 18

⁸⁹ Zylinska, *Nonhuman Photography*, 18

Photography in deep time

In 1839, Louis Daguerre publicly announced his method for fixing images on a metal plate, called the daguerreotype. The same year, the “heroic age” of geology was proclaimed by the Reverend William Whewell, the president of the Geological Society in England, who celebrated the men who had “slain its monsters and cleared its wildernesses,” to “extend her dominion over the earth.”⁹⁰ These innovations in geology were linked to advancements in mining technology. The discovery of the deep time of geology in the late eighteenth and early nineteenth centuries had widespread ramifications.⁹¹ Geological time presented a way of measuring time that far exceeds human history but has shaped human existence, what geologist John Playfair described as the “abyss of time.”⁹² Geological time asserted that the earth had existed and evolved over thousands of millions of years and carried records of these prior existences in the landscape. However, despite the knowledge that the sedimentary record was historically produced and always evolving, the rate of change was slow and the perception remained that “for all intents and purposes nature was a fixed background for human affairs.”⁹³ The rapid pace of industrialization in the same period seemed to confirm what Marx described as a “metabolic rift” between humanity and the earth due to the intensification of social change with

⁹⁰ Address by the Rev. William Whewell delivered February 15, 1839. Reproduced in I. Todhunter, *William Whewell: Volume I, An Account of His Writings* (Ann Arbor: University of Michigan Library, 1876)

⁹¹ Kathryn Yusoff observes how “semiotics of White Geology creates *atemporal* materiality dislocated from place and time—a mythology of disassociation in the formation of matter independent of its languages of description and the historical constitution of its social relations.” (Yusoff, *A Billion Black Anthropocenes or None*, np)

⁹² Geologic time was developed in the 18th century by the Scottish geologist James Hutton. The phrase deep time was first used in 1981 by John McPhee to describe the impossible expanses of history that extend to both the past and the future. For a history of geological time, see Paul Lyle, *The Abyss of Time: A Study in Geological Time and Earth History* (Edinburgh: Dunedin Academic Press, 2016)

⁹³ Kelsey, “Ecology, Sustainability, and Historical Interpretation,” 10.

industrialization.⁹⁴ The rise of geology and the awareness of deep-time was quickly linked to control over nature.

Throughout this dissertation, I locate photography within the deep time of geology. Within the photograph, the blackened traces of elemental silver that are fixed in the darkroom introduce a temporality beyond human comprehension. This reorientation to the geology of media locates a history of photography that dates back millions of years ago in the light-sensitive properties of silver. The photograph is an image-object whose physical existence is a representation of resource extraction: the silver within the photograph forms an archive or record of its extraction and transformation. Silver provides a way of thinking about how the past is always active in the present and the future, though the form may be materially transformed. Attention paid to the material foundations of technology through the relationship between a specific material (silver) and a specific technology (photography) necessitates an ecological critique while also providing an entry point into analyzing how capitalist forms of production reorganize nature.

Radiant relationalities

The geological register explores the pre-history of the photograph before it becomes fixed in silver, where it forms an index of a moment that has passed. However, to consider how photographs can act in the future, I attend to the engagement of the viewer with the material object. Tina Campt has written about the “haptic image” to conceptualize the ways photographs can come to take on the qualities of touch. Campt refers to “a tripartite sense of touch—an indexical touch, a physical touch, an affect touch”, with each embedded within “the composition

⁹⁴ In *Marx's Ecology*, John Bellamy Foster argues that Marx had an ecological perspective that has been understudied by Marxist theorists. Bellamy Foster develops the concept of a ‘metabolic rift’ between capitalist humanity and nature to argue that there can be no ecologically sustainable capitalism.

of the image and our response or relation to it.”⁹⁵ Campt highlights the emotional resonances produced by photographs, forming a potential site of political engagement. The affective process of ‘tactile looking’ helps construct relationships and communities.⁹⁶

The emphasis on the material aspects of the image-object aligns with scholarship that attends to the relational nature of photography. Photo theorist Ariella Azoulay describes the ontology of photography as profoundly collaborative: photographs are not a record of a moment that has passed but rather they form an ongoing event. A photograph emerges out of an encounter between the subject, the photographer, and others on the scene, and is initiated by the presence of a camera. The viewer can read the photograph for traces of the encounter between the subject, the photographer, and potential witnesses. Viewers can picture scenes that are not directly represented, what Azoulay terms ‘watching’, rather than looking, at photographs. As new meanings are generated through each viewing, photographs enable the production of alternative meanings by viewers and subjects.

To consider how relational encounters with photography can be applied within eco-critical frameworks, I turn to the materiality of silver and the role of light as a mediator. In physics, radiance refers to the transmission and reception of energy or light. Radiance is separate from the properties of a reflective surface, and the experience of luminescence through which the human eye experiences light. Instead, radiance influences the space between them, creating an atmosphere between the two “altering viewers’ encounters with their environment and reawakening them to the unsteady feeling that attraction breeds.”⁹⁷ Radiance is important

⁹⁵ Tina Campt, *Image Matters: Archive, Photography, and the African Diaspora in Europe* (Durham: Duke University Press, 2012), 43.

⁹⁶ Margaret Olin, *Touching Photographs* (Chicago: University of Chicago Press, 2012) 17.

⁹⁷ Ruth Jones, “Radiant Intensities,” in *Glimmers of the Radiant Real* (Oshawa, ON: The Robert McLaughlin Gallery, 2018) 18.

conceptually because it emphasizes the in-between: that which is in-between the viewer and the surface of the photograph.⁹⁸

Radiance points to the mediated nature of perception but also the energetic transfer between a subject/object. This suggests that the photograph is an actor in the present, highlighting the shifting historical and cultural readings we as viewers bring to bear on our reading of photographs. Throughout this dissertation, I hold onto the tensions that emerge in the interplay between radiance and shadows; between surface and depth; between valuable commodities and the harsh processes that extract them; between what photographs show us and what they hide. A shadow history of photography can be found in silver: the labour and extraction that is hidden from view by the radiance of the surface.

Theoretical Framework

My theoretical approach connects environmental, economic, and social justice, an approach that can be broadly described as ecological. Ecology is a biological term that describes the complex and indissoluble webs of relations that link bodies and environments.⁹⁹ Ecology stands in contrast to many strands of environmentalism, which have often focused on preserving certain eco-systems accessed by privileged populations. As Demos describes, when positioned within critical thought, ecology has alignments with intersectionality.¹⁰⁰ First theorized in the black

⁹⁸ For discussion about the importance of surface, see Giuliana Bruno, *Surface: Matters of Aesthetics, Materiality, and Media* (Chicago: University of Chicago Press, 2014). Bruno explores the role of surface as connective tissue, something that can subsume the divisions of interior and exterior, past and present, public and private. For an exploration of the role of surface in contemporary art, see Ruth Jones and Sam Mogelonsky, *Glimmers of the Radiant Real*, 2018.

⁹⁹ Lawrence Buell, *The Future of Environmental Criticism* (Wiley-Blackwell, 2005) 141.

¹⁰⁰ T.J. Demos, "Ecology-as-Intersectionality." *Climate Change & Art: A Lexicon*.
<https://thedistanceplanlexicon.org/>

feminist legal scholarship of Kimberlé Crenshaw, intersectionality describes the overlapping systems of oppression that are tied to class, gender, race, and sexuality.¹⁰¹ As Demos argues, an activist political ecology is fundamentally intersectional and seeks “to challenge the very viability of the petrocapiatalist economy, connecting its exploitation of the environment to its exploitation of the disenfranchised, impoverished, and brutalized segments of the population, and opposing its interlinked system.”¹⁰² For example, race is an important category of analysis in ecological crisis, rooted in the historical legacies of slavery and colonialism, Indigenous dispossession, and contemporary experiences of environmental racism.¹⁰³

With this in mind, I am conscious of the theoretical commitments and political consequences that the Anthropocene as a discourse perpetuates. For example, The Anthropocene Working Group recommended that the start date of the Anthropocene be placed in the mid-twentieth century: with petrochemicals, the atomic bomb, and plastics. In this framework, all of humanity becomes implicated in the ‘great acceleration.’ To counteract this tendency to ignore

¹⁰¹ Kimberlé Crenshaw, "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics." *University of Chicago Legal Forum* (1989); For intersectional approaches to photography, see, for example, Campt, *Image Matters*, 2012; Coco Fusco, "Racial Time, Racial Marks, Racial Metaphors," In *Only Skin Deep: Changing Visions of the American Self*, edited by Coco Fusco and Brian Wallis, 13–50 (New York: International Center of Photography in association with Harry N. Abrams, Inc., Publishers, 2003); bell hooks, "In Our Glory: Photography and Black Life," In *Picturing Us: African American Identity in Photography*, edited by Deborah Willis (New York: New Press, 1994); Sarah Parsons, "Site of Ongoing Struggle: Race and Gender in Photography Studies." *Handbook of Photography Studies*, edited by Gil Pasternak (London: Bloomsbury Press, forthcoming 2019); Laura Wexler, *Tender Violence: Domestic Visions in an Age of U.S. Imperialism* (Chapel Hill: University of North Carolina Press, 2000).

¹⁰² T.J. Demos, *Against the Anthropocene: Visual Culture and Environment Today* (Berlin: Sternberg Press, 2017) 55. This argument is more extensively discussed in Demos, *Decolonizing Nature*.

¹⁰³ See, for example, Françoise Vergès, "Racial Capitalocene," In *Futures of Black Radicalism*, edited by Gaye Theresa Johnson and Alex Lubin (New York: Verso, 2017); Yusoff, *A Billion Black Anthropocenes or None*.

the structural inequalities that produced our current crisis, Heather Davis and Zoe Todd propose that the start date of the Anthropocene be located with the conquest of the Americas. Davis and Todd root their intervention in the research of geographers Simon L. Lewis and Mark A. Maslin, who propose the Anthropocene started with ‘the golden spike’ of the Columbian Exchange in 1610. In 1492 there were between 54 to 61 million peoples in the Americas and by 1650 there were 6 million. The exchange of plants and animals between Europe and the Americas, the labour systems—often forced—that were implemented to extract raw natural resources, and the drop in Indigenous populations produced a change large enough to register in the biomass accumulated in the geologic layer. Naomi Klein describes that “the reality of an economic order built on white supremacy is the whispered subtext of our entire response to the climate crisis.”¹⁰⁴ Throughout this dissertation, questions of labour, class, gender, and race are explored in the context of a larger environmental framework to consider how the reproduction of power and wealth occurs within specific historical systems.

In the context of this case study, those specific historical systems are the settler colonial state and extractive capitalism.¹⁰⁵ The drive for raw resources that fueled the conquest of the Americas points to the centrality of colonialism and the control of territory in facilitating the expansion of capitalist-extractive frontiers. To avoid the conflation of colonialism and capitalism, I chart the development of these entwined but distinct processes by considering how they function together in this one particular place in a specific moment in time, teasing out the

¹⁰⁴ Naomi Klein, “Why #BLACKLIVESMATTER Should Transform the Climate Debate,” *The Nation*, December 14, 2014.

¹⁰⁵ Jason W. Moore argues that the rise of capitalism after 1450 marked a turning point in the history of humanity's relationship with the rest of nature. As Moore argues, the narrative that capitalism began after 1800 ignores the appropriation of nature as a productive force that fueled the rise of capitalism and the vast acceleration in the scale, speed, and scope of the transformation of landscapes (Moore, *Capitalism in the Web of Life*, 2015).

moments of divergence and convergence between the two processes. To bridge a Marxist focus on labour and capitalist development with the realities of a settler-colonial state, my project is informed by Glen Coulthard's rereading of Marx's theory of primitive accumulation. Marx's theory of primitive accumulation describes how precapitalist modes of production were transformed into capitalist ones through processes of enclosure, privatization, and the exploitation of labour. Coulthard situates dispossession as an ongoing, foundational feature of the social relations of capitalism and colonialism. The Canadian state initiated processes of displacing Indigenous peoples from their land and using racialized labour to build infrastructure.¹⁰⁶ As Coulthard articulates, securing land has been a more important factor than labour exploitation for understanding extractivism in Canada. The wealth produced from extraction remains controlled by the settler population. As Coulthard goes on to note, primitive accumulation continues beyond the material theft of land itself due to the destruction of the social relationships that existed prior to colonization and capitalism. These social relations were premised on a deep reciprocity between people and the extra-human world. Under extractivism, "the violent transformation of non-capitalist forms of life into capitalist ones" function to eliminate alternative ways of relating to land.¹⁰⁷

¹⁰⁶ As Coulthard writes, "following the waves of colonial settlement that marked the transition between mercantile and industrial capitalism (roughly spanning the years 1860–1914, but with variation between geographical regions) Native labour became increasingly (although by no means entirely) superfluous to the political and economic development of the Canadian state. Increased European settlement combined with an imported, hyper-exploited non-European workforce meant that, in the post-fur trade period, Canadian state-formation and colonial-capitalist development required first and foremost land, and only secondarily the surplus value afforded by cheap, Indigenous labour." Coulthard, *Red Skin, White Masks*, 12.

¹⁰⁷ Glen Coulthard, *Red Skin, White Masks: Rejecting the Colonial Politics of Recognition* (Minneapolis: University of Minnesota Press, 2014) 8.

Macarena Gómez-Barris draws attention to the ways in which colonial control of Indigenous land is a precursor for capitalist development. In her case studies of extractive regions of South America, she argues that it was “the system that was installed by colonial capitalism in the 1500s” that worked to “[convert] natural resources such as silver, water, timber, rubber, and petroleum into global commodities.”¹⁰⁸ She describes this process of conversion as the *extractive gaze*, which directs the eye to see land through the lens of extraction and wealth production. This framework highlights that extractive capitalism does not just transform raw materials into commodities, but it also alters ways of seeing the world, displacing other ways of seeing, relating to, and understanding territory. I consider how the extractive gaze structures how we see land in extractive regions, as well as oppositional perspectives that challenge extractivism.

Objects and Archival Collection Description

My dissertation places photography collections from corporate, government, organized labour, community, and family archives into dialogue with each other to analyze the impact of extraction on nature and communities. I also place photography into conversation with painting. In part, this is due to the prominence of landscape painting of the Canadian Shield, which have shaped popular imaginaries of the region.

Throughout this dissertation, I place instrumental photography into dialogue with amateur photography. Instrumental photography describes photographs that were produced or circulated by public institutions, typically in support of their existing policies and ideologies. Scholars have observed photography’s effectiveness as a tool for state propaganda and surveillance. This emphasis on the disciplinary nature of photography focuses on how photography was used to

¹⁰⁸ Gómez-Barris, *The Extractive Zone*, xvi.

control and manage human populations. This includes anthropological photography as well as state-sponsored social documentary projects.¹⁰⁹ In Chapter Two, I explore how landscape photography was instrumentalized by corporations and the state while Chapter Five focuses on anthropological photographs taken for the Geological Survey of Canada.

The majority of the objects discussed in this dissertation can be broadly classified as vernacular or amateur photographs, images taken to record people, places, and events. Unlike many prominent images of labour, they are not rooted in photojournalism or social documentary traditions, and were never intended for circulation in museums, galleries and artists books. With the rise of visual culture studies, vernacular, snapshot, and family photography have received much scholarly attention in recent years.¹¹⁰ This scholarship addresses a significant gap that previously existed in art historical studies, which has historically focused on photographs taken for the goal of aesthetic contemplation produced by skilled artists.¹¹¹ In contrast to the history of

¹⁰⁹ See, for example: Victor Burgin, "Looking At Photographs," In *Thinking Photography*, edited by Victor Burgin, 142-153 (London: MacMillan Press, 1982); Allan Sekula, "The Body and the Archive," *October* 39 (1986): 3-64; Martha Rosler, "In, around, and afterthoughts (on documentary photography)" In *The Contest of Meaning: Critical Histories of Photography*, edited by Richard Bolton, 303-341 (Cambridge, Massachusetts: MIT Press, 1993); John Tagg, *The Burden of Representation* (Minneapolis: University of Minnesota Press, 1993).

¹¹⁰ Vernacular photographs denote non-art photographs, or images made to be circulated outside of museums, galleries and artists books. They are also distinct from photojournalism, social documentary images, or as scientific evidence.

¹¹¹ Brian Coe's influential 1977 exhibition *Snapshots* argued that "aesthetic quality of the snapshot has received less attention than it deserves." (Brian Coe and Paul Gates, *The Snapshot Photograph*, 1977, 14) Significant exhibitions of snapshots date back to a 1944 exhibition at the Museum of Modern Art: *The American Snapshot*. More recently, the *Art of the American Snapshot* curated by Sarah Greenough at the National Gallery of Art charts how the immediacy and chance of snapshot photography influenced fine art photography, and stylistic tropes from snapshots became adopted by photographers as diverse as André Kertész, Henri Cartier-Bresson, Lisette Model, Robert Frank, Lee Friedlander, Garry Winogrand, and Jeff Wall. As Greenough notes, the snapshots included in the exhibition are worthy of serious aesthetic study. A number of contemporary artists including Gerhard Richter, Christian Boltanski, Tacita Dean, and Fiona Tan have collected everyday portraits which have been amassed into massive archives.

art which celebrates innovation and experimentation, snapshot photography more typically reveals conformity, adherence to visual types, and a reaffirmation of social norms.

Art historian Geoffrey Batchen called for a “*vernacular* theory of photography” that focused on “boring pictures” which he described as “art history’s worst nightmare.”¹¹² Many of the images I explore in this dissertation are unremarkable and might be broadly described as ‘boring.’ However, as Steve Edwards observes, the banality and repetition that surfaces in photographs is important because “[t]his is often how ideology works.”¹¹³ In seeking the exceptional and disruptive, “the mass of everyday images that perform so much signifying work” are obscured.¹¹⁴ As Kelsey argues, the focus on archival images demonstrates “a critical desire to widen the scope of our histories.”¹¹⁵ Further, as many scholars have demonstrated, these images are more visually complex than they may initially seem.

Feminist scholar and photo historian Laura Wexler has written that photographs of the past don’t show us “the way things were,” but rather they show us “a record of choices.” She reflects, “it is only through understanding the choices that have been made between alternatives—learning what won out and what was lost, how it happened and at what cost—that the meaning of the past can appear.”¹¹⁶ Tina Campt has extended Wexler’s call to think about photographs as a record of choices and *intentions*, a process that takes into account the larger set of relationships that determine the social life of the photo. This includes the intentions of both the sitter and the photographer as well as

¹¹² Geoffrey Batchen, ‘Snapshots’, *Photographies* 1, no. 2 (2008): 121.

¹¹³ Edwards, *The Making of English Photography*, 6

¹¹⁴ Edwards, *The Making of English Photography*, 8.

¹¹⁵ Robin Kelsey, *Archive Style* (Oakland: University of California Press, 2007) 9.

¹¹⁶ Wexler, *Tender Violence*, 133.

what those images say about who these individuals aspired to be; how they wanted to be seen; what they sought to represent and articulate through them; and what they attempted or intended to project and portray.¹¹⁷

This approach understands the image as a site of articulation and aspiration and reads the image as a site of interpretation and reinterpretation.

Art historian Catherine Zuromskis has also attended to the social life of photos. By focusing on how snapshots are shaped by, and disseminated through, mass culture, she approaches the snapshot as a public and political form. Through a careful consideration of the production, sharing, and collecting of images, Zuromskis' locates "an unruly side" within the affect of the photo.¹¹⁸ Due to the personal nature of many vernacular images, they often seem "natural and inconsequential;" but it is precisely because of this that "they have the power to function on the register of myth."¹¹⁹ Within the snapshot's 'democratic possibilities' photos can "provide a powerful space for creating fantasy social relations and imagining alternate realities. Throughout this dissertation, I consider the ways in which photography was used to, and still can be used to, imagine new economic and ecological realities.

I approach these photos as historical documents that provide fragmentary glimpses into histories of resource extraction; narratives that are often eclipsed by the larger histories of nation-building, economic development, and later, economic decline and environmental catastrophe. As John Berger has written, the "task of an alternative photography [to capitalism] is to incorporate photography into social and political memory, instead of using it as a substitute which encourages the atrophy of any such memory."¹²⁰ Situated within community memory, these

¹¹⁷ Campt, *Image Matters*, 6.

¹¹⁸ Catherine Zuromskis, *Snapshot Photography: The Lives of Images* (Cambridge, MA: MIT Press, 2013) 13.

¹¹⁹ Zuromskis, *Snapshot Photography*, 17. In this analysis, Zuromskis attends to Barthes' discussion on the Winter Garden photograph of his mother.

¹²⁰ John Berger, "Uses of Photography," In *About Looking* (London: Bloomsbury, 2009), 58.

photographs introduce the experiences of communities whose lives were subject to the prioritization of the production of wealth by both capital and the state. Following Camp and Wexler, however, I also read these images as records of ‘choices and *intentions*.’ In the context of large-scale climate change, the choices that brought us to our current historical moment are deeply important to understand.

Archival Methodologies

The question of why and how particular photos become the evidence of history, while other experiences and narratives are eclipsed, is central to considering photography within social memory.¹²¹ In “Reading an Archive: Photography between labour and capital,” Allan Sekula focuses on an archive of photographs from a commercial photography studio run by Leslie Shedden in the coal-mining region of Cape Breton, Nova Scotia. Shedden photographed coal companies, miners and families. Sekula argues that the structure of the archive itself obscures the economic, social and power relations that structure mining communities. The authority and perceived neutrality of the archive naturalizes the inclusion of some experiences at the exclusion of others, and as a result, archives maintain a latent connection between knowledge and power.¹²² By establishing a process of abstract visual equivalence, the radical antagonism between two different gazes—capital and labour—is eclipsed. As a result, the archiving of a photograph often results in the depoliticization of photographic meaning.

¹²¹ For an analysis on how some images come to stand in for ‘history,’ see, for example, Sekula, “Reading an Archive,” and Camp, *Image Matters*.

¹²² Allan Sekula, “Reading an Archive: Photography between Labour and Capital,” In *The Photography Reader*, edited by Liz Wells, 443-452 (London: Routledge, 2002) 447.

Yet despite this, Sekula concludes that an archive like Shedden's can help us "understand something of the relationship between photographic culture and economic life."¹²³ Sekula draws attention to the institutional contexts in which photographs are often collected and the ideologies that are presented through either textual framing or visual juxtaposition. However, in focusing on the structure of archives and their connection to power, Sekula doesn't attend to how viewers—especially those in Glace Bay—might read the images in ways that run counter to their official framing. While archives form the basis of histories that become narrated in linear form, the archive itself is messier and more incomplete than historicist narratives would have us assume. Indeed, the very structure of the archive facilitates small acts of reordering, captioning, and reinterpretation, destabilizing any one dominant reading. Elizabeth Edwards has argued the affective nature of the archive creates a "myriad of random encounters with objects of knowledge rather than singular linear narratives."¹²⁴ This is an important process, for as philosopher Michel de Certeau argued, "the transformation of archival activity is the point of departure and the condition of a new history."¹²⁵ Thus, while archives can limit the potential meanings of photographs, as Robert Wilkie observes, Shedden's images produced for commercial means can be recontextualized "as tools for engaging memory."¹²⁶ Throughout this dissertation, I focus less on how photography was used by the state and corporations to discipline, catalogue, and order industrial workers, Indigenous communities and nature. Instead,

¹²³ Sekula, "Reading an Archive: Photography between Labour and Capital," 443

¹²⁴ Elizabeth Edwards, *The Camera as Historian* (Durham, NC: Duke University Press, 2012) 120.

¹²⁵ Michel de Certeau, *The Writing of History* (New York: Columbia University Press, 1998) 75.

¹²⁶ Robert Wilkie, "Introduction." In *Mining Photographs and Other Pictures, 1948-1968*, edited by Benjamin H.D. Buchloh and Robert Wilkie, 203-251 (Halifax: Press of the Nova Scotia College of Art and Design, 1983) xxvii.

I'm interested in how these images can be read against the grain and what these images can tell us about life in extractive zones.

Sekula's critique does not explore how workers or working-class communities built photographic archives to preserve or locate their own histories outside of the disciplining gaze of the state or capital.¹²⁷ The archive of the Cobalt Mining Museum forms the foundation of my dissertation. The diverse holdings include photographs of the community, government and surveyors' reports, books on geology, mining history and mining techniques, and extensive maps. Run by local enthusiasts largely untrained in museum and archival practices, the Mining Museum archive is representative of many small museums that opened to commemorate sites of local significance. I also explore private family archives (photographer T.W. Foster), the archives of the Geological Survey of Canada (specifically photographs produced by the anthropologist Frank Speck) as well as crowd-sourced photographs posted to a Facebook group, Historic Northern Ontario. In some ways, the formation of community archives run by amateurs reflects a romanization of the past in communities that have suffered economic collapse.¹²⁸ At the same time, however, community archives also assert that seemingly peripheral, abandoned places have an enduring importance beyond their contributions to economic development.

Community archives establish a different set of concerns around what constitutes a past worth preserving as they preserve many narratives that are not contained within national

¹²⁷ For a critique of the Marxist emphasis on ideology—which is believed to obscure the conditions of production and “the violence of the class domination concealed beneath the appearances of quotidian ordinariness,” and is therefore often unnoticed by viewers—see Jacques Rancière, “The Misadventures of Critical Thought,” In *The Emancipated Spectator*, translated by Gregory Elliott (New York: Verso, 2009) 27.

¹²⁸ The archival holdings reveal a community that doesn't understand itself as a small boomtown situated in a provincial history of economic development. Rather, within the archive, Cobalt has situated itself within larger histories of mining, exploration, and visual culture. The archive forms a repository of mining, community, and labour history that spans centuries and continents.

histories. For example, a photograph from the Archives of Ontario documents the ‘First house in Cobalt,’ showing two figures standing casually in front of a small house, presumably a father and son, both of whom are white. [fig. 5] The scene around them is chaotic. The staging of the photograph shows us how a log cabin that had once been an isolated building in the northern boreal forest has now been overtaken by development and urbanization. The narrative of the first house is quite symbolic, depicting white ‘pioneers’ settling the frontier of Canada, establishing orderly, domestic communities. The photograph served an important purpose to the settlers in the region circa 1909 when it was taken. They were attempting to show that the town had permanency, that it could defy the many detractors who believed the camp would be a short-lived boomtown turned ghost town.

A second photograph preserved in the Cobalt Mining Museum archive documents a similar scene and appears to have been taken on the same day as the other image. [fig. 6] The framing of the image shows more of the street. A crowd of people are clustered to the right of the house, posing for the camera. The figures closest to the house are two Chinese men wearing casual clothes and two men wearing suits with two young children. Two more men stand behind them. Above them, a man looks onto the scene from the window of the unfinished building behind the house, while a third man poses on the roof. In the foreground, a young boy with a wagon sits on the timber and watches the figures being photographed. The attention of the figures in the foreground and background is focused on the house as it is being photographed. In contrast to the narrative of domesticity, this image presents a snapshot of a rapidly growing community though one lacking in a central vision for sustainable development. Like the first photo, the text ascription written on the photograph identifies the ‘First House in Cobalt.’ A sign beside the window identifies the structure as ‘Charley Chong’s Laundry’ reflecting that the building that

was once a domestic dwelling had been converted into a business. [fig. 7] The photograph introduces a new narrative: the multicultural makeup of the town and the role of Chinese immigrants in developing businesses that helped sustain mining communities.¹²⁹ The sign is present in the other photograph, but it is blurred and therefore becomes sublimated by the image of the white father and son. In the official photograph, the Chinese ownership of the business and the importance of immigration as a source for labour in the capitalist economy, is excluded in favour of an emphasis on British ‘pioneers.’ The emphasis on the structure’s former life as a house reaffirms the narrative of taming the frontier and the establishment of civility.

Within the large archive of photographs of the Cobalt mining boom, people of colour are largely absent. In a relatively small number of photos, racialized workers are present in street scenes, but they are rarely the intentional subject of documentation. The house was significant within the development of an official history of the region because it told the story of white settlement, while the larger archival record reflects that there was little interest in photographing a Chinese business. The contributions of non-white settlers in the establishment of permanent communities were, in essence, removed from the frame as these contributions unsettle a

¹²⁹ Nancy Forestell explores the racial dimensions within communities of migratory male workers that developed in mining camps in the Porcupine. In the 1911 census, there were 1023 males for every 100 women, a disparity that was enhanced due to the prohibition on hiring women for most positions within mining corporations. Married men working in the region were hindered by inadequate housing and a high cost of living. Chinese settlers became an important source of domestic labour for the primarily male population in the Porcupine due to the low female population in the region. She argues that gender and race had contradictory implications for Chinese settlers in resource frontiers. As a racial minority who performed domestic labour, they were dismissed as unmasculine. Yet, at the same time, there was a widespread perception that Chinese men posed a sexual danger to white women. See Forestell, “Bachelors, Boarding Houses, and Blind Pigs,” In *A Nation of Immigrants: Women, Workers, and Communities in Canadian History, 1840s-1960s*, edited by Franca Iacovetta, Paula Draper, and Robert Ventresca, 251-290 (Toronto and Buffalo: University of Toronto Press, 2007).

homogenized national history. However, within this photograph, archived in a community museum, this history resurfaces.

This dissertation charts the development of extraction and the transformation of land, social relations, and the environment through a sustained investigation of the production, circulation, and reception of photography in the Cobalt mining camp. I focus on archival photographs from the early twentieth century that document the Canadian shield as mining and logging began to reshape the natural landscape. This dissertation marks the first effort to think through the environmental art history of the Canadian shield through a focus on photography. Part of the work of this dissertation is placing disparate histories into dialogue with one another by analyzing different types of photographs from diverse archives. Gaps and omissions surface in the historical record, and I do not attempt to construct a complete picture of the region, but rather each chapter introduces one perspective on extractivism. I conclude that photographs formed a site of knowledge production that shaped how people in the early 20th century understood industrial development. Photographs invited viewers to envision new futures, where commerce and art would come together to drive economic and industrial development.

Chapter One: Silver, Materiality, and Photography

This chapter explores a chemical and social history of photography by following the circulation of metals, capital, and photographs. By using silver as a touchstone, this is not a history of the camera, but rather a history of film: tracing the extraction of metals from the mine to the development of silver halides in the darkroom. By the first decade of twentieth-century, the Kodak Park plant in Rochester, NY used no less than a ton of pure silver bullion a week, making the Eastman Kodak Company (EKC) the largest consumer of silver in the United States outside of the US mint.¹ With rising production in photographic industries, there was a growing demand for a cheap and steady supply of silver. In 1906, a Rochester-based company owned by several directors and investors of the Eastman Kodak Company purchased a silver mine in a remote mining camp in Ontario, Canada.² I want to use this connection to think about how these two distinct sites—Rochester, NY and Cobalt, ON—trace a fragmentary portrait of extraction and representation at the turn of the twentieth century. The relationship between mines and photography is not a linear movement that sees raw materials transformed into commodities, but a more complex interplay between the two: silver extracted from the Precambrian shield then returned to the mining camp as a component in photochemical processes, where the technology was applied to expand and complicate existing economic relations.

Photography's connection to silver and silver mining demonstrates another kind of history that complicates the story of photography as either a history of technology or a history of art. I use matter—silver and its light-sensitive properties—as an entry point to think about photography through the lens of labour, industrial processes, and production. This reorients

¹ “Rochester: The City Photographic,” *Eastman Kodak Co*, 1909, 10.

² The mine was an investment property, not a direct source of raw materials for the factory.

attention to geological time and the Anthropocene, centering the destructive ecological effects of human industry while extending ethical considerations beyond human structures. Media theorist Jussi Parikka's concept of 'medianatures'³ acknowledges the way that media and nature are co-constitutive spheres, these:

ties are intensively connected in material nonhuman realities as much as in relations of power, economy, and work. Indeed, it is a regime constituted as much by the work of micro-organisms, chemical components, minerals, and metals as by the work of underpaid laborers in mines or in high-tech entertainment device component production factories, or people in Pakistan and China sacrificing their health for scraps of leftover electronics.⁴

Parikka establishes how representational technologies are made possible by minerals and metals that are extracted from the mine and harnessed in the factory. Capitalist modes of production appropriate natural resources—such as silver—and other forms of “nature” as a productive force, in addition to relying on human wage labour.⁵ I suggest that reading the photograph as a material object connects the history of photography to the realities of resource extraction while foregrounding the human labour and natural resources that enable photography. Lee Mackinnon defines materialism as “a decision to focus upon the materials of engagement, such as the processes of production and their subsequent power relations, the workers who build components, and the otherwise black-boxed complexity of interactions that make the photographic event possible.”⁶ In this framing, “those who mine its raw materials, those who fit its components in remote sweatshops are the camera's extended functionaries and its remote body.”⁷ I argue that the “camera's extended functionaries” also encompass the labour in the

³ Parikka references Donna Haraway's concept of naturecultures.

⁴ Jussi Parikka, *A Geology of Media* (Minneapolis: University of Minnesota Press, 2015)

⁵ Moore, *Capitalism and the Web of Life*.

⁶ Lee MacKinnon, "Toward a Materialist Photography," *Third Text* 30, no. 3-4 (2016): 150.

⁷ MacKinnon, "Toward a Materialist Photography," 155.

darkroom, the complex networks of production and commodification, as well as the processes of archiving.

This chapter introduces the connections between silver and mining, and the application of silver's light-sensitive properties in photography. In the pages that follow, I introduce the connection between mining and the materiality of the photograph as an object. I locate this materiality within a broad spectrum of political, economic, and environmental transformations that defined industrial capitalism.

A mineral history of art

Before turning to photography, I want to offer a brief history of mining and representation. In his study of archival images of the coal mining community of Glace Bay, Nova Scotia, photo theorist Allan Sekula establishes the significance of German metallurgist Georgius Agricola's pioneering treatise on mining, *De Re Metallica (On the Nature of Metals)*, published in 1556.⁸ Agricola's text marks the transition within mining from artisanal to engineering knowledge. Agricola applied the emerging concepts of scientific observation to provide a favorable valuation to the work of mining and metallurgy. The first section of *De Re Metallica* restates and responds to the criticisms of mining by ancient and early modern writers who censured mining as

⁸ Agricola observed mining techniques during the central European mining boom that spanned from 1451-1540 in Joachimsthal and Chemnitz. This period also saw the exploitation of rich deposits of silver in Potosi, which made silver an important part of a complex system of global exchange. Between 1500 and 1800, 80% of the world's silver came from mines in what is now Mexico and Peru. Herbert Hoover, then a mining engineer who translated *De Re Metallica*, observed: "In many mining regions and camps, including the Spanish South America, [*De Re Metallica*] was chained to the church altar and translated by the priest to the miners between religious services." (Quoted in Sekula, "The Emerging Picture Language of Industrial Capitalism," 212)

promoting avarice, war, and the destruction of the earth. In *Metamorphosis*, for instance, Ovid links mining to conflict:

Men descended into the entrails of the earth, and they dug up the riches, those incentives to vice, which the earth had hidden and had removed to the Stygian shades. Then destructive iron came forth, and gold, more destructive than iron; then war came forth.⁹

In *The Death of Nature*, eco-feminist scholar Carolyn Merchant documents how sixteenth-century descriptions in literature and philosophy of nature as a nurturing mother operated as an ethical constraint against mining.¹⁰ In this context, Merchant suggests Agricola's treatise functions as an attempt to free mining from the moral restrictions imposed by this understanding of the natural world, presenting a new, more instrumental, conception of nature that would sanction development and mercantilist practices.

De Re Metallica took advantage of the new technology of the printing press and is extensively illustrated with woodcuts.¹¹ [fig. 8] Mining became one of the first industries to establish empirical science based on the use of visual demonstration.¹² Agricola innovatively used images to respond to the challenge that mining is rooted in greed and the spoliation of the earth. As a result, the images are not merely pedagogical; art, instead, is a cornerstone of the text. As one of the justifications for the importance of mining, Agricola poses the question: "how few artists could make anything that is beautiful and perfect without using metals?" noting that metals are used to create tools, metal-based pigments, and decorations.¹³

⁹ Ovid, *Metamorphoses*. Book 1:125-150. Quoted in Agricola, *De Re Metallica*, 7.

¹⁰ Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco, CA: Harper San Francisco, 1983), 29.

¹¹ The woodcuts were slow to produce so the text was published posthumously, reflecting the significance of the images.

¹² Sekula, "The Emerging Picture Language of Industrial Capitalism," 204.

¹³ Georgius Agricola, *De Re Metallica*. Translated by H. C. Hoover and L. H. Hoover (New York: Dover Publications Inc., 1950) 19-20.

Agricola's linking of art with the subterranean has an earlier lineage. The Greek God Hephaestus lived underground and ruled over the forge, metalworking, and artisans. Although Apollo, the God of the Sun, ruled poetry and music but in the Greek worldview, the work of the artisan emerged from the earth. While mining to create wealth or weapons was censured, the use of metal in craft was considered part of the triumph of civilization over disorder. A Homeric hymn to Hephaestus establishes the importance of craft: "men who before used to dwell in caves in the mountains like wild beasts. But now that they have learned crafts through Hephaestus the famed worker, easily they live a peaceful life in their own houses the whole year round."¹⁴ In this context, it is not surprising that Agricola evokes art so prominently, using the possibility of beauty created by metals as a way of shifting attention from the human and environmental costs of extraction. As Agricola reminded his readers, the minerals and metals extracted from the mine provide the raw materials for art, while the production of wealth provided patronage for artists.

The link between mining, materiality and cultural production dates back to the founding of the discipline of art history. Giorgio Vasari extensively documented the technical methods of artists and how this knowledge of the possibilities of materials facilitated great works of art.¹⁵ For example, in his assessment of Donatello's sculpture, Vasari notes that the difference between the marble sculptures and the "greater freedom in action" in his bronze sculpture "was really one of material" as Donatello's practice of working directly on marble required restraint in

¹⁴ "Homeric Hymn 20 to Hephaestus."

¹⁵ In addition to writing about technique, Vasari's *Vulcan's Forge*, (1563-5) depicts the metallurgical workshop. It is likely that Vasari produced the work for Prince Francesco de Medici, who was interested in artistic technique. Giorgio Vasari, *Vasari On Technique: Being the Introduction to the Three Arts of Design, Architecture, Sculpture and Painting, Prefixed to the Lives of the Most Excellent Painters, Sculptors, and Architects*. Edited by Gerald Baldwin Brown (New York: Dover Publications, 1960)

composition.¹⁶ Artistic practice is often understood as a relationship between the artist and their materials, both organic and synthetic.

The links between mining and art would continue to evolve. Within German Romantic literature and art, the “mysterious caves, wise miners, hidden secrets and ancient knowledge symbolized by precious minerals” became a prominent theme.¹⁷ In fact, a large number of German romantic writers trained as mining engineers.¹⁸ Jason Groves argues that the mine did not simply function as a metaphor, but argues that “Romantic imaginaries are underpinned by material acts of extraction.”¹⁹ As Groves suggests, we find “the crystallization of the romantic movement out of an early phase of modern mining technology. It emerges out of encounters that take place within those depths and in this way, it is also materially of those depths.”²⁰ The tensions that surface in the Ancient world are echoed in this period, most famously evoked by

¹⁶ Vasari, *Vasari On Technique*, 195.

¹⁷ Melanie Lorde, *Liminal Semiotics: Boundary Phenomena in Romanticism* (Berlin: De Gruyter, 2013). The conceptual link between the immersion in the mine and the journey of the soul date back to ancient literature, with Odysseus, Dante, and other prominent heroes in literature travelling to hell on a heroic quest.

¹⁸ For example, Johann Wolfgang von Goethe’s experience in silver and copper mines inspired *Ilmenau*. Theodore Ziolkowski, *German Romanticism and Its Institutions* (Princeton, NJ: Princeton University Press, 2013), 33.

¹⁹ To demonstrate the significance of the mine as a material, technological, industrial space, Groves cites Wackenroder’s letter which is credited with the origins of Romanticism in Germany. Wackenroder includes the hallmarks of Romantic description such as “rolling hills, gloomy, black woodlands” but they exist alongside descriptions of the industrial reality of the workspace. Wackenroder goes on to discuss working conditions underground and the compensation of miners, as well as observations on the architecture and infrastructure of the mine. Jason Groves, “Petrifiction: Reimagining the Mine in German Romanticism,” in *Readings in the Anthropocene: The Environmental Humanities, German Studies, and Beyond*, edited by Sabine Wilke and Japhet Johnstone (London: Bloomsbury Academic, 2017), 252.

²⁰ Groves, “Petrifiction: Reimagining the Mine in German Romanticism,” 252.

William Blake in 1804, who decried the ‘dark, Satanic Mills’ of industrial England and the resultant destruction of nature, human relationships, and links to slavery.²¹

While Agricola’s text predates photography, it would have provided another source of evidence for his defense of mining. Photography emerged out of alchemists’ experiments with light, heat, and photochemical reactions.²² The identification of the chemical substances silver nitrate, silver chloride, and ferrous salts formed the basis of experiments that led to photography.²³ To produce analog photographs, raw silver ore is first refined to create bullion. Silver bullion is dissolved in nitric acid, producing pure crystals of silver nitrate, which becomes the starting material in the film developing process. [fig. 9] Silver nitrates are transformed into halides: chemical compounds that form between silver and halogens. When halogens react with metals, they produce salts that are light sensitive. Once exposed to light, the halides darken, drawing the image in silver. [fig. 10] Many different minerals, metals, and fossil fuels have been

²¹ William Blake, “And did those feet in ancient times,” 1804. In the Romantic period, the fascination with the natural world and the proliferation of developments in geology lent a profound cultural significance to mining, particularly in Germany and England. Mining took on a wholly different character from place to place and the cultural imaginaries that emerge out of each history were very different. Germany was the main source of precious metals in Europe. The smaller scale of production in Germany gave greater autonomy to the individual worker and was less destructive to the environment. Germany was century behind England in terms of industrializing mining, as the Ruhr Valley was not developed until the mid 19th century. The rapid development of the coal and iron mines in England were tied to the emergence of steam power and had high rates of pollution and the related social problems. In England, industrial sites were widely documented in drawings, engravings, paintings and later, photographs.

²² Proto-scientific alchemic experiments conducted on silver were primarily made in an attempt to turn silver into gold. The belief that metals grew underground and that ‘base’ elements could become ‘noble’ elements persisted into the Renaissance. This belief fueled experiments that led to the discovery of silver’s light-sensitive properties. One of the arguments for the theory that metals grew was that silver was often found with lead ore, interpreted as a base metal in the process of turning itself into a noble metal. Agricola further points to abandoned mine shafts, which he observes are quite narrow: “they have become so narrow as a result of the increase of matter from which stone has developed.” (Ziolkowski, *German Romanticism*, 28-29)

²³ Naomi Rosenblum, *A World History of Photography* (New York: Abbeville Press, 2007), 193.

used as light-sensitive materials, including bitumen, iron, carbon, and uranium. However, silver was the most widely adopted.

Silver and value

Precious metals were highly valued in European economies, where the primary use of silver was in coinage and decoration.²⁴ Precious metals are ascribed inherent rather than culturally produced value. For example, Candice Hopkins suggests that gold is characterized as a natural commodity, or an “innocent commodity” based on its “relative scarcity (the quality of gold in the world was determined by nature itself) combined with the human labour required for its extraction (labour in, value out).”²⁵ The ornamental nature and relative scarcity of silver situates it as having natural value, yet the value of metals is always determined by abstract valuations of supply and demand.²⁶ In the decade before *De Re Metallica* was published, the richest silver deposit in history was found in near the city of Potosi in southern Bolivia.²⁷ The large-scale extraction of

²⁴ Warwick Bray, “Gold-Working in Ancient America,” *Gold Bulletin* 11, no. 4 (December 1978): 136.

²⁵ Hopkins, “The Gilded Gaze,” 225-6.

²⁶ Silver has a complicated relationship to value: silver can be diluted with copper by up to almost 50% with little change in color and, as a result, it lends itself well to the deception of wealth. In Rome, emperors issued debased coins in the provinces while pre-Columbian Incan rulers gifted silver-copper alloys with a silver surface to important visitors (Johnson, “Silver Cycles”). In seventeenth-century Massachusetts, the ubiquity of silver complicated its status as a marker of wealth: a law was passed that forbade anyone with an estate less than two-hundred pounds to wear silver buttons. Philippa Merriman, *Silver* (Cambridge, MA: Harvard University Press, 2009).

²⁷ Jason W. Moore observes the significance of Potosi in the development of global capitalism, and by extension, the massive reorganization of nature that happened as a result. Moore argues that “There was a revolution in environment-making that was unprecedented in scale, speed, and scope between 1450 and 1750. [...] The New World became a proving ground for industrial capitalism in every sense. The origins can be seen in sugar plantations. A close second was silver mining in Potosi, in Bolivia today, in Spain, Mexico today. There were very large production operations, lots of machinery, money flowing in, workers who were regimented by time and by task – and it was all premised on appropriating the work of nature for free or very low cost and turning it into something that could be bought and sold.” (Jason W. Moore and Kamil Ahsan,

silver in Potosi produced extraordinary movements of capital, knowledge, technology, and humans, forming a commodity frontier that would reshape systems of value globally.²⁸ Metals were melted down into coins that could be easily transported and standardized, which rapidly increased the amount of money in circulation. Between 1492 and 1600, the supply of precious metals in Europe had increased eightfold. This influx of wealth shifted power from the aristocracy to the merchant and banking classes while undermining traditional exchange and bartering economies. The drive to increase extraction for further wealth also stimulated the triangular trade between Europe, Africa and the Americas and transatlantic slave trade.

By the nineteenth century, however, silver declined in value with the introduction of the Gold Standard, which established gold as the sole monetary standard in the United States and eliminated bimetallism.²⁹ However, silver acquired a new type of use-value through its applications in film development and the surplus of cheap silver reduced the cost of film

“Capitalism in the Web of Life: An Interview with Jason W. Moore,” *Viewpoint Magazine*, September 28, 2015, np.

²⁸ It was both the high ecological surplus and human innovation that fueled the production of silver: output exploded in the early 1570s after the discovery of a mercury amalgamation process to extract it from the mined ore, which was coupled with the imposition of mita, a forced labour system. Before the Colonial Period, the mita was a form of labour recruitment based on traditional community obligations, where labour was done in turns to satisfy the larger communal needs. Once folded into the Spanish administration, mita became a requisition of Andean labour. (Cummins, “Silver Threads”, 3) This combination of technological innovation and forced labour lead to massive socio-ecological transformations. (Moore, *Capitalism in the Web of Life*, 122).

²⁹ Ohio Senator John Sherman’s memorable speech on the so-called ‘Crime of 1873’ reflects the contentious nature of demonetizing silver due to the influence of the so-called “silver States” who sought to find uses for silver being extracted. Since the US was still a major silver mining producer, a surplus of silver developed which reduced the market value of silver bullion contained in a silver dollar. Silver fell rapidly in market value and despite government intervention that sought to halt the declining value of silver, the value continued to plummet. By 1896, silver officially lost its place as money in the United States. In the same period, changing photographic technologies would find an alternative use for the silver being produced in mines across North America (John Sherman, “On the Crime of 1873,” 202)

processing. Marx observed the phantasmagorical nature of commodities, describing the ability to metamorphose from a sensual, material thing to a transcendent, supersensual thing.³⁰ In their analysis of nitrate mining and photography, Xavier Ribas, Louise Purbrick and Ignacio Acosta observe the significance of transformation in the creation of value, suggesting that while all commodities appear to metamorphose, the ability of nitrate to change from “material to immaterial state, to transform and to be transformative” lend it a specific type of value.³¹ Like nitrate, silver’s “capacity to change from material to immaterial state, to transform and to be transformative” enhances its value, a transformation that is often aided by human labour.³²

While innovations in camera technology are central to narratives of EKC, one of Eastman’s insights was recognizing that the repeat sales of film, of which silver is a key component, would be central to the financial success of EKC.³³ In its first several years, EKC sold relatively few cameras. The Kodak No. 1 camera released in 1888 streamlined the process of taking pictures, but the cost of twenty-five dollars was prohibitive to many workers.³⁴ However, with the introduction of the one-dollar Brownie Camera in 1900, the “effortless abundance” Kodak promised was in the reach of middle-class consumers.³⁵ The mass emergence of amateur photography is therefore aided by cheap and readily available silver, and silver mining is an essential preliminary step in producing light-sensitive emulsion for film.

³⁰ Marx, *Capital*, 42.

³¹ Xavier Ribas, Louise Purbrick and Ignacio Acosta, “Traces of Nitrate: Mining History and Photography Between Britain and Chile.”

³² Ribas, Purbrick, and Acosta, “Traces of Nitrate.”

³³ Elizabeth Brayer, *George Eastman: A Biography* (Rochester, NY: University of Rochester Press, 2006), 68.

³⁴ Nancy West, *Kodak and the Lens of Nostalgia* (Charlottesville, VA: University of Virginia Press, 2000), 23.

³⁵ West, *Kodak and the Lens of Nostalgia*, 2.

The Labour of Photography

In 1888, Eastman Kodak Company released the first branded camera, which promised: "You press the button - we do the rest." Kodak's famous slogan shifted attention from the process of photography to the snapshot itself, hiding labour from view in favor of an emphasis on ease, simplicity, and mechanical reproduction. [fig. 11] This image from an Eastman Kodak periodical emphasizes the cumbersome nature of photographic technology before the release of the Kodak No. 1. The reference to the 'amateur' is frequent in Kodak advertisements. When the roll was exposed, the camera and roll holder could be returned to the Kodak factory for unloading, reloading, and developing.³⁶ Prior to this, photography as a hobby was associated with upper-class enthusiasts, who had the time and money to explore the complex chemical and technical aspects of production. Agricola's usurpation of artisanal knowledge into codified structures is echoed here by Eastman's rationalization of photography from an amateur hobby to regulated, industrial production. Agricola and Eastman shared an interest in rationalizing the labour of the worker while more effectively harnessing appropriated raw materials.

Narratives that promoted the autogenic nature of photography predated Eastman's focus on expanding the market for photography. Henry Fox Talbot's origin story for his invention of what he called "photogenic drawing" centers on his inability to draw, insisting that with his invention, the "picture is what makes ITSELF."³⁷ Art historian Steve Edwards situates Talbot's erasure of labour in contemporary discourses that subordinate artisan skill, promoting the cultural invisibility of labour in the nineteenth century. Edwards suggests that the narratives that displaced human agency from the scene of production in factories are echoed in "autogenic

³⁶ *The Home of Kodak: Facts about the worlds largest photographic organization*. Rochester: NY: Eastman Kodak Company, 1929, 7.

³⁷ Quoted in Edwards, *The Making of English Photography*, 31

conceptions” that described photography: “the pictures make themselves; the apparatus draws the scene; objects draw their own likeness; the sun makes the picture; the self-acting apparatus makes the commodity.”³⁸ Despite this narrative, early photography required specialized knowledge. For example, Talbot was accused of intentionally withholding essential steps in his photogenic drawing process. Talbot’s presumption that the explanations were unnecessary indicates he was writing for an audience he assumed was highly knowledgeable in photographic chemistry, which in this period, separated the more skilled producers of photography from lesser artists.³⁹

The erasure of labour in nineteenth-century discourse aligned with the goals of Eastman, whose innovation was to reduce the complexity of film processing and, by extension, the labour of the photographer. As *The Scientific American* observed in September 1888, Kodak “promises to make the practice of photography well-nigh universal” as the film could now be easily shipped to specialists:

All the individual has to do is to send the apparatus to the manufacturers, who do all the work of finishing up the pictures. Thus no manipulation whatever is required by the purchaser, save the making of the exposures; the balance is done by persons especially skilled in the art, resulting, as might be expected, in the production of very uniform and satisfactory work.⁴⁰

In this production chain, the visible labour of photography—taking the exposure—was then aided by the often-invisible labour of developing, cropping, printing, and mounting, which could now be completed at the Kodak factory. Describing this process that turned snapshots into commodities, Nancy West observes that EKC sought to “veil the history of their production

³⁸ Edwards, *The Making of English Photography*, 36.

³⁹ Kelley. E. Wilder, “Photography and the Art of Science.” *Visual Studies* 24, no. 2, (September 2009): 166.

⁴⁰ “Instantaneous Photography,” *The Scientific American: A Weekly Journal of Mechanics, Chemistry and Manufactures* LIX, no. 11 (September 15, 1888): 159.

while at the same time maintaining the illusion that they, and the meanings they represent, are produced by us.”⁴¹ For many amateur photographers and some commercial practices, this shift reduced the darkroom “to a factory-assembled technical process” rather than “a site of craft, artistry, and agency.”⁴² However, the darkroom remained an essential site in the photographic process for both artists and commercial producers, as well as many hobbyist photographers. While EKC reshaped how we think about photographic labour, photography relies on, and produces, complex histories of labour, both extractive and artistic. Photographs have affective and artistic value that transcends their production as commodities.

As the industrial production of photography escalated, corporate communication evolved rapidly, often using images to target messages to different groups.⁴³ Advertisements selling EKC products to the general public highlighted amusement, fun, and simplicity, transforming photography from work to play. In contrast, communications targeted to stockholders and dealers in EKC products spotlight efficiency at Kodak plants worldwide. While the images highlight machinery and tools, workers doing specialized tasks are quite prominent.⁴⁴ For example, a row of women in the developing and printing department at Harrow Factory are pictured “doing the rest”- developing photographs sent from the company’s retail shops in London.⁴⁵ [fig. 12] Historian Colleen Skidmore has argued that in the 19th century, the photography studio was deemed a respectable place in which women could earn a living.⁴⁶ In her study of female

⁴¹ West, *Kodak and the Lens of Nostalgia*, 8.

⁴² Cho, “Darkroom Material,” *Postmodern Culture* 28, no. 2 (2018): np.

⁴³ David Nye, *Image Worlds: Corporate Identities at General Electric, 1890-1930* (Cambridge, MA: MIT Press, 1985), 16.

⁴⁴ *The Kodak Properties*. Rochester: NY: Eastman Kodak Company, 1906, 33.

⁴⁵ *Kodak Properties*, 43. Colleen Skidmore has documented the gendered division of labour in William Notman’s photography practice. (Skidmore, “Women workers in Notman's studio”)

⁴⁶ Skidmore, “Women workers in Notman's studio,” 125.

workers in William Notman's Montreal studio, she concludes that female labour was "an integral part of the public image manufactured by the studio. Their presence is clearly and deliberately on display."⁴⁷ Women workers are also prominent in EKC photographs. Within these images, the order of the Kodak Factory is asserted, alongside EKC's control of labour. By focusing on the specialized knowledge and vertical integration that essentially gave the company a monopoly on film production, these publications reinforced EKC reputation as a good investment and setting it apart from competitors.

Extraction

If photography promises light and clarity, the mine—which functions symbolically in the cultural imaginary as epitomizing darkness, peril, and riches that remain unseen—can be read as an allegorical inverse of photography. As Agricola observed, however, the mine also provides the very possibility of art itself, linking these two histories on the material plane. As Eastman Kodak Company recast the photographer from a producer to a consumer, maintaining a steady supply of raw materials for photographic production became increasingly important. By the turn of the twentieth-century, the knowledge that metals were non-renewable resources was accompanied by the opinion that most of the world's silver deposits had been found.⁴⁸ As one way of addressing this issue, EKC set up a silver department in Rochester to capture scrap silver and by-products, as unexposed silver halides can be recovered.⁴⁹

⁴⁷ Skidmore, "Women workers in Notman's studio," 124. Kate Fogle's "Women at Work: At Kodak Heights and Female Employment in the 1920s" is a labour history of women workers at the Kodak plant in Toronto. Like Skidmore, Fogle concludes that women are featured prominently, and they are often shown working.

⁴⁸ Ziolkowski, *German Romanticism*, 28-29.

⁴⁹ The unexposed silver halides are converted during the fixing process to water-soluble compounds which are dissolved from the film/paper and can be recycled. 10% of silver used annually will have been recycled. *The Photographic News* argued that "besides the individual

In 1903, a new silver mining camp was discovered on the northern side of Lake Ontario. The camp, located in what would become Cobalt, became the fourth-largest silver producer in history, creating significantly more wealth than the Klondike Gold Rush.⁵⁰ The mining region was a mere thirteen kilometers in length but the high-grade silver veins sat on the surface of the earth, reducing the cost of extraction.⁵¹ In 1903, the first mining claim was staked by J.H. McKinley and Ernest F. Darragh. In April 1906, McKinley and Darragh sold an interest in their claim, and the McKinley-Darragh-Savage Mines of Cobalt, Limited was incorporated with a capital of \$2,500,000. [fig. 13] A Rochester company owned by directors and shareholders of EKC purchased the mine, though George Eastman himself was not involved.⁵² By August of the same year, a syndicate representing New York-based industrialists, the Guggenheims, invested in the Nipissing Mine. Within five years, the camp had given birth to 1,300 mining companies claiming a total capitalization of a billion dollars, though only 10% of mines were ever productive.⁵³ The investors from Rochester recognized the potential early on and their speculation predated the boom. The property proved to be a good investment: by 1909, the

gain, it is a saving, in the gross, to the commercial world, as in the case of waste, so much silver goes, practically out of existence, and is lost to the world.’ (“Saving the Silver,” *The Photographic News*, July 4, 1862, pp. 324). Methods for recovering silver was a common subject in photographic journals in the period. See, for example, William Tudor Mabley, “On The Expenditure of Silver Used in Photographic Operations, and on the Savings That May Be Effected,” *The Photographic News*, May 23, 1862, pp. 245; “Recovering Silver From Residues,” *The Photographic News*, July 13, 1865; “Intense Negatives and Saving Silver,” *The Photographic News*, November 24, 1865, pp. 558.

⁵⁰ Baldwin, *Cobalt*, 48.

⁵¹ Silver is rarely found in its native form, only 25% is from silver ore, the rest is recovered from smelting lead, copper, gold or other metals.

⁵² Baldwin, *Cobalt*, 15; Harold Palmer Davis, *The Davis Handbook of the Cobalt Silver District: With a Manual of Incorporated Companies*. The Canadian Mining Journal, 1910, 8.

⁵³ Baldwin, *Cobalt*, 47.

general expenses and salaries constituted only 2% of ore revenue.⁵⁴ By the end of 1913, the mine had paid 172% in dividends, with \$3,865,000 in dividends and bonuses.⁵⁵

But there had long been another way of using the silver found in the Great Lakes region. The area is the traditional territory of Algonquin and Ojibwa tribes, who traded silver from Cobalt dating back at least two millennia.⁵⁶ Curator Candice Hopkins has suggested that metals were “the mediator between the west and east, between Indigenous and colonial, between a local commodity and distant market,” bringing with it new economic and social forces, ones that entirely usurped local economies, ideologies, and forms of justice.⁵⁷ Like the Ancient Greeks, the Ojibwa had narratives surrounding silver and violence, though they relate specifically to colonization. In the Legend of the Sleeping Giant, the spirit Nanabijou showed the Ojibwa a rich silver mine in Northern Ontario, accompanied by a warning that if white settlers found out about his gift, the god himself would be turned to stone. White settlers found the location of the mine and Nanabijou turned himself to stone to block the entrance. Despite this, settlers continued to try to extract the rich ore from the earth.⁵⁸

⁵⁴ Baldwin, *Cobalt*, 257

⁵⁵ Baldwin, *Cobalt*, 47.

⁵⁶ In Indigenous economies in the region, silver was one of many objects and services that was traded but it did not function as currency. The systems of exchange that characterized the Indigenous trade of silver was markedly different than the systems of capitalism extractivism that developed in the region in the 20th century. Because growth and wealth production have become seemingly inevitable in Western economies, it is hard to imagine non-extractive ways of relating to resources such as metals.

⁵⁷ Hopkins, “The Gilded Gaze” 225.

⁵⁸ This version of the Legend of the Sleeping Giant is written down in Tanya Talaga, *Seven Fallen Feathers* (Toronto: House of Anansi Press, 2017). Vanessa Watts cautions against the tendency to use Indigenous epistemologies of “as a gateway for non-Indigenous thinkers to re-imagine their world. In this, our stories are often distilled to simply that – words, principles, morals to imagine the world and imagine ourselves in the world.” (Watts, “Indigenous place-thought & agency amongst humans and non-humans.” *Decolonization: Indigeneity, Education & Society* 2, No. 1 (2013): 20-34) Nick Estes describes how myths and “prophecies do not predict the future, nor are they mystical, ahistorical occurrences. They are simply diagnoses of the times

As the mines were producing silver, new photographic technologies became increasingly intertwined with the socio-economic development of mining camp, reinforcing the connection between mining and art that Agricola articulated over three centuries prior. One of the first businesses established was a photography studio in a tent, and the mining camp was extensively documented in images. Snapshots of rich bodies of ore circulated worldwide in periodicals and postcards. Through the circulation of images, mining companies increased the natural value of silver by promoting investment and speculation. For example, a 1909 edition of the periodical *Canadian Life and Resources* featured an article titled “To Cobalt and Back.” [fig. 14] The article was illustrated by a photograph of a crowd of people standing around a rock identified in the caption written directly into the emulsion as “almost a ton of native silver in a solid block.” The role of image is made explicit in the article, which suggests, “Seeing, according to the old saying, is believing.”⁵⁹ The photograph functions as visual proof in a stand-in for first hand observation, which is used to silence those who doubted the veracity of claims of incredible wealth.⁶⁰ The indexical qualities of the camera confirm the value of investment, while the reproducibility of the image in a periodical ensures the promotion is widespread. The article ran alongside three different ads for promoting investment opportunities in mines on what the newspaper called “millionaire’s row.”

in which we live, and visions of what must be done to get free.” (Nick Estes, *Our History is the Future: Standing Rock Versus the Dakota Access Pipeline, and the Long Tradition of Indigenous Resistance*, London: Verso, 2019). The Legend of the Sleeping Giant is a diagnosis of extractivism and posits an alternative way of being in the territory. The Legend of the Sleeping Giant frames silver as a gift to be cherished, and critically, a gift that would be taken away if it was not valued as such. As a narrative, it establishes an anti-extractivist framework that provides a strong counterpoint to the ways in which white settlers in the region related to minerals.

⁵⁹ Irving E. Struthers, “To Cobalt and Back,” *Canadian Life and Resources*, 1909, 13.

⁶⁰ Eric Nystrom, “Underground Photography and American Mining Before 1920.” *Mining History Journal* 17 (2010): 107.

Mining was a prominent social theme amongst artists and photographers in the late nineteenth and early twentieth centuries.⁶¹ Underground photography posed a technical challenge, as photographers were hindered by inadequate light and the dirty underground conditions, especially during the era of wet plate process.⁶² In the 1860s, Nadar took the first images underground in sewers and catacombs, but he photographed mannequins ‘at work,’ as the exposures took as long as eighteen minutes.⁶³ [fig. 15] One solution to complications posed by low light was the use of magnesium flash as a light source. First used in English coal mines in 1864, the flash emitted a cloud of acrid white smoke when ignited.⁶⁴ Photographs using electric light were taken in 1884, following a commission for George M. Bretz by the National Museum in Washington. Bretz photographed miners in Pennsylvania posing in static positions.⁶⁵

Timothy O’Sullivan took the first significant photographs underground in 1867 at Comstock Lode, Nevada, the first major discovery of silver ore in the United States.⁶⁶ O’Sullivan’s portraits were the first to document the working conditions of miners. Using burning magnesium wire as a light source, he photographed the miners as deep as nine hundred feet underground in tunnels, shafts, and lifts, as well as in the aftermath of a cave-in. O’Sullivan developed a visual iconography that conveyed the claustrophobia of the mine, capturing miners “cornered, truncated, and overpowered [...] beneath heavy masses of rock.”⁶⁷ O’Sullivan’s portraits were celebrated by influential MoMA curator John Szarkowski for their artistic form.

⁶¹ Rosenblum, *A World History of Photography*, 253.

⁶² Nystrom, “Underground Photography and American Mining Before 1920,” 104.

⁶³ Rosenblum, *A World History of Photography*, 248.

⁶⁴ Rosenblum, *A World History of Photography*, 248.

⁶⁵ Derrick Price, *Coal Cultures: Picturing Mining Landscapes and Communities* (London: Bloomsbury, 2018).

⁶⁶ Sekula “The Emerging Picture Language of Industrial Capitalism,” 226

⁶⁷ The Met, “Miner at Work, Virginia City, Nevada 1868.”

<https://www.metmuseum.org/art/collection/search/283218>

Yet the adoption of survey photographs within an art historical canon has been contested. Art historian Rosalind Krauss critiques Szarkowski's framing of O'Sullivan through formalist experimentation and modernist terms rather than situating the images within the scientific or archival histories under which the work had been created.⁶⁸ Krauss rightly argues that archival photographs do not need to be legitimated within art historical frameworks to have value, instead contending that they are situated within the context of their taking and the original conditions of their viewing. However, Krauss constricts the meaning of photographs to their original intentions within the survey, which leaves little space for the photographs to have meanings to viewers that exceeded the intentions of the survey.

Sekula argues that the photographs cannot be adequately understood through art history, but rather form a "[p]roblem of materialist cultural history."⁶⁹ For Sekula, art historians fail to consider the "actual conditions" of those who lived and worked in these spaces and the role the images played in defining power relations.⁷⁰ As the contested readings of O'Sullivan highlight, the circulation of the images and the context of their display surfaces as a critical issue in the meaning of the images. Despite their technological innovations, O'Sullivan's underground photographs were not widely circulated or reproduced: only one of the underground images appeared in King's report.⁷¹ As Sekula observes, the one exception was "a neatly symmetrical

⁶⁸ Rosalind Krauss, "Photography's Discursive Spaces: Landscape/View," *Art Journal* (Winter 1982): 314.

⁶⁹ Sekula, *Reading an Archive*, 227.

⁷⁰ Sekula *Reading an Archive*, 227.

⁷¹ Alan Trachtenberg, *Reading American Photographs: Images as History: Mathew Brady to Walker Evans* (New York City: Hill and Wang, 1990): 144-54.

view that presented a disciplined work crew about to descend into the depths.⁷² It is notable that the other pictures were not circulated given the widespread public interest in Comstock Lode.⁷³

While O’Sullivan remains the most significant mining photographer in the art historical tradition, many other photographers tackled the technical challenges of mining and explored its social and cultural themes. In 1884, the National Museum in Washington commissioned George M. Bretz to photograph conditions within a working mine. Using a dynamo to produce electric light, the miners pose in static positions.⁷⁴ In the social documentary tradition of the 1920s and 1930s, miners became important subjects, reflecting both their status as “proud, indispensable workers and as exemplary figures of unemployment and economic depression,” as photographs captured miners at work underground and in their communities.⁷⁵ A combination of sympathy and exploitation characterizes many of these images.

Photographs in Cobalt documented a wider variety of industrial sites and individuals than in previous mineral rushes, as lightweight cameras increased both the number of photographs and the variety of sites that could be documented. However, underground photography posed several technical challenges. In figure 16, the bright light of magnesium illuminates the rock face, emphasizing the infrastructure of the mine. The tonal contrasts create a perspectival absorption in the scene as the eye is pulled back into the darkness. In the shadows, the two workers recede in the background. While the photograph suggests an immersion underground, the reality of the mine is flattened and abstracted in the image. In many ways, the

⁷² Sekula, *Reading an Archive*, 227.

⁷³ Kelsey, *Archive Style*, 117.

⁷⁴ Price, *Coal Cultures*.

⁷⁵ Coal mining has a significant visual history. See Price, *Coal Cultures*; Geoffrey L. Buckley, *Extracting Appalachia* (Athens, OH: Ohio University Press, 2004); Paul Cabuts, *Creative Photography and Wales: The Legacy of W. Eugene Smith in the Valleys* (Cardiff: University of Wales Press, 2012).

representational plane of the photography is limited in its ability to capture the specificity of the workplace. In this example, the photograph-as-representation is insufficient to tell us something about the labour of mining and the realities of the workspace.

The Darkroom

In his essay “Photography and Liquid Intelligence” photographer Jeff Wall draws attention to the contrast between the “liquid intelligence of nature with the glassed-in and relatively ‘dry’ character of the institution of photography.”⁷⁶ Wall describes the “liquid intelligence of nature,” an important part of the film developing process as latent images are immersed in a liquid bath. Liquid forms a contrast to the mechanical reproduction of the camera, emblematic of the relationship between technology and ecology. This connection to the mineral world introduces new dimensions to understanding to histories of photography more associated with optics or the mechanical lens of the camera. Wall imagines a speculative history of photography as it emerges from the “mineral and vegetable worlds,” suggesting that water forms an archaism that connects photography to the past, embodying a trace memory of “ancient production processes—of washing, bleaching and dissolving, and so on, which are connected to the origin of techne [craft]—like the separation of ores in primitive mining.”⁷⁷ This evocative linking of development processes with mining provides a link between industrial and artistic labour: the photographer in the darkroom becomes symbolically analogous to the miner underground.

For Wall, the liquid intelligence of photography introduces the possibility of an “immersion in the incalculable,” a process of surprise, slippage, or chance that exists within even

⁷⁶ Jeff Wall, “Photography and Liquid Intelligence.” In *Jeff Wall: Selected Essays and Interviews*, edited by Peter Galassi. 109-110 (New York: Museum of Modern Art, 2007), 109.

⁷⁷ Wall, “Photography and Liquid Intelligence,” 109.

the most controlled systems. If photography as a medium contains trace memories of ancient production processes, each photograph also carries residual traces of the labour of the miner, the refiner, the chemist, and the developer, captured in the silver. To meditate on the potential of material-based analysis, I think about the photograph as something whose physical existence is a representation of resource extraction.

However, I also want to consider the public function of photographs after the labour of producing the photograph is done. How does the circulation of photographs function between labour and capital, both as forms of representation and as material objects that circulate as tools of communication and as commodities? One real photo postcard will help us to consider how that image-object functioned to expand and complicate labour relations on a mining frontier. [fig. 17, 18]

On July 2, 1907, miners at the Nipissing Mine walked out of work to protest wages and working conditions. The strikers were members of the Cobalt Miners' Union, a recently founded chapter of the Western Federation of Miners (WFM). Three thousand miners—half the population of the community—followed and initiated a general strike. A photo postcard from 1907 captured the strikers gathered in the town square with a large Industrial Workers of the World (IWW) banner. Throughout the two-month strike, organizers held daily meetings in the town square.⁷⁸ The sender wrote directly on the front of the postcard to identify the scene as “The Present Strike of Miners at Cobalt.” The banner contains the IWW symbol Haggerty's Wheel, which visually classified the industrial population to illustrate the interconnection

⁷⁸ On another copy of this postcard of the striking workers, the sender wrote “You can see this bunch every evening at Cobalt it is the striking miners hope you will get here in time to take a snapshot of some of them,” affirming the desire to visually document the event. It also documents the organizing method employed by the IWW of public speeches in town squares. The postcard was sent from Haileybury to Fife Lake, MI.

between all workers—skilled and unskilled—and reflects the role images played in circulating messages of solidarity.

Silver, materially transformed from the raw silver ore extracted in the mining camp, returned to the site of extraction to circulate the perspective of the worker: to communicate with supporters, labour activists, and families.⁷⁹ The material basis of the image is significant: unlike traditional postcards which are mass-produced mechanically on lithographic or off-set printing processes in urban centers, real photo postcards are printed directly from negatives onto photo paper with a divided back—in this instance, AZO paper produced by EKC.⁸⁰ Real photo postcards were primarily produced in rural areas by local photographers who had at most one or two employees. The labour-intensive process of developing and writing captions was done by hand.⁸¹ With this technology, any photograph could be printed as a postcard and sent through the mail.

Postcards bear traces of the sender: the worker, prospector, or traveler who purchased a cheap and convenient medium. In the strike postcard, the relationship of the sender to the subject of the postcard is ambiguous; he states that a general strike has shut the mines, so he is staking new claims and apologizes for not coming home. As the sender indicates he is not working

⁷⁹ My reading of this image is informed by Warren Cariou's petrographs, photographs made using bitumen as a light sensitive material. Cariou describes how it "seemed appropriate to use this repurposed form of bitumen photography to document the process of industrial bitumen mining itself, and the result has been a series of what I call "petrographs," representing the gigantic machinery and the terrestrial devastation that have become the hallmarks of bitumen extraction." By repurposing bitumen, Cariou establishes a different relationship with the material that considers the damaging but also desirous nature of oil as well as our circular and often contradictory relationship to extraction. See Warren Cariou and Jon Gordon, "Petrography, The Tar Sands Paradise, and the Medium of Modernity," *The Goose* 14, no. 2 (2016): 4.

⁸⁰ Robert Bogdan and Todd Weseloh, *Real Photo Postcard Guide: The People's Photography* (Syracuse, N.Y.: Syracuse University Press, 2006), 8.

⁸¹ Bogdan and Weseloh, *Real Photo Postcard Guide*, 82.

underground, he demonstrates his solidarity with the cause. The act of taking a photograph and turning it into a postcard is an active assertion that the strike is not an isolated labour agitation in a remote mining camp but rather an event significant enough to circulate, a fact that would remain regardless of the intentions or politics of the sender. Today, the postcard is in the collection of the Cobalt Mining Museum, where it now marks the historical significance of the strike and the aesthetic significance of images of collective labour action. As a physical object, the postcard is intended to be held by the viewer, creating a tactile link between the temporally remote moment in the image and the present.

The real photo postcard provides insight into the working conditions and labour politics of the period. Sekula's critique that photographs can't show us the "actual conditions" of labour is nuanced when placed into dialogue with Azoulay's conceptualization of the event of photography. Azoulay argues that the act of taking a photograph is an encounter that enables "new possibilities of political action and forming new conditions for its visibility."⁸² In viewing photographs, there is the possibility to 'watch' photographs, a process that enables a partial reconstruction of the event by speculating on the moment that the photograph was taken and the circumstances around it. If we 'watch' this postcard, the context of the strike reminds us of the human cost of resource extraction: of the cramped, damp, dangerous worksites that lacked proper ventilation and where accidents frequently occurred, and how these conditions radicalized workers. The photograph evokes the environmental costs of government regulations that favored the production of wealth over the sustainability of an ecosystem: the cost to the body of the worker, to the health of the community, and to the landscape as it was stripped, trenched and

⁸² Ariella Azoulay, *The Civil Contract of Photography* (Cambridge: MIT Press, 2008), 24.

mined. While these histories are not contained within the photographs frame, they are embodied in the materiality of the real photo postcard as an object and as a record of labour agitation.

In the present, an encounter with this image object is laden with the knowledge of what came: the struggles, victories, and failures of the union, the closing of the mines, the shattered landscape. It also testifies to the principle of collective action and the importance of labour histories to broader narratives of both economic development and culture. It opens up a moment where workers collectively organized under the WFM and the IWW, though the two organizations and their supporters ultimately split over the issue of winning workplace concessions versus continuing to fight for larger, more revolutionary change. The strike lasted two months and had wide-ranging repercussions, as strikers won concessions on hours of work, wages, and working conditions.⁸³ While the image may not have carried these meanings when it was sent, the postcard is now archived in a community museum, and therefore, situated in social memory.

A general strike is a moment of collective action and public politics. Historian Kevin Coleman has described the potential of photography within labour struggles to call new political, economic, and social relations into being, what he terms the “here-already and the yet-to-

⁸³ By 1907, the rapid growth of the camp and the lack of effective government regulations for underground work had caused increased accidents and the first recorded underground fatalities came in 1906 and jumped dramatically in 1907. Several the smaller mines, primarily those run by Canadian owners, opted to negotiate with the union in order to continue production. Larger mines sought to replace the striking workers by hiring substitute labour to attempt to break the strike. After two months, miners returned to work. In 1910 the Meredith Commission was established to study Workers’ Compensation and in 1911, heard testimony in Cobalt. In 1913, the Workers Compensation Act in Ontario was established. In 1912, the provincial government adopted the eight-hour workday for miners. (Mike Solski and John Smaller, *Mine Mill: The History of the International Union of Mine, Mill, and Smelter Workers in Canada since 1895* (Ottawa: Steel Rail Publishing, 1984).

come.”⁸⁴ The demonstration of solidarity enacted in a general strike and the decision to document the event is an assertion of the collective power of workers, both organized and unorganized. The real photo postcard disseminates the event of the general strike in a form that can be circulated and (somewhat) mass-produced. In many ways, this photograph of a strike tells us more about mining than a photograph underground, demonstrating both the limits and possibilities of representation. The real photo postcard is not simply a reflection of external factors, but it acts as a catalyst through its ability to be altered by the viewer and to circulate. Silver, via the image it facilitates, also has a catalytic effect beyond its natural value. Within the real photo postcard, miners in a remote labour camp had the technology to circulate a message of radical politics that built connections to other labour struggles and asserted a collective identity. Within the physical object, mining, industry, and artistic labour come together in a material form that allow for a fragmentary recovery of a history that may otherwise be lost.

⁸⁴ Coleman, *A Camera in the Garden of Eden*, 179. Coleman’s description relates to a 1954 strike by United Fruit Company workers in Honduras. In analyzing the use of photography in a strike, Coleman argues that workers asserted their political subjectivity and called into being an alternative set of social and economic relations within the photographs, asserting that change was “here-already.”

Chapter Two: Landscape Photography and the Extractive Gaze

Writing in 1909 for *Canadian Life and Resources*, the reporter Irving E. Struthers described Cobalt as a “straggling mushroom-like town” that “really stands on silver, but the superstructure is not in keeping with the foundation.”¹ Rather, the community is described as sitting “on the top of a barren, stony, irregular hill, pitted with holes and hollows which, after a rain, contain stagnant water, and sprinkled with enough soil and dirt to load the air with dust when it is dry and the wind blows.” A panoramic photograph captures tree stumps and slag heaps marking the remnants of extraction with stacked logs and a small building billowing smoke in the back. [fig. 19] In Cobalt, Struthers finds a community that is not only *not* picturesque, but where to be “fairly presentable is an impossibility, for Nature decreed it otherwise.”² Yet, before the overburden was blasted away to uncover ore bodies, Cobalt was a rich boreal forest ecosystem, not unlike the famed landscape of nearby Temagami. As a point of contrast, the photograph that immediately follows the panoramic view shows “the waters of Temagami glimmering in the golden sunshine of September.”³ [fig. 20] A lone canoeist paddles on still water, abundant waterways stretching on beyond the frame of the camera.

Struthers implies that due to the rich minerals, the destruction of the landscape in Cobalt was inevitable as “Nature decreed it otherwise.”⁴ In this sense, Cobalt’s fate as an extractive zone⁵ was sealed between 2217 and 2210 million years ago, when veins of silver flowed through faulted fractures alongside cobalt and arsenic in the Nipissing diabase sill. Cutting through

¹ Irving E. Struthers, “To Cobalt and Back,” *Canadian Life and Resources*, 1909, 12.

² Struthers, “To Cobalt and Back,” 12.

³ Struthers, “To Cobalt and Back,” 12.

⁴ Struthers, “To Cobalt and Back,” 12.

⁵ Macarena Gómez-Barris describes the extractive zone as sites where resource extraction violently reorganizes social life as well as the land to convert natural resources such as silver, water, timber, rubber, and petroleum into global commodities.

Archean volcanic rock and Proterozoic sedimentary rocks, the ore added to a geological formation that dated back over 3.25 billion years. The unusual geological formation that would become known as Cobalt extended a mere thirteen kilometers, but the high-grade silver veins sat along the surface of the earth. However, while Struthers describes the outcome as inevitable, the landscape the author encounters a mere six years after the first discovery of silver was the result of deliberate human choices that prioritized wealth production over the health of an ecosystem. In this framing, Cobalt becomes situated as a sacrifice zone, an eco-system sacrificed for the demands of constant growth. The inclusion of a photograph of Temagami's glimmering water reassures the viewer that other, more pristine landscapes, are still preserved.⁶ Despite the shattered landscape, the author concludes that the “visitor leaves Cobalt with a feeling that a new chapter in the record of Canada's development has been opened.”⁷

This chapter focuses on instrumental photographs that identified, catalogued, and inspired the search for metals, timber and water. Photography was an important actor in the development of the region. The opening up of Northern Ontario to development occurred as evolving camera technology made the photograph pivotal in documenting this emerging story of nationhood. Photography did not simply document changes as they were happening. The widespread development and settlement of the region was directly preceded by survey photography. Survey photography played an important role in identifying potentials for wealth production in the vast wilderness. In the 1890s, provincial government surveyors began documenting the landscape in Timiskaming and highlighting the natural resources of the region. The survey projects were

⁶ Temagami was a site of large-scale logging but also a popular wilderness tourism destination. See H.V. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario, 1849-1941*. Second edition. (Montreal and Kingston: McGill-Queen's University Press, 2005)

⁷ Struthers, "To Cobalt and Back," 14.

linked to The Geological Survey of Canada which was founded in Montreal in 1842, reflecting what historian Suzanne Zeller has described as "inventory science," a manifestation of the preoccupation with mapping and the cataloguing of resources in early Victorian Canada.⁸ By the 1850s, the GSC was leading significant exploration and cartography projects. After Confederation, the GSC focused on uncharted land across western Canada and the North, documenting geological resources along planned railway lines. The Geological Survey of Canada celebrates how "geologists became among the first to recognize the importance of photography in scientific work."⁹

The earliest photographs in the GSC collection were taken by James Richardson the north shore of the Gulf of St. Lawrence and the island of Newfoundland in 1860. By 1871, photographers from Notman Studios accompanied the GSC on the first explorations in the new province of British Columbia. The use of phototopography, which recorded topographical details, by Canadian surveyors became widespread by the late 1880s.¹⁰ By the 1890s, when Temagami began to be surveyed, photography had become central to the practices of the Geological Survey. Survey photographers created the foundations for a cultural imaginary to emerge that would be rooted in the beauty and vastness of natural resources. The "spirit of possession" at the heart of systematic nature of surveying and the professionalization of the GSC was intended to overcome a perceived sense of backwardness deeply through economic

⁸ Suzanne Zeller, *Inventing Canada: Early Victorian Science and the Idea of a Transcontinental Nation* (Montreal: McGill-Queen's University Press, 2009) 4.

⁹ E. Hall, *Early Canada: A Collection of Historical Photographs by officers of the Geological Survey of Canada* (Ottawa: Queen's Printer, 1967) 6.

¹⁰ Marionne Cronin, "Northern Visions: Aerial Surveying and the Canadian Mining Industry, 1919-1928," *Technology and Culture* 48, no. 2 (April 2007): 307.

progress.¹¹ In keeping with this, the initial interest of the GSC was in finding iron and coal, resources that had fueled industrialism in England and were symbolically linked to civilization, progress, and power.¹² In the Timiskaming region, however, surveyors found abundant pine forests, and slightly later, rich silver ore deposits.

Robin Kelsey has argued that the “instrumentality of surveys” produced a new pictorial style, what he terms ‘archive style.’¹³ In his analysis of Timothy O’Sullivan’s survey photographs in mining regions, Kelsey draws a link between the processes of retrieval that characterize the labour of survey photographers and the miner. He describes how the “image of photographer fumbling blindly to bring glittering metals to the dark surface of the river offers an allegory for the photographic process.”¹⁴ Kelsey observes the parallels between the search for valuable natural resources and “the magical exchange value photos were supposed to have.”¹⁵ This analysis describes how surveyors sought out natural resources that could be harnessed to promote growth, and the ways in which the documentation and cataloguing of these resources fueled investment and the creation of value. As Kelsey concludes, O’Sullivan’s survey photographs are thus “both a mining and a minting.”¹⁶

Within the GSC, survey photography “created an ordered, cataloged, and labeled environment.”¹⁷ Surveyors created an inventory of nature framed through a lens of contemplation, a tradition rooted in “aesthetic awe and disciplined scientific curiosity.”¹⁸ Yet

¹¹ In this context, Canadian geological surveys were heavily influenced by contemporaneous discussions in Scotland. See Zeller, *Inventing Canada*, 35.

¹² Zeller, *Inventing Canada*, 49.

¹³ Kelsey, *Archive Style*, 3

¹⁴ Kelsey, *Archive Style*, 127.

¹⁵ Kelsey, *Archive Style*, 127.

¹⁶ Kelsey, *Archive Style*, 127.

¹⁷ Cronin, "Northern Visions: Aerial Surveying and the Canadian Mining Industry," 309.

¹⁸ Sekula, "The Emerging Picture Language of Industrial Capitalism," 228.

despite the scientific lens of the surveyor, there was also a speculative and imaginative component to the survey. The instrumental images were grounded in a belief in the potential wealth that “drives ambitions into the wilderness.”¹⁹ This drive into the wilderness was expressed in periodicals as a spiritual quest or an expression of faith. As another contemporary commentator described, to *not* extract these minerals would be to deny that “utility was in the Creative Mind,”—presumably God—“that called these rocks into existence.”²⁰ In this framework, development was essential to fulfilling the destiny of the nation, but also the destiny of the resources themselves, whose essential ontology was understood as tied to wealth production. This linking of resources to destiny was echoed in by Vincent Massey who celebrated the wilderness aesthetic of the Group of Seven painters and the emergence of a national landscape aesthetic by describing how “[t]his treasure-laden wilderness... will inform our literature and art with a spirit of its own... Commerce and art are becoming allies.”²¹ For Massey, art played a crucial role in celebrating the “great treasure hunt conducted from the sky, its railways nosing their way through the forest to northern oceans, the harness which is being thrown on rapid and water-fall.”²² In the nascent country of Canada, an emerging conception of nationhood became rooted in geographic exceptionalism: a national destiny borne out of raw natural resources.

¹⁹ The Editor, "The Development of a Great Industry," 7.

²⁰ The Editor, "The Development of a Great Industry: The Opening up of a Wealth Producing Opportunity," *Mer douce* 1, no. 5 (1921): 7.

²¹ Quoted in McKay, *Picturing the Land*, 188. Massey would go on to chair the Royal Commission on National Development in the Arts, Letters and Sciences, known as the Massey Commission, which led to the formation of the Canada Council for the Arts in 1957.

²² Quoted in McKay, *Picturing the Land: Narrating Territories in Canadian Landscape Art, 1500 to 1950* (Montreal: McGill-Queen's University Press, 2011) 188. Massey would go on to chair the Royal Commission on National Development in the Arts, Letters and Sciences, known as the Massey Commission, which led to the formation of the Canada Council for the Arts in 1957.

The extractive gaze

Struthers' article establishes Cobalt and Temagami as opposites, one a site of extraction, and one a pristine wilderness. The reality was, of course, more complicated. Temagami was a site of industrial logging and mining. But in the visual record, this binary is largely reinforced. To reconcile the seemingly oppositional visualities of wilderness and extraction that surface in the visual representation of this region, I explore how narratives of *surplus* work with and within visual conventions of wilderness. In the early 20th century, 'wilderness as surplus' superseded the Precambrian wilderness that would later be imagined by the Group of Seven.²³ This chapter focuses on images that accompanied industrial development, including company reports, promotional material, and government surveys to demonstrate how photographs were used to naturalize and justify resource extraction.

To thread the three different ways of seeing landscape—wilderness, wilderness as surplus, and extraction—charted in this chapter together, I apply Macarena Gómez-Barris concept of the 'extractive zone' which provides a framework to interpret zones of extractive capitalism through the visual and the political. Gómez-Barris describes a colonial-extractive gaze which directs the eye to see the land through the lens of extraction and wealth production, rooted in a "colonial paradigm, worldview, and technologies that mark out regions of 'high biodiversity' in order to reduce life to capitalist resource conversion."²⁴ Like many extractive zones, the Timiskaming region, Temagami in particular, was a site of high biodiversity, and had been the traditional territory of Indigenous nations for millennia. The ways in which we are trained to *see* these sites through the lens of wealth production has tangible, material effects. Landscape photography of

²³ The landscape painting of the Group of Seven is discussed in Chapter Six.

²⁴ Gómez-Barris, *The Extractive Zone*, xvi.

early 20th century Canada highlighted raw natural resources—or not-yet-commodified nature—training Canadians to associate abundance and national destiny with the resource-rich north. Art historian Marilyn McKay argues that

The nomadic hero' could document the process of "having dominion," in accordance with the country's new name, "the Dominion of Canada." Dominion in the latter context meant self-governing colony, but the word comes from a passage in the King James' version of the Bible (Genesis 1,6) in which God creates the world and everything in it and then decrees, "let man have dominion" (or control) "over the earth."²⁵
The images of a vast, empty wilderness "encouraged English Canadian businessmen to imagine untapped natural resources just waiting for the right entrepreneurs to find them."²⁶

While landscapes are often understood as natural, timeless, and given, land is the result of historical processes. Landscape is derived from the Dutch word *landschap*, which acknowledges the mutual “shaping” of land and people, foregrounding both human and natural labour. The anthropologist Tim Ingold has drawn attention to the etymological confusion between ‘scope’ and ‘scape,’ and the tendency to overemphasize the visual aspects of land at the expense of its material and political status, disavowing relationality with the natural world through the imposition of distance.²⁷ Scope, from the Greek *skopos*, is literally “the target of the bowman,” derived from *skopein*, or to look.²⁸ Scope implies a detailed and disinterested observation of the world, placing humans outside of nature, looking in. In this framing, nature becomes understood as something distant to observe, contemplate, or own. This process is particularly effective in

²⁵ McKay, *Picturing the Land*, 147. McKay describes the nomadic regime of seeing, a conception of nature as something land outside of civilization waiting to be conquered by the lone hero, best epitomized in the Homeric epics. As she argues, this nomadic gaze has deep connections to imperialism and colonization, as it implies an active process of conquest and directs the gaze to regions being explored for timber, minerals, and hydro-electric power.

²⁶ McKay, *Picturing the Land*, 188.

²⁷ Tim Ingold, "Landscape or Weather-World?" In *Being Alive: Essays on Movement, Knowledge and Description* (London and New York: Routledge, 2011), 126-27.

²⁸ Ingold, "Landscape or Weather-World?" 126-27.

photography, which positions the viewer outside of the frame through the perspectival orientation of the lens. As Kelsey observes in his analysis of Sierra Club photography,

To speak of "natural scenery" or "scenic resources" is to speak as if nature were a theater set, a motionless array of visual features awaiting human action and intended for a human audience. Photography, which emerged out of the picturesque and bore a reputation for faithful replication of the visual world in a still image, was a promising means by which to assess, communicate, and promote nature as scenery.²⁹

The widespread use of photographs to promote conservation further confirms the assumption "that the value of those places was primarily visual."³⁰

More recently, art historians have foregrounded questions of the material and the political, rather than solely emphasizing the visual.³¹ Foregrounding the political, economic and social issues that converge in land and land-use while analyzing how formal representation functions politically can open up new inquiries and insights about the entanglement between human and extra-human labour, capitalist development, representation, and the natural world. Art historians Emily Eliza Scott and Kirsten Swenson draw attention to the role that art can play in revealing how "land, formed over the course of geological time, is also contemporary, or formed by the conditions of the present."³² This enables a shift in focus from landscape as purely aesthetic to questioning the role of visual representation (or lack thereof) in struggle over land and its potential meanings and uses. This approach necessitates taking land as neither "fixed, neutral or natural" but rather an "outcome and an index of complex procedures."³³ In this chapter, I emphasize the *material* aspects of land in addition to the visual through a consideration of the

²⁹ Robin Kelsey, "Sierra Club Photography and the Exclusive Property of Vision," *RCC Perspectives* no. 1 (2013), 12.

³⁰ Kelsey, "Sierra Club Photography and the Exclusive Property of Vision," 12.

³¹ See Emily Eliza Scott and Kirsten Swenson, eds., *Critical Landscapes: Art, Space, Politics*. Oakland, California: University of California Press, 2015.

³² Scott and Swenson, *Critical Landscapes*, 2.

³³ Scott and Swenson, *Critical Landscapes*, 2.

way landscapes have transformed over time, whether the deep time of geological change or the rapid changes brought by mining and logging.

Wilderness

A 1909 advertisement by the Grand Trunk Railway System in *The Canadian Magazine*

promoted Temagami as 'A New Place to Shoot and Fish.' [fig. 21] In the ad, what appears to be a father and son stand on the shore beside a canoe holding a bounty of fish. The ad promotes both railway travel and Temagami as a leisure destination: 'a new territory now reached by rail- the country of the canoe, the camper's paradise.' The figures are framed by still water while the trees in the background open into new pathways, showing the potentially endless canoe routes. The image invites the viewer to imagine themselves outside of the chaos of city life, rediscovering their connection to nature after a short ride on the railway. The inclusion of shoot in the title references hunting, but it has a dual meaning here, reminding the viewer to 'Bring your camera- the scenery is wild and magnificent.' The compelling visual aspects of the territory are explicitly drawn out in the advertisement. Leisure becomes something to experience and to document through the tourist's gaze.

Temagami's pine forests were perceived as the best pinery in central Canada, but the forests also attracted attention for their aesthetic value.³⁴ The rise of wilderness tourism was tied to the rise of anti-modernism at the turn of the twentieth century, where 'authentic, spiritual' nature experiences became sought out in response to rapid economic and social change.³⁵ However, as art historian Lynda Jessup notes, this anti-modernism was often ambivalent, and

³⁴ Hodgins and Benidickson, *The Temagami Experience*, 68.

³⁵ Lynda Jessup, "Introduction," in *Antimodernism and Artistic Experience: Policing the Boundaries of Modernity*, edited by Lynda Jessup (Toronto: University of Toronto Press, 2001) i.

modernism often collided and worked together with romantic ideas of authenticity.³⁶

Conceptions of wilderness on the Canadian Shield reflect a society caught between industrial development and desire to frame national identity around landscape. This led to a paradoxical binary, an "anti-modern modernism" to borrow Ian McKay's phrase.³⁷ This tension is highlighted in the conflict between the desire to develop the logging resources of the forest and its recreational potential as a site of 'pristine' nature. This conflict was solved by the creation of the Temagami Forest Reserve (TFR) in 1901, covering almost six thousand square miles. In the establishment of forest reserve, commercial and development interests existed alongside preservationist goals.³⁸ Rather than limiting development, the forest reserve was intended to preserve the forest for long-term logging and to establish a bureaucratic, scientifically based system of conservation. Within the TFR, lakes were dammed, sections were withdrawn for mineral development, and summer homes and camps were built.³⁹ The construction of Temagami as pristine and wild in tourist literature cloaked the environmental changes brought about by both extraction and the influx of settlers and tourists.

Promotional images and travel literature glossed over resource extraction within the forest reserve and focused on its natural beauty and seclusion. Wilderness as a way of imagining nature is based on the idea of untouched land. Temagami was promoted as an escape from urban life, or

³⁶ Jessup, "Introduction," 3.

³⁷ Quoted in Anderson, "Staging Antimodernism in the Age of High Capitalist Nationalism." In *Antimodernism and Artistic Experience*, edited by Lynda Jessup, 97–103 (Toronto: University of Toronto Press, 2001) 98.

³⁸ John Sandlos, "Nature's Playgrounds: The Parks Branch and Tourism Promotion in the Canadian National Parks 1911–1929." In Claire Campbell, *A Century of Parks Canada* (Calgary: University of Calgary Press, 2011) 59. While the TFR is not a federal or provincial park, the creation of the reserve reflects the mandate of the federal Dominion Parks Branch that was created in 1911 to oversee forest reserves through a bureaucratic system of conservation.

³⁹ Jocelyn Thorpe, *Temagami's Tangled Wild* (Vancouver: UBC Press, 2012) 48.

as L.O. Anderson, the Colonization and Tourist Agent of the Canadian Pacific Railway, observed in a handsomely illustrated article about Temagami in *Rod and Gun in Canada*: "Canada has room enough in her illimitable riches of forests, with lakes, streams and mountains... for all who may come... Canada can give space enough to make playgrounds for the world."⁴⁰ The construction of Temagami as wild served to neutralize Indigenous land claims and justify white settlement while reassuring settlers that the spiritual solace found in nature would be preserved in the face of capitalist development.

Temagami is not the first wilderness areas to be celebrated for its wildness yet also developed for extraction and tourism. For example, Carleton Watkins' images of Yosemite helped establish the visuality of wilderness that would develop in the Americas.⁴¹ Watkins arrived in California during the Gold Rush in 1851, and he captured the birth of industrial California alongside dramatic Western landscapes such as Yosemite. Watkins began his commercial career by photographing California's rapidly developing mining industry, and his photographs often served an evidentiary function in land disputes. For example, in 1858, he was hired to document the site of the Guadalupe quicksilver mine to be used as evidence in a court case and later took pictures used to settle land disputes in the East Bay. Watkins first visited

⁴⁰ L.O. Anderson, "Timagami, Mississauga, French River and that Sort of Thing," *Rod and Gun in Canada* 6, no. 11: 585.

⁴¹ The often contradictory aims of national parks and their shifting relationships to the natural world have been explored by Mark Daniel Barringer, *Selling Yellowstone: Capitalism and the Construction of Nature* (Lawrence: University Press of Kansas, 2002); Claire Campbell, ed, *A Century of Parks Canada, 1911–2011* (Calgary: University of Calgary Press, 2011); J. Keri Cronin, *Manufacturing National Park Nature: Photography, Ecology, and the Wilderness Industry of Jasper* (Vancouver: University of British Columbia Press 2011); Ian McLaren ed., *Culturing Wilderness in Jasper National Park: Two Centuries of Human History in the Upper Athabasca River Watershed* (Edmonton: University of Alberta Press, 2007).

Yosemite in 1861 with his patron Trenor Park, who owned a gold mine in nearby Mariposa.⁴²

The mammoth photographs rendered the vastness and grandeur of Yosemite's glacial valleys, dramatic waterfalls, and massive rock faces with exquisite detail. Produced with a wet-print collodion process, Watkins required a dozen or more mules and carried roughly two thousand pounds of equipment. His photographs of Yosemite would establish him as the pre-eminent landscape photographer in the United States and bring him national fame. Reflecting the tangible material effects of the visual, it was partly due to the rugged beauty of these photographs that President Lincoln set aside Yosemite for conservation and public use in 1864, initiating the blueprint for the National Park System.⁴³

As Watkins work and biography reveal, wilderness played a more complicated role than simply celebrating ancient and unchanging nature. These pristine sites often had direct links to extraction. Wilderness landscape photography played a dual role that points to the tensions and interconnections between preservationist and instrumental approaches to nature: it identified the natural resources of the region as lucrative sources of surplus that could be easily appropriated while providing reassurance about the sustainability of extraction from a super-abundant nature. Photography was one of the tools through which the promotion of capitalist development and the politics of Canadian 'distinctiveness through wilderness' was linked and circulated. These contradictory myths—the myth of virgin wilderness and the promise of a northern frontier that

⁴² The links between photography and industry were quite strong in this period. As Rebecca Solnit has observed, railroad baron Leland Stanford supported the experimentations of photographer Eadweard Muybridge, who carried out his famous motion studies of racehorses on Stanford's Palo Alto estate. This site later became Stanford University, the birthplace of Silicon Valley. Rebecca Solnit, *River of Shadows: Eadweard Muybridge and the Technological Wild West* (New York: Penguin Books, 2003).

⁴³ "Carleton Watkins: Yosemite." *The Met*, <https://www.metmuseum.org/exhibitions/listings/2014/carleton-watkins>

would fuel development—root ‘Canadianness’ in raw resources and isolated expanses and both find their natural expression in landscape photography.

Wilderness as surplus

In 1921, the Algonquin Historical Society magazine *Mer douce* published an article titled “A Midsummer Trip through the Eldorado of the North.” [fig. 22] The title references common descriptions that circulated with the discovery of the Cobalt mining camp: in 1906, the Grand Trunk Railway issued a promotional pamphlet titled “the Eldorado of New Ontario”⁴⁴ while *The New York Times* also proclaimed that El Dorado had been discovered in Cobalt, though one with “all the sensations of the most modern city on the continent.”⁴⁵ The title references the mythical city of gold, pointing to the continued obsession with finding natural resources so abundant that healthy profits could be made while minimizing human labour inputs; in essence, appropriating extra-human surplus as a form of unpaid labour, rather than relying on human wage labour. The caption describes a ‘typical scene of North Ontario.’ The image is also typical in its framing of the subject material. The photograph spotlights the ecological surplus of the region: the choppy, glistening waters cascading from a waterfall, the smooth rock face and the seemingly endless forest. It replicates the iconography of a picturesque landscape, with a distant horizon and gentle, undulating water that fills the foreground. On first glance, the scene appears untouched by human hands, though the caption alerts the viewer to the linear form of the railway in the background. The caption describes:

A typical scene of North Ontario: bluffs of rock covered with birch and poplar and an occasional evergreen: the lonely trunk of a pine or other large tree... the water-fall awaiting to be harnessed to provide electric power for the necessities of our advancing

⁴⁴ General Passenger Department, “The Eldorado of New Ontario: Cobalt, the Rich New Silver District.” Toronto: Grand Trunk Railway Company of Canada, 1907.

⁴⁵ “New Eldorado in a Northern Ontario Wilderness; How the Mishap of a Burly Blacksmith Revealed the Wonderful Mineral Wealth of the Cobalt District.” *New York Times*, May 27, 1906.

timing; and here also the steam railway, the greatest factor, west to the lakes and rivers, for the opening and development of this great area.⁴⁶

The photograph reflects a tension between celebrating the beauty of wilderness and an emphasis on its utility. The photograph casts an admiring gaze on the aesthetic value of nature, but the caption directs the viewer to read the scene in instrumental terms, resulting in a collision of two narratives: wilderness and development.

The low image quality reproduced on newsprint dulls the intensity of the photograph, and the lack of contrast reinforces the essential placidity of the image. There is nothing dynamic about the image; it is flat, *terra nullius*. The territory that is home to Indigenous nations, diverse ecosystems, and resource extraction becomes removed from the local and specific into a general impression of 'nature.' The subject becomes a landscape that could be anywhere: it signals that we do not have to look deeper, that this nature is like all other nature. Ahistoric and abundant, placated and passive. The conquest of nature is symbolically completed in the image as the specificity of the landscape is flattened by the camera. The distant, contemplative, and indexical gaze of the camera serves to frame and contain nature.

The essay that accompanies the photograph describes the utility of nature, the possibilities of expansion, and the necessity of growth. The author, identified only as "a varsity undergrad," is in search of the "The Mining Game" and the "prospects of this country in terms of silver and gold."⁴⁷ The text describes the excitement of discovery, the risks of fraud through financial speculation, and the role of machinery, chance, and human ingenuity in the creation of incredible wealth. However, by the time the author visited Cobalt in 1921, the 'game' was over, and the

⁴⁶ Varsity undergraduate. "A Midsummer Trip through the Eldorado of the North." *Mer douce* 1, no. 4 (1921): 5.

⁴⁷ "A Midsummer Trip through the Eldorado of the North," 5.

author laments the loss of the easy profits and excitement that Cobalt promised just fifteen years before, when “it set the world on fire in excitement” due to its mineral wealth.⁴⁸

The article focuses specifically on the value of natural resources in the region. This raises an obvious question: why was a wilderness landscape photograph chosen to illustrate the article as opposed to an image of a mine or its abundant surplus? This image reflects a broader trend where the formal conventions of landscape were employed by the state and industrialists to encourage investment and development. The image and text seem to be in opposition to each other: the photo aestheticizes the landscape, but the article emphasizes the utility of the ‘cheap natures’ of the north while celebrating the encroachment of technology. In this photograph, it becomes clear why Vincent Massey saw art as playing an important role in promoting national development in natural resources. The text celebrates the development of industry; it tells the reader that development is both natural and necessary. While the text tells, the photograph *shows*. It offers visual proof through the ostensibly objective lens of the camera of the overwhelming abundance of resources still ripe and available for development. A sense of immersion in the natural world is constructed by the closeness of the camera lens to the edge of the water. The photographer, reader, and aspiring capitalist are all placed in nature in a way that emphasizes the rightness of the task, the naturalness of expansion, and the spiritual connection of the industrious white male adventurer to nature.

But at the same time, it reassures. Organic shapes dominate the image except for the train that cuts through the landscape and introduces the specter of industry. The railway is subsumed by the softness of the scene around it, presenting the encroachment of industry as benign, and nature as endlessly able to absorb the trauma of development. Additionally, while the text

⁴⁸ "A Midsummer Trip through the Eldorado of the North," 5.

discusses the depletion of the silver in Cobalt, the image encourages the viewer to imagine a nature is that is *still* untouched and abundant; an endless storehouse of natural resources that would continue to fuel economic growth despite the exhaustion of the silver veins in Cobalt. Textual sources often fail to reconcile the twin desires of wealth creation and environmental appreciation. In this image, in a way that the text struggles to do so, the instrumental gaze and the preservationist gaze are at least temporarily brought together.

There can be absolutely no doubt that Cobalt is a reality⁴⁹

While survey photography identified potential sites of surplus, within business periodicals and advertisements, photographs highlighted surplus to promote the mythology of the camp as a place where anyone could make a fortune. A photograph from the Cobalt Mining Museum archive shows four sharply dressed men standing around the Lawson Vein, each pointing to the vein with a stick or cane. [fig. 23, 24] The Lawson Mining Company was famed for its Lawson Vein, a surface expression of silver that was one hundred meters long and half a meter wide, reaching a depth of sixty metres below the surface. In these images, the figure of the capitalist is inserted into the landscape, pointing to a natural surplus that they will expropriate. The black and white photograph is unable to reveal the coloring of the rock, and as a result, the richness of the ore isn't necessarily apparent within the photograph itself. The vein is labeled on the photographic emulsion to identify it as a non-human source of surplus, making explicit the intended extraction of the ore. This image reveals how the role of the photograph as evidence was utilized in the photograph as an advertisement.

⁴⁹ W.J. Blair, "Cobalt Mines." *Canadian Mining Review* 27, no. 6 (1906): 183.

The surplus of what Moore terms ‘cheap nature’⁵⁰ attracted considerable attention to the Cobalt camp. The *Canadian Mining Review* described how the “extraordinary richness of the ore, and the comparatively small amount of development necessary, as well as the low cost of mining, are important features of this unique mining camp.”⁵¹ In 1906, the total cost of mining equipment in the Cobalt camp was only one hundred thousand dollars.⁵² The *Engineering and Mining Journal* described The Right-of-Way Mining Company as “seven men, three planks and a wheelbarrow, to which has been added a couple of candles for the nightshift.”⁵³ Mining in Cobalt was primarily done through a process of trenching; where the rock was exposed and trenches were dug in grid-like patterns.⁵⁴ This was a cheap but wasteful form of extraction. In the first five to seven years of the camp only high-grade, surface ore was extracted. Approximately 70% of the gross value of ore was profit.⁵⁵

The photograph also would have carried a more specific meaning to investors, workers, and speculators in this period. While the unusual geological foundations of the silver veins in the Nipissing diabase facilitated quick profits, trade papers of the day circulated reports that suggested that the veins of ore did not extend deep below the surface, a narrative that proved to be accurate.⁵⁶ As a result of tales of quick and easy profits in the early years of the camp, Cobalt was plagued by stock fraud and over-capitalization. In 1907, total capitalization reached

⁵⁰ Jason W. Moore draws attention to the appropriation of nature as a productive force, what he terms the ‘cheap nature strategy.’ Easily accessible surpluses of labour, food, energy and raw materials are central to capitalist growth, premised on the devaluing of women, nature and colonies and the opening of new frontiers. See Moore, *Capitalism in the Web of Life*.

⁵¹ “Mineral Production” *Canadian Mining Review* 26, no. 4 (1906): 102.

⁵² Baldwin, *Cobalt*, 80.

⁵³ *Engineering and Mining Journal*, January 26, 1907, 27.

⁵⁴ New Liskeard Speaker, “Christmas 1907.”

⁵⁵ Baldwin, *Cobalt*, 52.

⁵⁶ See, for example, “Editorial,” *Canadian Mining Review* 28, no 1: 1 (1907); “In Gay New York,” *Canadian Mining Review* 27, no. 6 (1906): 199–200.

\$212,186,000, though the high rates of stock fraud meant that many of the mines that were invested in never actually produced any silver.⁵⁷ By 1908, only thirty of the several hundred mines incorporated in 1906 still existed.⁵⁸ This reality was summed up by a contemporary writer who described “many of the Cobalt mines are lying idle and their owners are lying furiously.”⁵⁹ Cobalt's reputation as a poor investment was exacerbated following a swift decline in stock prices on the New York Stock Exchange after a syndicate headed by Daniel and Murray Guggenheim rapidly dropped shares in the Nipissing Mine in 1907, fueling rumors that the camp was too good to be true.⁶⁰ Ironically, the Nipissing Mine was one of the few safe investments in the Cobalt camp, producing over thirty million dollars in dividends throughout a forty-year existence.

Seeking to quell reports that the veins did not extend below the surface and that many mines were overcapitalized, the pages of the *Canadian Mining Review* were filled with reports of deeper veins which were used to demonstrate the long-term potential of the camp. In response to rumors and stock fluctuations, promoters sought to prove that there should be “no fear for Cobalt's future,” and newspapers such as the *Ottawa Citizen* argued that while investments in Cobalt should be made cautiously, there was the potential to miss the “opportunity of a lifetime” and if Ontarians “had not been overcautious and incredulous during the past eighteen months they might have made a lot of money. Now the Americans are coming in and buying large interests in the camp.”⁶¹ Naturally, the Lawson Vein was heavily documented; some photographs show a ruler measuring the vein to prove its wealth to otherwise wary investors. The inclusion of

⁵⁷ Baldwin, *Cobalt*, 42.

⁵⁸ Baldwin, *Cobalt*, 42.

⁵⁹ “Editorial,” *The Canadian Mining Review*, 1.

⁶⁰ “In Gay New York,” 189.

⁶¹ “Cobalt,” *Canadian Mining Review*, 27, no. 6 (1906): 202.

people is further proof that the vein being promoted through the sale of penny stocks is not just real but is under the watchful eye of the prudent business owner. In this context, the photographs can be read as emphasizing the incredible potential for wealth to a skittish public. The indexical nature of the photograph, its perceived ability to convey the 'truth' is utilized. The photographer played the crucial role as a validator of this new mineral frontier, as viewing a photograph became a stand-in for first-hand observation, even though photographs were often unreliable witnesses. This appeal to photography's evidentiary power is perhaps most literally expressed in the reproduction of a photograph of a large silver nugget in a periodical promoting natural resource development, which proclaimed, "Seeing, according to the old saying, is believing."⁶²

"the harness which is being thrown on rapid and water-fall"

In a photograph from the Cobalt Mining Museum Archive, the hallmarks of the northern landscape figure prominently: rapids, rocks, and trees [fig. 25]. The close-up framing of the rapids emphasizes the textures and forms of the water, structured by ragged diagonal lines that convey a strong impression of movement. The water flowing from the apex of power in the waterfall establishes the visual rhythm of the photograph. The sense of movement and instability is emphasized by the trees askew in the background. The image captures rapids on the Montreal River, which would become a significant source of power for the early Cobalt mining camp. The framing of the Montreal River through the familiar aesthetic of the sublime presents the appropriation of natural labour as beneficial to development, but not necessarily harmful to nature. This image, if removed from the context of its archiving, could read as traditional wilderness landscape photography: any set of rapids, untouched by human engineering. Surplus

⁶² Struthers, "To Cobalt and Back," 13.

found a logical visualization in the sublime,⁶³ conveying the power of nature, and the same time, its potential as a source of appropriated labour. The transformation of water into waterpower is a process rooted in both material and symbolic violence. This includes both the transformation of the landscape and the naturalization of the new landscape through art and literature, or in this case, photographs of 'rapids and waterfalls' which highlighted the power to be harnessed.

While the photograph conveys awe at an overpowering, turbulent nature, it is also a nature that has been appropriated to serve economic growth. Massey's description of "the harness which is being thrown on rapid and water-fall"⁶⁴ is embodied here, linking art and utility in an evocation of the sublime. Water was an essential source of power in the camp, particularly as shafts sunk deeper into the earth. In 1910, Charles Havelock Taylor of the Cobalt Hydraulic Power Company created a compressed air system that harnessed the rapids on the Montreal River that were ideal for generating electric power. [fig. 26] By 1910 Taylor's company was delivering affordable energy directly to the mines. The appropriation of nature as a productive force allows for enhanced productivity while reducing wage labour, increasing profits.⁶⁵ The

⁶³ In the Romantic period, the sublime became a prominent way of picturing and relating to nature. The sublime found beauty in the vastness or grandness of nature. This beauty, which lied outside of human comprehension, produced an overwhelming sense of awe or terror.

⁶⁴ Quoted in McKay, *Picturing the Land*, 188.

⁶⁵ The large-scale transformation of waterways was essential to the growth of industrial capitalism. Environmental historian Stefania Barca argues that "the appropriation of water is probably the most relevant place to look at [to locate] the birth of European industrial capitalism" as waterpower fueled the factory system. Critically, as Barca observes, the process of enclosure that turned rivers into engines of capital was a social problem as well as an environmental problem, suggesting that the ecological and social costs cannot be separated. See Donald Worster, *Rivers of Empire: Water, Aridity and the Growth of the American West* (New York: Pantheon Books, 1985); Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1995); Mark Cioc, *The Rhine: An Eco-Biography, 1815-2000* (Seattle: University of Washington Press, 2002); Stefania Barca, *Enclosing Water: Nature and Political Economy in a Mediterranean Valley, 1796-1916* (Cambridgeshire, UK: White Horse Press, 2010).

harnessing of nature as a productive source had significant effects on labour in the region, as the increased power supply reduced staffing needs at mines. To attract American financiers to fund the project, Taylor took potential investors on a hunting and fishing expedition that played up the natural resources of the region.⁶⁶ The aesthetic value of nature was central to funding the project.

Extractive Landscapes

Smoke and debris fly as the camera shutter opens, capturing a dynamite explosion in a winter landscape. [fig. 27] Uneven rock breaks through the snow coating the ground. One lone tree stands tall in the background, anchoring the scene, with tree stumps and felled logs in the center of the frame. This photograph from 1904—identified on the film emulsion as ‘blasting’—documents the rapid transformation of the boreal forest landscape in the service of extractivism. Buildings dot the landscape, revealing how close blasting was to the community itself.

Invented in 1866 by Alfred Nobel, dynamite was intended as a safer explosive that could be easily transported and exploded safely with a detonator. The highly explosive pure form of nitroglycerin was stabilized through being combined with diatomaceous earth which acted as an absorbent. Miners planted dynamite charges in the drilled holes of the rock walls, a quick way to blast open mine shafts and clear space for further industrialization. Literary scholar Sarah Cole charts how "dynamite violence added a potent new element to the modern imaginary "as the violence of dynamite reverberated in "every sensory register" from its chemical smell to its shattering sound to its extreme tactile effects.⁶⁷ As this photograph reflects, the visual impact of dynamite was also quite vivid. The local paper described the physical presence of dynamite in the region in 1907:

⁶⁶ Baldwin, *Cobalt*, 93.

⁶⁷ Sarah Cole, "Dynamite Violence and Literary Culture," *Modernism/modernity* 16, no 2 (April 2009) 301.

nearly all the mining operations were operating near the surface and the sound of blasting was the most pronounced evidence that this was one busy mining camp. Day and night the exploding charges of dynamite sounded like a sham battle in full progress. Now the mines are mainly working underground, and the sound of an explosion is only occasionally heard. No longer are the recently arrived in camp kept awake all night by the sound of blasting. No longer are the buildings about town shook and the windows made to rattle by the violent vibrations.⁶⁸

Economic exploitation shapes the physical landscape of mining towns, degrading the water, air, and soil quality.⁶⁹ The most surprising thing about the photograph is not the overt violence of the blast, but rather how close it is to built structures, making visible the prioritization of extraction.

As Sekula observes, mining exemplifies the human domination over nature, extracting raw materials for the production of value.⁷⁰ In his study of photographs from the coal mining community Glace Bay, Sekula observes a shift in the visual culture of mining from topographical landscape photography towards images that foreground the power of industry. A similar trajectory emerges in the visual archive of Cobalt, as the scientific gaze of the survey gave way to celebrations of industrial power. Extractive landscapes are often in tension with the conventions of landscape as a genre, as the reshaping of the natural world and the historical production of 'nature' are made visible. Historian Thomas Andrews describes mines as "worksapes": places that are shaped by the interplay of human labour and natural processes. Landscape is a stretch of terrain that can be contained in a frame. A workscape encompasses a set of relationships enmeshed in a process of mutual forging between the natural world and the human world, many of which are not immediately visible. This dynamic remains in constant

⁶⁸ "A Greater Cobalt," *Cobalt Nugget*, February 6, 1909.

⁶⁹ MacDowell, *An Environmental History of Canada*, 147.

⁷⁰ Sekula, "The Emerging Picture Language of Industrial Capitalism," 203.

flux, for "wherever people work, in short, the boundaries between nature and culture melt away."⁷¹ Historian Douglas Baldwin describes:

Exploratory shafts were sunk in the very heart of the town, and businesses and residences were literally crushed beneath tailings piled against their walls by the mining companies that owned the rights to the land... The very lives of the residents were bound up in mining, and not in a simple economic sense: it affected their health, their leisure, their access to drinking water, and their politics.⁷²

Under provincial regulation, mining rights superseded property rights. Houses and businesses were torn down to facilitate blasting or used as sites for dumping ground for waste rock. *The Toronto Star* described the reality as:

There is scarcely a public or private building here that is not at the mercy of several mine managers. A shaft could be sunk in the middle of any dwelling and the householders would have no recourse. The citizen, the shopkeeper or the man who runs the ten-cent restaurant counts for nothing.... **Everything centers around surface rights. The person who owns a store or house in Cobalt has a deed for that property and nearly everyone agrees that it is not worth the paper it is printed on.** [emphasis mine]⁷³

The domination of nature that created the blasted landscape that horrified Struthers is documented in photographs. Photographs highlighted the quick and relentless process of extraction, connoting a high return on investment. In addition to blasting rock for trenching, dynamite was also used to blast trees to clear territory, which was faster than hand-logging. A postcard of the Coniagas and Trethewey Mines is jarring in its disregard of the visual conventions of postcards, which are associated with charming, picturesque tourist views. [fig. 28] The felled trees left in chaotic groupings and the charred, uneven tree stumps document the transformation of land under rapid development. In the context of the tendency of postcards to

⁷¹ Thomas G. Andrews, *Killing for Coal: America's Deadliest Labor War* (Cambridge, MA: Harvard University Press, 2010) 125.

⁷² Douglas Baldwin and David F. Duke, "A Grey Wee Town: an environmental history of early silver mining at Cobalt, Ontario," *Urban History Review* 32, no. 1 (2005): 72.

⁷³ *The Toronto Star*.

idealize, the realism of this scene is incongruous. However, it sends a message that profits were not being diverted to build infrastructure, that profits for investors were the priority. Yet despite the “shacks” and “mill-end dumps of rejected ore” that mark the “newer and rawer” mine sites, “everywhere there are evidences of large outlays of capital and each spot is bustling with well-directed energy.”⁷⁴ As Struthers observes, “Some of the older mines that have ‘struck it rich’ have already taken on an appearance of neatness. Their buildings are all painted, everything about is tidy and the plant with the little homes round about looks like a village in miniature.”⁷⁵ Struthers concludes that despite the appearance of the town, “there are few villages in the whole Dominion worth as much as one of these little patches of settlement on a Cobalt hillside.”⁷⁶

Shattered landscapes

In the second half of the 19th century, the Ontario government liberalized access to land to encourage mineral exploration. When extraction began in Cobalt, development was largely unregulated, and the “richness of that ore body [Cobalt] seemed to require rules all its own.”⁷⁷ The balance between industry and government was negotiated during the life span of the Cobalt camp, as bureaucrats, corporations and municipalities responded to rapidly evolving conditions. For example, one of the most visible forms of unregulated intervention into the landscape was hydraulic mining. Hydrauicking was pioneered in California in the 1850s to facilitate the search for new ore bodies by blasting overburden, the material that lies above an ore body, with

⁷⁴ Struthers, "To Cobalt and Back," 13.

⁷⁵ Struthers, "To Cobalt and Back," 13.

⁷⁶ Struthers, "To Cobalt and Back," 13.

⁷⁷ Nelles, *The Politics of Development*, 20, 156. Nelles describes how government policies sought to stimulate resource sectors as the government encouraged private strategies of expansion and profit on property rights vested in the Crown. Early phases of growth emphasized the government's role in promotion, but as large-scale operations developed, the regulation of industry increased. Though, Nelles notes that the process was not as clear cut as this trajectory articulates.

pressurized water. In 1871, Carleton Watkins captured a hydraulic mining operation at Malakoff Diggins, North Bloomfield, Nevada County, California. The intrusion of industry into the landscape is emphasized by the wide view of the frame, as a pipe cuts through the scene. The precision of the photograph documents "a vast depth of field," as the camera "sharply drew each stone and pebble in the mine, each striation of rock."⁷⁸ However, the single flash of light that fixes the image is limited in its ability to show the release of the mud, gravel, and debris that clogged streams and rivers, leading to flooding and mercury contamination. Today, the effects of hydraulic mining mark the eroded landscape of Malakoff Diggins. The violence of hydraulic blasting led to the first environmental law issued by the federal government in 1884, as the process was banned under American federal law due to the environmental impacts. Nearly twenty years after it was banned in the United States, Cobalt became the first mining camp to use the technology east of the Rocky Mountains.

In 1906, a group of workers posed around a large hydraulic hose at the Nipissing Mine. [fig. 29]. While Watkins image holds industry and nature in a delicate balance, this image lacks any formal beauty. The human labour required to blast away overburden is highlighted by the large crew. The dark tones of the image and close framing of the landscape Struthers encountered as looking "raw, unattractive and worldly" was, only a decade earlier, a vibrant boreal forest ecosystem.⁷⁹ The average depth of overburden was 1.2 meters. Miners used pressurized water to strip the Precambrian rock of overburden, a process that took one hundred and twenty hours per week for seven months.⁸⁰

⁷⁸ "Malakoff Diggins, North Bloomfield, Nevada County, California," *The Getty*. <http://www.getty.edu/art/collection/objects/55573/carleton-watkins-malakoff-diggings-north-bloomfield-nevada-county-california-american-1871/>

⁷⁹ Struthers, "To Cobalt and Back," 14.

⁸⁰ Baldwin, *Cobalt*, 224.

The location of the mine facilitated the rapid removal of soil: sitting on a hill on the east side of Cobalt Lake, the debris was blasted into the lake, formerly a source of drinking water for the community. *The Cobalt Nugget* described the violence of the hydraulic hose as:

A scene worth going a considerable distance to see. An electric pump raises the water from Cobalt Lake and a stream which would cut a man in two as quickly as if struck by a power buzz saw, and which will move pieces of rock weighing a thousand pounds, is hurled against the overburden with such tremendous force that anything moveable in its path is torn from its resting place. The earth mixed with water flies in clouds before the stream, pieces of rock are hurled some distance away, and tree stumps are uprooted and driven away by the force of the tremendous stream.⁸¹

The destruction of a forest ecosystem is described as a *visual* event, one symbolic of the primacy of industry over nature. There was an unintended consequence of this expedited form of labour: the archeological records that registered the presence of Indigenous people in Cobalt were washed away, providing a terra nullius of raw, uncovered Canadian shield.⁸²

“A preview of the aftermath”⁸³

Cobalt Lake, at the center of town, sat on rich mineral deposits. An undated photo shows the Right of Way Mine in Cobalt with billowing smokestacks signifying production. [Fig. 30] On the left side of the image, the railway tracks cut through the landscape towards the mine, guiding the eye toward the background of the image that documents the developing industry in Cobalt. The scale of industrial production is quite small: just a few buildings and one headframe, quite distinct from the massive mines that would develop in a few decades in communities further north. A woman gathers water from the lake while a young child waits. On one level, the

⁸¹ *The Cobalt Nugget*, May 30, 1912.

⁸² Thank you to Ryan Primrose for this information. While Cobalt was the territory of the Saugeen Anishinabeg, this history has largely been obscured by an emphasis on extraction and industrial modernity. In contrast, Indigenous peoples are prominent narratives of untouched wilderness that were promoted about Temagami, conceptually linking Indigeneity with something ancient and timeless.

⁸³ Nixon, *Slow Violence*, 265.

photograph seems to reveal a balance: industry and community co-existing. However, the mine tailings piled beside the lake and the billowing smoke point to the slow violence in communities that develop around resource extraction. Numerous provincial health warnings from the period indicate that the knowledge the lake was contaminated with arsenic and untreated sewage was widespread. However, without access to a consistent and clean water supply in the community, people resorted to gathering water from the lake, posing serious health risks that would lead to a series of typhoid epidemics.

In 1903, W.G. Miller, the provincial geologist, recommended no claims be allowed within ten miles of Cobalt Lake to protect the town's water supply from contamination.⁸⁴ However, sanitation was catastrophic in the community. In 1906, the provincial government sold Cobalt Lake to Henry Pellatt's Cobalt Lake Mining Company for \$1,085,000. The shoreline was stripped and trenched, and shafts were sunk on either side of the lake so drifts could be built underneath. Eventually, the lake was drained, which at a rate of seven thousand gallons per minute, took a full seven weeks to complete.⁸⁵ The toxic water was linked by pipes to Lake Temiskaming, contaminating waterways between the two lakes and further polluting the drinking water of Cobalt and a nearby township. The lakebed never returned to its original size.

In tracing these realities of ecological devastation, we face what Demos has called "the insufficiency of the image."⁸⁶ The photograph cannot show us how mills dumped millions of tons of contaminated waste rock and tailings into lakes and rivers. Or how without proper sanitation facilities, human waste infected most bodies of water which would eventually lead to a

⁸⁴ Baldwin, *Cobalt*, 19.

⁸⁵ Baldwin, *Cobalt*, 227.

⁸⁶ Demos, "The Agency of Fire: Burning Aesthetics," np.

series of typhoid, diphtheria and smallpox outbreaks.⁸⁷ Literary scholar Rob Nixon introduces the limitations of perception and other forms of narrative making in capturing slow violence, a “violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.”⁸⁸ The overt violence of the dynamite is a visible intervention in a landscape, a violence that can be documented. The blasting of overburden is likewise a visible spectacle. But the detritus that ends up in water from the hydraulic blasting slowly poisons local ecologies, a poison that infects human bodies, animals, and plants, an interconnected series of “long dyings.”⁸⁹

Yet, in fragmentary and incomplete ways, photography can serve an evidentiary function by documenting how ecological crisis is produced by the prioritization of wealth over the health of ecosystems and communities. The photograph of hydraulic mining on the shore of Cobalt Lake, for example, is revealing when placed into dialogue with photographs of people gathering water from the same lake. Without a stable supply of drinking water, people gathered water from heavily polluted small streams or lakes because the town lacked a stable supply of drinking water.⁹⁰ These images document the uneven distribution of resources, and the risk of disease and accident that this produces. To access this history, the images have to be rooted in social memory and contextualized in dialogue with one another. In his analysis of a photograph of a sea-bottom

⁸⁷ In 1912, the Ontario government amended the mining act to allow mining and lumber companies to drain lakes. By 1913, the municipality approved the draining of Cobalt Lake. The lake was by this point highly contaminated by arsenic from the milling process and had for several years been used to dump untreated sewage from the community. The lake was drained in 1915 over the course of 7 weeks where 1,100 meters of pipe carried the contaminated water in Lake Temiskaming. The tailings and sewage polluted the waterways on their way to Lake Temiskaming. (Baldwin, *Cobalt*, 227)

⁸⁸ Nixon, *Slow Violence*, 2.

⁸⁹ Nixon, *Slow Violence*, 2.

⁹⁰ Water was shipped by train from Montreal and could be purchased at the cost of 50 cents a gallon or from water carters who delivered freshwater door to door at a higher rate.

in the Maldives, Nixon suggests “[w]hat we enter through photographs and video is a premonitory landscape prefiguring the consequences, on a global scale, of wasted foreknowledge. The scene serves as a preview of the aftermath.”⁹¹ The shattered landscape of Cobalt is a preview of what would come, an unfinished history that enters into our present through the geographic and temporal dispersal of the consequences of extraction in the form of environmental catastrophe.

Conclusion

Historian Jean Morrison describes how “boarding the overnight train for Toronto, passengers left Cobalt's grey slag heaps behind to awake next morning amidst tall skyscrapers and solid public edifices. That the splendours of Toronto's financial district seen from Union Station could be explained, in part, by northern Ontario's scarred landscape was something a child could not grasp.”⁹² Morrison links ‘Cobalt’s grey slag heaps’ to the skyscrapers of the financial district. While landscape photography is limited in documenting these more complex spatial networks of extraction, it nonetheless forms an evidentiary record of the transformation of territory through processes of extraction. Jacob Emory attends to the ways in which the landscapes of industrial processes are an index “of the larger economic process in which they participate and of which they are a result”⁹³ The index is the evidentiary function of photography, as it describes a process in which a trace or mark is made by an object.⁹⁴ Emory draws attention to the ways “that all

⁹¹ Nixon, *Slow Violence*, 265.

⁹² Jean Morrison, "The Working Class in Northern Ontario," *Labour/Le Travail*, 7 (Spring 1981), 151.

⁹³ Jacob Emory, “Art of the Industrial Trace,” *New Left Review*, September-October 2011, np.

⁹⁴ The index is set in silver when the aperture opens and light catalyzes a chemical interaction during which the scene is recorded as a latent image. Through immersion in photographic developers in the darkroom, the exposed silver halides darken. The latent image becomes a positive image, visible and fixed. The latent image is explored in Shawn Michelle Smith and

work, including the photographic artwork, constitutes a trace of productive activity as well as an image of it.”⁹⁵ The interplay between the geological register of the photograph and the flash of light that produces the index is thus paralleled in the transformation of landscape. The mine shafts, slag heaps, cleared boreal forests and exposed Precambrian rock form an index of the surface transformations caused by industrial processes, written on the landscape.

The photographs analyzed within this chapter broadly fit into what Gómez-Barris has described as the extractive gaze. Images played an important role in identifying sites for development as well as promoting these sites for investment. The chaotic development based on the easy extraction of minerals in the Cobalt camp reveals a particular moment in time: a commodity-based frontier that relied on the appropriation of ecological surpluses to maximize profits. As the *Canadian Life and Resources* article makes clear, the destruction of Cobalt’s boreal forest ecosystem was a necessary but acceptable loss, as viewers were simultaneously reassured that Temagami’s pristine nature remained preserved, despite the concurrent mining and logging occurring in Temagami. Wilderness became the dominant way of seeing the region in the 20th century, established in the 1920s in the aftermath of the devastations of World War 1 and the emergence of Canada as an independent dominion, celebrated with the Group of Seven’s nationalistic landscape vision. However, other visual archives reveal a much more complicated negotiation and co-existence between extraction, settlers, and Indigenous communities. The endurance of wilderness as a mythology and an aesthetic in Canadian culture point to a continued tension between an economy based on resource extraction and a national identity rooted in the perception of a deep connection to the natural world.

Sharon Sliwinski, eds, *Photography and the Optical Unconscious* (Durham: Duke University Press, 2017).

⁹⁵ Emory, “Art of the Industrial Trace,” np.

Chapter Three: Worker Photography and Extractive Labour

A young man sits on a series of boxes piled askew atop a rock, gazing directly at the camera, confidently asserting his autonomy and skill. [fig. 31] The staged photograph is part of a series of occupational portraits taken at the Nipissing Mine of workers posing with dynamite boxes.¹ [fig. 32] The portrait captures a miner posing with the tools of his trade: boxes containing 50lb of dynamite, a candle on his hat, and in some of the portraits, a pick-axe to break rock. The miner sits on rock that has already been blasted by dynamite. The young man posing with dynamite was Harold Whittingham. Whittingham was born in Sussex but came to Cobalt in 1907, where he found work at the Nipissing Mine. In his casual self-presentation, the worker embodies a description by a contemporary observer who described miners who “think no more of handling sticks of dynamite than a confectioner thinks of handlings sticks of candy;” transitory male workers “ready for any sort of a job and soldiers of fortune to whom the excitement and uncertainty of a mining camp is as the breath of life.”² As an occupational portrait, the image is revealing but unusual. The clothing of the miner reflects the health and safety standards of the period, as no protective uniforms were provided by the company.³ The photograph predates the use of hard hats, protective eyewear and safety boots underground, and light was provided by candles.⁴

¹ The portraits were taken by an unknown photographer and later donated to the Cobalt Mining Museum Archive. The photographs appear to have been mounted on birch-bark, indicating they were displayed at some point in time.

² Struthers, “To Cobalt and Back,” *Canadian Life and Resources*, 1909, 14

³ Terence Wilde, “Masculinity, Medicine and Mechanization: The Construction of Occupational Health in Northern Ontario” (PhD Diss., York University, 2014) 54.

⁴ The hat is likely made from “several layers of canvas laminated together and covered with a heavy paint or tar, though others were made of cardboard or leather. The hats quickly softened through heat or sweat, and they regularly caught fire. Although candles had proven inadequate and unsafe in mining operations, and despite the acknowledgement of mine inspectors in 1894,

There is a strong element of gallows humor to the portraits, as the workers defiantly pose with a tobacco pipe on top of boxes of highly unstable dynamite.⁵ While the boxes are presumably empty, what can we make of this series of portraits of workers self-presenting in such a way? The dynamite portraits are quite unusual in mining history. Earlier images of mining were limited by technology and cost and were typically commissioned by the mining company. In these portraits, changing photographic technology facilitated a moment of rupture where the worker asserts individuality and his autonomy as a skilled labourer. Photography is thus used by the worker as a tool to construct an alternative vision of the self that contests the reduction of their lives to their labour.

To consider how photography and extractive labour intersect, this chapter focuses on how people on a remote mining frontier used the camera as a tool to both document their experiences and to articulate their identities. Rapidly changing technology enabled new forms of self-presentation and expanded the visual possibilities of portraiture. Photography is a primary source for both producing and consuming social articulations of identity and for negotiating the power relations associated with those identity positions. While many celebrated images of work reinforce existing power relations, in this chapter I am concerned with how workers use

of a pressing need for efficient mine lighting, hand and hat-held candles persisted.” (Wilde, “Masculinity, Medicine and Mechanization,” 50).

⁵ For studies of labour and masculinity, see, for example, Nancy Forestell, “Bachelors Boarding Houses and Blind Pigs” in *A Nation of immigrants: women, workers, and communities in Canadian history, 1840s-1960s*, edited by Franca Iacovetta, with Paula Draper and Robert Ventresca (Toronto: University of Toronto Press, 1998); Gail Bederman, *Manliness and Civilization* (Chicago: University of Chicago Press, 1995); Joy Parr analyzes ‘breadwinner masculinity’ in *The Gender of Breadwinners: Women, Men and Change in Two Industrial Towns, 1880-1950* (Toronto: University of Toronto Press, 1998); Terrence Wilde locates this ‘breadwinner masculinity’ in Northern Ontario mining camps, undermining the dominance of rugged masculinity narratives (“Masculinity, Medicine and Mechanization,” 2014).

photography as a tool of self-representation.⁶ Jacques Rancière articulates a framework where politics is understood as a struggle between the established social order and its excluded parts. In this context, photography plays an important role in not simply documenting identities, but also providing space for subjects to articulate different modes of being and representation.⁷ These images open up questions of how and by whom they are represented and who is deemed worthy of presentation. The images analyzed in this chapter have been collected within the Cobalt Mining Museum archive. Most of the image are archived with little context, such as the photographer, date, or sitters name. There is, therefore, a loss of the original meanings of the photograph. Yet these photographs open up some possibility of locating the “texture of lived contradictions in the labour/capital relation.”⁸

Oliver Wendell Holmes described photographs as a “mirror with a memory,” highlighting that silver has had associations with reflection and representation long before the discovery of silver halides and their application in film emulsion.⁹ Silver has the highest reflectivity of any metal, and as a result, mirrors have commonly had a silvered back.¹⁰ As in photography, this

⁶ For critiques of social documentary work on labour, see, for example, Rosler, “In, around, and afterthoughts (on documentary photography)”; Abigail Solomon-Godeau, “Rethinking Documentary” In *Photography at the Dock: Essays on Photographic History, Institutions, and Practices*. (Minneapolis: University of Minnesota Press, 1991).

⁷ Coleman, *A Camera in the Garden of Eden*, 190.

⁸ Peter Hitchcock, *Labor in Culture, Or, Worker of the World(s)*, (London: Palgrave Macmillan, 2017), 11

⁹ Silver atoms behind the glass absorb the photons of incoming light energy, however, silver gives off as much energy as it absorbs, and the mirror reflects radiant energy back.

¹⁰ Early mirrors were polished metal and convex, which concentrated space to offer multiple perspectives and distorted images. The technique of applying a silvered backing to glass developed in the 13th century, and a series of technical innovations over the following two centuries in Venice created the plane mirror, which introduced a singular, framed point of view. The mastery over reflection embodied in the mirror initiated a shift in the relationship between the self and the image. By the 18th century, mirrors became culturally associated with the ability to teach manipulations of appearances and to transform oneself, an indispensable tool in a

process is rooted in light. Silver operates on two distinct temporalities in terms of representation: through its reflectivity, the interplay between silver and light produces instantaneous but impermanent representations in mirrors. Silver's capacity to produce a surface reflection of what is in front of it gave silver profound cultural significance, as it enabled the ability to see oneself, and thus determine how one wants to be seen. Sabine Melchior-Bonnet has argued that the mirror allowed the person to construct a unique identity through a process of the self-conscious recognition of how one is perceived by others, a process that separates the internal and external self, which encouraged the cultivation of particular social qualities.¹¹ The mastery over reflection that is introduced with the mirror is extended in the photograph as the ability to present oneself as one wants to be seen publicly. In photography, the interplay between light and silver—now materially transformed—can freeze the likeness of a person in time. When people have the tools to present themselves to the world, what do they look like?

Portraiture and work

This chapter draws from scholarship that investigates the connections between photography, power, and the representation of labour. The incompatibility of labour and photography is articulated by Allan Sekula in his reading of the earliest dated photograph of a human figure, *Boulevard du Temple, Paris, 3rd Arrondissement* shot by Louis Daguerre in 1838.¹² The scene captures two figures in the distance, a shoeshine and his client. [fig. 33] Shot as a daguerreotype, the exposure time of ten to twelve minutes eliminated the majority of movement on the busy

“society of reflections.” Sabine Melchior-Bonnet, *The Mirror: A History* (New York: Routledge, 1994)

¹¹ Melchior-Bonnet, *The Mirror*, 147.

¹² Allan Sekula, “An Eternal Esthetics of Laborious Gestures,” *Grey Room* 55 (Spring 2014):16-27.

street as the carts and people in motion disappear from the photographic frame. The shoeshine becomes blurred as he is in motion, but the man getting his shoes shined sits in stillness, and therefore was visible within the slow exposure time. Sekula points to the dual erasure enacted in this shot: the camera hides the labour that made the photograph possible and the labour of the shoeshine gets erased within the photograph.¹³ In their discussion of Sekula's reading of Daguerre's image which "obscures how our world is made," Kevin Coleman, Daniel James, and Jayeeta Sharma ask

Can photography depict the worker as both an individual and part of a larger political and economic process? If a photograph manages to represent labor, does that entail abstracting out the lived experience of a particular historical subject?¹⁴

The tendency to abstraction enacted by photography is rooted in the use of visual forms and conventions. Portraiture refers to a likeness which refers to the identity of a specific person who at one point existed, a tradition that dates back to the ancient world. In Ancient Rome, artisans crafted carefully produced representations of individuals which asserted political power and celebrated traditional Roman values. In this context, likeness was used to separate the patrician class from the plebeians, signifying the ancient lineages of the ruling class as a way of asserting authority in a shifting political context.¹⁵ As Richard Brilliant observes, portraits exist at the interface between art and social life, fundamentally enmeshed in the value systems of the societies that produce them.¹⁶ Charting the rise of portraiture as an art form, David C. Ward links portraits to bourgeoisie society and the rise of capitalism in the 16th century that valorized

¹³ Kevin Coleman, Daniel James, and Jayeeta Sharma, "Photography and Work," *Radical History Review* 132 (October 2018): 8.

¹⁴ Coleman, James, and Sharma, "Photography and Work," 8.

¹⁵ Fred Kleiner, *Gardner's Art Through the Ages* (Boston: Cengage Learning, 2012), 89.

¹⁶ Richard Brilliant, *Portraiture* (London: Reaktion Books, 2004), 11.

individual initiative.¹⁷ This reflected a shift from an emphasis on civic and humanist concerns for the collective good towards a celebration of personal identity and competitive individualism. Portraits became a way to “celebrate both the achievements of the individual and the system that has allowed him to succeed.”¹⁸ By the 18th century, honorific images became widely disseminated.¹⁹ In this context, the ordinary worker, particularly the anonymous industrial worker, lies outside the parameters of what constitutes a suitable subject for a portrait.

If portraiture has historically been associated with elites, how can we read portraits of workers? In his essay for the exhibition, “The Sweat of Their Face: Portraying American Workers,” curator David C. Ward highlights the incompatibility of labour and portraits, observing, “[p]ortraiture was designed and intended to create an exemplary image of an exemplary life-usually a public life.”²⁰ However, Ward observes that despite the common associations of portraits with the elite class, within fine art production, portraits of the labouring body have been a significant theme. Portraits respond to economic and social shifts as well as the evolution of work. With the rise of the factory system and industrialization, the heroic figure of the skilled, individual craftsman gave way to the ‘anonymous and immiserated’ worker, rooted in the conception of the working class that emerged with industrialization.²¹ Many of the images of

¹⁷ Portraiture retained its associations with the aristocracy and the assertion of noble values. Portraits produced in the Dutch Republic showed a wide range of subjects and occasionally broke from the conventions associated with hereditary nobility. The reference to traditional concepts of portraiture, inherited from the aristocracy, were applied as the emergent bourgeoisie class used re-presentation to define themselves from the rest of society. Joanna Woodall, *Portraiture: Facing the Subject* (Manchester University Press, 1997).

¹⁸ David C. Ward, “Portraying the American Worker,” in *The Sweat of Their Face: Portraying the American Worker*, (Washington, DC: Smithsonian Institution, 2017) 17.

¹⁹ This period marked the creation of the National Portrait Gallery in London in 1856 and the rise of periodicals which printed portraits in print.

²⁰ David C. Ward, “Portraying the American Worker,” 14, 17.

²¹ Griselda Pollock and Valerie Mainz, eds. *Work and the Image*, Volume 1 (Burlington, VT: Ashgate Press, 2000), 3.

work in American fine art focus on a single worker rather than their context or the work being done, casting the individual worker as either heroic or downtrodden. Ward ultimately concludes that “because portraiture valorizes images of people who were publicly or privately successful, not anonymous workers, it is impossible to paint a true portrait of a working person, for reasons of class, money and ideology.”²² While Ward correctly highlights the limitations of the image to reveal the full scope of the workers existence—the life of the worker outside of one’s wage labour—all portraits are insufficient to reveal the scope of the sitter’s existence.

With the birth of photography and the rise of the commercial portrait studio, portraiture became a common practice for middle and working-class people. While producing portraits became more accessible with the increased proliferation of representational technologies, portraiture still retained its associations with elites, and photographs of work continue to pose the challenges Ward raised in the context of painting. Marxist critiques of photography have foregrounded the disciplinary role photography has played, which extends to the context of labour or worker photography. As Sekula argues “[e]very portrait takes place within a social and moral hierarchy,” where visual types and symbols confirm social roles.²³ John Tagg argues that despite the “seeming ‘democratization’ of photography,” photographic production was still outside of the reach and control of most people as representations of work and workers were rarely produced by workers themselves.²⁴ In Tagg’s formulation, the images of workers that

²² David C. Ward, “Introduction,” 15.

²³ Sekula, “The Emerging Picture Language of Industrial Capitalism,” 222.

²⁴ In the first third of the 20th century, social documentary projects that centered on labour--specifically the lack of work--became prominent. The work of Jacob Riis and Lewis Hine documented the deplorable social conditions and the plight of marginalized and working people, drawing attention to poverty, child labour and other social ills. In the 1930s, photographers associated with the Works Progress Administration or the Farm Security Administration of the 1930s “captured the poverty of the Great Depression through a realist aesthetic that sought to reveal sociological truths about everyday life across the United States.” Advocating for socio-

achieve prominence—and thus shape public perceptions—function to reify existing social and political hierarchies. Yet as the photograph of the worker sitting on dynamite reveals, working class people used camera technology in ways that did not necessarily seek official or institutional approval. Historian Kevin Coleman suggests that photography “allowed people with little power or influence to rearrange the signs of their exclusion and purported inferiority such that they could see themselves, and others could see them, as worthy of respect.”²⁵

The defiance of the workers in these portraits asserts the autonomy of the individual worker, rupturing notions of a complacent, downtrodden working class under industrialism. These images were produced by workers and circulated within their communities to reflect the ways in which they wanted to be seen within the worlds they had built. While social and economic divisions inform how portraits are read, portraits could be used by workers to position themselves as they wanted to be seen.²⁶ In his study of the use of visual culture by farm workers in California, Curtis Marez argues that scholars have not attempted to “understand and model farmworker visions of the world.”²⁷ Tagg’s critique highlights the ways in which photography has been used by governments and corporations to repress labour or marginalize working people.

political reforms, these images sought to bear witness to poverty and social ills to force action by governments and individuals. Social documentary reveals the complicated nature of worker portraiture. Ward observes that concern over industrialization and its effect on workers split between those understood as worthy but immiserated, in particular, child labourers, while organized workers were often feared in respectable opinion and considered capable of choosing an alternate path. (Ward, “Portraying the American Worker” 25) As Abigail Solomon-Godeau notes, many of the critiques of the ethics of documentary practice have come from the left, where the politics of representation became a central category of analysis (Solomon-Godeau, 171).

²⁵ Coleman, *A Camera in the Garden of Eden*, 4

²⁶ The context in which the images were intended to read is important here. On the geographic and cultural periphery or frontier, like a remote mining camp, individuals had the potential to position themselves in ways exceeded the ability to self-construct identity in more established places.

²⁷ Curtis Marez, *Farm Worker Futurism* (Minneapolis: University of Minnesota Press, 2015), np.

But it ignores alternative forms of cultural production—often “low, marginal, ephemeral and minor cultural fragments”—and it does not center the perspective of the workers themselves. An analysis that only focuses on the disciplinary gaze obscures other relations of power. A focus on worker-produced visual culture can “bring into relief historical relations of power otherwise occluded in more conventional historical accounts based on dominant archives.”²⁸

Recent scholarship has framed workers’ engagement with portraiture as acts of self-construction. Coleman directs our attention to how photography can function as a process of “self-forging,” where photography can be used to articulate working-class subjects’ political and social identities, “and thereby to create new ways of thinking, speaking and acting.”²⁹ In his analysis of United Fruit Company workers in El Progreso, Honduras, Coleman approaches photographs as documents “that enable the reconstruction of events and subjectivities that have otherwise remained misunderstood or inaccessible.”³⁰ In her analysis of portrayals of noncitizen agricultural workers from Mexico in photojournalism, historian Erica Toffoli suggests that “in its ability to fix presence, photography enables mobile, often unseen laborers to cement fragments of their histories,” enabling migrant braceros to act as political subjects while introducing “subtle articulations of migrants’ opposition to capitalism’s abuse of dependent workers.”³¹ Art historian Gabrielle Moser reads photographs of indentured labour in the British empire by attending to the latent potentialities of images, through which the process of looking can become a political act, informed by a “desire to see her as an active, agentic citizen; to acknowledge her specific

²⁸ Marez, *Farm Worker Futurism*, np.

²⁹ Coleman, *A Camera in the Garden of Eden*, 4.

³⁰ Coleman, *A Camera in the Garden of Eden*, 28.

³¹ Erica Toffoli, “Capturing Capitalism’s Work: Competing Photo-Narratives of the Bracero Program,” *Radical History Review* 132 (2018): 128, 131.

position in the empire rather than regulating her to a type.”³² Moser’s study points to the shifting meanings that emerge when images from archives are recontextualized in the present and activated by viewers. As these studies show, work and representation are a contested site where multiple meanings converge and the potential for political activation exists, however latent.³³

Constructing the frontier

Three men cluster around a camp stove set up over a fire in a recently cleared forest, signified by the felled trees around them. [fig. 34] Behind them, a tent confirms the transitory nature of the scene. Wearing cowboy hats, suspenders and hobnail boots—inexpensive but durable work boots—both the setting and the attire of the figures signal the ‘frontier.’ Aware of the camera, the men appear to pose as they look away from the camera, staring in the same direction out of the frame. Titled ‘Three Prospectors’ the photograph is from the early years of the camp and reinforces the narrative of the mining camp as an unconquered frontier for adventurers or “soldiers of fortune.”³⁴

The portrait of the three prospectors responds to cultural narratives of the ‘frontier’ which held a privileged place in the cultural imaginaries of the Americas in the nineteenth and

³² Gabrielle Moser, *Projecting Citizenship* (University Park, PA: Penn State University Press, 2019), 146.

³³ In the context of organized labour, Carol Quirke demonstrates how the New York based Local 65 United Warehouse Workers Union published photographs by members of an affiliated camera club in *New Voices* that used photography as a tool to challenge race-based labour segmentation while advance community struggles and a civil rights agenda (“Imagining Racial Equality,” *Radical History Review* 132 (2018): 96-125). Larry Peterson suggests that through the use of snapshot photography in the periodical *Steel Labor*, “workers saw themselves reflected, not through the slick gimmickry of a Margaret Bourke-White or the manipulated realism of the FSA, but in photographs familiar to them from their homes, communities, workplaces and associations.” (“Visual Culture and Working-Class Community: Photography and the Organizing of the Steelworkers’ Union in Chicago.” In *Looking for America: The Visual Production of Nation and People*, edited by Ardis Cameron, 212–37, (Malden, MA: Wiley-Blackwell), 212-3.

³⁴ Struthers, “To Cobalt and Back,” 14.

twentieth century. As a concept, it is associated with cities that emerged around mineral discoveries that contributed to the settlement of the West. Frederick Jackson Turner's scholarship on the significance of the settlement of the West in American history linked the frontier to conceptions of individualism and energetic expansion. By the early 20th century, the gold and silver mining booms in the US—Tombstone, AZ, Leadville, CO, Comstock Lode, NV—were largely over, but the mythologies of the frontier were gaining traction. With the rise of the Western in fiction, and, later cinema in the early 20th century, the frontier became a popular cultural concern. In this portrait, the three men present as adventurers living roughly and simply, signifying their aspiration to conquer new territory in search of wealth. The self-presentation as prospectors rather than miners reflects a broader trend that would continue as the community became more established.³⁵ As Kelsey notes, the image of the lone prospector outfitted with pick and pan masked the reality of corporate mining and glossed over the class divisions within mining camps. The valorization of the prospector became “a stock ideological move during the Gold Rush era,” aligned with the celebration of the individual initiative in capitalist ideologies, masking the brutal, exploitive realities of the mining industry.³⁶

The mythology of the gold and silver rushes in the US provided a model for how people who arrived in Cobalt in search of silver self-constructed their identity. As curator Luce Lebart argues, daguerreotypes from the California Gold Rush served a constructive function, allowing the prospectors who flooded into California to shed their previous identities in the open cultural

³⁵ Prospecting refers to the search for mineral deposits. This stands in contrast to mining, which a form of wage labour. While mining refers to the extraction of minerals, prospecting evokes the *possibility* of striking it rich.

³⁶ See Maureen Jung, “Capitalism Comes to the Diggings: From Gold: Rush Adventure to Corporate Enterprise.” *California History* 77 no. 4 (Winter 1998/1999): 52-77.

imaginary of the frontier.³⁷ In this period, portraits were both rare and time-consuming and they were often taken in a studio either upon arrival in California or before their departure. [fig. 35] Shifting identities allowed for a construction of the self, fixed in daguerreotypes, tintypes, and ambrotypes. Lebart articulates the material and symbolic connection between metals and photography

two great myths or crazy dreams — filling your pockets with the most precious metal and fixing your image in metal — became a reality in the mid-nineteenth century. The affinity between these ‘latter day argonauts’ and the daguerreotype, the first commercially successful photographic process using a silvered copper plate, was immediate and intense.³⁸

Young men used portraiture to construct new identities where the “model was not the prince but the bandit,” rooted in the mythology of the lawless frontier.³⁹ Prospectors posed with tools, guns, and occasionally gold. In one of the few self-portraits of Carleton Watkins, he poses not as a photographer, but as a miner.

When silver was discovered in Cobalt in 1903, Canada had no significant mining industry, and as a result, had very few homegrown miners, prospectors, or investors. Like America, Canada would root its developing sense of nationalism in geography, though instead of settling the frontier, Canadian’s located their cultural destiny in the vast abundance of the Canadian wilderness. But at the turn of the century, the cultural narratives and accompanying visual forms that would become dominant over the course of the 20th century were not yet clear or established.

³⁷ One of the prospectors who went to California in search of gold was Albert Sands Southworth of Southworth & Hawes. The famed early photographic firm in Boston was widely regarded as being among the first and finest portrait studios in America. Robert Vance also travelled to California during the Gold Rush. Vance commissioned photographs of Yosemite as well as mining on the American River. See Peter Palmquist, “Robert H. Vance: The Maine and Boston Years, 1825-1850.” *The Daguerreian Annual* (1991): 199–216.

³⁸ Luce Lebart, *Gold and Silver: Daguerreotypes, ambrotypes and tintypes from the gold rush* (Belgium: RVB Books and the Canadian Photography Institute, 2017) np.

³⁹ Lebart, *Gold and Silver*, np.

Early images reveal an importing of pre-existing cultural forms from American boom towns, a trend fueled by the flood of American prospectors, miners and investors who followed the mineral rushes north to Canada.

The popularity of the Western and the myth of the cowboy is reflected in studio portraiture from Cobalt. An undated studio portrait captures two men dressed as cowboys. [fig. 36] On the right, the man stares directly into the camera. His pose mimics the cowboy about to draw his gun from his holster, posing with his hand on his hip and his other hand hovering just above his belt. To his left, a man stares out of the frame, resting his arm on a piece of furniture, a pose that evokes someone leaning on a bar in a Western saloon. Anthony Lee argues that workers used studio photography to “fashion a self and play,” contesting the reduction of the individual to the abstract category of worker.⁴⁰ A similar impulse is reflected in the conscious self-construction of the self as the ‘cowboy,’ the recognizable and iconic hero of frontier narratives. In another image, two women introduce a more subversive toying with the cowboy trope.⁴¹ [fig. 37] Posing with guns pointed at the camera, the women kneel on the ground in oversized coats. To the left, a woman slightly out of focus stares directly into the lens as the woman beside her appears to defend against someone outside of the frame. The wallpapered background undermines the reality of the scene, highlighting the performative nature of the photograph. The assertive playfulness of the women, in contrast to the studied seriousness of the male ‘cowboys,’ toys with narratives of masculinity and frontier.

⁴⁰ Lee, 221.

⁴¹ There are several photos of women playing with the trope of the male gunslinger on a northern frontier. For example. T.W. Foster took a series of portraits of young women in playfully posing with guns in wilderness settings. In contrast to the studied masculinity in male portraits of the kind, the women typically smile, and in one instance, the woman is framed by flowers.

“The ladies are going to do real prospecting it is understood”

The cultural framing of the ‘frontier’ presented the mining camp as a place of rugged masculinity that had its own set of social norms. For example, an 1889 advertisement for The Scovill & Adams Company promoting cameras and dry plates that ran in *The Engineering and Mining Journal* used the novelty of women in mining camps as the basis for the advertisement. [fig. 38] The ad featured an illustration of a woman behind a camera with the caption, “A Lady is so seldom seen at the mines and in the camp that we thought the very picture of one would be welcome,” going on to promote cameras and lenses that were well suited to prospecting and surveying.⁴² In 1907, seventy-four percent of the residents in Cobalt were males between the ages of twenty-one and sixty.⁴³

However, contradicting the associations of masculinity with mining, women feature prominently in early mining photography within Canada. William Notman’s 1867 photograph *Assorting the ore, Huntington Copper Mining Company's works, QC*, shows young women sorting copper in an above-ground workspace. Mattie Gunterman documented life in a mining camp in Lardeau, BC. Shooting on a 4×5-inch glass plate camera, she developed negatives in a shed that doubled as a darkroom. Her photograph *Two miners drilling inside the Nettie L. mine in Ferguson* from 1902 is one of the earliest underground photographs in Canada. [fig. 39] Photo historian Colleen Skidmore has documented the presence of female photographers and artists in Alberta following the opening of the Canadian Pacific Railway in 1886.⁴⁴ Skidmore approaches the histories of female photographers in the wilderness through the lens of social history, to

⁴² *Engineering and Mining Journal* 47, April 20, 1889.

⁴³ Baldwin, *Cobalt*, 177.

⁴⁴ See *Searching for Mary Schäffer: Women Wilderness Photography* (University of Alberta Press, 2017) and *This Wild Spirit: Women in the Rocky Mountains of Canada* (University of Alberta Press, 2006).

explore how women shaped photographic processes and images and in turn, how photography shaped ideas of gender.⁴⁵ Skidmore articulates the “complexities, diversities, possibilities, and contradictions” that women negotiated as explorers, photographers and workers in societies where “gender is fundamental to the distribution of power.”⁴⁶

Many women travelled to the camp in search of work as nurses, teachers, washerwomen and other forms of wage-labour. In the boom-towns that developed around resource extraction, white women were viewed symbolically as civilizing agents whose arrival on the ‘frontier’ was central to creation of the new community.⁴⁷ As Sarah Carter observes in her analysis of gender in Western Canada in the last three decades of the 19th century, white women were understood as key to empire building, framed as being “essential to the creation and reproduction of community” while acting as “moral and cultural custodians.”⁴⁸ It is not surprising that histories of the community emphasize the story of Elizabeth McEwan, considered the first woman in the town. McEwan arrived with her husband in 1905 and established the first school in 1906, a considerable challenge considering the limited financial resources of the community and the large number of students who were non-English speakers. Another prominent woman in community narratives was Annie Saunders, who came to Cobalt with her young son to see her brother who was working at the LaRose Mine in 1906. Saunders found work as a washerwoman at a mine. A month after she arrived, she was left homeless when a dynamite explosion destroyed the house she was renting. Saunders became Cobalt’s first nurse and would establish the first hospital in the community, the Red Cross Hospital.

⁴⁵ Skidmore, *Searching for Mary Schäffer*, 5.

⁴⁶ Skidmore, *Searching for Mary Schäffer*, 10.

⁴⁷ Sarah Carter, *Capturing Women: The Manipulation of Cultural Imagery in Canada's Prairie West* (Montreal: McGill-Queen's University Press, 1997), iii.

⁴⁸ Carter, *Capturing Women*, 6.

If the labour of McEwan and Saunders were congruous with the expectations of women in the period, other women ruptured the conventions of the period. Wilda Brown of New York was the first woman prospector in Cobalt. After her death in the Porcupine fire of 1916, the local paper wrote that Brown “was said to be the best known woman in the North Land [...] attracting special attention by the fact that she wore knickers all the time and strode the country like a man.”⁴⁹ While no photographs of female prospectors have been archived in the Cobalt mining camp, a 1911 photograph from the nearby Porcupine Gold Rush captures a woman in Edwardian clothing, a white blouse, long dark skirt and felt hat. The femininity of her outfit is offset by the revolver slung on her hip. [fig. 40] The portrait captures Carolyn Mayben Flowers who stands beside her canoe, the Lady Prospector.

Like Brown, Flowers arrived in the region in 1909 from New York City. She moved to the Mattagami River, which required a fifty-kilometre trek from the rail line through the dense forest and winding rivers. A local newspaper article described Flowers as a prospector “who worked on her own plans and ideas, and not by following the lead of the men as the other women prospectors usually did.”⁵⁰ While Flowers poses in an outfit that reflected the standards of Edwardian femininity, a 1922 article in *The Porcupine Advance* described two other female prospectors, Mrs. Sainsbury and Mrs. Patterson as “being garbed in riding breeches and khaki shirts. The mosquitos and black flies will no doubt make special note of the fact that the ladies had not discarded their silk hose.”⁵¹ The outfits of female prospectors received much press attention. The *Porcupine Advance* described how “[t]he lady prospectors in the Porcupine Camp

⁴⁹ “First Woman Prospector in North Died in 1916 Fire,” *Porcupine Advance*, August 5, 1926.

⁵⁰ “First Woman to Record Claim in Red Lake Area,” *Porcupine Advance*, July 15, 1926.

⁵¹ “Lady Prospectors Go Into Lightning Area,” *Porcupine Advance*, December 20, 1922.

were of the practical variety, and more than one of them actually staked out valuable properties.”⁵²

While larger cultural narratives limited the ways in which women could self-present, Flowers used photography to document her new identity as a prospector, asserting a distinctively feminine presence in a field of work that has been coded masculine. The cultural scripts constructed around gender in this context bore little resemblance to the reality of women’s lives in this period. Instead, as Carter argues, they functioned to restrict the ability of the women to “project their own images or identities.”⁵³ In this context, photography was one tool that women used to assert their belonging within this place.

Constructing the Capitalist

As mines became more established, the narrative of the heroic adventurer on the frontier was supplemented by a more established figure: the mine owner, the manager, the investor. More traditional conventions of portraiture supplemented the frontier cowboy as an emergent capitalist class sought to solidify their social standing and articulate their membership in a higher social stratum. In the early years of the mining camp, class identities were, to a certain degree, in flux. The neat class antagonism that characterize many histories of mining camps— an antagonism between working-class labour (miners) and capital (owners and managers)—is complicated by the numerous forms of work, both paid and appropriated, that coalesced on the mining frontier. While speculators and investors had clear upper-class affiliations, many people came into the camp as prospectors. Very few of these individuals would find lucrative claims, but in the early years, the potential to quickly become rich existed and formed a potent myth. The New Zealand-

⁵² "Lady Prospectors Go Into Lightning Area." *Porcupine Advance*, December 20, 1922.

⁵³ Carter, *Capturing Women*, 10, xv.

based *Marlborough Express*, for instance, described how the surface ore in Cobalt gave “the poor man as good a chance as the capitalist; he may indeed, have become a capitalist himself through the sale of surface ore before he needs to expend money on deeper sinking or upon machinery.”⁵⁴ By 1909, the Cobalt Nugget proclaimed that thirty-eight men had become millionaires by staking claims in Cobalt.⁵⁵ Very quickly, these individuals turned to visual conventions to solidify their new class affiliations.

In a portrait from 1903, eleven men wearing suits pose around a table in front of a studio backdrop. [fig. 41] The caption identifies the photograph as the board of directors of the Temiskaming & Hudson Bay Mine. It describes the corporation as “Northern Ontario’s First Mining Company,” and notes that it was incorporated with a capital of \$25,000. Half of the men stare directly at the camera, while the others look just outside the frame. They pose with papers in front of them, signaling business transactions. Like the prospectors, the mine owners signal their class through their uniform, in this case, the suit. In this context, the uniformity in dress is drawn upon to signal reliability, respectability and official power. The founders of the Hudson’s Bay Mine were local prospectors who found a rich vein, and the portrait reflects the conscious adoption of visual conventions to imply social status. Before quite literally striking it rich, the founders held varied jobs as shopkeepers, sawmill proprietors, and farmers, amongst others. Small ruptures within the uniformity of dress are introduced within the photo. For example, in the back row, second from the left, John Piche wears a plaid hat, a reference to his French-Canadian heritage. Piche’s father Edouard came to the region as a logger and built a gristmill on

⁵⁴ Quoted in Baldwin, *Cobalt*, 38.

⁵⁵ “Millionaires of the Cobalt Camp,” *Cobalt Nugget*, April 10, 1909.

the territory of the Saugeen Anishnabeg a project funded by the Department of Indian Affairs.⁵⁶

John Piche's sister married Adam Burwash, shown third from the left. Burwash was appointed as the Indian Agent in 1899, despite being denounced by local Indigenous leaders for illegally squatting on their territory.⁵⁷ Burwash benefitted from his control of Timiskaming reserve by selling land to white settlers. He used this wealth to promote the mining boom in Cobalt and provide vital funding for the Temiskaming & Hudson Bay Mine. Piche and Burwash's biographies points to the ways in which the state control of Indigenous territory was used to promote extraction.

The signifiers of wealth, status, and expertise presented within the group portrait were also applied out of the studio. In a hand-tinted postcard of the King Silver Mine, a sharply dressed man in a suit and bowler hat stands above miners at an adit (the entrance of the mine). [fig. 42] Standing with his hands in his pockets, the man conveys sober respectability, while the workers stand more casually. The man's outfit is incongruous with the scene. John Berger draws attention to suits as

made for gestures of talking and calculating abstractly – the suit inhibits vigorous action. It was the first ruling class costume to idealize purely sedentary power. The power of the administrator and the conference table.⁵⁸

The composition of the postcard symbolically asserts the significance of the mine manager by making him almost double the size of the worker. The workers pose with hand tools, and their bodies provide scale to show how narrow the entrance to the shaft is. Rather than a standard uniform with safety gear, the men appear to wear their own clothing, reflecting the unestablished

⁵⁶ A. H. Telfer, *Worth Travelling Miles to See: Diary of a Survey Trip to Lake Temiskaming, 1886*, edited by Lorene DiCorpo (Toronto: Natural Heritage Book, 2004), 117.

⁵⁷ Timiskaming First Nation, "Chronology of Key Events," 5.

⁵⁸ John Berger, 'The Suit and The Photograph,' in *About Looking* (New York: Pantheon Books, 1980), 34.

labour regulations within the camp. In these scenes, the worker becomes reduced to the function of their labour.

This iconography is replicated in a photograph of the Buffalo Mine, taken underground at the 120-foot level. [fig. 43] In the photograph, four workers stand with tools. Wearing hats, the men pose beside the equipment, clearly aware of the camera. Above them is the bucket they would use to get into the shaft while a ladder is propped on the side. The adit above and behind them recedes into the earth, a marker of previous exploration. To the right of the workers, four men stand above them and watch. Of the men on the left, the man closest to the camera is a worker, identified by his more utilitarian clothes scuffed with dirt. Beside him stand three individuals, wearing suits and hats whose polished shoes reflect that they are not often underground. The eye is immediately drawn to the individuals above the pit who are illuminated against the rock face. Within the pit, the workers are less visible. One of the workers poses boldly, and his face is brightly lit. The other three workers blend into the dark rock, however, and they seem to become part of the earth that they excavate.⁵⁹ Through the inclusion of figures above the workers, seeming to monitor their work, a supervisory gaze is made explicit.

Mirroring Identities: Reading a portrait between labour and capital

The symbolic signifiers of status and respectability that are charted in the first section of this chapter were in many cases adopted by working class people and organizations. John Berger describes that the emulation of upper class aesthetics demonstrates how the peasant class “came to accept as their own certain standards of the class that ruled over them, in this case standards of

⁵⁹ In another photograph of the same scene, the image is cropped to focus on the workers, with only the polished shoes of the supervisors visible.

chic and sartorial worthiness.”⁶⁰ In his analysis of August Sander’s 1914 portrait *Young Farmers*, Berger observes that the young, rural men photographed on their way to a dance “belong, at the very most, to the second generation who ever wore such suits in the European countryside. Twenty or thirty years earlier, such clothes did not exist at a price which peasants could afford.”⁶¹ The self-presentation by the young men subverts the peasant type, but Berger argues that the ill-fitting mass-produced suits they wear draws attention to, rather than disguises, their social class.

A similar tendency is echoed in a photograph of a group of men in the Cobalt Mining Museum archive. [fig. 44] Six men pose stiffly in front of a tropical studio background, as water, palm trees, and a cloudy sky denote a tropical paradise that was a distant reality from the hard-rock landscape. Wearing hats and suits with ties, the individuals stare directly at the camera, faces emotionless. The photograph is a medium-close shot, collapsing social distance as the intimate shot creates a sense of familiarity or connection. However, like Sander’s peasants, the suits the men wear are ill fitting. The symmetry and stillness of the image gives it an uncanny quality. The seated men all lean their arm on the chair rest, hands hovering partially closed in space, turned towards the center of the frame. Each pair of standing and sitting men have similar hats, producing a visual pattern that links the two rows. The clothing and comportment of the men present an impression of respectability, and in many ways, the visual structure of the image mimics the visual form of the corporate boardroom.

The men proudly wear badges that mark their union affiliation, identifying them as the leaders of Local 146, the Cobalt Miners’ Union, a chapter of the Western Federation of Miners

⁶⁰ Berger, “The Suit and the Photograph” 30.

⁶¹ Berger, “The Suit and the Photograph,” 30.

(WFM) founded on March 29, 1906.⁶² Like many of the investors and mine owners, many workers also came to Cobalt from the earlier mineral rushes in the western United States. They brought with them methods of collective organizing that had been forged in the harsh conditions of the American West and the polarized labour struggles that resulted.⁶³ In contrast to their reputation as radicals, the group of men self-present as respectable, sober, and driven by duty. While the clothing mirrors the sartorial standards of the upper-class, a distinct working-class identity is conveyed through their self-presentation. There is an obvious tension between the adoption of portraiture forms that signified respectability and adhered to convention, and the values proclaimed by the workers and the organizing work they were undertaking which called into question the foundational principles of capitalist society. In his analysis of a photograph of six militant trade unionists from Turkey in 1980, John Berger writes:

Most workers in the world carry the same physical stigma; a sign of how the labour power of their bodies have been wrenched away from their heads, where their thoughts and imaginings continue, but deprived now of the possession of their own days and working energy... resistance is more than a reflex, more than the muscles primitive refusal of what the body knows to be an injustice- because what its effort is continually creating is immediately and irredeemably taken out of its hands. Their resistance has mounted, and entered their thoughts, their hopes, their explanations of the world. The five heads, whose eyes pierce me, have declared their bodies, not only resistant but militant.⁶⁴

The portrait provides reassurance that while militant, the unionized workers and organizers were also respectable. Yet as Berger notes, the defiance within the workers' gaze subtly undermined the static form of the image and provides space to locate the militant politics of the sitters.

The use of photography to promote their cause was likely a response to the strong resistance to unionization in the region by corporate and government interests. The portraits of

⁶² Brian Hogan, *1919: The Year of the Strike* (Cobalt: Highway Book Shop, 1978), 14.

⁶³ Jedediah Purdy, *After Nature: A Politics for the Anthropocene* (Cambridge, MA: Harvard University Press, 2015), 33.

⁶⁴ John Berger, *and our faces, my heart, brief as photos* (New York: Random House, 1984), 17.

organized labour assert a class politics and a broader sense of solidarity within the mining camp. As outlined in Chapter I, the region was a site of organizing for the Western Federation of Miners, who were allied with the Industrial Workers of the World. The harsh conditions of mines radicalized workers, as unsafe working conditions lead to high accident rates (and eventually, industrial disease) coupled with low wages and long hours. The IWW broke with the craft union movement which had a mandate to enhance the status of skilled workers within a capitalist system. Instead, they sought to organize skilled and unskilled workers to overthrow the capitalist system altogether. With their founding, the IWW articulated a commitment to “the class struggle, and its general administration must be conducted in harmony with the recognition of the irrepressible conflict between the capitalist class and the working class.”⁶⁵ In response to the strong anti-capitalist framework that workers were organizing under, mine managers hired private detectives to monitor workers and prevent organizing, while the Mines Employment Bureau attempted to limit employment for union sympathizers. In an attempt to reduce the credibility of the labour organizers and disrupt worker solidarity, the WFM and the IWW were attacked as foreign radicals. This language reflected a broader trend. In a strike in the nearby Porcupine region in 1913, for example, the press and corporate interests attacked the WFM as a foreign presence, evoking the spectre of Bolshevism. In a community where many workers were of non-British origin, this charge had a special resonance in the community. Miners marching through the streets carried a banner that proclaimed, “The Capitalist is the Only Foreigner,” counter-asserting a broad class solidarity. [fig. 45]

⁶⁵ Industrial Workers of the World, “Proceedings of the First Convention of the Industrial Workers of the World,” (New York, 1905), s-6.

The 1919 strike in Cobalt was organized through the Mine, Mill and Smelter Workers Union.⁶⁶ 2,500 workers went on strike from fourteen different mines over wages, working conditions and, significantly, union recognition and the mandatory check-off. The strike was castigated by the managers as a direct result of socialist infiltration.⁶⁷ Characterized by acrimony and violence, the strike ended forty-seven days later with few of the union's demands met. While narratives of Cobalt typically emphasize the enormous wealth produced, the 1919 strike amounted to a time loss of over eighty-nine thousand working days and millions of ounces in silver production dropped."⁶⁸ The strike, in many ways, marked the end of the mining boom.

Industrial workers in this period actively organized against the exploitation of wage labour. While the WFM and the IWW organized out of the mines, they advanced a more capacious conception of class solidarity than many trade unions in the period, linking skilled and unskilled workers. While gender and racial divisions persisted, there is a strong revolutionary impulse enacted by the workers who organized against the precarious nature of their work and the exploitation inherent in the capitalist system. The miners' unions had some victories, but more defeats, but the cumulative effect of labour organizing, and the lessons learned in the struggles would be brought to industrial unions throughout Ontario as miners dispersed throughout the province.

Explosive Imaginaries

At this point, I want to return to the portrait of the worker with dynamite at the beginning of the chapter. What can this photograph tell us about work? The image can show how an individual

⁶⁶ Previously known as the Western Federation of Miners.

⁶⁷ "A Statement from the Mine Managers on the Present Strike Conditions in Cobalt, Ontario" *The Canadian Mining Journal*, August 27, 1919, 638-640.

⁶⁸ Hogan, 1919: *The Year of the Strike*, 5.

wants to be seen, but it cannot show the more complex realities of the workplace. As Cole notes dynamite had a “stunning ability not only to kill and maim, but within seconds to level an entire landscape.”⁶⁹ Nobel’s invention was intended to make blasting safer for workers, but the highly unstable sticks of dynamite had high freezing temperatures and their sensitivity to shock or friction was one of the leading causes of mining accidents. Explosive manufacturing was not regulated in this period, and as a result, the strength and stability of explosives and fuses was unpredictable.⁷⁰ For example, on March 25, 1909, the worker Panfilo Chiocchio was killed at Nipissing Mine—the same mine that the portraits were taken at—by the premature explosion of dynamite. This was just one example. In 1909, twenty-one deaths and seventeen accidents were identified in the local paper, which editorialized that “Fatalities were comparatively small, not so large as expected.” Despite the accident rates, The Cobalt Nugget celebrated the opening of a dynamite factory, proclaiming: “Dynamite Factory for Cobalt: This Means Something for the Silver City.”⁷¹

As environmental sociologist David Pellow has argued, “in every way, the workplace is an environmental justice issue.”⁷² These “connective tissues” between work and the environment are frequently overlooked.⁷³ Historian Terence Wilde describes how miners in this period worked by candlelight in cramped tunnels to thaw out dynamite:

Many deaths, blindings and disfigurements resulted from thawing explosives. Miners’ bodies became tools – they were the thawing mechanisms as men frequently tucked sticks of dynamite into their armpits or put frozen cartridges inside their clothing, down the front of their pants, along their belts and in their pockets. Even when such methods worked, miners

⁶⁹ Cole, “Dynamite Violence and Literary Culture,” 301.

⁷⁰ Wilde, “Masculinity, Medicine and Mechanization,” 56.

⁷¹ “Dynamite Factory for Cobalt, *Cobalt Nugget*, February 6, 1909.

⁷² David Pellow, *Garbage Wars: The Struggle for Environmental Justice in Chicago* (Cambridge and London: MIT Press, 2002), 12.

⁷³ Moore, *Capitalism in the Web of Life*, 225.

experienced dreadful headaches that occurred when trace amounts of the active ingredients were absorbed into the body dermally.⁷⁴ Beyond the risk of accidents, miners were also exposed to occupational disease and chronic health problems that included silicosis, phthisis, and high rates of cancer. Photography's limited ability to capture the attritional violence of unsafe workplaces become clear in the context of health and safety.⁷⁵ In her study of photographs of workers exposed to radiation, art historian Julia Bryan-Wilson notes the limitations of photography to document the "slow blooming invisible damage that accompanies these blasts and shoots itself into our atmosphere and into bodies, damage that can take years, even decades to reveal itself."⁷⁶ The indexical nature of photography cannot connect long-term damage to exposure with any firm causality, as radiation exposure can take years to manifest in symptoms. Through the lens of occupational disease, another link surfaces between the labour of the miner and the photographer. Photographers also experienced high rates of industrial disease, described by *The Photographic News*, as one of the "special dangers of the profession."⁷⁷ The article documents the dismissal of the risks of certain chemicals by "high medical authorities" though the "alarm has been sounded over and over again," a tendency also demonstrated in mining worksites.⁷⁸

While there are powerful examples of photography being used as a tool to bear witness and document people's stories, these narratives remain incomplete within the Cobalt archive.⁷⁹

⁷⁴ Terence Wilde, "Masculinity, Medicine and Mechanization," 56-57.

⁷⁵ Nixon, *Slow Violence*.

⁷⁶ Julia Bryan-Wilson, "Posing by the Cloud: US Nuclear Test Site Photography in Process," in *Camera Atomica*, ed. John O'Brian (London: Black Dog Press, co-published with Art Gallery of Ontario, 2015), 119.

⁷⁷ *The Photographic News*, August 26, 1864, 409

⁷⁸ *The Photographic News*, August 26, 1864, 409

⁷⁹ Photographic projects on occupational health include W. Eugene Smith's photographs that documented the biological effects of mercury pollution in Minamata, Japan; Louie Palu, *A Field Guide to Asbestos*, 2019; and work by the Atomic Photographer's Guild.

Newspaper reports and government reports record accidents, but the photographs archived within the camp do not reflect an interest in social reform that emerges in social documentary work in this period. Organized labour did not deliberately use photographs as an evidentiary tool.⁸⁰

As unions began organizing around health and safety, images like the worker posing with dynamite would undermine claims that it was the workplace itself not the reckless worker who was the cause of accidents, and the individual's safety depended on abandoning the 'old freedoms' associated with mining to conform to standardized corporate best-practices.⁸¹ The Bureau of Mines often concluded that workers were responsible for their injuries.⁸² In 1899, an Inspector from the Bureau of Mines wrote: "In some occupations [like mining] the constant presence of danger seems to lead to a foolhardiness and disregard of all precaution, which men in less dangerous callings rarely show."⁸³ The autonomous, skilled worker self-presenting his masculinity was precisely the mythology that corporations made reference to in order to deny their responsibility in health and safety issues. Within a decade following this image, the haphazard development and lax regulations that enabled these images to be taken would be limited by the growing rationalization of mining in the region. Very quickly, mines became more regulated and the increased presence of organized labour drew more attention to health and

⁸⁰ The *Ontario Workmen's Compensation Act* was not established until 1914, and while it covered accidents, it excluded industrial disease. In 1926, silicosis was declared compensable, though criteria remained stringent and occupational disease was commonly blamed on the unhealthy lifestyles of the individual miners. Occupational disease was not formally recognized or compensated until The *Occupational Health and Safety Act* (OHSA) was passed in 1978 and has been in force since 1979.

⁸¹ One of the main themes in photographs commissioned by mining companies was documenting staged scenes of safe and unsafe underground practices. The images carried the connotation that an individual's safety depended on following company rules. Eric Nystrom, "Underground Photography and American Mining Before 1920," *Mining History Journal* 17 (2010): 119

⁸² Wilde, "Masculinity, Medicine and Mechanization," 67.

⁸³ Ontario Bureau of Mines, "Report for 1899," 26.

safety concerns.⁸⁴ Whittingham, the young man in the image, likely would have moved away from these forms of self-presentation as well. By 1908, he had been promoted to underground surveyor, and in 1909, left Cobalt to study mining engineering at the Michigan College of Mines. Whittingham served overseas in World War 1, but eventually returned to Northern Ontario where he served as the president of the massive nickel producer Falconbridge Nickel Mines.⁸⁵

Conclusion

In the same way that photographs are limited in their ability to reveal the slow violence of environmental change, the surface impression captured in the photograph cannot reveal depth of experience or a multifaceted identity. The histories offered to us by photography are always fragmentary and incomplete. However, as Sekula observes, class conflict is also a conflict of representation, a conflict that centers on who gets to define one's self:

every subordinate class constructs an image of itself, and of the ruling class, which does not entirely conform to this invention from above. Something else, something is retrieved from the slag heap of dominant culture, from tradition, from "popular memory" from political struggles and from everyday experience. These representations are, for the most part, invisible to the dominant culture, though occasionally appropriated.⁸⁶

This chapter focuses on some of those portraits which are rooted in popular memory, political struggle and everyday experience. The images invite the viewer to enter into dialogue with the subjects, a proposal for a collective solidarity. As Coleman argues, photography of working people "takes place at intersection of is and ought," an indexing of a moment that created a "new space in which labourers practices a different mode of being, one that responded to their needs and will."⁸⁷ While in many contexts, photography is applied for instrumental or disciplinary means, or to elide class differences—seen in the photographs of prospectors vs miners, for

⁸⁴ Nystrom, "Underground Photography and American Mining Before 1920," 119.

⁸⁵ "Harold Whittingham," *Northern Mine Research Society* 56 (1946-7): 626-7.

⁸⁶ Sekula, "The Emerging Picture Language of Industrial Capitalism," 250-1.

⁸⁷ Coleman, *A Camera in the Garden of Eden*, 238, 190.

examples— cameras allow people to take pictures of themselves and their communities, bringing alternative histories into view.

By means of transition to the next chapter, I want to return to the discussion of Timothy O’Sullivan introduced in Chapter One. What do O’Sullivan’s photographs tell us about class and the possible recognition, or perhaps even solidarity, between extractive and artistic labourers? O’Sullivan’s photographs made the hard, dirty and dangerous work of the miner visible, which conflicted with desires of the Department of War, who commissioned the survey photographs. As a result, the images were not widely circulated. Kelsey situates the visual choices made by O’Sullivan to emphasize the oppressive nature of the workspace within his awareness of his class position. As an immigrant of Irish descent, O’Sullivan’s class position was low within the hierarchy of the survey. Kelsey concludes that O’Sullivan “evidently resisted or ignored those interests [of the Department of War] when matters of class and labour were too obviously at stake.”⁸⁸ While Sekula argues that the photographer is positioned between capital and labour as a small entrepreneur, Kelsey argues that O’Sullivan’s awareness of his status as a worker imparts an identification with the miner. This allows for a more nuanced reading of O’Sullivan’s class position. Kelsey develops an analysis of the parallels between the labour of the survey photographer and the workers he documented underground, noting that both “regularly worked in the dark, sought something glittering and valuable, and depended on silver for livelihood” while having to “negotiate tensions between entrepreneurial fantasies and organizational realities.”⁸⁹ The symbolic resonances between the mine and the darkroom are made tangible in the production of the photograph, which carries traces of both extractive and artistic labour. In

⁸⁸ Kelsey, *Archive Style*, 120

⁸⁹ Kelsey, *Archive Style*, 123.

the next chapter, I turn from the labour of the miner to focus on one archive by a prospector and amateur photographer in the region.

Chapter Four: Amateur Photography and the Labour of Photography

A muscular body in motion appears to fall out of the photographic frame. [fig. 46] His bent arm raises his elbow to the highest point of his body while his blurred foot slips off a narrow pole. The figure is captured seconds before falling into the surrounding water. His upper body is in focus, but the overall tone of the photograph is hazy, emphasizing the instability of the scene. The gentle tonal shifts within the photograph are punctuated only by the harlequin patterned shorts the subject is wearing. The horizon line in the background is off-balance, tilting slightly upwards to the right, mimicking the falling human body. On the emulsion, the photographer, TW Foster, wrote “Too much grease for Dick, Cobalt Aug 20-09.” In August 1909, TW Foster documented athletes and spectators at a three-day celebration that included the ‘Cobalt Aquatic Sports Games’ and baseball tournaments. [fig. 47] One of a series of photographs of the ‘Cobalt Aquatic Sports Games,’ the snapshot captures Richard Elliott, a young black man, competing in the greased pole competition.

Foster’s candid shot of Elliott in motion is complimented with a staged portrait taken before the competition that shows “Dick Ready [sic] to walk greased pole.” [fig. 48] Captured by a low camera angle, the empty foreground fills half of the frame while Elliott stares directly at the camera. Shot on a Kodak No 3A which produced narrow vertical shots, the frame emphasizes the verticality of the scene while the low angle places Elliott above the horizon line, emphasizing his stature. His body is equivalent in scale to the out of focus stand full of spectators which diagonally cuts through the background of the image. Elliott sits in focused tension, his back straight, hands resting on his knees and his ankles crossed. He stares directly at the lens, projecting a quiet interiority and dignity. Elliott’s portrait echoes what Tina Campt describes as “the conceptual frameworks of quiet, stasis, and refusal,” which form an assertion of

sovereignty.¹ While the candid shot shows the human body in motion, in the portrait, he self-presents in stasis. Campt references Darieck Scott's reading of Frantz Fanon's theory of muscular tension and the black body:

Darieck Scott reconstructs the salience of "muscular tension" for theorizing an alternate vision of black futurity and possibility. For Scott, muscular tension represents the paradoxical power of the black body in subjection, for, as he contends, "even within the lived experience of subjugation perceived to be at its worst, there are potential powers in blackness, uses that undermine or act against racist domination." [...] For Scott muscular tension constitutes a state of black powerfulness in the midst of debility, a form of resistance expressed through a refusal to accept or acquiesce to defeat.²

This is a "practice of refusal as an extension of the range of creative responses black

communities have marshaled in the face of racialized dispossession."³

The context of an athletic competition is one of the few spaces that self-presentation on these terms would be possible. In the extensive textual documentation of the mining camp, people of colour are largely absent from official archives. In newspaper reports, they are mentioned almost exclusively in the crime section, and even then, are often only identified by their ethnicity. In the Cobalt Mining Museum archive, there are only two photographs in which blackness is visible and both are crowd scenes.⁴ In one of the photos, a group of people pose in a street scene, as the shoeshine stands assertively in the center of the frame. [fig. 49] Within the photograph, the identity of the individual is reduced to his labour, effacing the individuality of the worker while maintaining notions of racial hierarchy. To return to Sekula's discussion of Daguerre's photo of the shoeshine in Paris, the tension between motion and stillness surfaces as an early theme in the history of photography. Campt reframes this tension as stasis as a "form of

¹ Campt, *Listening to Images*, 9

² Campt, *Listening to Images*, 52.

³ Campt, *Listening to Images*, 10

⁴ The other image was reproduced in the 1909 edition of the periodical *Canadian Life and Resources* featured an article titled "To Cobalt and Back," which shows crowd of people cluster around "almost a ton of native silver in a solid block." [fig. 13]

stillness in motion” as a way of locating some of the less visible strategies of survival and resistance in the black diaspora.⁵

The normative whiteness of the visual archive is incongruous with the demographics of the community. In 1911, only 19% of the town’s population was of English descent, a number that would drop to 14% by 1921.⁶ The 1911 census documents that 16% of the town’s population was French-Canadian and another 17% were from central Europe. Significant populations of Chinese, Italians, Syrians and Greeks also lived in the community. The multicultural community is thus in many ways incongruous with notions of white anglophone settlement on a hostile northern frontier.⁷ Foster’s portrait emphasizes the person-hood and dignity of the portrayed, solidified by the choice to identify Elliott by name, indicating a familiarity.⁸ This photograph thus forms a contrast to the abstraction of the shoe shiner to his labour or the ways in which racialized labour was erased as the business owned by Chinese workers is literally removed from the frame.⁹ Despite the aestheticized display of the black male body, the intensity and quietness of Elliot’s self-assured presentation is profound, using the camera to shape how he is perceived, reflecting “a desire to be seen, to be photographed, to be visible, and to matter.”¹⁰ Elliott’s muscular tension asserts physical power but also dignity and control: both a strategy of survival and a vision of possibility. Within this historical context, black masculinity was a threat articulated in the local press:

⁵ Campt, “Performing Stillness,” 159.

⁶ Baldwin, *Cobalt*, 143.

⁷ Forestell, “Bachelors, Blind-Pigs and Boarding Houses.”

⁸ This corresponds with what Deborah Willis has called “photography as biography” in her demand for the critical work of “visualizing memory” and portraying black lives. (Willis, “Visualizing Memory: Photographs and the Art of Biography,” 22)

⁹ See page 44-46.

¹⁰ Campt, *Listening to Images*, 42.

Very few people realize the danger which threatens the ruling white race....compared with the white man the negro is a child and a child with great physical strength, fierce passions, an utter lack of control and a way of looking at life so different from the white man that the two races are totally unable to understand each other.¹¹

As this quote reveals, the notion of whiteness as both an implicit normative code and civilizing influence is present within narratives of the region. If archives reinforce certain narratives at the expense of others, in the case of Cobalt, white settlement and success on a hostile frontier, Foster's archive introduces a history left out of these narratives. In this chapter, I argue that attention paid to photographers in remote places expands our archival histories in ways that nuance how we understand, negotiate, and act upon our individual and collective understandings of the past.

The drama of extraction fixates on the incredible wealth extracted, the mass migration of people, the huge dreams and bigger disappointments. Private archives like Foster's that focus on the day-to-day life of the community include many moments that would not be considered significant within the official historical record. They provide an opening to think about the history of the place as existing outside of the logics of extraction.

A Prospector-Photographer

To consider the labour of photography within an extractive zone, this chapter focuses on a private archive by the photographer Thomas Wilfred Foster.¹² Foster was both a worker and

¹¹ *New Liskeard Speaker* "Black versus Whites." September 13, 1907.

¹² The decision to focus on Foster as a case study is rooted in both the visual strength of his photographs, but also in the relatively complete record of his life and his archive. Foster's domestic and work life was recorded in extensive oral history interviews between Foster's wife Mary and daughter Muriel. Foster's grandson, John Weatherburn maintains the extensive collection of photographs, negatives, and postcards. The T.W. Foster collection contains over two-hundred photographs and postcards and over two-hundred B&W large format negatives.

prospector in an extractive zone as well as a photographer who produced and sold his own photographs. While Foster purchased his materials from EKC suppliers, he shot, developed, and sold his own images as penny postcards in his general store. Like many rural photographers, Foster occupies multiple and shifting class positions on this spectrum: a prospector (though not a miner), a photographer, developer and retailer. Foster developed a distinctive visual style that reflects an engagement with questions of composition, light, and print quality. There are consistent visual tropes and forms of experimentation coupled with an emotional texture that links the body of work as a whole. Foster can be described by what Naomi Rosenblum has characterized as a “new breed of image-maker [that] sought to express a personal vision that embraced the special qualities of the time and place in which they lived” capturing the quotidian nature of day to day life.¹³

I argue that Foster’s personal archive reveals an experience of place that has been largely eclipsed by narratives that promoted industrial development, capitalist speculation and the construction of a white settler region. In centering the cultural production within the mining camp, we have seen how workers used photography to both assert an identity beyond their labour and how the circulation of images of a general strike was used as an organizing tool. Within this archive, an emergent shadow history illuminates more nuanced experiences of gender, race, and class. The ubiquity of the snapshot photograph and the desire to capture street scenes, public events, and other day to day activities becomes an opening to recover a discarded history. These

This exploration is fragmentary, and many other histories and experiences are left out. To attempt to address this gap, I place Foster’s work into dialogue with often unidentified work by other producers throughout this chapter.

¹³ Rosenblum, *A World History of Photography*, 261.

glimpses introduce an experience of place where desires exist that transcend the demands and logics of extraction.

Writing about Cobalt in 1909, G.B. Vanblaricom asked, “What tales of blasted hopes and dire poverty, what stories of sleepless nights, bodily stress and mental torture could be disclosed. Of these, the outside world hears little and, perhaps, cares less.”¹⁴ Vanblaricom highlights how narratives of “wealth, achievement and success” obscure the harsher realities of life in a mining camp.¹⁵ Vanblaricom’s article, however, then turns to “The Millionaires of Cobalt,” seemingly confirming this musing that the “outside world hears little and, perhaps, cares less.”¹⁶ In the textual and visual record of the region, the gaze is focused firmly on extraction. The archive Foster developed captures ‘displaced histories.’¹⁷ community events, local celebrations and tragedies, and an interior domestic world. Foster directs attention away from the flow of money to the ordinary and mundane. In doing so, he invites the viewer to think not of “fortunes of immense proportions” but the quotidian experiences of workers.

As Chapter One argues, the production of commodities is always accompanied by a parallel, but often obscured, story of workers producing that commodity.¹⁸ The industrialization of photography under EKC made camera technology more accessible but effaced the labour of the photographer. Kaja Silverman describes this process as the zenith of the “ocularization” of photography.¹⁹ For many amateur photographers and some commercial practices, Silverman argues that this shift reduced the darkroom “to a factory-assembled technical process” rather than

¹⁴ G.B. Vanblaricom, “The Millionaires of Cobalt,” *The Busy Man’s Magazine*, January 1909, XVII, no. 3, 19.

¹⁵ Vanblaricom, “The Millionaires of Cobalt,” 19.

¹⁶ Vanblaricom, “The Millionaires of Cobalt,” 19.

¹⁷ Ann Laura Stoler, *Along the Archival Grain* (Princeton: Princeton University Press, 2009) 20.

¹⁸ Coleman, *A Camera in the Garden of Eden*, 8.

¹⁹ Silverman, *The Miracle of Analogy, or The History of Photography Part I*, 82.

“a site of craft, artistry, and agency.”²⁰ The focus on EKC emphasizes the control of the corporation over the means of production.²¹ However, rather than cultural histories of technology that take a top-down perspective that emphasizes corporate hegemony, I am interested in how workers used this technology and how cameras can be used as “tools for speculative world building.”²²

In this chapter, I refocus attention away from how Eastman Kodak Company produced and standardized photographic production to an analysis of how individual photographers practiced the labour of photography. Despite the increased standardization, the darkroom remained an essential site in the photographic process for both artists and commercial producers, as well as many hobbyist photographers. Lily Cho theorizes photography through to the labour of the darkroom technician. She argues, “To think of the photograph as an object of mechanical reproduction risks occluding how every repetition is a repetition with a difference. This difference haunts photography's reproducibility. Its anticipatory spectrality makes manifest the darkroom's materiality.”²³ Kodak included manuals that had detailed information on how to develop roll film, and many artists, craftspeople and amateurs continued to engage with the labour intensive processes of photography.²⁴ As Cho notes, centering darkroom labour complicates the promise of standardization offered through an emphasis on mechanical reproduction.

This line of thinking is central to a broader argument within my dissertation, which seeks to locate cracks and fissures within systems that appear to be totalizing, such as extractive

²⁰ Cho, “Darkroom Material,” np.

²¹ Thanks to Sarah Parsons for this observation.

²² Marez, *Farm Worker Futurism*, preface

²³ Cho, “Darkroom Material,” np.

²⁴ Waggoner, “Photographic Amusements 1888-1919,” 13.

capitalism. It is the gap between the standardization of processes and the resulting effacement of labour with the more democratic possibilities entailed by these shifts that are of interest.

Photography's ability to reveal the experience of labourers in extractive zones is limited by the potential of the camera, but also by the reality that some forms of labour were considered more valuable, and therefore, more worthy of documenting than other experiences. This section uses the labour of an independent photographer to think through the role of photography in preserving community memory. Snapshots and other amateur production that are not driven solely by artistic or instrumental impulses broaden the scope of our histories.

The Labour of Photography

Foster's archive reflects the experience of one migratory, working-class family who lived and worked in the shadow of resource extraction. Foster moved to Cobalt in 1906 at the age of twenty-one. The seventh child of second-generation Irish immigrants, Foster moved to Cobalt with four of his siblings at the peak of the mining boom, just three years after the initial discovery of silver. Foster obtained a prospector's license on July 31, 1906.²⁵ His experience was typical of many young men who came to the region in search of discovery: when none of his claims panned out in Cobalt, Foster travelled by canoe to a nearby mineral discovery in Gowganda in 1907 in pursuit of the new silver discoveries there. Foster immortalized this journey by shooting a group of prospectors with the caption "Gowganda or Bust." [fig. 50] Gowganda turned out to be a bust, but the same year, Foster found and sold a small amount of silver in Temagami. However, like many mineral discoveries, the claim did not extend to deeper veins. While Foster continued to prospect in his free time, he worked in general merchandise

²⁵ Permit to Prospect for Minerals in Forest Reserve, no. 619, dated 31 Jul 1906, issued to Thomas W. Foster; L2017.002.838, T. W. Foster Collection, Museum of Northern History.

store in Haileybury, just north of Cobalt. Using a Kodak No 3A Model 4-B Folding Pocket Camera, Foster explored the technical abilities of the camera while documenting the region in a moment of rapid transformation. Introduced in 1903, the Kodak No. 3A produced photographs in postcard format. Foster sold these postcards through his shop.

By 1910, Foster began a northward migration to the Porcupine mining camp and in 1913, to the gold fields of Kirkland Lake. Foster's journey is typical of the transient labour of the region: many people left Cobalt in 1910, as the development of hydropower on the nearby Montreal River reduced staffing needs at mines.²⁶ This coincided with rich discoveries in gold fields further north. While in the Porcupine and Kirkland Lake, Foster continued to prospect and shoot photographs. Foster founded the Masonic Lodge in the Porcupine and eventually became Police Magistrate and Postmaster of Kirkland Lake (which he ran out of his general store). By 1917, he moved his family to Toronto after contracting tuberculous. He died of pneumonia in 1920 at the age of 35.²⁷

Foster was one of many producers in the region taking advantage of the increased availability of camera technology and film. While Foster purchased his materials from EKC suppliers, he shot, developed, and sold his own images as penny postcards in his general store. The labour-intensive process of developing and writing captions was done by hand.²⁸ Other photographers and retailers licensed photographs for mass-produced lithograph postcards. In 1910, the census identifies H.H. Post, James White, and Charles Aylut as photographers by

²⁶ The harnessing of nature as a productive force reduced the need for human wage labour.

²⁷ His widow Mary lived for more than six decades after the death of her husband. Mary went on to have a successful career in the insurance industry while raising five children. Foster's youngest daughter, Muriel Winnifred Foster, was born after TW Foster passed away and she initiated the oral history project of the family's time up north.

²⁸ Bogdan and Weseloh, *Real Photo Postcard Guide*, 82.

primary occupation. By 1920, eleven photographers were identified in the census, many of whom operated portrait studios. A local business directory of the same year listed eight photography companies, with an additional five photography supply stores.²⁹ Many of these businesses employed multiple photographers. One of the most prominent photographers in the area was a Syrian immigrant, Fred Askar. Very little documentation exists of the business, but Askar produced an extensive number of studio portraits. Askar was part of a prominent population of recent Syrian immigrants in the community: over forty percent of the businesses in Cobalt were owned and operated by Syrian merchants.³⁰ Many photographers, like Foster, were never identified as having their primary form of labour be photography. Compared to many other photographers in the region, Foster's operation was small and the scenes he shot typically reflect personal or aesthetic concerns rather than commercial viability.

I want to return to John Tagg's criticism that photography places the means of production in the hands of workers but isolates them from the privileged spaces. Tagg observes that within photography, we can locate

contradictions central to capitalist modes of production which must place its means of production in the hands of those it expropriates and in which there is an inherent antagonism between the socialization of production and consumption and of the mechanisms of discipline and desire, and the private appropriation of surplus value.³¹

Foster is a photographer without any institutionalized power, which is reflected in the ordinary things he photographed. This alone contributes to the deeper understanding of day to day life.

However, the power imbalance that Tagg reinforces between the photographer and subject is also complicated in Foster's images. A reading of these images through Azoulay's event of

²⁹ Henry Vernon & Son, *Vernon's District of Temiskaming Alphabetical Business and Farmers Directory for the Years 1919-20*. Hamilton: Griffin & Richmond Co, 1919.

³⁰ McKernan, *Uncovered Voices*, 135.

³¹ Tagg, *The Burden of Representation*, 16

photography opens up another way of understanding Foster's role. As Azoulay argues, a photograph emerges out of an encounter between the subject, the photographer, and others on the scene, and is initiated by the presence of a camera. The casual, tender and often irreverent presentation of the community that Foster captures is what is lost in most studies of labour, where the worker comes to stand in for their class, and workers who do not fit into a neat capital/labour nexus are simply ignored.

Family Photography

On July 1, 1909, TW Foster celebrated Canada Day with a trip to the Montreal River with his wife Mary and three other people. [fig. 51] In a richly textured photograph from the excursion, the group poses on a grouping of smooth granite rock as the choppy water of the Montreal River curves through smooth rock towards the camera. The leaves of a tree neatly frame the group. In the center of the composition, Mary wears a crisp white dress and wide brimmed hat, sitting on the rock with her hands on her lap. Three neatly dressed figures stand behind her. The man places his hands on the shoulders of the child. Beside them, the woman both wears and carries a hat. Shot from a higher vantage point, the focus in the photograph is remarkably even, rendering precise detail and rich texture in the water, the rock and the human figures. The tonal shifts are pronounced, as the bright white of the rapids backlights the figures while juxtaposing the dark grey of the rock face.

The intrusion of the family into a tangled landscape of tree branches, smooth rock, and rapidly flowing water ruptures many of the narratives of untamed wildness that circulated of the Canadian Shield. Mining camps are often associated with single men, and frontier narratives are often male-centric. Pulled in by economic opportunity, however, both single women and families quickly followed the male workers who first came to the mining camp. For example,

Foster's wife Mary Greer moved to the mining camp shortly after its founding as a single woman in search of career opportunities. Greer was a native of Philadelphia, born to Scottish and Swedish immigrants.³² Her mother, Sophia Sikstrom, worked as a photographer's assistant in New York. Mary lived and worked in Toronto and was offered a position as an office assistant in Haileybury in 1906-7. Lured by the higher wages and the promise of adventure, Greer moved north as a young, single woman. She is often photographed by her husband in intimate scenes showing domestic routine, including her bedroom, a domestic space once considered off limits to the camera.³³ [fig. 52] While mining is strongly associated with male culture, Foster's photographs repeatedly focused on groups of people with significant numbers of women and children.

In another shot from the same day, titled "'The Notch' Montreal River," the well-organized composition and feeling for mood and texture that characterized Foster's work is evident. [fig. 53] Shooting from a low-vantage point, the lens has an unfocused foreground where moss covered rock is interrupted by tangled foliage. The lens focuses in the center of the background of the image, where four figures stand on a bridge spanning a break in the rock, several meters above the turbulent water. Behind the figures is a cluster of trees which mimics the shape of the human figures. The image is the second in a series, and the inclusion of visual detail in the foreground appears to have been a correction to the previous image which is taken from a higher vantage point and lacks the visual texture of the foreground. The winding river

³² Ontario marriage registrations, 1909, Foster-Greer; digital image, Ancestry.ca, citing Marriage License Books, 1907-1910; Series: MS945; Reel: 7; Archives of Ontario; Toronto, Ontario, Canada.

³³ Waggoner, "Photographic Amusements 1888-1919," 29.

draws the eye through the image into a gap in the rock, so the impression of unencumbered flow is emphasized by the visual structure of the scene.

Deeply personal and often silly, Foster's images are hard to read outside of the context of the particular family dynamics.³⁴ Like all portraits, family photographs blur the lines between public and private. Amateur photography often carries affective or sentimental meanings, some of which are recorded but many of which are lost or inaccessible. One representative photograph captures three women sitting on the floor in a domestic interior. [fig. 54] Dressed in similar outfits, the high-necked white lace blouses and full skirts evoke Victorian domesticity, amplified by the floral-patterned wallpaper that forms the backdrop. Mary holds an instrument, and the women pose with a taxidermized owl in a scene of play. Foster has written on the emulsion to identify the women as Bertha, Mary and Grace, while the caption reads 'Tonight at Grand "Wish Fosters Over the Fence" This Season.' The caption then references performances in New York, with matinees on Wednesday and Saturday.

The images reflect recreation and happiness, the traditional snapshot tropes of leisure. These tropes circulated in EKC advertisements which promoted photography as a tool to record

³⁴ Perhaps the most famous meditation on family photography is Roland Barthes' *Camera Lucida*, which centers on his affective response to the 'Winter Garden' photograph of his mother. For Barthes, photograph of his mother is inaccessible to other viewers as it acquires its meaning from the personal relationship of viewer to subject. In contrast to this phenomenological approach, Pierre Bourdieu read family photographs through the lens of sociology. Reading vernacular photography as a "middle-brow art," Bourdieu emphasizing the structural and systematic nature of photography revealed through the conventional nature of most family photography. A wave of recent scholarship has read family photos for visual evidence into issues of race, sexuality, state power, and everyday experience. The ways in which the family album can both uphold and subvert race, gender, class and nation have been explored in scholarship by bell hooks (1994) Shawn Michelle Smith (1998 and 2017), Thy Phu (2011) and Julie Crooks (2017). The connection between memory and family album has been written about by Marianne Hirsch (1997, 1999), Martha Langford (2001), and Thy Phu and Elspeth Brown (2018).

playful and positive events.³⁵ As both Richard Chalfen and Nancy West have argued, the ad campaigns produced by Eastman Kodak taught consumers how to photograph, and by extension, how to see, family.³⁶ The visual conventions of family photography are rooted in these early campaigns which promoted photography's ability to preserve domestic memories. As West observes, with the Brownie camera, the domestic sphere began to replace leisure as a primary subject in advertisements, which would culminate following World War 1. EKC taught photographers to "see their experiences as objects of nostalgia, to arrange their lives in such a way that painful or unpleasant aspects were systematically erased."³⁷ EKC used advertisements that "commodified memory" by promising the possibility of preserving them while turning snapshots into commodities.³⁸ Yet as West goes on to argue, nostalgia can be a potentially valuable mode of feeling that can allow for the possibility of "retrieval, as a means of reclaiming the past and even of shaping the future."³⁹

The obvious affection and emotional register in Foster's photographs promise a sense of closeness. Marianne Hirsch has argued that family photographs elicit an "an affiliative look," allowing viewers to 'feel family.'⁴⁰ However, as Hirsch cautions, "familial looking can also function as a screen; the identifications it engenders can be too easy."⁴¹ This is echoed by Shawn Michelle Smith who reflects, "how do we look at other people's family photographs? And when we do, whose feelings do we feel?"⁴² While family photographs have complex and varied

³⁵ Waggoner, "Photographic Amusements 1888-1919," 29.

³⁶ Phu, Brown, and Dewan, "*The Family Camera Network*," 151.

³⁷ Nancy West, *Kodak and the Lens of Nostalgia*.

³⁸ Nancy West, *Kodak and the Lens of Nostalgia*, 9.

³⁹ West, *Kodak and the Lens of Nostalgia*, 10-11.

⁴⁰ Hirsch, *The Familial Gaze*, xiii.

⁴¹ Hirsch, *The Familial Gaze*, xiii.

⁴² Shawn Michelle Smith, "Feeling Family Photography: A Cautionary Note," *Photography and Culture* 10.2 (2017): 165

meanings, they reveal an experience of place that is left out of larger histories. In a community with a transient population, domestic and family photographs often move with families. This leaves a gap in understanding people's lives outside of extraction. In this context, Foster's photographs have a broader resonance besides their specific meanings within family memory. Foster's photographs are revelatory because they show a place marked as an environmental sacrifice zone through a different lens: one of visual beauty and formal experimentation, and one of community, play, and family.

Domestic photographs provide a unique record of everyday life as individuals and groups used photos to "narrate their lived experiences, visually shape and project their preferred characters in relation to prevalent social customs, as well as pass on private information."⁴³ As Batchen argues, there is the "potential for subjects to be empowered through engagements with family photography" facilitating "modes of self-representation and resistance."⁴⁴ Focusing attention on the domestic sphere subtly nuances a totalizing view of extractive zones.

"Cobalt is a failure"

The region that Foster and Greer met, married, worked, and had children in was assessed by *Canadian Magazine* in 1908 as "possibility the worst piece of ground that holds up a town anywhere in America."⁴⁵ The author went on to argue that "Cobalt is a failure" noting the garbage heaps in the street, lack of clean drinking water, high rents, no drainage, no sidewalks or

⁴³ Gil Pasternak and Marta Ziętkiewicz, "Beyond the Familial Impulse: Domestic Photography and Sociocultural History in Post-Communist Poland, 1989–1996," 123.

⁴⁴ Batchen, 'Snapshots,' 95.

⁴⁵ Frederic Robson, "Cobalt: A Mistaken Idol," *Canadian Magazine* XXXI no. 2 (June 1908): 100. Greer and Foster lived in Haileybury, a community right beside Cobalt in what was called the Tri-Towns.

proper roads and “scarcely any fire protection of an adequate sort.”⁴⁶ Cobalt was a community built to serve the needs of extraction and capital, and the community paid a high price due to limited regulations. For example, when a proposal for waterworks and sewage was presented in 1907, mining representatives described the plan as “insane,” “a folly” or a “practical impossibility.”⁴⁷ The prioritization of extraction affected the ability of the town council to build infrastructure or initiate planning.⁴⁸ This was compounded by the way the town limits were initially established. Many of the mines were located in Coleman Township, which surrounded the community. The mines in Coleman Township didn’t pay local taxes.⁴⁹ Because of this, Cobalt lacked a sufficient tax base. The Mayor petitioned the provincial government to enlarge the town limits to include Coleman township and the mines within its area, but the request was refused.⁵⁰ This connection between government and town planning and the health of communities connects to Laura Wexler’s call to think about the domestic sphere as it relates to state regulation and the priorities established by governments, which in this instance, favoured extraction.⁵¹

⁴⁶ Robson, “Cobalt: A Mistaken Idol,” 100.

⁴⁷ Quoted in Baldwin, *Cobalt*, 117.

⁴⁸ In 1908, the town of Cobalt ordered the Coniagas Mining Company to stop flooding streets in the town. In response, the corporation built a large fence across the road cutting off residents from accessing the downtown and began to build trenches along the street, eventually digging in the town square. When the town arrested the miners, company filed a legal injunction against the town, arguing that the town had no right to stop them from carrying out mining activity because the Railway Commission sale of land gave them access to all the potential mineral wealth underneath the downtown buildings. The Ontario Court ruled in favour of the Coniagas Mining Company. This emboldened other companies, who expanded their exploration into the downtown and under existing buildings.

⁴⁹ When Timmins was established as a city, they made the city limits excessively large to ensure mines paid municipal taxes. Today, Timmins spans 2,962 km and is one of the largest cities in Ontario.

⁵⁰ For a detailed discussion, see Baldwin, *Cobalt*, 117-118.

⁵¹ Wexler, “State of the Album,” 100.

It was not surprising to many observers then when community members were awoken by the fire bell at 4am on July 2, 1909. The local paper poetically described how the fire “raged like a fiend. The sparks ran like skirmishes of disaster... Behind was the awful roar of falling buildings, in front was a blazing, surging demon of fire fanned by a stiff breeze, leaping many feet to its next vantage point.”⁵² As the streets filled with “blackened, smoking embers,” and the town crackled with explosions of dynamite, photographers captured the chaos through the pall of smoke that hung over the town.⁵³ The fire began in Joe Lee’s New York Café, a restaurant owned by a Chinese entrepreneur, but spread quickly through the poorly constructed buildings and streets filled with garbage and debris.⁵⁴ The fire moved through Cobalt’s immigrant quarter, known as Frenchtown, where the flimsy frame boarding houses were quickly destroyed.⁵⁵ Two-thousand people were left homeless.

⁵² *Cobalt Nugget*, July 1909

⁵³ The photographs of the fire evoke Arnold Genthe’s 1906 photographs of The San Francisco Fire, which were taken by the artist with a borrowed camera while his own studio burnt. [fig. 12] A severe earthquake rocked San Francisco, prompting a devastating three-day fire, the same natural disaster would destroy Carleton Watkins studio and archives. Genthe described the motivation to document the scene: “The one thought uppermost in my mind was not to bring some of my possessions to a place of safety but to make photographs of the scenes I had been witnessing, the effects of the earthquake and the beginning of the conflagration that had started in various parts of the city. I found that my hand cameras had been so damaged by the falling plaster as to be rendered useless. I went to Montgomery Street to the shop of George Kahn, my dealer, and asked him to lend me a camera. “Take anything you want. This place is going to burn up anyway.” I selected the best small camera, a 3A Kodak Special. I stuffed my pockets with films and started out.” <http://www.sfmuseum.net/1906.2/genthe.html>

⁵⁴ The fire sparked a racist backlash, with the New York Times reporting that the following the fire, there was widespread racial unrest in the community: “Cobalt Fire Swept, 3,000 are homeless” followed by “Angry at Orientals: Third Blaze in Last Three Months Due to Chinese, and They May be Driven From the District”. The New York Times, July 3, 1909.

⁵⁵ Ethnicity was an important factor in town-planning in this period. As Sarah Basnett has described in her study of photography of the Ward, a low-income, largely ethnic neighbourhood Toronto, ethnic difference was formulated in newspapers, public discourse, and photography. She argues that “non-British immigrants [were] positioned as a source of public anxiety about poverty, moral and biological degeneracy, and disease.” (“Shooting Immigrants,” 107).

This part of town was described as looking like a “conglomeration of a western mining camp and a medieval slum” before the fire.⁵⁶ The fire swept quickly through the town, reducing half the town to ashes and destroying one hundred-buildings. The health inspector Dr. W.E. George complained “It is hard for those who have not seen them to appreciate the depraved conditions of these foreign people with regard to dirty houses and defective hygiene” which “renders the filth of the place indescribable.”⁵⁷ Yet as historian Douglas Baldwin observes, “the entire town was filthy, not just the north ward.”⁵⁸ This was echoed by numerous contemporary observers: the Board of Health decried that the “sanitary condition of the town is in a deplorable state and the present system is totally inadequate to cope with the situation.”⁵⁹ The Board of Trade reported that the town was probably “probably one of the most filthy spots existing in Canada to-day.”⁶⁰ A mining engineer observed “all necessary sanitary protections had been neglected. No water mains, no sewers, outdoor toilets.”⁶¹

Fires were common in quickly built communities that sprung up in the region, and “that fire would one-day sweep through Cobalt had been confidently predicted by almost everyone who visited the town.”⁶² The community was without a fire chief for the three months preceding the fire, as the fire chief George Brady resigned when the town refused to provide funds for necessary staffing and equipment upgrades. When the fire started, a volunteer fire brigade struggled to transport fire-fighting equipment through the narrow and unpaved streets. The

⁵⁶ “A Better Cobalt.” *Cobalt Nugget*. July 3, 1909.

⁵⁷ Ontario Provincial Board of Health, Annual Report for 1914, 94-5.

⁵⁸ Baldwin, *Cobalt*, 126.

⁵⁹ Ontario Provincial Board of Health, Annual Report for 1909, 30-31.

⁶⁰ Letter from the Cobalt Board of Trade to the Town Council, June 1909, signed by Carr, Stevenson and Cody. *Coniagas Scrapbook*, Cobalt Mining Museum.

⁶¹ J.H. Stovel, Quoted in Baldwin, *Cobalt*, 126

⁶² Baldwin, *Cobalt*, 118.

controlled explosions of dynamite intended to eliminate structurally compromised buildings unintentionally spread the fire further. *The Ottawa Citizen* ascribed responsibility to the town council, describing their approach to fire prevention as too “short-sighted and too economical policy.”⁶³ The *New Liskeard Speaker* found a silver lining in the tragedy, “The only good feature of the fire has been the wiping out of a lot of unsightly buildings which were all right four years ago, but an eye-sore at present.”⁶⁴

Foster documented the eerie beauty of aftermath of the fire.⁶⁵ [fig. 55] Foster focused on the rich textures introduced by the charred stumps and wreckage dotting the ground.⁶⁶ Within the frame, the crowd juts diagonally across the image. In the center of the image, Foster has labelled blocks of ice. Another photograph in the series, “Sunday ‘after’ Fire, Waiting for Train at Cobalt,” is shot from the roof of the train station. [fig. 56] Foster’s choice of framing reflects his sensitivity to spatial ambiguity. The well-organized composition employs diagonal lines that turn into curves to structure the scene, as the dark, geometric form of the roof fills one-third of the frame. The linear diagonal is disrupted by the train station, which produces a curve-live pattern. The shape mimics the train tracks which weave around the lake, introducing a repetitive pattern that structures the image into thirds. In the center, a dense crowd of well-dressed people are shot from a bird’s eye view of the crowd. The image is marked by sharp contrasts between pops of white on women’s dresses and hats and the typically dark suits of the male crowd, emphasized by the flat colour of the roof and the lake. Three faces look to the photographer, but most of the

⁶³ Baldwin, *Cobalt*, 120.

⁶⁴ New Liskeard Speaker, 9 July 1909.

⁶⁵ In 1911, Foster photographed a fire in South Porcupine and also collected photographs of the fire taken by H. Peters.

⁶⁶ Before the area destroyed by fire was rebuilt, the territory was trenched as companies sought bodies of ore. (Baldwin, *Cobalt*, 97)

crowd remains engrossed in conversation. Foster's choice to focus on visual form as opposed to the more tangible aspects of ruin and tragedy is reflective of his approach which is geared more towards formal exploration rather than straightforward documentation.

Displaced histories

Foster's archive contains experiences and subjectivities that are absent from most narrative accounts, visual histories or public archives. These official histories emphasize economic growth and industrial development, narratives which situate extraction as both natural and inevitable. If archives and photographs can be used to reinforce historical exclusions, displaced histories can also be recovered in the visual record. The portrait of Dick Elliot, for example, provides an opportunity to locate blackness in a space that was deliberately culturally constructed as white. As Lily Cho has demonstrated, the consideration of racial representation in photography also necessitates thinking through how histories of racism are embedded in the materiality of photographic processes themselves. Cho theorizes the darkroom as a generative space for understanding the relationship between race and photography, noting that the darkroom "has also been a space of normalized whiteness. Its equipment, chemicals, and paper are calibrated for representations of white subjects."⁶⁷ In spite of this, Cho draws attention to how the racialized or diasporic worker can bring their own histories and techniques to bear in photographic production, insisting on an agential understanding of the wet process. For despite the standardization on many enlargers, printers, papers, and fluids, the techne of the darkroom saw them take on different forms in different places.⁶⁸ Cho draws a parallel between diasporic communities and the repetition of the photograph:

⁶⁷ Cho, "Darkroom Material," np.

⁶⁸ Cho, "Darkroom Material," np.

Each diasporic formation is both a repetition of an older, earlier form, and also utterly and necessarily original. To be in diaspora is to grapple perpetually with forms of repetition that are also always new. Diasporic communities are imperfect re-formations of ideas of origin and home that are always elsewhere, but are perpetually re-made in the present. This remaking anticipates its own originality. It knows in advance that what is lost or left behind cannot be copied or made again. Attending to the work of developing photographs calls for a focus on one of the moments when the photograph is most unstable, when it is unfixed and in transition.⁶⁹

The focus that Cho shifts to the darkroom provides an opportunity to think through the more experiential uses of photography which cuts across our assumption of the different ways that photographic genres function. Cho's reading of a self-portrait of her father, a Chinese darkroom technician, has unexpected resonances with the photographs that surface in the mining camp, produced by darkroom technicians far removed from centers of industry or art.

In her analysis of the role of photography in diasporic communities, Campt attends to the complex role the image plays in constructing race. Campt suggests that "we rely all too often on images to confirm our unspoken assumption about race and diaspora through their capacity to materialize the visible traces and visual indexes of difference and affiliation."⁷⁰ However, the materiality of the negative—which is always an inverted image—enacts a process of "making race disappear only to make it reappear in a stable and fixed form."⁷¹ The structure of the camera, the event of photography, and the labour of the photographer "reminds us that even when race seems clearly visible in a photographic print, its visibility is the creation of technical, material, and cultural processes of conjuring and fixing, where the very chemical and technological matter of the image – the photographic negative – must disappear race in order to make it reappear in recognizable form."⁷² However, in her study of family photography in black

⁶⁹ Cho, "Darkroom Material," np.

⁷⁰ Campt, *Image Matters*, 128.

⁷¹ Cho, "Darkroom Material," np.

⁷² Campt, *Image Matters*, 128.

European communities, Campbello locates a tension within how race is codified in photography and how vernacular photography was used to create forms of identification and community.

The ‘vision of possibility’ for members of the black diaspora on the frontier that Elliott asserts in his portrait is expanded in later photographs.⁷³ Five men stand outside a small log-cabin with a sign identifying it as the 4 Nations, a mine in the Kenagami mining camp which got its title from the partnership of four prospectors. [fig. 57] The now middle-aged Elliott poses assertively with his arm around one of the group members, presumably the co-founders of the mine, all of whom are white besides Elliott. The body language of the men in the photograph suggests an intimacy and friendship between the group of men, reflecting the homosocial working-class culture that developed in mining communities. Elliott was well liked in the community and developed a reputation as a hard-worker, demonstrated by the fact that Sir Harry Oakes, who owned the Lake Shore Mine—which was the richest gold discovery in Canada—invested in the property.⁷⁴ Further documentation of friendship is shown in a photograph from 1925 which captures Elliott sitting on a train platform with a crowd of people. [fig. 58] The man beside him rests his arm on his shoulder in a gesture of comradeship. Finally, in an undated portrait, a now much older Elliott holds the arm of a woman, each holding a trailing bouquet of flowers.⁷⁵ [fig. 59] Standing in short grass, they wear what seems to be their Sunday best, as

⁷³ These photographs were preserved in a private archive by Valerie Macpherson of Kenagami, Ontario.

⁷⁴ Oral history, Ian and Valerie MacPherson.

⁷⁵ In frontier communities, white women were viewed as civilizing agents, and ideas about the vulnerability of white women helped create and sustain the concepts of racial and cultural difference (Carter, *Capturing Women*, xiv). Interracial marriage was controversial in Canada in this period, and it was noteworthy enough to be discussed in the local paper under headline such as ‘Cobalt Chinamen Have White Wives’ (Cobalt Nugget). Partially in response to the moral panic around interracial marriage, Ontario introduced legislation in 1914 that banned Asian entrepreneurs from hiring white women (Backhouse 2004). Syrian immigrants also married outside their culture (McKernan, 119-120)

Elliott wears a three-piece suit while the woman wears a polka dot dress. As in the first photograph, Elliott stares directly into the camera lens with little emotion but a posture that is dignified and affectionate. The photographs capture a nuanced and rich life: participating in community events, success in prospecting, and marriage.

Conclusion

Foster's archive reflects an engagement with photography as a craft and a process, and an awareness of photography as a form of labour. For example, a week before the fire, Foster documented a train derailment at the T&NO Railroad. [fig. 60] He focuses on the scene around the accident, not the derailment itself. Shooting from a low angle, Foster photographed three photographers standing on tree stumps, angling their cameras down. The ground fills half of the frame, and the photographers occupy the space lightened by the sky, highlighting the human figures. The photographer and the camera become the subject in a self-referential gesture.⁷⁶ By turning his lens to other photographers documenting the scene, the presence of the photographer and the labour of photography are directly introduced.

The photographs Foster produced capture unexpected moments that provide alternative viewpoints into the region. These photographs form an important record of the ways in which communities developed around mining. This archive nuances the understanding of life in extractive zones. Foster's archive reveals an experience of place that transcends the dominance of resource extraction. If images have played an important role in role in naturalizing extractivism in Canada, images that introduce different histories and experiences can help

⁷⁶ For an analysis on the camera-as-subject in sites of disaster or violence, see Julia Bryan-Wilson, "Posing by the Cloud" which focuses on images of nuclear detonations in which the photographer and camera appear in the frame.

unsettle the seeming inevitability of extractive relationships to land. While Eastman Kodak Company transformed photography and reshaped how we think about photographic labour, photography relies on, and produces, complex histories of labour, both extractive and artistic.

Chapter Five: Anthropological Photography and the Teme-Augama Anishnabai

A real photo postcard¹ from 1913 captures the crew of the Hudson's Bay longboat at dinner. [fig. 61] A group of fifteen—both men and children—sit in an overgrown clearing in Temagami. Compositionally, the photograph is strong: two groups of men standing (in the center and far right) mimic the tree line behind them. In the front left corner, dense underbrush provides a compositional counterpoint to the neatly packed materials in the far-right corner. Throughout the image, dappled light and textured foliage provide depth, guiding the eye through the group of men and framing them in the natural setting. The occupational portrait captures a group of workers at rest, and the image alludes to the centrality of water-navigation to economic survival. In the immediate foreground, a man faces away from the camera, though everyone else looks directly at the camera. In the center of the frame, a young boy peers out from behind the man in front of him, directing his gaze to the photographer. The boy holds a roll of Kodak film. [fig. 62]

The formal structure of the image emphasizes the incongruity between the old growth Temagami forest, which had come to symbolize a primeval 'nature' in tourist literature during this period, and Kodak film, an overt symbol of modernity. This unexpected rupture introduces a small confrontation to generalized settler expectations of what it meant to be Indigenous in the early 20th century. The inclusion of roll of film also breaks with the standard conventions of scientific picture making associated with anthropology. The pretense of the unmediated glimpse into reality offered by the camera is undermined as the mediating role of the camera and, by extension, the photographer—likely the anthropologist Frank G. Speck—is made explicit.

¹ Real photo postcards are printed directly from negatives onto photo paper with a divided back, unlike lithographic or offset printing processes which are used to manufacture most postcards. In 1903 Eastman Kodak introduced the No. 3A Folding Pocket Kodak which used postcard sized film. They are individually printed in small numbers and can be sent through the mail.

In 1913, the anthropologist Frank G. Speck arrived in Temagami to document the experiences and folklore of the Teme-Augama. A professor at the University of Pennsylvania, Speck devoted his scholarly career to studying the Eastern Woodland tribes of the United States and Canada. This chapter focuses on a collection of photographs of the Temagami Ojibwa in 1913 and 1914 taken by Speck. The images were originally mounted in a photo album titled ‘Ojibwa Temagami Ont.,’ which contained just under one-hundred photographs.² Speck’s photographs form a case study of how the visual can take on activist or advocacy roles. Anthropological photography is commonly associated with a scientific approach to image-production, often characterized by scientific racism which sought to convey standardized types and an ‘authentic’ culture. Photography was also considered an important tool to document ‘vanishing races.’³ Speck’s anthropological photographs break from the conventions of the discipline and introduce nuanced questions about the role of photography in the context of settler colonialism and extraction at the turn of the 20th century. The images are situated in the complicated histories of anthropology, taxonomy projects sponsored by the state, and the promotion of extraction by the Geological Survey of Canada. However, the images cannot simply be reduced down to this colonial-extractive gaze. Photography’s perceived evidentiary

² While Speck extensively photographed the Temagami Ojibwa, there are no photographs of the neighbouring Timiskaming Algonquins, though he did gather folktales from the community. The Timiskaming Algonquins were connected to a larger trade network, in contrast to the relatively isolated Temagami band. Because of the increased contact with European traders, the Timiskaming Algonquins were considered more assimilated by anthropologists. This may be the reason that Speck focused more on Temagami.

³ By the 1870s, representations of Indigenous people within the fine arts had shifted towards romantic, benign visions of vanishing races. However, there were some exceptions as the state, surveyors, and settler populations navigated shifting political contexts. Within the Wheeler Survey (1872-79), a survey of America west of the 100th meridian, there was a strong emphasis on the need to secure the west with military oversight. To convey the need for security in the west, Timothy O’Sullivan’s photographs of Apache populations convey an unusual degree of graphic chaos, symbolically linking Indigeneity with disorder. (Kelsey, *Archive Style*, 110)

role is particularly significant in this context as anthropology's status as a science made it central to establishing and legitimizing notions of authentic indigeneity.⁴

Speck's anthropological methodology included collaboration with Indigenous communities, and he directly engaged with issues of identity and sovereignty, using anthropology and more specifically, visual forms, to advocate for Indigenous land-tenure.⁵ Through the active collaboration of the community who positioned themselves based on their enduring relationship to this territory, the report and images assert the ways in which Tem-Augama Anishnabai sovereignty exists outside of the state recognition of it. While this is not to imply that power imbalances did not exist between the community and the state, as well as between the anthropologist and the subjects of the photographs, it does indicate that within this archive, a 'submerged perspective' emerges. Gómez-Barris describes how 'submerged perspectives' exist alongside the extractive gaze. These perspectives encompass a vast array of Indigenous ontologies, artistic practices, and resistance tactics that work "to name the visible and invisible forces between the human and nonhuman, between animate and inanimate life" causing us "to perceive a too-often-ignored network of relationality."⁶ This draws attention to the parallel history that counters the extractive gaze which existed before, during, and after extraction, though it was a history that was not always directly in view.

The Anthropological Department of the Geological Survey of Canada

⁴ Raibmon, *Authentic Indians*, 5.

⁵ Bruchac, *Savage Kin*, 167.

⁶ Gómez-Barris, *The Extractive Zone*, 2.

Over the course of the 19th century, ethnographic photography was applied to categorize distinctions between peoples and races.⁷ The anthropological use of photography dates back to the emergence of the medium, forming what Christopher Pinney describes as a “doubled history” due to the intertwinement of anthropology and photography.⁸ European colonies and their inhabitants quickly came to occupy an important place in the history of photography. When Louis Daguerre introduced his invention to the Chambre des députés in France in 1839, the politician Dominique François Arago commented upon “the extraordinary advantages that could have been derived from so exact and rapid a means of reproduction during the expedition to Egypt,” and recommended that the Institut d’Egypte be equipped immediately with the new visual technology to scientifically observe and record foreign lands with accuracy and speed.⁹ Arago lamented that photography had not been invented in time to aid earlier colonial excursions, for if “we had photography in 1798 we would possess today faithful pictorial records of that which the learned world is forever deprived of by the greed of the Arabs and the vandalism of certain travellers.”¹⁰ The French government commissioned photographic

⁷ There is extensive scholarship on anthropological images. The anthology *Anthropology and Photography* reconsiders how historical ethnographic photographs can provide insight into the historical experiences of the subjects depicted, moving beyond the photographers’ intentions (Edwards, *Anthropology and Photography*, 1992); Deborah Poole has studied the relationships between empire formation and image-making technologies, practices, and representations, emphasizing the circulation of images and photographic exchange that are embedded within wider “visual economies” (Poole, “An Excess of Description: Ethnography, Race, and Visual Technologies,” 2005); Christopher Pinney’s *Photography and Anthropology* charts the intertwined histories of photography and anthropology while providing an overview of the use of the medium by anthropologists; Amos Morris-Reich’s *Race and Photography* considers the role photography played in the development of racial science.

⁸ Pinney, *Photography and Anthropology*, 2011.

⁹ Quoted in Darcy Grimaldo Grigsby, “Two or Three Dimensions,” in *Photography's Orientalism: New Essays on Colonial Representation*, edited by Ali Behdad and Luke Gartlan, 115-128 (Los Angeles: Getty Research Institute, 2013) 115.

¹⁰ Quoted in Grigsby, “Two or Three Dimensions,” 115.

expeditions to the Middle East and the subject matter and format of colonial imagery continued to expand over the course of the 19th century.

Within Canada, the government also quickly adopted photography as a tool to document expansion in both the west and the north. Beginning in the mid-to-late nineteenth century, Indigenous peoples were a common subject for ethnographic studies intended to reinforce notions of racial hierarchy. In his case study of South America, historian Jens Andermann describes the processes of “visual primitive accumulation.”¹¹ Andermann describes how scientists and the state in Brazil and Argentina used photography to accumulate a record of the conquest of Indigenous territories and peoples. This colonial tool was also used in Canada, and as Library and Archives Canada observes:

Photography has been an active participant in the complicated relationship between the dominant Canadian culture and Aboriginal peoples. Photography's dual role, as both documentary instrument and art form, has led to the creation and perpetuation of some of the most lasting stereotypes.¹²

From the late 1850s onwards, government photography provided a record of both Canadian topography and Indigenous culture. While the Department of Indian Affairs and Northern Development amassed a collection of over 80,000 photographs starting in 1880, many portraits that documented Indigenous people and lives were taken and collected by the Geological Survey of Canada. The territory surveyed for potential coal or mineral extraction was often a site of contact between settlers and Indigenous nations, and as a result, photographers who worked on topographical government survey projects in the late nineteenth and early twentieth century often also photographed Indigenous North Americans, as survey projects adopted photography early on and used it comprehensively.

¹¹ Andermann, *Optic of the State*, 203.

¹² Library and Archives Canada, “Framing Canada.”

The Geological Survey was founded to develop Canada's mineral knowledge, and by extension, mineral wealth. Yet within the Geological Survey, the natural sciences were broadly defined, and specialized branches were developed that spanned a variety of 'outdoor sciences'.¹³ The famed anthropologist Edward Sapir, a student of Franz Boas and friend of Speck, was hired to found the Anthropological Division of the Geological Survey of Canada.¹⁴ Sapir's department was part of what was then the Victoria Museum in Ottawa, now the Canadian Museum of History. Sapir hired numerous anthropologists to conduct fieldwork under the auspices of the Anthropological Division of the Geological Survey of Canada.¹⁵ The Anthropological Division was established to carry out scientific research among all Indigenous Canadian peoples, in what would now be described as a 'salvage' anthropology.¹⁶ The desire to establish a national research program in anthropology responded to a larger sentiment that the "lifeways of native peoples had to be recorded before they were irretrievably absorbed by the culture introduced by European traders and settlers."¹⁷ As Sapir wrote in *Science* in 1911,

Now or never is the time in which to collect from the natives what is still available for study... With the increasing material prosperity and industrial development of Canada the demoralization or civilization of the Indians will be going on at an ever-increasing rate.... What is lost now will never be recovered again.¹⁸

¹³ This is in part due to the widespread interests of George Dawson, who was director from 1895-1901, whose twin passions were geology and ethnology. (Regna Darnell, *Edward Sapir: Linguist, Anthropologist, Humanist*, 55.)

¹⁴ For a history of the Geological Survey of Canada, see Suzanne Zeller, *Inventing Canada*.

¹⁵ In this period, Canada lacked any anthropological training programs, and Sapir hired anthropologists from the US to conduct fieldwork in Canada.

¹⁶ Salvage anthropology describes a belief that authentic Indigenous culture was corrupted by modernity and would eventually vanish. In this framework, the anthropologist attempted to preserve authentic culture before it was lost. For a contemporary description of this belief and method, see, for example, Franz Boas, "Ethnological Problems in Canada," in *Journal of the Anthropological Institute of Great Britain and Ireland* 40 (1910): 539. Boas argued that Canadian Indigenous communities needed to be studied before it was too late.

¹⁷ Regna Darnell and Judith Irvine (eds.) *The Collected Works of Edward Sapir IV: Ethnology*, (Berlin: Mouton de Gruyter, 1994), 827.

¹⁸ Quoted in Darnell, *Edward Sapir*, 51

As Sharon Hall observes, the “salvage anthropologist” took an approach that “lamented, but also assumed the inevitability of, the Indian’s cultural demise. From this perspective, Indians were those of strictly pre-contact innocence.”¹⁹ Through the lens of salvage anthropologists, cultural adaptation was understood as decay, and ‘authentic Indians’ “were no longer a people who ‘lived among us’ or who had a place in the modern world.”²⁰ To the salvage anthropologist, the Kodak film would symbolize cultural decline.²¹ In the desire to document cultures uncontaminated by Western influence, salvage anthropologists “erased the historical specificity of their own days and of their informants lives,” a process that obscured the violent and turbulent transformations of Indigenous lives in this period into “timeless Aboriginal culture.”²²

Speck’s fieldwork was funded by the Anthropological Division of the Geological Survey of Canada, part of the Canadian Department of Mines.²³ Speck was among the first generation of American ethnographers to follow Franz Boas’ method, based on long and intimate stays within a community to conduct fieldwork.²⁴ Described by colleagues as the “greatest and most persistent fieldworker of all of Boas’ students,” Speck was famed for spending as much time as

¹⁹ Wall, “Playing Indian’ at Ontario Summer Camps,” 531.

²⁰ ‘Wall, “Playing Indian’ at Ontario Summer Camps,” 531.

²¹ Speck articulated more nuanced understandings of the contemporary experience of Indigeneity. For example, in correspondence to Sapir in 1912, Speck complained that George Heye, a prominent collector of Indigenous artifacts was picky in the material he was interested in buying, “desiring only the ‘oldest’ ‘used’ and ‘rare; specimens,” a tendency that denied the contemporary cultural expressions of Indigenous communities. (Quoted in Pulla, “From Advocacy to Ethnology,” 38)

²² Raibmon, *Authentic Indians*, 5

²³ Chute, “Frank G. Speck's Contributions to the Understanding of Mi'kmaq Land Use, Leadership, and Land Management,” 482.

²⁴ Wallace, “The Frank G. Speck Collection,” 286.

possible in the field and for being one of the most prolific anthropologists of the 20th century.²⁵

Speck revealed an “unusual willingness to interact with Native people on their home ground, practicing what he described to his students as ‘bedside ethnography,’ a deeply personal mode of participant observation.”²⁶ Approaching anthropology as a descriptive discipline, Speck documented language, kinship, approaches to territory, religion, and art in addition to collecting material culture.²⁷ Speck was known for his faculty with Indigenous languages and his interest in their philosophies. Because of this, there was a widespread assumption among his colleagues, repeated by his biographers, that he had ‘Indian blood,’ or had been raised by members of the Mohegan tribe.²⁸ Speck’s friendship with Indigenous people and the frequency of Native guests in the Speck household was used as further evidence that he must be Indigenous.²⁹ While

²⁵ William Fenton, “Frank G. Speck’s Anthropology.” In Blankenship, (ed) *The Life and Times of Frank G. Speck*, 9.

²⁶ Margaret M. Bruchac, “The Speck Connection: Recovering Histories of Indigenous Objects,” *Penn Museum Blog*, May 20, 2015, <https://www.penn.museum/blog/museum/the-speck-connection-recovering-histories-of-indigenous-objects/> While Speck developed ongoing relationships with communities, his research trips were limited by his teaching schedule (William Fenton, “Frank G. Speck’s Anthropology.” In Blankenship, (ed) *The Life and Times of Frank G. Speck*, 13).

²⁷ Unlike many anthropologists in this period, he documented the material culture he gathered very meticulously, cataloguing its maker, owner, use, and history. (Fenton, “Frank G. Speck’s Anthropology,” 47). However, Speck’s archives and objects he collected are dispersed through different museums and archives, and many of the original information has been displaced. Margaret Bruchac’s project “Fictive Kin: Re-assembling Frank Speck’s Native Relations and Collections,” has done exceptional work on reconnecting some of the information that has been lost. (See Bruchac, “The Speck Connection: Recovering Histories of Indigenous Objects,” *Penn Museum Blog*, May 20, 2015, <https://www.penn.museum/blog/museum/the-speck-connection-recovering-histories-of-indigenous-objects/>.) For a discussion on recovering Indigenous material culture, see Bruchac, “Broken Chains of Custody: Possessing, Dispossession, and Repossessing Lost Wampum,” *Proceedings of the American Philosophical Society* 62.1 (2018): 56-105.

²⁸ Bruchac, *Savage Kin*, 149

²⁹ In a period of social stratification and racial prejudice, Speck’s willingness to associate socially with people from diverse backgrounds and his perceived preference for associating with Indians rather than his colleagues forms a large component of his reputation. There are many stories of the warmth in which Speck was greeted with in Indigenous communities (See, for

anthropology is typically associated with social and scientific distance, Speck's method of physical closeness and his comfort with cultural traditions and Indigenous languages was unusual. His student Edmund Carpenter described:

When his host hunted, he hunted; when they spoke, he replied in their language; and thus, he came to know what symbols meant and where value lay. He was completely, happily at home in each of these cultures so much so he could switch from one to another, from language to language, the way a train switches tracks.³⁰

For example, when he arrived in Temagami, he held a 'potlatch,' responding to local traditions of gift giving and reciprocity, circulating candy, nuts, pipes, and tobacco to the community in exchange for their assistance.³¹

Correspondence indicates that Speck collected ethnological specimens on commission from the Victoria Memorial Museum to fund his fieldwork.³² Speck sold his first pieces to the museum in 1912 and conducted his first official collecting trip for the GSC that same year.³³ While Speck described his research in Temagami as the result of "ethnographical explorations in the interests of the Geological Survey of Canada,"³⁴ there is no documentation that he was ever an employee (even on contract) of the museum. With this in mind, the exact intention of the

example, Bruhac, *Savage Kin*, 162-4). As Bruhac describes, "Speck was an opportunist and a sort of ethnographic shape-shifter, willing to participate in whatever strange fictive kinship would offer him the best access to desired material or data. Native people welcomed him because he was generous, kind, and nonjudgmental. He allowed his white colleagues to imagine he had Native ancestry or Native kin, perhaps as a means to explain his desire to cross social color lines, or to avoid compliance with white social norms." (*Savage Kin*, 164).

³⁰ Quoted in Bruhac, *Savage Kin*, 161.

³¹ Letter from Speck to Sapir, June 30, 1913. Edward Sapir Papers, Correspondence, I-A-236M, box 634, folder 2, Canadian Museum of History.

³² Siomonn Pulla, "From Advocacy to Ethnology," MA Thesis, Department of Sociology/Anthropology Carleton University, 30, 38

³³ Pulla, "From Advocacy to Ethnology," 33. Pulla notes that no copies of contracts or written agreements could be found in the archives to indicate that Speck was an "employee" of the Museum.

³⁴ Frank G. Speck, "A New Aspect of Primitive Land Ownership," Frank G. Speck Papers, MS. Coll. 126, Series I, 1) 3B2d. Hunting territories – d. "Land Ownership among hunting peoples in Primitive America and the World's Marginal Areas." 1922-1926.

photographs is not clear. The majority of the photographs in the collection are stamped and dated by the “Department of Mines Geological Survey Photographic Division,” which would indicate that the photographs were collected by the GSC.

After Speck’s death in the 1950s, many of his papers and the majority of his photography collection was collected by the American Philosophical Society in Philadelphia.³⁵ The collection of photographs at the APS consists of five thousand items, which are primarily from Speck's own collection.³⁶ The collection contains a set of four hundred lantern slides which were used for lectures and public talks. The anthropologist Deborah Poole has drawn attention to the circulation of anthropological images in “image economies,” highlighting the movement of images in and out of archival collections, public presentations (such as lectures or newspapers) and between the public and private.³⁷ As Poole emphasizes, the meanings of the images change through mobility. Speck’s archive shifted meanings as it moved between the private (the album) and the public (the archive and the newspaper). As the images were originally mounted in an album, it is reasonable to conclude that the organization of the images followed Speck’s original

³⁵ The collection was indexed by Anthony F.C. Wallace, an anthropologist and former student of Speck. Speck’s notes did not have a consistent organization, and it’s unclear how much of the current archival system was imposed by Wallace. There are also photographs from regions in which Speck did not conduct fieldwork, including Mexico, South America, Africa, Asia, Australia, and Oceania. Significant holdings of Speck’s photographs can also be found at the National Museum of the American Indian in Washington, DC, which holds photographs produced under contract to George Gustav Heye and the Museum of the American Indian, Heye Foundation. “Frank Gouldsmith Speck Photograph Collection, 1885-1934.” *Smithsonian National Museum of the American Indian*, https://www.si.edu/object/siris_arc_248692.)

³⁶ In most instances, the photographer is not identified. One exception is the Speck-Choate Photograph Collection, a collection of photographs photos by a commercial photographer in Carlisle, Pa. Unlike Speck’s photographs, the Choate photographs typically include "before and after" shots of students in traditional dress and school uniforms, the school band, and shots of the students at work in the saddle shop and making shoes. (Frank G. Speck Papers, Related Material. American Philosophical Society)

³⁷ Deborah Poole, *Vision, Race, and Modernity: A Visual Economy of the Andean Image World*. Princeton, NJ: Princeton University Press, 1997.

formation. In this context of encountering the images, the photos register at multiple levels. They form a record of Speck's time in the community, a private research archive for further consultation, and presumably, carried personal, sentimental or affective resonances for Speck. Removed from the album and placed in a public archive, the tactile encounter with the album is replaced by the more structured encounter within the archive. The images could also be encountered by people with no connections to the territory. In the public dissemination in a newspaper, the images take on a more direct role. The personal is supplemented with a political advocacy intention, which sought to change public perceptions of Indigeneity, particularly in the context of land use.

Latent Perspectives

In the early 20th century, images played an important role in shaping public opinions about what constituted authentic indigenous identity. The most famous example of the ways in which the visual was used to capture so-called authentic Indigenous culture is Edward S. Curtis' *The North American Indian*, a twenty-volume set of photographs and text produced between 1907-1930. [fig. 63] Producing approximately 40,000 negatives for the project and 2,226 photogravure plates, Curtis framed his project as both ethnological and aesthetic. Influenced by pictorialism, Curtis' romanticized portrayals were heightened by the materiality of the volumes: soft focus, textured papers, and chiaroscuro. Curtis often posed his subjects in a studio tent and provided costumes and props.³⁸ In contrast to Speck, whose photographs frequently involve signifiers of contemporary existence, Curtis made a number of aesthetic choices to remove overt symbols of modernity from the portraits, famously removing the clock from "In a Piegan Lodge" when the

³⁸ There are examples of Speck staging photographs, but there are none included in this collection.

negative was transferred to the brass plate to produce the photogravure for the North American Indian.³⁹ [fig. 64] At the turn of the century, there was a fascination with ‘authentic Indians,’ an existence that was pre-industrial, pre-capitalist, and therefore out of sync with the modern world. This fascination was rooted in a preoccupation with the imminent disappearance of Indigenous peoples and the belief that with modernity, the ‘true Indian’ no longer existed. As the comparison of the images reveals, what appears to be a truthful document is unsubtly edited, revealing the constructive nature of the photographs. In her reading of “In a Piegan Lodge” Anne McClintock asks, “what they conceal, what lies half hidden, haunting the edges of historical memory,” pointing to the histories of dispossession that lurk outside the frame.⁴⁰

In Speck’s photograph of the HBC crew, in contrast, the co-existence of a traditional form of labour (the longboat) and technological modernity (the camera) holds tradition and the contemporary in balance, asserting the possibility of being both Indigenous and thriving in the modern world. The self-presentation as both traditional and modern disrupts a widespread belief in this period that Indigenous people had a naïveté around technology, particularly image-making technologies. For example, the *Philadelphia Photographer* described that “some of the Sioux think that photography is “pazuta zupa” (bad medicine). Others have an impression that they will die in three days if they have their portraits taken.”⁴¹ Narratives circulated that described how “supposedly primitive Indians are fearful of cameras, duped or coerced into film appearances, the subject of photographic jokes, so unsavvy that they refuse to play dead after

³⁹ For an analysis of In a Piegan Lodge, see Allison C. Meier, “Edward S. Curtis: Romance vs. Reality.” *Jstor Daily*, May 18, 2018. <https://daily.jstor.org/edward-s-curtis-romance-vs-reality/>

⁴⁰ Anne McClintock, “Ghostscapes from the Forever War.” In Karl Kusserow and Alan Braddock, *Nature’s Nation: American Art and Environment* (Princeton, NJ: Princeton University Art Museum, 2018) 276.

⁴¹ “Photography Amongst the Red Indians,” *The Photographic News*, September 14, 1866. P. 443.

being shot, and so on,” which suggested that Indigenous people were incapable of controlling their image and how it might be used.⁴² Yet as historian Philip Deloria charts in *Indians in Unexpected Places*, significant numbers of Indigenous peoples engaged with modernity and technology to confront the Euro-American expectation that understood Indigeneity as anachronistic.

The anthropologist Ann Laura Stoler draws attention to the contradictions present within colonial archives, which are less about “taxonomy than on the unsure and hesitant sorts of documentation and sensibilities that gathered around them.”⁴³ The Geological Survey of Canada funding anthropological fieldwork raises complicated questions about the links between resource extraction and settler colonialism in Canada. The context Speck’s images were produced in root them in the anthropological mandate of salvaging the culture of vanishing races. The funding, provided by the Geological Survey of Canada, implicates this fieldwork in territorial displacement. Yet Speck’s connection to the region and his advocacy work sit in tension with the official funding of the project. Further, regardless of the intentions or conditions of creation, the photographs constitute a resource for the community itself, an unintentional record and lineage and cultural ancestry.

Stoler proposes reading “along the archival grain,” an archival approach that works from “the observation that producing rules of classification was an unruly and piecemeal venture at best.”⁴⁴ Or as cultural historian Sumathi Ramaswamy has suggested, we should “consider empire formation as a messy business of mutual entanglements and imbrications, of collisions and compromises,” foregrounding enmeshment rather than a binary understanding of active

⁴² Deloria, *Indians in Unexpected Places*, 54

⁴³ Stoler, *Along the Archival Grain*, 1.

⁴⁴ Stoler, *Along the Archival Grain*, 1.

colonialists with agency acting upon passive or resistant colonized populations.⁴⁵

Anishinabekwe visual anthropologist Celeste Pedri-Spade has argued that while scholarship has traditionally placed emphasis on the intent and agency of the photographer, colonized populations have used “photography to confront ongoing legacies of colonialism, particularly in agendas aimed at repairing and reconfiguring relationships with self, family and kin, colonizer, community, and the natural world.” As Pedri-Spade argues, we “cannot presume that these individuals were solely the silenced subject or victim in a one-sided, inferior relationship with the camera and its operator,” but rather, self-presented to the camera in ways that asserted autonomy and agency.⁴⁶

Writing about Edward Curtis, Shamoan Zamir has argued that the subjects of Curtis’s images were active participants or “to some degree at least, coauthors of the visual meanings” emphasizing agency and participation.⁴⁷ While Zamir highlights the constructed nature of the portraits, noting, for example that his portrait of Alexander B. Upshaw as “an illustration of the triumph of romance over reality, of genre conventions and racial typology over individuated portraiture,”⁴⁸ he also suggests that portraits can “honor the Native American effort to live through the dislocation of culture and time.”⁴⁹ This approach to portraits approaches photography as inherently collaborative: always a site of negotiation and interaction between the photographer and the subjects. Sarah Parsons writes that from its inception, women and people

⁴⁵ Ramaswamy, “The Work of Vision in the Age of European Empires,” 4.

⁴⁶ Celeste Pedri-Spade, “‘But They Were Never Only the Master’s Tools’: The Use of Photography in de-Colonial Praxis.” *AlterNative: An International Journal of Indigenous Peoples* 13, no. 2 (June 2017): 106–13.

⁴⁷ Zamir, *The Gift of the Face*, 3.

⁴⁸ Shamoan Zamir, “Native Agency and the Making of ‘The North American Indian’: Alexander B. Upshaw and Edward S. Curtis.” *American Indian Quarterly* 31, no. 4 (2007).

⁴⁹ Zamir, *The Gift of the Face*, 9.

of colour used the “pseudo-scientific authority [of photography] to carefully craft stronger public personae.”⁵⁰ This use of portrait photography to reframe cultural perceptions is perhaps best epitomized in Frederick Douglass, who was an important photography critic and was extensively photographed in an attempt to shift perceptions of blackness in America.

If representation and self-determination are inextricably linked within a public cultural imaginary increasingly driven by mass-circulated images, the choice to present in a particular way identifies visual representation as a site of self-determination, to “see and be seen on their own terms,” by combatting one stereotypical mode of representation with alternative forms of public visibility.⁵¹ Speck was a representative of the government, albeit one who was not directly tied to the Department of Indian affairs, who was sympathetic to their cultural traditions and their contemporary plight. Their assistance to Speck in his anthropological research reflects a community actively participating in the production of knowledge about Indigenous life in this

⁵⁰ Parsons, “Site of Ongoing Struggle: Race and Gender in Studies of Photography,” np. Parsons notes that significant and early writing on the cultural impact of photography was produced by women and people of colour, including the British critic Lady Eastlake in the mid 19th century, and abolitionist Frederick Douglass in the nineteenth century to American sociologist and civil rights activist W. E. B. Du Bois in the early twentieth century.

⁵¹ JW Cook, “Seeing the Visual in U.S. History,” 434. Cook draws attention to the active deployment of the visual as a form of political self-construction, highlighting “Frederick Douglass's seminal writings on the relation between pictures and politics and Sojourner Truth's efforts to control her public image through photographic portraits to Emma Goldman's strategic uses of media spectacles to agitate for women's rights and James Young Deer's battles to produce commercial films that pictured Indians as something other than “yelling, paint bedaubed creature[s], reeking of barbarism.” For studies that focus on the representation of Indigenous North Americans, see Philip Deloria, *Indians in Unexpected Places*, 2004; Paige Raibmon, *Authentic Indians: Episodes of Encounter from the Late-Nineteenth-Century Northwest Coast*, 2005; Michael D. McNally, “The Indian Passion Play: Contesting the Real Indian in ‘Song of Hiawatha’ Pageants, 1901-1965,” *American Quarterly*, 58 (March 2006), 105-36; Mary Lawlor, *Public Native America: Tribal Self-Representations in Casinos, Museums, and Powwows*, 2006; Richard White, “Frederick Jackson Turner and Buffalo Bill,” in *The Frontier in American Culture*, ed. James Grossman, 1994, 7-66; and L. G. Moses, *Wild West Shows and the Images of American Indians, 1883-1933*, 1996.

period. In this context, the images can be understood as collaboration, photographs which deliberately assert an identity that is at once traditional and modern. The mix of contemporary clothing with headdresses or yokes⁵² is perhaps the most tangible example, but throughout the archive, the co-existence of traditional ways of life is situated with and within modernity.

Postcards and popular imaginaries

Within the APS Speck collection is a postcard produced by the Detroit Photographic Co. from 1903 that captures ‘(Aleck) Wabunosa, Ojibwa Brave.’⁵³ [fig. 65] Wabunosa poses in a yoke with beaded embroidery on top of a fringed buckskin shirt and knee-high moccasins, with a feathered headdress framing his long, loose hair. While other postcards from the same series show Ojibway braves posing in action shots, Wabunosa stands in a dignified stillness in front of a studio backdrop. Holding a bow and arrow loosely in his right hand, he stares somberly out of the frame. Within cultural imaginaries, the figure of the brave sits somewhere in between the noble savage who has not been corrupted by civilization and the violent savage. In this portrait, he asserts the physical power of the Indigenous warrior, but he is posed in a non-threatening way, emphasizing nobility and honour.

Stereographs, postcards and other visual forms were widely distributed, what Carolyn Marr has described as the “marketable Indian picture.”⁵⁴ Defined as a card designed to be sent through the mail, postcard production expanded in the late 1800s. The popularity of souvenir picture postcards at the World’s Columbian Exposition in Chicago in 1893 led to the postcards

⁵²A yoke is part of a garment that fits over the shoulders through which the main part of the garment is attached.

⁵³ Only two mass-produced postcards are archived in Speck’s collection of Temagami. The other postcard captures ‘The Hudson’s Bay Post, Bear Island, Temagami, Ont., Canada’ circa 1907. Another copy of the postcard is held in the collection of the Museum of Fine Arts in Boston.

⁵⁴ Marr, “Photographers and their subjects on the Southern Northwest Coast,” 19.

decisively entering the image world of the Americas.⁵⁵ As consumers embraced the new form of communication, picture postcards of cities, landmarks, and other tourist destinations exploded and the production of postcards quickly became industrialized. The anthropological theory of ethnographic types neatly aligned with the standardized, rectangular images that could be collected, catalogued, and compared. The materiality of the postcard: mass-produced, cheap, and collectible had alignments with the idea that Indigenous culture could be absorbed by white settlers. Through the postcard, Indigenous identity was simplified to formulaic types. Sumathi Ramaswamy argues for the constitutive role of vision and the significance of “struggles occurring at the level of the image” in histories of empire and post-colonialism.⁵⁶ In the context of Speck’s photographs, we can extend this to settler colonialism. Technologies, image making processes, and subjectivities circulate within empire, producing an intertwined history of vision and power. In this framework, the visual does not simply reflect larger political shifts and systems of power but rather participates in the production and consolidation of these systems. Critically, Ramaswamy also foregrounds how the “materiality of the image and image-making — their practices, social relations, production, and circulation,” participate in these systems.⁵⁷ The emphasis on questions of materiality is an important intervention into studies of vision and anthropology, as the ways in which image-objects circulate and are reproduced shifts both their meaning and the ways in which they are given value in society.

The reproducibility of the postcard is central to its meaning. As Deloria observes, the word *stereotype* comes from the printing trade, and refers to a relief printing plate used to reproduce

⁵⁵ Fred Bassett, “Wish You Were Here!: The Story of the Golden Age of Picture Postcards in the United States,” *New York State Library*, <http://www.nysl.nysed.gov/msscfa/qc16510ess.htm>

⁵⁶ Ramaswamy, *Empires of Vision*, 4.

⁵⁷ Ramaswamy, *Empires of Vision*, 4.

identical copies.⁵⁸ When applied to people, stereotypes produce generalized impressions of groups of people, which are then layered with symbolic meanings. In his analysis of Walter Ferguson's 1905 photograph of Geronimo in a Locomobile Model C—commonly misidentified as a Cadillac—Deloria highlights the perceived tension, or possibly humor, of the famed Apache warrior, then a prisoner at Fort Sill, sitting behind the wheel of a luxury automobile with its significations of speed and mobility. [fig. 66] Geronimo wears a top hat and modern clothing. Edward LeClair Sr. sits to Geronimo's left wearing a Ponca ceremonial headdress. Ferguson's image is anomalous with popular imaginaries of 'Indians' in this period which functioned to "separate Indian people out of the contemporary world" while foreclosing the recognition of "the possibility of Indian autonomy in that world."⁵⁹

Stereotypes create a set of expectations that direct our reading of images, for example, that the pairing of Geronimo and a Cadillac are aberrant. These stereotypes circulate in the visual realm, but they also have tangible effects. When Indigenous peoples did appear in painting and photography in the late 19th and early 20th centuries, they often appeared as exotic, romantic figures. These tropes formed symbolic justifications that the violence against Indigenous peoples, the suppression of language and culture, and the appropriation of Indigenous territory was an inevitable, if regrettable, step in the linear progression of history. As part of the same process, historian Gillian Poulter has shown that settlers adopted Indigenous and French Canadian traditions to confer a sense of belonging in a young country.⁶⁰ To aid this process,

⁵⁸ Deloria, *Indians in Unexpected Places*, 8.

⁵⁹ Deloria, *Indians in Unexpected Places*, 143. As the artist Jimmie Durham observes of Ferguson's portrait, Geronimo is not a passive subject of the camera's aggression but "every bit the aggressor" with his clothes and tight-lipped stare, active in presenting and re-presenting himself. (Durham, "Geronimo!", 55–58)

⁶⁰ Gillian Poulter, *Becoming Native in a Foreign Land, Sport, Visual Culture, and Identity in Montreal, 1840-85*.

settlers created visual icons that came to signify ‘Canadianness:’ as an identity that was “almost but not quite Native.”⁶¹

In 1903, the year the photograph was taken, Wabunosa was an actor in the play *Hiawatha*, a play developed by Garden River First Nation based on Henry Wadsworth Longfellow’s “The Song of Hiawatha.”⁶² The performance was enacted by a “troupe of Ojibways from the North Shore of Lake Huron” and staged at the Sportsman Show in various American cities.⁶³ The performance in Chicago was organized by L.O. Anderson, the Colonization and Tourist Agent of the Canadian Pacific Railway and the 1,200 foot display of Canadian nature constructed for the sportsman’s expo “showed wilderness in every inch.”⁶⁴ In the promotional material for the performance, Wabunosa is identified as working as a guide and living in Garden River in Northwestern Ontario.⁶⁵ Based on the fact that the postcard was taken the same year that Wabunosa appeared in *Hiawatha*, it is reasonable to assume that the attire and character were connected to the performance. The romanticized costume further indicates that it was likely a performative construction of the ‘warrior,’ context that is lost in the widespread circulation of the image.

Photography’s correlation with the performative assumption of identity is linked to the relationship between photography and the practice of staging, especially within the portrait studio. The constructed idea of ‘Indianness’ embodied in this postcard, where an Indigenous man

⁶¹ Poulter, *Becoming Native in a Foreign Land*, 6, 11.

⁶² For a discussion on resistance and representation in the Hiawatha performances, see Karl Hele, “The Vanishing Indians That Never Were,” *Restorying Canada*, np.

⁶³ Charles Hallock and William A. Bruette “The Sportsmen’s Show.” *Forest and Stream*, Volume 60, 173.

⁶⁴ Charles Hallock and William A. Bruette “Chicago and the West: Chicago Sportsmen’s Show.” *Forest and Stream*, Volume 58, 128.

⁶⁵ Hallock and Bruette “Chicago and the West: Chicago Sportsmen’s Show,” 128.

is ‘playing Indian,’ participated in a visual economy of Indigeneity that could be appropriated by settlers.⁶⁶ ‘Playing Indian’ produced a sense of closeness to Indigeneity that enabled settler colonials to establish connections to territory and establish an American identity.⁶⁷ Historian Sharon Wall documents a similar process in Canada, fostered through summer camps—including prominent ones in Temagami— where young settlers were encouraged to establish “their sense of identity and nationalism through ‘Indian’ emulation.”⁶⁸ As Wall goes on to note, this process of imagining an inheritance of Indigenous culture is deeply rooted in the naturalization of the colonial project, for positive stereotypes functioned “by freezing Aboriginal peoples in time,” a narrative that “suggested that such noble, pre-modern creatures couldn’t hope to survive in a modern civilized society.”⁶⁹ Poulter directly connects this performative appropriation of Indigeneity to control of land, noting that “these ideas also encouraged the growth of a sense of colonial entitlement that made it seem natural and legitimate to claim Native land in order to turn it into an elite leisure preserve governed by game laws designed to reserve hunting for white sport hunters.”⁷⁰

⁶⁶ For example, William Notman and Co. captured studio portraits of portraits of settlers dressed up in Indigenous regalia, which Gillian Poulter reads as “attempts to envisage and embody this new nationality” of Canada (*Becoming Native in a Foreign Land*, 66). The highly constructed sets included props gathered indiscriminately from different Indigenous communities across the country. In her analysis of a photograph of Hayter Reed—then the Deputy Superintendent General of Indian Affairs— dressed as an Iroquois for a fancy dress ball, Cynthia Cooper observes that: “The ‘Indians’ which Reed and his group imitated had nothing to do with the nature of aboriginal peoples; rather, they were part and parcel of the mythology of the Canadian past; the heroism of the other historical figures was bolstered only in the presence of this ‘other,’ in all its barbaric and savage glory.” (*Magnificent Entertainments; Fancy Dress Balls of Canada’s Governors General 1876 – 189, 1997*)

⁶⁷ Deloria, *Playing Indian*.

⁶⁸ Wall, “‘Playing Indian’ at Ontario Summer Camps,” 530

⁶⁹ ‘Wall, “‘Playing Indian’ at Ontario Summer Camps,” 539

⁷⁰ Poulter, *Becoming Native in a Foreign Land*, 108.

Labour and leisure

In a richly textured forest setting, a group sits in what appears to be a temporary campsite, a common motif of Indigenous communities in the area. [fig. 67] The photograph captures the lushness of the foliage and the framing of the image immerses the viewer within the ‘nature’ of the scene. In the right-hand side, hazy smoke from a cooking fire pours out of a rudimentary structure of birch trees. However, the group faces the left-hand side of the frame where a young man stands beside a phonograph holding a record. Like the boy holding the film, the man stares directly into the lens. The smooth form of the phonograph invites us to imagine the sound filtering through the forest, forcing a reimagining of the forest as not an untouched site of nature and retreat from the contemporary world, but rather a place where people worked, played and lived. The modern clothing of the group further asserts a contemporaneity.

The postcard breaks from romantic pre-modern rendering of Indigeneity that circulated in this region at this time. Historian Paige Raibmon describes the tension that Indigenous communities experienced during the 19th and 20th centuries as “anthropologists and tourists ask them to interact with ‘traditional’ elements of their culture” while “missionaries and government officials tell them to abandon tradition in favour of civilization.”⁷¹ This tension was used against Indigenous communities as white settlers imagined an ‘authentic’ Indigenous identity. In contrast to the lithographic post-card of Wabunosa, Speck’s postcard is a real-photo postcard, printed on Azo paper produced by EKC. Unlike traditional postcards which often served to reinforce stereotypes, the ability to print any photograph as a postcard introduced the possibility for documenting, circulating, and archiving events of local significance.⁷²

⁷¹ Raibmon, *Authentic Indians*, 16.

⁷² de Certeau, *The Writing of History*.

The desire for authentic Indigenous culture aligned with the ‘anti-modern modern’ desire for an authentic experience found in nature, aligning popular settler conceptions of Indigeneity with notions of untouched nature itself.⁷³ The circulation of postcards and other visual forms depicting Indigenous people promoted the opportunity to see the ‘unspoiled’ Indian as a benefit of wilderness tourism in the region. The territorial displacement enacted by tourism and extraction limited Indigenous rights to practice traditional land-use on their territory. As a form of labour, many members worked as guides for tourists in search of wilderness adventures and were often viewed by white tourists as a part of nature itself. One contemporary writer observed of the Indigenous guides in the Temagami forest:

The more one sees of the thoroughly wild and unspoiled Indian, the more one realizes what a strange being he is – in many respects wonderfully gifted, in others perfectly idiotic. If one of these ‘men of the woods’ is introduced to civilization, his intelligence seems far below that of a child, but in his own wilderness he is a different creature, and pitted against him, we are forced to acknowledge his infinite superiority.⁷⁴

The allure of the Indigenous guide for white tourists partaking of leisure travel points to a paradoxical reading of labour in this context. In this period, labour was understood as being driven by the white settler who brings modernity and therefore, produces history, a myth that is central to the conception that ‘wilderness’ untouched by human labour.⁷⁵ Coco Fusco argues that whiteness “can be expressed as the spirit of enterprise, as the power to organize the material world, and as an expansive relation to the environment.”⁷⁶ In contrast, Indigenous labour was understood as “‘spiritual’ or ‘traditional’ knowledge that is timeless,” and therefore outside of history.⁷⁷

⁷³ Raibmon, *Authentic Indians*, 6.

⁷⁴ Jasen, *Wild Things*, 144.

⁷⁵ White, “Do You Work for a Living,” 176.

⁷⁶ Fusco, “Racial Time, Racial Marks, Racial Metaphors,” np.

⁷⁷ White, “Do You Work for a Living,” 176.

Cultural imaginaries of ‘Indianness’ cast the Indigenous connection to nature as premodern and incompatible with modernity, but within Speck’s archive, there is a consistent emphasis on labour: splitting spruce tips, transportation by canoe, tanning. These images subtly yet consistently articulate land-use, demonstrating the multiple ways in which Indigenous communities reshaped their environments. For example, Speck documented Peenay ‘Partridge’ smoking a moose skin after tanning. [fig. 68] Staring directly at the camera, the close framing of the image creates an intimacy that mimics the intimacy of the labour, the slow and deliberate process of tanning and stretching skin. Unlike the stock images of Indigenous labour that circulated on postcards, the subject is named and identified. The evidentiary nature of photography is thus enlisted to document traditional land use patterns, demonstrating the normal, everyday ways that Algonquin and Ojibway people continued to live on their territories, even in the midst of an upheaval in traditional land-use patterns. At the same time, the small ruptures of stereotypes within the photographs, like the Kodak film being held by the long-boat worker, undermine the promise of unmediated glimpses into exotic ways of life, asserting that Indigenous labour co-exists with the modern. It further demonstrates that the extraction of Indigenous culture by settlers was not a linear process, as Indigenous communities responded to cultural imaginaries of identity, pointing to the ways in which authenticity was always mediated and in flux.⁷⁸

⁷⁸ At the Chicago World Fair in 1893, Kwakwaka’wakw performers from Vancouver Island performed a theatrical performance purported to be adapted from a sacred winter ceremony. The lurid performance confirmed stereotypes of wild and savage Indians and provoked fascination from spectators. As Raibmon has documented, the performative spectacle was a “show of cultural survival and political defiance”, through which the performers toyed with stereotypes and assert their right to engage modernity and tradition in distinctly indigenous ways. One of the key performers, George Hunt, worked as an ethnographic informant for Franz Boas. See Raibmon, *Authentic Indians*, 15. In *Savage Kin*, Margaret Bruchac writes about the relationship between Boas and Hunt (See “Finding Our Dances,” 20-47).

“You can write this down for me”

Speck arrived in Temagami at a pivotal moment in the relationship between the Temagami band and the provincial government. While the Saugeen Anishnabeg in the neighbouring region of Timiskaming were granted a reserve in 1852, the Teme-Augama did not have a formal agreement with the provincial or federal government and their rights to the territory were not recognized. In 1913, it was believed by the community that the government would finally grant the Teme-Augama a reserve in Temagami. A week before Speck arrived, a meeting was held with federal officials to negotiate a reserve, though provincial officials failed to show up, halting the negotiations.⁷⁹ Community members have recounted that the Teme-Augama Anishnabai believed Speck was there on behalf of the federal government to gather more information that would help settle their land claim.⁸⁰

The Ojibway in Temagami were very aware of the potential usefulness of a sympathetic anthropologist in helping them prove their claims to territory. Recognizing that white settlement, tourism and extraction were only increasing, Chiefs William Berens and Aleck Paul asked Speck to advocate for their territorial rights to hunt and fish to the Canadian government.⁸¹ Abenaki anthropologist Margaret M. Bruchac directs our attention to the ways in which the Temagami Ojibway worked with Speck to advance their own agenda, noting that Speck arrived in a community that was very aware that their rights were being reduced by the encroachment of settlement and extraction, and “his informants were not ‘primitives’ stuck in the past; they were

⁷⁹ Federal government officials repeatedly pressured the province of Ontario to establish a reserve, arguing that Temagami had a distinct band. See Hodgins and Benidickson, *The Temagami Experience*, 48.

⁸⁰ Potts and Morrison, “The Temagami Ojibway, Frank Speck and family hunting territories.” Paper presented at the American Society for Ethnohistory Conference, Williamsburg, VA, November 11, 1988, 16.

⁸¹ Bruchac, *Savage Kin*, 168.

savvy people in the modern world, using ancient logics to respond to the forces around them,” attempting to negotiate with a hostile government.⁸²

In November 1913, a few months after Speck completed his initial fieldwork, the Philadelphia-based *Public Ledger* ran a feature article on his research, titled “Penn Professor’s Discovery Confounds Indian ‘History’: Doctor Speck Establishes That the American Redskin Hunts on His Own Family Ground, is a Protector of Game, and is No Mere Rover Through the Forests.”⁸³ [fig. 69] Occupying a full broadsheet, the article outlined the recent research Speck had conducted on the hunting territory of the Temagami Ojibway. The article goes on to suggest that Speck’s research disproves the doctrine of terra nullius, conclusively demonstrating through rich fieldwork that “the vast Canadian forest is not a pathless wilderness, as many suppose. It is an accurately surveyed, parceled out country, with every tree, rock and stream known to its Indian inhabitants.”⁸⁴ This statement ran contrary to the notions of untouched wilderness that circulated in this period that underscored Duncan Campbell Scott’s assimilationist ambitions to control the territory of the nation state. Instead, it asserts the ongoing and unbroken Indigenous regulation, maintenance, and control of territory. The author observed the novelty and widespread implications of this claim, beginning his article with “[w]hat a shock it would be to

⁸² Bruchac argues that “Speck’s Native informants were not, as might be imagined, passive and politically naïve subjects patiently waiting to be discovered; they often had access to culturally authentic knowledges and objects and were willing to interface with non-Native collectors. Some of the most productive informants consciously sought out anthropologists and offered their services as interlocutors. Those who held formal positions of knowledge and authority as faithkeepers or chiefs strove to mediate anthropological relations in ways that could help their kin and communities.” (*Savage Kin*, 169)

⁸³ Malcolm Read Lovell, “Penn Professor’s Discovery Confounds Indian ‘History’: Doctor Speck Establishes That the American Redskin Hunts on His Own Family Ground, is a Protector of Game, and is No Mere Rover Through the Forests.” *Public Ledger*, November 23, 1913. Frank G. Speck Papers Mss.Ms.Coll.126, II(3B1k). Courtesy American Philosophical Society

⁸⁴ Lovell, “Penn Professor’s Discovery Confounds Indian ‘History.’”

Fenimore Cooper and writers of his type, and the shock it will be to the American citizen of today, to learn that one of the pet illusions of Indian history has been confounded.”⁸⁵ As the author described,

To get this accurate map he carried with him through his trips a large Government section map on which the Indians he visited drew with their own hands the boundaries of their lands. The map would be spread on the floor of the tent and a family council would be held to ensure the accuracy of the drawing. Sometimes the head of the family whose lands abutted would be summoned, and a minute question of line would be settled. When the limits of their land were completely outlined, Doctor Speck would continue his journey with his guides to the home of the next family, where a similar process would be gone through with. [...] Doctor Speck has obtained this absolutely accurate, detailed map and has added tangible proof to his most important discovery.⁸⁶

The article is richly illustrated and featured six photographs taken by Speck as well as two illustrations. Speck was aware of the evidentiary power of photographs: in 1909, a photograph of ten year old Gladys Tantaquidgeon, hair braided and wearing tribal regalia, was printed in the *Public Ledger* as proof of the survival of a supposedly vanished tribe.⁸⁷ The images chosen to accompany the Ledger article are primarily portraits which capture a range of ages: children, a mother with a baby on a cradleboard, and elders. These portraits are included alongside a group photograph of a priest, Father Evain, preaching ‘to the Ojibway in their own tongue’ and another photograph of ‘Indians making a portage between lakes with supplies for the Hudson Bay districts.’ All of the images are simple in their framing and ordinary in the subject matter. While the article documents hunting territory, the group shots and portraits of people doing day to day tasks simply assert presence, or existence.

⁸⁵ Lovell, “Penn Professor’s Discovery.”

⁸⁶ Lovell, “Penn Professor’s Discovery.”

⁸⁷ Tantaquidgeon would go on to study with Speck at U Penn and became an anthropologist. “Indian Maiden Here, Descendant of Uncas: Miss Gladys Tantaquidgeon, of the Mohegans, Visiting Dr. Frank Speck, Family Heads Tribe,” *Public Ledger* (Philadelphia), undated clipping, Frank G. Speck Papers, Subcollection 1, Series 1, III. Northeast, D. New England Algonkians, 4. Mohegan-Mohican, box 7, APS.

The inclusion of the elder Old Misabi reflects the significance of the storyteller in Speck's research.⁸⁸ In another portrait, Speck captures "Old Misabi, The Giant," wearing a feathered headdress with a decorative floral trim and upright feathers.⁸⁹ [fig. 70] Misabi wears contemporary clothing with a beautifully decorated feather headdress. With his mouth parted as if he is about to speak, Misabi conveys the gravitas of an Elder, though his body, strong and upright, looks younger than his age, which is identified in the caption as nearing his 100th year. Speck writes that Misabi "remembers when Toronto was a trading post of a few houses and there was no railway in Canada."⁹⁰ The image is captioned to highlight the centrality of oral traditions.

Speck deployed the visual power of the map, and its implicit link to property, to undermine settler colonial assertions that the land was empty and waiting for their extractive presence to make it productive. Speck demonstrated that territory was individually managed by Indigenous families and therefore conformed to Western notions of property. Speck defined

⁸⁸ Speck's research in the myths and narratives of Indigenous communities was published in 1915 by the Department of Mines Geological Survey as "Myths and folk-lore of the Timiskaming Algonquin and Temagami Ojibwa."

⁸⁹ The use of plant and floral pattern in Anishinaabe art is contested in scholarship. Speck argued that floral designs in Indigenous cultures originated in the double-curve designs and eventually progressed towards more naturalistic imagery. In contrast, Marius Barbeau suggested that floral patterns were introduced to Indigenous communities by Ursuline nuns. See Frank Speck, "Huron Moose Hair Embroidery," *American Anthropologist* 13.1 (1911): 1-14; Marius Barbeau, "The Origins of Floral and Other Designs among the Canadian and Neighboring Indians," *Proceedings of the Twenty-Third International Congress of Americanists* 23 (1930): 512. More recently, scholars have attended to a thorough analysis of material culture, moving away from debates centered on authenticity. See, for example, Ruth Phillips, "The Iconography of Indianness: The Floral, the Feminine and the Folk," in *Trading Identities: The Souvenir in Native North American Art from the Northeast, 1700-1900*, (Seattle: University of Washington Press ; Montreal, Quebec : McGill-Queen's University Press, 1998), 155-197; David Penney, "Floral Decoration and Culture Change: An Historical Interpretation of Motivation," *American Indian Culture and Research Journal* 15.1 (1991): 53-77.

⁹⁰ 7-21-K. S12.97 Sp 3, Box #7-21.

property as something an individual had exclusive, and recognized, control over.⁹¹ Maps are perhaps the most tangible manifestation of the imbrication of the visual with empire building, arbitrarily parceling land into an “abstract and quantifiable commodity” that could be then bought and sold.⁹² In his study of the colonization of Egypt, for instance, Timothy Mitchell describes how the grid that maps laid out across territory have the effect of arranging the material world as a picture, despite the immateriality of the grid itself.⁹³ As Bruchac notes, Speck was fully aware that in traditional land-use practices, these territories were communally rather than individually managed.⁹⁴ However, Speck “conceptually secularized hunting practices into a modern model that (apparently intentionally) fit the restrictions of the 1876 Indian Act, wherein land ownership, hunting rights, and chiefly title were vested conspicuously in men,” and

⁹¹ Speck defined property with reference to Leonard Trelawney Hobhouse’s *Property, Its Duties and Rights*: “property is to be conceived in terms of control of man over things. Man needs food to eat, implements to procure it, land to work upon. That he may supply his needs at all he must at least temporarily control the spot on which he is working. But that this temporary control or possession may become property, certain further conditions are essential. His possession in the first place must be recognized by others, i.e. it must be of the nature of a right. He must be able to count on the use of the thing. His right must be respected in his absence. Thirdly his control must be exclusive... If all the world can use it, it is not property at all.” (Frank G. Speck, “A New Aspect of Primitive Land Ownership,” 3. Frank G. Speck Papers, MS. Coll. 126, Series I, 1) 3B2d. Hunting territories – d. “Land Ownership among hunting peoples in Primitive America and the World’s Marginal Areas.” 1922-1926)

⁹² Andermann, *The Optic of the State*, 146.

⁹³ Mitchell, *Colonising Egypt*, 79.

⁹⁴ Speck’s hunting territory work has generated considerable controversy. Speck’s methodology and conclusions are outside of the scope of this thesis, but for debates on Speck’s methodology, see Edward S. Rogers and Eleanor B. Leacock, “Montagnais-Naskapi,” 69-89; Harvey A. Feit, “The Construction of Algonquin Hunting Territories: Private Properties as a Moral Lesson, Policy Advocacy, and Ethnographic Error,” 1991; Andrea Bear Nicholas, “The Assault on Aboriginal Oral Traditions: Past and Present,” 2008; Janet E. Chute, “Frank G. Speck’s Contributions to the Understanding of Mi’kmaq Land Use, Leadership, and Land Management,” 1999; Bruchac, *Savage Kin*. As Adrian Tanner observed, the debate has typically had an ideological divide between advocates of “private property” against proponents of “primitive communism.” (Quoted in *Native Studies Review* 5, No. 2 (1989): 185)

promoted his research in both the press and academic publications.⁹⁵ In Indigenous traditions, oral history was used to communicate complex information about culture, politics, the environment, and economics. However, following European contact, these traditions were given less and less weight, and Indigenous communities were put at a profound disadvantage in negotiating land and resources. Using the language of science and detached observation, Speck sought to convert Indigenous oral traditions into what western governments would recognize as legitimate, drawing attention to link between what counts as knowledge and who is in power to record and produce knowledge.⁹⁶ As Speck wrote in his report, “The Indians themselves realized the importance of the subject and probably, for the first time in their lives, settled matters in black and white which had formerly been merely entrusted to memory.”⁹⁷

In his report on Ojibwa Hunting Territories that was reported on in the *Ledger*, Speck quotes Chief Aleck Paul, who situates the central conflict over territory as being one of extractivism: white settlers are endangering the Indigenous way of life by depleting eco-systems which are held in a delicate balance. In contrast, Paul suggests that Indigenous people conserve populations as they have to maintain their ways of life while white settlers hunt “only for sport and not for support.” Paul goes on to argue that “They are after the money. After white man kills all the game in one place, he can take the train and go three hundred miles or more to another and do the same there. But the Indian cannot do that. He must stay on his own section all the time and support his family on what it produces.”⁹⁸

⁹⁵ Bruchac, *Savage Kin*, 168.

⁹⁶ Stoler, *Along the Archival Grain*, 47

⁹⁷ F.G. Speck, *Family Hunting Territories and Social Life of Various Algonkian Bands of the Ottawa Valley*. Canada Department of Mines Geological Survey, Anthropological Series, No. 8 (1915), 13.

⁹⁸ Frank G. Speck, “Ojibwa Hunting territories”, n.d., APS II(2F5), 3.

Speck's research and its public dissemination seems to run contrary to the mandate of Speck's work under the GSC. Janet E. Chute has observed that Speck's work was fueled by a desire to enlighten people, in particular, "the ranks of Indian Affairs 'officialdom' in both Canada and the United States. He felt these persons were generally ignorant about the Native societies whose affairs they administered and might benefit from knowing more."⁹⁹

Conclusion

Over one hundred years ago, the Teme-Augama worked with Frank Speck to prove their land title. Using both photography and mapping as tools, they called a latent future into being, one where Indigenous sovereignty over land was recognized. Speck's photographs form a case study of how the visual can take on activist or advocacy roles. The images are situated in the complicated histories of anthropology, taxonomy projects sponsored by the state, and the promotion of extraction by the GSC. However, the images cannot simply be reduced down to this colonial-extractive gaze. By positioning their actions based on the enduring relationship to this territory, the report and images assert the ways in which Teme-Augama Anishnabai sovereignty exists outside of the state recognition of it, and the emergence and existence of non-Indigenous allies. As Stoler reflects, archives are sites of "epistemological and political anxiety," and Speck's fieldwork, tied as it is the GSC and territorial control, is an archive that sits uneasily with "predictable stories with familiar plots," revealing the "granular rather than seamless texture" of the archive.¹⁰⁰ In contrast to the methods of detached observation, Speck's deliberate intervention into political debates using visual forms of anthropology sit outside the bounds of his disciplinary conventions.

⁹⁹ Chute, "Frank G. Speck," 516.

¹⁰⁰ Stoler, *Along the Archival Grain*, 50.

Chapter Six: From Photography to De/Industrial Painting

In 1929, after a summer of camping in Temagami, David Milne painted *Dark Pool, Ti Magami*.

[fig. 71] The painting is one of a series of thirteen works of a flooded mineshaft in which a reflective surface pool had formed. The dominant colour in the work is black, punctuated with bright shades of emerald, arsenic, orange and red violet. Known for the flatness of his works, Milne makes little effort to construct pictorial layers, and instead immerses viewers in the colors and simple shapes.¹ The work forces the eye to the murky brown of the reflective surface of the abandoned mineshaft pool, surrounded by slashes of vibrant colour. The sophisticated rhythm of the work introduces a harmony to the composition. The flat, geometric shapes resemble the abstract forms of fossils.

While rugged, untouched wilderness landscapes dominate the cultural imaginaries of the region, in this work, Milne attends to the scars left in the landscape. Milne described the compelling visual aspects of the flooded mine shaft, noting that while “[t]o the miner it may be a disappointment but to the painter in search of colour it is a find. Everything in the way of colour that there is and in all possible intensities and combinations.”² In contrast to the horizontal orientation of most landscape painting, Milne’s landscape is not a vista to be conquered but a vantage point that alludes to the complex networks of mine shafts that exist below the surface.³

¹ Ihor Holubizky, “David Milne, Dark Pool, Ti Magami, 1929,” In *Picturing the Americas: Landscape Painting from Tierra Del Fuego to the Arctic*, edited by Valéria Piccoli, Peter John Brownlee, and Georgiana Uhlyarik (New Haven: Yale University Press, 2015), 246.

² David P. Silcox, *David B. Milne: Catalogue Raisonné of the Paintings* (Toronto/Buffalo: University of Toronto Press, 1999), 457-458.

³ For an analysis of how land is traditionally framed in photography, see Rebecca Solnit, “‘Every Corner is Alive’: Eliot Porter as an Environmentalist and Artist” in *A Keener Perception: Ecocritical Studies in American Art History*, eds. Alan C. Braddock and Christoph Irmscher (Tuscaloosa: University of Alabama Press, 2009); Kelsey, “Sierra Club Photography and the Exclusive Property of Vision.”

As the literary critic Northrop Frye observed of Milne's style, "the flatness of his painting [is] an absorption of the painters' (and beholders') eye in the subject. The beholder is at once well inside the picture, where he finds that everything is on much the same pictorial level."⁴

This immersion within the landscape has resonances with what Macarena Gómez-Barris describes as submerged perspectives. In her case study of artists and filmmakers in South America, Gómez-Barris tracks the ways these artists "shift how we see, specifically by reckoning with the thick opacity of what lies below the water's surface" that might challenge how we understand the totality of the extractive view.⁵ Gómez-Barris positions this way of seeing land against "the extractive gaze," through which the viewer is trained to see land through the lens of extraction and wealth production. Attending to the "muck" and "thick water," and the material processes of mixing and blurring evade the desire of the extractive gaze to symbolically separate the complex webs of relationality that make up ecosystems.⁶ In Milne's work, this is done quite literally, with the murky pool drawing the eye to the mine shaft.

If extractivism reinforces dualisms such as nature and culture, these messy mixings— of ecosystems, of human and non-human labour, of nature and culture—points to possibilities outside of the extractive gaze. Gómez-Barris argues that, "Like any system of domination, extractive capitalism is not totalizing in its destructive effects," and submerged perspectives foreground the deep relationality that continues to exist even in the wake of the violence of extraction to show "life that is unbridled and finds forms of resisting and living alternatively."⁷ Shortly after active extraction began, Cobalt—and the mining sites in neighbouring communities

⁴ Northrop Frye, "David Milne: An Appreciation," in *The Bush Garden* (Toronto: House of Anansi, 1971), 247.

⁵ Gómez-Barris, *Extractive Zone*, xiv.

⁶ Gómez-Barris, *Extractive Zone*, xiii.

⁷ Gómez-Barris, *Extractive Zone*, 4, 3.

like Temagami—were already being described as marginal landscapes: damaged, ugly, and beyond saving. A regrettable scene of industry, but a landscape that was ultimately able to be sacrificed for economic growth.⁸ The mines, slag heaps, tailings ponds, clear cut forests, flooded lakes, and toxic by-products of extraction changed landscapes and endangered the human and non-human life that comes into contact with these extractive places. Yet this land remained the home of both Indigenous communities and working-class people, and these landscapes have histories and experiences that lay outside of the demands or logics of extractions.

Writing about Eliot Porter's closely framed photographs of land in the Northeastern United States produced for the Sierra Club, Rebecca Solnit reflects that "[t]his close-up scale emphasizes the ordinary over the extraordinary [and suggests] that we can love a place for its black-berries or its stream ripples, not just for its peaks, waterfalls, or charismatic macrofauna. All parts have equal value."⁹ Milne's work demonstrates that we can push Solnit's observation further, that we can also find beauty in an abandoned extractive landscape. While Milne's work could be read as aestheticizing decay or ruin, the intimacy of his work instead suggests a sense of care. Milne orients attention to an extractive landscape and introduces an ecological perspective that attends to the messiness that industry left behind, while still finding beauty and value in the landscape.

From photography to painting

At the turn of the century, the Precambrian shield was defined in the cultural imaginary by its ecological surplus and raw natural resources. In particular, Cobalt attracted global attention for

⁸ See, for example, Struthers, "To Cobalt and Back," 1909; Fraser, *Cobalt, The Goblin of the North*, 1907.

⁹ Solnit, "Every Corner is Alive," 225-226.

its silver ore during the first two decades of the twentieth century. In the early years, the region was understood through an instrumental lens by both corporations and the state that sought to develop the region. The ease of circulation and the suitability of photography for both evidentiary and advertising roles was well suited to this task. However, within Canadian art history, the region is more famous as an important site of landscape painting. As Cobalt faded from public view, the photographs that were so central to how Cobalt shaped its identity during the boom years became less prominent. The instrumental photographs that emerged from the camp and circulated worldwide were supplanted by the more subjective, aesthetic lens of painting.

By way of conclusion, I want to shift from a consideration of photography to painting to consider why this extractive zone became framed—and famed—in popular cultural imaginaries as an idealized wilderness landscape. This dissertation has charted the complex and often contradictory ways that photography was used to picture nature and development in the region. Painting's role is also complex. I don't want to suggest that there is something inherent within the medium specificity of either photography or painting that makes one better suited to document either industry or the aftermath of industry. The photographs explored in Chapter Two that chronicle how mining and logging reshaped the natural landscape are both in dialogue and in tension with the wilderness landscape painting aesthetic that became dominant in the 1920s. After World War I, the prominence of the Precambrian rock formation in the cultural imaginary was solidified by the widespread popularity of Tom Thomson and the Group of Seven, a collective of painters formed by Franklin Carmichael, Lawren Harris, A.Y. Jackson, Frank Johnston, Arthur Lismer, J.E.H. MacDonald and Frederick Varley, a collective that grew until their last exhibition in 1931. Following the decline of industry, wilderness landscape painting

reframed the region as empty and untouched, obscuring the environmental costs of industrialization. In a sense, wilderness painting erases the trauma of development, reassuring viewers that landscapes have not been altered in ways that cannot be undone, that nature is still rugged and wild. The story is more complicated than a simple narrative of the idealization of the landscape and the eliding of the changes and traumas brought by development. At the same time as artists were romanticizing rugged nature, artists—in some cases the same ones—also turned to both industrial and deindustrial sites, as the railway opened up access across the north. Placed into dialogue with each other, wilderness and de/industrial painting point to the unresolved experience of the industrial landscape.

In the Americas, specific landscapes and natural features became powerful symbols of national unity as the terrain was reimagined in visual motifs. For the nascent Canadian nation, asserting its autonomy against the United States and its imaginaries of a Western frontier was a prominent cultural concern. Following Confederation in 1867, Canada also sought to establish a national identity separate from its imperial connection to Britain, which was visually defined by its refined, picturesque landscape. This nation building process intensified after World War I. In this context, Canada sought symbols and motifs which would assert a unique national identity. In the decades following Confederation, art historian Dennis Reid observed that the "exploration (and exploitation) of magnificent new terrain was the chief preoccupation of the period."¹⁰ The moralism and expansionist nature of Victorian culture found its expression in landscape photography and painting that documented Canadian nation-building. The emergence of perspectival landscape photography as a major motif in Canadian visual culture played a

¹⁰ Dennis Reid, *"Our Own Country Canada": Being an Account of the National Aspirations of the Principal Landscape Artists in Montreal and Toronto 1860-1890* (Ottawa: National Gallery of Canada, 1978).

significant role in shaping the ways settlers came to identify with Canadian nationhood. The Rocky Mountains became the first iconic symbol of Canada, aided by the extensive promotional work of the Canadian Pacific Railway as the transcontinental railway became the central plank in an expansionist nation-building project.¹¹ The CPR recognized the significance of visual arts and offered free passes to artists to travel to the West Coast, linking the western landscape and tourism to national identity.¹² In Ontario, the relationship between settlers and the natural world would be idealized in visions of wilderness adventure, creating an iconography of Canadianness that O'Brian has described as "wildercentric."¹³

The geology of the Precambrian Shield became a symbol "that was fetishized in the name of unity," chosen over many other possible landscapes that could have come to stand in for 'Canada.'¹⁴ The National Gallery of Canada produced hundreds of thousands of silkscreen reproductions of Canadian art—mostly central Canadian landscapes dominated by the Group of Seven—which were hung in classrooms, libraries, and homes, beginning in 1927.¹⁵ These works formed what literature scholar Lawrence Buell has described as an environmental imagination: a way of seeing the natural world that is both symbolic and material and that has tangible effects

¹¹ The link between landscape painting and railway development date back to the mid 19th century in the United States and played a decisive role in Westward expansion. However, railroads did not become important visual themes in Mexico or South American in this period. Laura Malosetti Costa, "Land Transformed," in *Picturing the Americas: Landscape Painting from Tierra Del Fuego to the Arctic*, edited by Valéria Piccoli, Peter John Brownlee, and Georgiana Uhlyarik (New Haven: Yale University Press, 2015), 180.

¹² Reid, *Our Own Country Canada*, 6.

¹³ O'Brian, "Wild Art History," 21. Settlement, which took the visual form of agricultural landscapes, did not become a prominent motif in English-speaking Canada, though they do appear often in Quebec.

¹⁴ John O'Brian and Peter White, "Introduction," 4.

¹⁵ Joyce Zemans, "Establishing the Canon: Nationhood, Identity, and the National Gallery's First Reproduction Programme of Canadian Art." In *Beyond Wilderness: The Group of Seven, Canadian Identity and contemporary art*, edited by John O'Brian and Peter White, 181-5. (Montreal: McGill-Queen's University Press, 2007) 184.

on how we understand and engage with the world.¹⁶ The perception of a spiritual connection to a wild, rugged nature—the rocky, inhospitable Precambrian shield—helped shape how Canada as a nation-state has collectively imagined itself.¹⁷

The artist as prospector

In 1913, A.Y. Jackson painted an autumn scene on the shore of Georgian Bay, titled *Terre Sauvage*.¹⁸ [fig. 72] A landscape typical of the style and subject matter of the Group of Seven, Jackson captures the smooth granite of the Canadian Shield, formed by glaciers so many millennia ago. The rolling rhythm of the bedrock evokes gently undulating water, adding a sense of dynamism to the ancient rock. In the foreground, the scene is dotted with trees which tower over the landscape, as slashes of bright green form tall and narrow pine and spruce trees. In the center of the work, the space between the jagged forms of the two pine trees invites the viewer into the scene, guiding the eye towards the dense boreal forest in the background. Flashes of orange and red leaves on the small deciduous tree on the left-hand side and a burst of red in the center mark the seasonal change to autumn. In the upper left-hand corner, a small rainbow disappears into the heavy, rolling clouds which visually mimic the bedrock of the Precambrian rock formation. Divided roughly into thirds, the balance and symmetry of the composition creates a sense of stability. The luscious application of rich, full colour and the dense materiality of the facture visually convey the abundant surplus of the boreal forest. Through the thick,

¹⁶ Buell, *The Environmental Imagination*.

¹⁷ John O'Brian and Peter White, "Introduction," 4.

¹⁸ The painting was originally called *The Northland* and it was renamed multiple times before becoming *Terre Sauvage* in 1936. This was also the title of a 2001 National Gallery of Canada exhibition, "Terre Sauvage: Canadian Landscape Painting and the Group of Seven."

gestural application of paint, Jackson's process of painting symbolically asserts a sense of laying claim to territory.

Heavily influenced by Impressionism and Fauvism, Jackson studied at the Art Institute of Chicago and the Académie Julien in Paris. Upon returning to Canada, he produced *Terre Sauvage* based on sketches he made from a trip to the Georgian Bay. The gestural brushstrokes, loose detail, and bold colours attracted attention among local artists as Jackson's technique was perceived as being influenced by European painting while reflecting the emergence of a distinctly Canadian style. Fellow landscape painter J.E.H. MacDonald suggested he title the work 'Mount Ararat' because it resembled the land that Noah's Ark landed upon after the world-engulfing flood narrated in Genesis subsided. Admiring the painting as an allegory of Canadian northernness, MacDonald's observation links the rebuilding of the world after the deluge to settlers discovering the new world.¹⁹ In 1918, the art critic and mining engineer Harold Mortimer-Lamb wrote that this artwork was "one of the most important paintings of landscape yet produced by a Canadian artist, and more clearly expresses the spirit and feeling of Canada than anything that has yet been done."²⁰

To consider Mortimer-Lamb's assessment, we can ask what spirit and feeling was perceived as embodying Canadianness in this period. In his analysis of the painting, art historian John O'Brian observes that the "quality of stilling, or of timelessness, helped the painting to become an icon, a representation of Nordicity and emptiness."²¹ The history of the territory is obscured by the deliberate choice to leave out signs of human inhabitation. O'Brian argues this

¹⁹ Wayne Larson, *A.Y. Jackson: A Love for the Land* (Montreal: XYZ Publishing, 2003) 41.

²⁰ Harold Mortimer-Lamb is quoted on the National Gallery of Canada website, "A.Y. Jackson, *Terre Sauvage*, 1913." <https://www.gallery.ca/collection/artwork/terre-sauvage>

²¹ O'Brian, "Wild Art History," 24

choice points to the ideological underpinnings of the Canadian landscape tradition which often work to justify colonial occupation and extractive industries. Anthropologist Margaret Bruchac notes that the French word *sauvage*, which roughly translates as people of the forest, did not recognize Indigenous people as owners of the forests they inhabited.²² It also evokes the English word *savage*, which positioned Indigenous peoples as less civilized than European settlers. The landscape thus renders the traditional territory of Indigenous nations as *terra nullius*. Throughout the 19th and 20th century, artists, writers, journalists, and promoters reimagined the homeland of the Algonquin and Anishinabek peoples as an untouched wilderness, which was often applied to function as a visual justification for white settlement and the extraction of resources. O'Brian draws attention to the fact that this work was "executed in a studio above a bank in Toronto, a reminder, if any were needed, of the connections between wilderness art and urban commerce."²³ This critique highlights the exclusions at the heart of Canada's landscape painting tradition, which celebrated the myth of the white male adventurer conquering vast, empty wilderness.

The Group of Seven sought to extend Jackson's painterly innovations to create a distinctly Canadian aesthetic that would form the basis of a national art free from foreign influence. The director of the National Gallery of Canada, Eric Brown, described the rise of this new style:

A younger generation is coming to the fore, trained partly in Canada, believing in and understanding Canada and to some small though quite insufficient extent, encouraged by Canadians. These artists are painting their own country and realizing its own splendours and its character... Many are convinced that they are looking into the dawn of a new era in Canada which will glorify their country and help its people towards a better understanding of one of the greatest refining influences in the national life.²⁴

²² Bruchac, *Savage Kin*, 4.

²³ O'Brian, "Wild Art History," 24

²⁴ "Report of the Board of Trustees of the National Gallery of Canada, 1914–15," in Canada, Sessional Papers, no. 19, 61. Quoted in Ann Davis, "The Wembley Controversy in Canadian Art," 123.

The Group of Seven quickly came to dominate visual imaginaries of Canadian modernity, blending myth and reality into deeply symbolic works. The sparse, depopulated landscapes that were often painted *en plein air* were defined by bright colors, simple forms, and dynamic brushwork that sought to capture the distinctiveness of the Precambrian shield and other regional landscapes. Jackson, in particular, travelled the country producing paintings that typify regional variations in landscape. However, as Lynda Jessup has shown, the formal choices that became typical of the Group of Seven's style responded to a rhetoric of wilderness that began to emerge in the late 19th century and they reflected these characteristics of "boldness, ruggedness, vitality, and vibrancy" in paint.²⁵

Studies of landscape art in Canada produced before 1960 tended to emphasize Canadian exceptionalism and distinctiveness, rooted in the wilderness landscape aesthetic. As a result, tropes of a depopulated, wild nature have historically been more central to Canadian art history than celebrations of human history and industrial development. However, as O'Brian observes in his discussion of *Terre Sauvage*, wilderness and commerce were fundamentally linked. During this period, the bush workers, prospectors, and miners were transforming land marked for development. The territory opened up by the railway and resource extraction was followed by settlers, vacationers, and artists, and the Group's paintings were "as closely tied to the industrial growth produced by mining and lumber interests as they were to the perception of the north as uninhabited, pristine territory."²⁶ In this context, it is not surprising that the artist was reimagined as a romantic adventurer, often described as a prospector or woodsman conquering Canada's

²⁵ Jessup, "Bushwackers in the Gallery," 134.

²⁶ O'Brian, "Wild Art History," 22

remote expanses. Journalist and Theosophist Fred Housser, who wrote the first biography of the Group of Seven in 1926, celebrated this:

new type of artist; one who divests himself of the velvet coat and flowing tie of his caste, puts on the outfit of the bushwacker and prospector; closes with his environment; paddles, portages and makes camps; sleeps in the out-of-doors under the stars; climbs mountains with his sketch box on his back.²⁷

The clear conflation of landscape representation with economic development—embodied in the ‘artist as prospector’—demonstrates that an instrumental and aesthetic-romantic gaze were not necessarily understood as being in opposition to each other in this context. While the ‘artist as prospector’ was celebrated culturally, the landscapes that were transformed by actual prospectors did not become prominent in art. Instead, many of these paintings functioned to obscure the traumatic reshaping of land in the previous two decades. The following sections analyze examples of industrial landscape paintings by members of the Group of Seven and their contemporaries. While the “mongrel version of the Canadian landscape” represented in industrial sites did not reach the same iconic status in popular Canadian cultural imaginaries as the images of wilderness, they form a significant body of work.²⁸

Art and Industry

While wilderness landscape painting has historically received more attention than industrial scenes by the Group of Seven and others, industrial production became a significant theme in painting in the 1920s and 1930s. While the National Gallery of Canada placed Group of Seven wilderness landscapes in schools and libraries across Canada, images of towering mine shafts, smokestacks, smelters, mills, and slag were also reproduced and widely circulated in school textbooks, trade promotions, advertisements, and government bulletins. Industrial photography

²⁷ Quoted in Jessup, "Bushwackers in the Gallery," 133.

²⁸ O'Brian, "Wild Art History," 37.

and painting celebrated Canada's perceived transformation from an untamed wilderness into a major industrial producer. In the same period that the wilderness landscapes most associated with the Group of Seven rose to prominence, there was a parallel shift by Canadian modernists who painted and photographed human structures and the built environment. Unlike wilderness, these works emphasized the landscape as site of human interaction. This evolved into a growing interest in social issues that chronicled art's relationship to society.²⁹ In *Industrial Images*, Rosemary Donegan charts the rise of industrial scenes in painting during the First World War. Donegan argues that artists created a symbolic visual language that celebrated progress, industriousness, and the importance of labour. In doing so, the small, but significant body of industrial landscapes shaped the collective imaginaries that came to stand in for Canada's growing modernization and industrial growth. The imagery of mining both reflected and constructed the experience of industrial modernity.

The industrial imaginary that was emergent in the first half of the twentieth century was heavily informed by the state and corporations.³⁰ Many prominent artists including Tom Thomson, J.E.H. MacDonald, Arthur Lismer, Franklin Carmichael, and Charles Comfort worked as commercial artists for advertising and printing companies. As a result, they were aware of developments in extractive industries as their clients included the mining, financial, and manufacturing industries.³¹ With the economic insecurity of the Great Depression, commercial commissions became more central to artistic production in Canada. In this period, there was strong growth in the mining and smelting industries. The nickel producers Falconbridge and

²⁹ Sandra Paikowsky, "Modernist Representational Painting before 1950," in *The Visual Arts in Canada: The Twentieth Century*, eds. Anne Whitelaw, Brian Foss, and Sandra Paikowsky (Don Mills: Oxford University Press, 2010), 121.

³⁰ Rosemary Donegan, *Industrial Images* (Hamilton: Art Gallery of Hamilton, 1987) xii.

³¹ Donegan, *Industrial Images*, 145.

Inco, located a few hours north of Cobalt in Sudbury, became the largest and most overt symbols of industrial modernity in Canada.³² Inco, the world's largest producer of nickel for most of the 20th century, commissioned many artists to produce work. The artist Charles Comfort described his relations with Inco:

essentially my association with the Nickel Company was that they had asked me earlier to do a number of institutional drawings in their magazines. I did a lot of drawings for them...I went to Sudbury, to Rossport, in 1935, that was when I got the sketch for Lake Superior Village but I did at least seven or eight sketches of slag heaps, and mine heads and the stacks.³³

Comfort found inspiration in the industrial landscape. In *Smelting Stacks, Copper Cliff*, billowing smoke pours out of the smelting stacks of Inco, which became an important symbol of the industrial landscape at Coppercliff. [fig. 73] The bright white of the swirling smoke illuminates the landscape, forming a stark contrast to the dark blue sky in the background. Comfort described the smoke stacks as “the grey lady of Copper Cliff [who] rose 574 feet above the smelter sheds, her face to the weather, her hair blowing in the wind.”³⁴ This identification of the smoke stacks as the “grey lady” anthropomorphizes the distinctive forms of industry.³⁵ However, Inco was not interested in acquiring the painting as it drew attention to an aspect of their industry that they did not wish to publicize.³⁶ This body of industrial landscapes is

³² The mineral deposits at Falconbridge were discovered in 1901 by Thomas Edison, the inventor of the motion picture camera. Edison also explored in Temagami and Cobalt. In 1905, he founded the Darby Mine in Temagami was intended to source the mineral cobalt for batteries. While the region was immensely rich in cobalt, Edison's claim was not productive, and he quickly abandoned the post.

³³ Comfort/Hill interview transcript, NGC archives, 86. Comfort also produced a painting from some of those sketches entitled *Smelter Stacks, Copper Cliff*, 1936, now owned by the National Gallery of Canada.

³⁴ Hill, “Justification for Acquisition of “The Romance of Nickel” by Charles Comfort, National Gallery of Canada, 31 March 2014 (unpublished) n/p.

³⁵ Hill, “Justification for Acquisition of “The Romance of Nickel,” n/p.

³⁶ Hill, “Justification for Acquisition of “The Romance of Nickel,” n/p.

illustrative of the complex interrelationships between advertising, government and corporate promotion, and artistic vision.

By the 1930s, the social and economic crises of the Great Depression drew the attention of artists to social themes. This shift to socially-engaged art that sought to meaningfully reflect the social, economic and political upheavals of the period broke from the largely apolitical emphasis on wilderness and landscape which dominated Canadian painting in the late 1910s and 1920s. Art historian Sandra Paikowsky observes that by the late 1920s, the “majority of Canadian artists had begun to turn away from heroic images associated with wilderness landscape and towards subjects that better reflected the common experience of Canadians,” focusing on issues from everyday life.³⁷ Reflecting the shifting mood of the period, the politically-engaged artist Paraskeva Clark challenged her contemporaries to “come out from behind the Pre-Cambrian shield and dirty [their] gown[s] in the mud and sweat of conflict.”³⁸ Her 1937 work *Petroushka* reflects the emerging social conscience in Canadian art. A dramatization of a Russian folklore tale which narrates the suffering of humanity, Clark paints the titular figure as an industrial labourer. The central conflict plays out on a red podium in the center of the frame, capturing the worker being attacked by police at the behest of the state, framed by tenements rising around them. The carnivalesque atmosphere below them shows workers, some raising fists. Clark captures capital and political power colliding against the worker and the wilderness, symbolized in the dead tree at the back of the scene.³⁹

³⁷ Paikowsky “Modernist Representational Painting before 1950,” 121.

³⁸ Quoted in Christine Boyanoski, *Paraskeva Clark: Life & Work* (Toronto: Art Canada Institute, 2016)

³⁹ Anna Hudson, “Art and Social Progress,” (PhD Diss, University of Toronto, 1997), 119.

Clark's work is representative of a larger shift. Artists began to paint industrial scenes that questioned the conditions of contemporary society while human labour also became a subject of interest.⁴⁰ Comfort, in particular, created images of heroic labourers coincident with the Federal Art Project of the Works Progress Administration in the United States, Members of the Group of Seven were active in this shift. In the early 1920s, Lawren Harris painted the coal mining community Glace Bay, Nova Scotia.⁴¹ [fig. 74] Harris' distorted forms of miners' houses reflect the psychological pressure facing the economically depressed extractive communities which provided raw materials to urban centers. In the context of the social and economic instability of the Depression, the core tenants of capitalism and the belief in growth were called into question. The anxiety that pervades many industrial landscapes reflect the uncertainty surrounding development and its human and environmental costs.

In 1936, Comfort produced the large-scale mural *The Romance of Nickel* (1936) for Inco for the Canadian Pavilion at the 1937 Exposition internationale des arts et des techniques dans la vie moderne in Paris. [fig. 75] The mural narrates the story of nickel: its extraction by the miner, its industrial applications harnessed by the labour of the scientist, and finally, how nickel contributed to transportation infrastructure, symbolized in planes and trains. The sleek lines convey a dynamic momentum, with trains, bridges, planes and machines charging forward through the mural, rendered in rich reds and greys. The compositional balance of the work

⁴⁰ For example, Paul Rand's *Coal Diggers* (1935) shows two workers with pick and shovels, a painting of coal mines in Coleman, Alberta. The muscled, industrial workers fill the frame, highlighted by light from the top left corner. The coal pit is stylized in a geometric structure, echoing the structure of crystals more than a coal pit. As one worker swings a pickaxe over his shoulder, the other miner's hunched shoulders appear worn down by the oppressive labour. Placing the worker at the center of the narrative, Rand's portraits of the workers echo a tendency Donegan observes of the valorization of the musclebound male worker.

⁴¹ Other significant images of Glace Bay were produced by Avrom Yanovsky as editorial cartoons for communist periodicals.

asserts an order and equilibrium within a production chain that encompassed extraction, refinement in the laboratory, and consumer products. The prominent placement of the worker—including the miner, the metallurgist, and the scientist—has parallels with muralism in the 1930s, notably the social realism of Diego Rivera.⁴² Comfort saw the mural as a tool of social communication capable of reaching a broad audience.⁴³ The reconciliation of industry with art was found in the heroic labour of the worker. This is not surprising, as Comfort defined the artist as a worker, linking artistic labour to social progress.⁴⁴ At the same time, the “Art Deco-inspired energy and optimism helped to promote nation-building aspirations and priorities of a new Canadian art patron: industry leaders.”⁴⁵ Anna Hudson suggests that *The Romance of Nickel* was likely the first time that the worker was a subject of a North American government approved mural.⁴⁶

Comfort’s mural for the Toronto Stock Exchange (1937) also celebrated the worker to demonstrate a belief in progress and industry. [fig. 76] On the interior of the stock exchange, the eight canvasses represent the industries of Canada, transportation and communications, mining, smelting, pulp-and-paper, refining, agriculture, oil, engineering and construction.⁴⁷ The exterior frieze celebrates labour, with white-collar workers, farmers, miners, salesmen, scientists and bankers, cut into limestone. As Donegan argues, “Comfort’s Stock Exchange murals

⁴² Comfort admired Rivera and José Clemente Orozco, who he described as being among the contemporary painters “whom, without any exaggeration I am sure, the verdict of posterity will favour as ranking among the great of all time.” Quoted in Hudson, “Art and Social Progress,” 127.

⁴³ Hudson, “Art and Social Progress,” 127.

⁴⁴ Hudson, “Art and Social Progress,” 122.

⁴⁵ Gillian MacCormack, “The Art of Nation-Building: Two Murals by Charles Comfort,” (MA Thesis, Concordia University, 2016), 6.

⁴⁶ Anna Hudson, “Art and Social Progress,” 137.

⁴⁷ Rosemary Donegan, “Mural roots: Charles Comfort and the Toronto Stock Exchange. *Canadian Art*,” 4 no. 2 (1987), 66.

symbolically integrated the capitalist, represented in the figure of the stockbroker, as a productive element, with the worker and the scientist as part of "the natural order of things."⁴⁸ In Comfort's frieze, bankers and miners are both identified as central to economic growth, and therefore, have a common interest in supporting capitalism and commerce. Produced near the end of the Great Depression, the visual equivalence between different forms of labour elides the labour tensions of the period. This tendency is demonstrated within earlier photographs of Cobalt as well, where the capitalist, symbolized by the mine manager or investor, is inserted into the mining workscape. In these murals, Comfort uses art to symbolically reconcile labour and capitalism in a moment of economic crisis.

Industrial imagery was characterized by tension between optimistic and dystopian visions, as anxiety over the social and environmental costs of development co-existed with a belief in progress. Within many of these paintings, the human costs are coupled with an emphasis on smokestacks, chimneys, slag heaps of industrial landscapes. They document the social, cultural and environmental problems that accompanied industrialization that both historically, and in the present, have "yet to be resolved."⁴⁹

Deindustrial Landscapes

Celebrated paintings of industrial landscapes captured production, symbolized in the pouring of hot slag, smoke billowing from smelting stacks, and the visible infrastructure of transportation. While there is often an ambivalence to these works, at their core, they convey a belief in the inevitability of progress. However, paintings of Cobalt do not sit neatly into this body of work.

⁴⁸ Donegan, "Mural Roots," 69.

⁴⁹ Rosemary Donegan, "Modernism and The Industrial Imagination: Copper Cliff and the Sudbury Basin," In *Beyond Wilderness: The Group of Seven, Canadian Identity and contemporary art*, edited by John O'Brian and Peter White, 145-152. (Montreal: McGill-Queen's University Press, 2007) 151.

The rise of industrial painting in Canada coincides with the decline of industry in Cobalt. The poorly built structures and small scale of development had few resonances with the towering industrial forms of modernism that Comfort captured in Sudbury. By the time Cobalt became a prominent subject in painting, the population had dwindled, unemployment was high, and mining corporations had left the community and government to clean-up the polluted industrial sites. Despite this, in the 1920s and 1930s prominent artists including Yvonne McKague Housser, AY Jackson, Franklin Carmichael and Frederick Banting amongst others travelled to the region. In light of this, I suggest that paintings of Cobalt do not belong in the category of industrial landscapes. Rather, they are deindustrial, revealing an anxiety about the long-term costs of economic growth.

In 1917, Yvonne McKague Housser, an artist associated with the Group of Seven and founding member of both the Canadian Group of Painters and the Federation of Canadian Artists, travelled to Gowanda, a mining town 130 km north-west of Cobalt. In 1920, she returned to the region, and during a change of trains in Cobalt, she became struck by the distinctive visual character of the community. Housser was “determined to get back to that fascinating mining town,”⁵⁰ and returned in the 1920s and then again in 1934 for an extended stay.⁵¹ Her lively paintings of the mining town became well known. In *Silver Mine, Evening* (1932) a mine shaft towers over a small community at night, rendered in moody shades of brown and blue. [fig. 77] Punctuations of yellow in the windows and the flash of a streetlight beside the structure signal the mine is working through the night. The windows in the small, narrow houses in the foreground are also illuminated, though there are no human figures in the scene. Smooth brushstrokes form

⁵⁰ Yvonne McKague Housser, “Address for Art Gallery of Peterborough: “Sketching Trips” Gowanda, Cobalt: North Shore of Lake Superior.”

⁵¹ Housser, “Address for Art Gallery of Peterborough.”

rolling hills around the mine. Industrial waste formed into slag heaps tower in the background.⁵² In the immediate foreground, boards are laid over gaps in the rock, presumably leftover from mining exploration within the town center. The holes are surrounded by a small, slightly akimbo fence which echoes the power lines that span the background.

Cobalt “captured [Housser’s] visual imagination” in the same period that the wilderness aesthetic of the Group of Seven became associated with a distinctly Canadian artistic identity. In this context, Housser’s interest in a community made up “of tar-paper shacks and houses with false fronts,” and “mining shafts, slag heaps and mills” seems out of step with the dominant ethos of the period.⁵³ Housser was attentive to this tension between the coexistence of the ancient Precambrian shield and the active production of industry. She observed that “I found the subtle colour of the rock formations difficult to get and still be able to keep their solid Precambrian character. It was strange to feel this ancient world surrounded by the rampant new growth crowding in around it.”⁵⁴ Within Housser’s work, industry and the community sit in an uneasy co-existence. As Housser reminisced:

I used to wander at dusk when the mines were changing shifts, and the so-called ugliness became dramatic and romantic against the evening sky, the mine shaft, connected with the big mill and surrounded by the slag heaps and the small sheds all pin pricked with tiny lights and reflected in a pond or small lake made me itch to try to get it down in paint. I would watch as men in lanterns moved in and out of this stage set. How I loved these walks and painted quite a few evening subjects.

⁵² Slag heaps also feature prominently in impressionist painting. For example, Maximilien Luce, *A Slag Heap Near Marchiennes*, 1898 uses a pointillist technique to introduce a strong social commentary. Slag heaps became a reasonably prominent visual form in the inter-war period. In England, Edward Wadsworth made a number of drawings of industrial landscapes, which prominently feature the distinctive form of slagheaps.

⁵³ Housser, “Notes for lecture [1980] on three sketching trips with correspondence.”

⁵⁴ Housser, “Address for Art Gallery of Peterborough,” 5

The realistic and unidealized landscape focuses on the built forms of industry and the landscapes formed by industrial waste. At the same time, the town appears sleepy but inviting, as Housser described, it is a “almost fairy tale (at dusk).”⁵⁵ The small, colourful houses sitting at the edge of the lake appear idyllic. A tendency towards romanticization infuses the work. Housser’s slag heaps echo the natural rhythm of the brown, earthy bedrock. However, the hills are unnaturally tall and conical for a boreal forest landscape. Painted in a darker colour, the man-made slag heaps seem slightly out of place, signaling their unnatural-ness.

As the painting documents, extraction is not simply the removal of valuable commodities to be shipped to distant markets, but also the reshaping of entire landscapes as new materials that are considered waste are deposited on the earth.⁵⁶ Slag heaps, sites of disposal for the glass-like by-product of metal that has been smelted from raw ore, are one of the more recognizable visible forms of extractive landscapes. Within Cobalt, silver ore was tightly bound to arsenic and cobalt, materials from which it had to be separated. Geographer Gavin Bridge describes the “spoil heaps, waste ponds, slag piles, tank farms, tramways, stacks, and flues clustered around the hole” that form an architecture of extractive landscapes.⁵⁷ Extractive landscapes reveal the “sorting, dispatch, and abandonment that materializes abstract calculations of value.”⁵⁸ By the time Housser arrived in the community, extraction was largely over and Housser captures a landscape that has been abandoned due to ‘calculations of value.’

The landscape that fascinated Housser, therefore, is more about what industry left behind. Housser’s painting captures the larger affect that the ruins of industry evoke. There is an

⁵⁵ Housser, “Notes for lecture [1980] on three sketching trips with correspondence.”

⁵⁶ Gavin Bridge, “The Hole World: Scales and Spaces of Extraction,” np.

⁵⁷ Bridge, “The Hole World: Scales and Spaces of Extraction,” *Scenario* 05 (2015): np.

⁵⁸ Bridge, “The Hole World,” np.

unmistakable charm to her depiction of the community that was built entirely around the demands of extraction. In popular culture, mining communities are often viewed through a nostalgic, romantic lens as places shaped by “the intense individualism and fierce independence of both the mine owners and the miners”⁵⁹ Yet fading mining towns are testaments to the legacies of limited state regulation of extractive capitalism and the prioritization of wealth over the health of landscapes, workers, and communities. Historian Laurel Sefton MacDowell articulates the importance of nostalgia in the afterlife of mining communities after industrial production slows or ceases, observing

People wanted to keep alive memories of these lively places where the effects of human activity were visible. This romanticized view of the past, however, could not disguise that once the resource was removed and the mines shut down, the industry left behind damaged environments and communities.⁶⁰

MacDowell highlights the tension between bearing witness to the realities of ecological damage and economic downturn versus a nostalgic romanticization of life in extractive zones.

Housser acknowledged the complexity of finding beauty in a former mining town, reflecting, “People sometimes say to me, what on earth do you see in those ugly mining towns? How can one answer?” She concludes, “For me, there is, strange as it may seem, something romantic about the mine shafts against a northern sky with silver clouds racing by a great mountain-like slag heap beside the tall mineshaft building for one.”⁶¹ Historian Richard Francaviglia has written that mining landscapes are controversial because they exemplify the tension between nature and industry. This controversy is reflected in Housser’s belief that she had to justify why she chose to paint the community. In this context, Housser’s ambiguous paintings are useful as documents to understand how we can navigate these tensions between

⁵⁹ MacDowell, *An Environmental History of Canada*, 148.

⁶⁰ MacDowell, *An Environmental History of Canada*, 148.

⁶¹ Housser, “Notes for lecture [1980] on three sketching trips with correspondence.”

industry, nature and culture. She invites us to consider the communities that develop around industry, to consider the people who stay after industry leaves. In these landscapes, Housser locates the dramatic relationship of humanity and nature.

While the striking mining landscape resulted in distinctive visual forms, in some cases, the tropes of wilderness landscape painting were also used. In *A Northern Silver Mine*, Group of Seven member Franklin Carmichael applies the motifs of his wilderness painting. [fig. 78] Introduced to the town by Housser, Carmichael produced several paintings of the community. Smooth brushstrokes in saturated greens punctuated with touches of brown guide the eye through gentle rolling hills towards the lake in the center. The charmingly pastoral hills are dotted with small houses. Above the scene, white clouds tinted with blue disappear into the background. In the center, a glacial lake winds through the landscape, guiding the eye with the jagged lines. In the immediate foreground, the sharp line and stark form of the mine shaft introduces a precision to the composition. The clouds in the sky culminate in a focal point above the dark mine shaft, accentuating the grandeur of the structure which resembles a church towering over the town.

In the foreground, the hills are white, echoing the cloudy white sky above the town. The green on the hills in the background indicates it's a summer landscape. The white hills are visually incongruous, formed by slag from mining operations. In the choice to make the hills white, rather than Housser's more naturalistic depiction of the hills as a dark grey, Carmichael's slag heaps have the radiant purity of fresh hills of snow. While the saturated greens of the landscape sit in visual tension with the white slag heaps, the co-existence of the two naturalizes the industrial waste. In this work, industry and nature are held in balance.

Street scenes and community

Brightly coloured houses in yellow, green, blue and ochre pop up randomly over rolling hills in Housser's *Cobalt* (1931). [fig. 79] The composition emphasizes the crooked orientation of the town: the telephone poles and fences are tilted, and the porches seem to sink into the earth. The smooth brushstrokes largely eliminate detail to focus on colour and the elongated forms of the structure. The lack of symmetry within the painting creates a chaotic, almost claustrophobic scene, as the eye moves around the painting. For example, within the houses, the windows are different sizes and shapes. Tightly packed, the narrow houses and elongated windows emphasize the verticality of the painting, which collapses the spatial dimensions of the town. The staircase that winds down the right side of the work introduces an M.C. Escher-style abstraction. In the background, the slag heaps from mining operations evoke Lawren Harris' icy glaciers.

By the time Housser returned to Cobalt in 1934, this work had been collected by the National Gallery of Canada and had been reproduced in a magazine called *Gold*. Housser was dismayed to find that a critic in a local newspaper dismissed Housser's work for inaccuracy.⁶² As a result, she described herself as more 'infamous than famous' upon her return to the town. The critic objected that Housser had made the town hilly when it was in fact flat. As far as criticisms go, this is quite strange, as the town is really quite hilly. As Housser wrote, "[h]is statement that my painting was influenced by the modern art movement in Germany puzzled me, when I asked him to explain this, he said it reminded him of the powerful German film *Metropolis*, how I wished that I had deserved that comparison." While the critic was probably referring to the exaggerated elongation of the buildings, architecturally, Cobalt's Western-style

⁶² Housser, "Address for Art Gallery of Peterborough," 11.

false front buildings and tar-paper shacks are far removed from the futuristic urban dystopia created by Fritz Lang in *Metropolis*.

Despite the mixed reviews by local critics, the work effectively captures the peculiar spatial orientation of the community, perhaps more completely than any photograph could. While mine shafts are the most obvious visual marker of a mining region, the town's chaotic streets also captured the attention of Housser. The spatial arrangement of Cobalt reflects the dominance of the needs of industry over town planning; without clear boundaries between residential and industrial areas, buildings sprang up haphazardly and without regard for terrain.⁶³ Housser was fascinated by the landscape, describing it as a 'stage-set' and celebrated the "colourful crowds like a Brueghel painting."⁶⁴ The disorder of the town planning interested Housser, who articulated the appeal of the unfinished and chaotic to the artist: "perfect leaves nothing for the artist to do, one admires but it but it does not stir the imagination and that the so-called ugly subjects often have a juxtaposition of shapes and colours that leaves room for creativity and is somehow exciting to work on."⁶⁵ Housser's assessment that it was precisely the imperfection that drew her to the community was echoed by AY Jackson, who reflected that Cobalt "was a wonderful place to paint, especially under some snow. I can't find a thing to work on in towns laid out on a grid."⁶⁶

While famed for his wilderness landscapes produced as a member of the Group of Seven, Jackson produced exceptional paintings of industry, including Eldorado Mine in the Northwest Territories; the Smallwood Mine at Schefferville in Quebec and mining camps in Jack Wade,

⁶³ MacDowell, *An Environmental History of Canada*, 147.

⁶⁴ Housser, "Address for Art Gallery of Peterborough," 13.

⁶⁵ Housser, "Notes for lecture [1980] on three sketching trips with correspondence."

⁶⁶ Naomi Jackson Groves, *A.Y.'s Canada* (Toronto: Clarke, Irwin & Company, 1969), 120.

Alaska and Coleman, Alberta. Jackson made several sketching trips in the 1930s to Cobalt—first visiting in September and October 1932 with the scientist and artist Dr. Frederick Banting, and again in October 1935.

Some of the works are more closely aligned to his famous wilderness landscapes. In *Autumn, Cobalt, Ontario* (1935), a fiery, gestural swirl of red, yellow and orange dominates the foreground. [fig. 80] As in *Terre Sauvage*, the use of colour marks the season as autumn. However, this later work is looser and more fluid. The gentle forms of rocks, trees, and mine shafts seem to flow into each other. The hazy forms of the mine and mine waste in the center echo the organic forms of the trees, but the dark color separates the mine from the rest of the scene as Jackson captures the tones of crushed rock left after mining operations. Besides the bright pop of colour in the foreground, the colour palette is muted, and the hues are blended throughout. If the thick, defined application of paint in *Terre Sauvage* materially conveys a sense of laying claim to territory, this impulse is replaced with something more restrained in this work.

A clear evolution is demonstrated in Jackson's style from the early experiments that would inspire the Group of Seven to his industrial and deindustrial paintings. In *Ontario Mining Town, Cobalt* (1933), Jackson captures the town coated in snow, with rich, saturated colours, with a gloomy, oppressive sky hanging over the scene. [fig. 81] Jackson's expressive brushstrokes fluidly define the snow piled on roofs, the rolling lines of the land. The colourful houses are blanketed in snow. Visually, the use of bright colours on the houses distinguishes them spatially, highlighting the variety of sizes, structures and the lack of a central grid. Jackson's niece Naomi Jackson Groves relates that Jackson "enjoyed the subjects offered by its steep slopes, the jutting mineshafts and higgledy-piggledy houses built before the streets, which

wended their way around them with such picturesque irregularity.”⁶⁷ These hallmarks of the town are featured prominently in this work, as slightly akimbo mine shafts jut out of the hills surrounded by houses, with gentle swipes in the snow along the sagging rooftops. At the top of the road, Jackson has included people walking and a horse and sleigh, fondly depicting the small population of survivors who, as he wrote, “stayed on, subsisting somehow,” long after prosperity left this “Dawson City of the east.”⁶⁸ Visiting during the Great Depression, one can assume that impressions of poverty were evident, something Jackson was sensitive to. He reflected that during a trip to the arctic with Lawren Harris in 1930, “we were happy to get away from all the pessimism that came with the Great Depression.”⁶⁹ In Cobalt, however, this would have been unavoidable.

Within Jackson’s work, a material connection to the geology of the town is reintroduced through Jackson’s extensive use of cobalt-based pigments. Blue and violet pigments are made from the mineral cobalt. Liberal touches are found throughout the work in sweeps of blues and violets. Silver in the region was bonded to the metal cobalt, which produced a distinctive pink bloom when it oxidized. Miners in Germany called cobalt-blue pigments *kobold ore*, which translates to goblin ore. Cobalt bonds to arsenic, and when smelted or broken, gave off poisonous arsenic fumes and dust. In recognition of the high rates of illness and death linked to cobalt, medieval miners blamed sprites or goblins. This connection was observed by the journalist W.A. Fraser in the Philadelphia based *Saturday Evening Post* the 1907, who described the town as “the

⁶⁷ Jackson, *A Painter’s Country*.

⁶⁸ Ross King, “Ontario Mining Town, Cobalt,” *Heffel Fine Art Auction House*, https://www.heffel.com/auction/Details_E.aspx?ID=98981.

⁶⁹ Jackson, *A Painter’s Country*, 126.

Goblin of the North.”⁷⁰ Thirty years later when Jackson produced this work, the community was in worse shape than when Fraser encountered it at the beginning of the boom. As mines closed and corporations left toxic environmental sites behind, Jackson reflected that “[t]he palmy days were over.”⁷¹

Conclusion

Writing about Lawren Harris’ icy, pure Arctic landscapes, curator Andrew Hunter reflects that Harris did not yet know he was living in the Anthropocene.⁷² The idealized, abundant nature celebrated by the Group of Seven that was framed by contemporary observers as integral to maintaining a spiritual connection to nature in the face of modernity has now become increasingly called into question. While the artists and the photographers documenting the region also did not know they were living in the Anthropocene, at moments, an ecological perspective surfaces within painting that attends to the messiness that industry left behind. Photography is a medium associated with loss, memory and memorialization. In this context, it is in some ways surprising that there are very few photographic studies of Cobalt after the decline of industry. However, as art historian Anna Hudson argues in her analysis of the interplay between painting and photography in the Canadian Group of Painters, painting enabled the “extended timeless narrative of painting” in contrast to the singular moment of the photograph.⁷³ The ‘extended’,

⁷⁰ Fraser, “Cobalt, The Goblin of the North,” *Saturday Evening Post, Busy Man's Magazine*; April 1, 1907, 59

⁷¹ Ross King, “Ontario Mining Town, Cobalt,” *Heffel Fine Art Auction House, Canadian, Impressionist & Modern Art, Arts Canadiens, Impressionniste et Moderne* - May 30, 2018.

⁷² Andrew Hunter, “Notes to self: the drawings of Lawren Harris,” *The Idea of North: The Paintings of Lawren Harris* (Toronto: Art Gallery of Ontario, 2015).

⁷³ Anna Hudson, “Time and Image: Picturing Consciousness in Modern Canadian Painting,” In *A vital force: the Canadian Group of Painters* (Kingston, ON: Agnes Etherington Art Centre, 2013) 63.

subjective, and interpretive possibilities of painting were applied to capture the nostalgic tinge of an economically dying community. By painting post-industrial sites in Cobalt and Temagami, artists attend to the complex legacies of extraction. They probe the human and environmental costs of extraction. Importantly, they draw attention to what is left behind when industry leaves.

The tensions between the idealized forms and the moments of recognition of the damage caused by industry reflects that artists grappled with a belief in progress and the promises of industrial society, and the tangible, material costs they saw around them, both to land and within labour conflicts. The subjective nature of painting opens up a less direct but more affective way of thinking through extractivism. These paintings provide insight into how the aesthetic mediates our relationship to the natural world. Rather than the instrumental lens of survey and corporate photography, an aesthetic lens began to reshape how the region was understood, which in many cases hid the traumas and transformations of extraction. However, the contemplative rituals of looking that painting invites are well suited to the questions these works evoke in our current historical moment.

Conclusion: Seeing Otherwise

In 1991, the photographer Edward Burtynsky visited Temagami and Cobalt while on a trip through Northern Ontario in search of quarries. Today, Burtynsky is famous for his large-scale aerial view photos of industrial landscapes. Reflecting on his decision to tour Northern Ontario, he describes

I remember looking at buildings made of stone, and thinking, there has to be an interesting landscape somewhere out there because these stones had to have been taken out of the quarry one block at a time. I had never seen a dimensional quarry, but I envisioned an inverted cubed architecture on the side of a hill. I went in search of it.¹

Once in Temagami, however, he expressed “disappointment with the small scale of operations.”² A worker on the quarry site suggested Burtynsky visit the Barre quarry in Vermont, thought to be one of the deepest quarries in the world. The photographs he produced of this visually spectacular site of extraction would launch his career.

Burtynsky’s documentation of the massive impacts of the Anthropocene is a significant intervention into contemporary visual culture. However, there is an equally important need to note the more subtle impacts and changes. It is helpful to return to Sekula who cautions that the “widespread use of photographs as historical illustrations suggests that significant events are those which can be pictured, and thus history takes on the character of spectacle.”³ The emphasis on what we can see—visually spectacular decay—overlooks some of the most profound changes in eco-systems. For example, while the impacts of industry in Temagami and Cobalt were too small for Burtynsky, within Canadian history, Cobalt was one of the most important extractive sites, while Temagami was the site of the one most significant environmental and land-rights

¹ Edward Burtynsky, “Quarries: Artist Statement.” EdwardBurtynsky.com, accessed on November 14, 2019. <https://www.edwardburtynsky.com/projects/photographs/quarries>

² Burtynsky, “Quarries.”

³ Sekula, “Reading an Archive: Photography between Labour and Capital,” 448.

struggles. The reality of communities like Cobalt and Temagami reveal the longer historical trajectory of climate crisis, a series of “hard histories.”⁴

Burtynsky began documenting extractive sites before the rise of the Anthropocene as a concept. With the increasing awareness of human influence on the planet, Burtynsky’s work has assumed a prominent public role. His interest in the spectacular and the large-scale has continued: “I have always been concerned to show how we affect the Earth in a big way. To this end, I seek out and photograph large-scale systems that leave lasting marks.”⁵ His most recent body of work, *The Anthropocene Project*, documents the most extreme sites of environmental trauma on the planet: the Athabasca Tar Sands, marble quarries in Carrara Italy, coal mines in Westphalia, and Dandora landfill in Nairobi to name a few. In 2018, these works were exhibited in *Anthropocene* at the Art Gallery of Ontario which featured work by Burtynsky and filmmakers Jennifer Baichwal and Nicholas de Pencier.

The exhibition was framed as bearing witness to the role humanity now plays as a geological actor, and Burtynsky expressed his intention to promote discourse on the concept of the Anthropocene. The mandate of the exhibition reflects the belief that “we can be ethical only toward what we can see” and the common narrative that visibility is an important step in climate action.⁶ Burtynsky’s work makes an important intervention by “reconnecting us to the wastelands” that enable our contemporary society.⁷ As he describes, “We have this world that we’re living in, but we don’t necessarily understand what’s happening out there that allows us to

⁴ Donna Haraway, *Staying with the Trouble* (Durham: Duke University Press, 2016), 89.

⁵ Edward Burtynsky, “Life in the Anthropocene,” In *Anthropocene*, edited by Sophie Hackett, Andrea Kunard and Urs Stahel, (Göttingen: Steidl, 2018).

⁶ Qtd in Nixon, *Slow Violence*, 14.

⁷ Trevor Dunn, “Reconnecting us to the wastelands’: AGO’s new photo exhibit shows what humanity’s doing to the planet,” *CBC News*, September 26, 2018. Accessed on November 14, 2019. <https://www.cbc.ca/news/canada/toronto/ago-photography-burtynsky-1.4838375>

have the lives we live.”⁸ A promotional poster released by the Art Gallery of Ontario sought to make this link explicit. “Come See the Art You Helped Create,” was the slogan over a Burtynsky aerial photo of oil bunkering on the Niger Delta. The advertising slogan implicated viewers in climate change.

The visually seductive image abstracts a site of environmental decay into geometric shapes and brilliant colors. Through Burtynsky’s aestheticizing gaze, environmental catastrophe becomes beautiful. At the same time, Burtynsky’s work takes an unflinching gaze at the massive impacts of resource extraction on the planet. The tension between the gorgeous landscape and the implication of responsibility is unresolved in Burtynsky’s work. In part, this is due to the limits of the ability of photographic representation to communicate the causes and effects of climate crisis.⁹ Burtynsky shows us large sites of extraction and waste, but no photograph can reveal the more complex webs of causality that have produced the successive and interrelated climate crises.¹⁰

In the twenty-first century, narratives of dematerialization define our contemporary understanding of photography. Dematerialization also defines our contemporary understanding of labour. In Sebastião Salgado’s *Workers: An Archaeology of the Industrial Age* (1993),

⁸ Dunn, “Reconnecting us to the wastelands.”

⁹ It is also a limitation with the Anthropocene as a framework. The prefix *Anthro-* flattens the differences between worldviews, economies, and systems of power. Assigning equal responsibility for climate change ignores structural inequality, the unequal distribution of resources, and the reality that some governments, corporations, people, and geographies bear an outsized responsibility.

¹⁰ The politics of Burtynsky’s photographs have been debated and are outside the scope of this dissertation. The ambiguity of Burtynsky’s work means the photographs are well suited to be adopted by oppositional viewpoints: corporations on the level of form, and environmentalists on the level of subject matter. For an analysis of Burtynsky’s work, see Hackett, Kunard and Stahel (eds), *Anthropocene*, 2018; Georgiana Banita, “Sensing Oil,” 2017; Clint Burnham, “Photography from Benjamin to Žižek,” 2017; Joshua Schuster, “Between Manufacturing and Landscapes,” 2013; Jayne Wilkinson, “What Images Don’t Do,” 2018.

Salgado describes how they are pictures of an era “when men and women at work with their hands provided the central axis of the world.” The use of the past tense ‘provided’ signals that for Salgado, this world driven by human labour was coming to an end.¹¹ For example, earlier photography relied on the extraction of silver from mines, which strained silver supplies. As recently as 1987, over 50% of silver used was in photography.¹² This number peaked in 1999, when the global consumption of silver in photography was over 267,000,000 ounces of silver.¹³ By 2013, silver consumption in photography was a mere 9%, largely for x-ray technology.¹⁴ While digital images are “often seen as somehow an escape from the materiality of film and the labour of developing,” and “that it seems there are no costs involved,” allowing us to forget about the materials “of which it is made, where they came from, who dug them out of the ground, who processed them into component parts, who assembled them.”¹⁵ While automation and mechanization have reduced the demand for labour, the rapid changes in digital photography driven by Silicon Valley are grounded in the exploitation of metals and minerals that make smartphone technology possible. However, dematerialization is rooted in infrastructure that continues to rely on primary resource extraction, human labour, and the transformation of matter. Smartphones use rare earth metals, cobalt, silver, copper and gold, often extracted from conflict zones in the Global South. Petroleum-based plastics are used in casing. Planned obsolescence in technology produces incredible amounts of waste. Finally, the Cloud Infrastructure that stores

¹¹ Michaels and Zamora, “Chris Killip and LaToya Ruby Frazier,” 23.

¹² Jeremiah Johnson, Robert Gordon, and Thomas Graedel, “Silver Cycles: The Stocks and Flows Project, Part 3.” *JOM* 58, no. 2 (February 1, 2006) 35.

¹³ “A Big Source of Silver Bullion Demand Has Disappeared,” *Bullion Vault*, June 21, 2013. Accessed on November 19, 2019. <https://www.bullionvault.com/gold-news/silver-bullion-photographic-demand-062120133>

¹⁴ “A Big Source of Silver Bullion Demand Has Disappeared.”

¹⁵ Warren Cariou and Jon Gordon, “Petrography, The Tar Sands Paradise, and the Medium of Modernity,” *The Goose* 14, no. 2 (2016): 4.

photographs as bits, bytes, and pixels on remote software is housed in massive warehouses all over the world.

In 1905, Thomas Edison, the inventor of the motion picture camera, founded the Darby Mine in Temagami. Intending to source the mineral cobalt for batteries, Edison predated the new mineral rush for rare earth minerals in media technology by one hundred years. While the region was immensely rich in cobalt, and gave the town its name, Edison's claim was not productive, and he quickly abandoned the post. Today, the demand for the mineral cobalt has once again opened up Cobalt for exploration, one hundred years after large scale silver extraction stopped. The difficulty in sourcing ethically extracted cobalt has posed a challenge to technology companies. While rare earth minerals and cobalt are quite common, they are often found in small deposits and therefore expensive to mine. The majority of cobalt used in smartphones comes from the Democratic Republic of Congo. In 2016, a number of companies joined the "Responsible Cobalt Initiative," which seeks to combat the environmental damage and labour violations that are found in cobalt supply chains.¹⁶ Apple has pledged to end reliance on mining altogether, while Tesla has committed to sourcing minerals from North America, though at present, it still relies on cobalt that may have been sourced from the DRC.¹⁷

The *Anthropocene* exhibition at the Art Gallery of Ontario introduced some of these questions, but the larger question of image production and extraction was elided. Within the exhibition, users were invited to use smartphones to enter into an immersive view through augmented reality installations using an 'Anthropocene App' called AVARA. What was not

¹⁶ This includes Apple Inc., Beijing Easpring Material Technology Co., Ltd., HP Inc., Huawei Device Co., Ltd., L&F, Samsung SDI, Sony Corporation, Tianjin B&M Science and Technology Joint-Stock Co., Ltd. and Zhejiang Huayou Cobalt Co., Ltd.

¹⁷ Josh Goldman, "Electric Vehicles, Batteries, Cobalt, and Rare Earth Metals." *Union of Concerned Scientists*, October 25, 2017.

emphasized within the framing of the exhibition was the reality that smartphones are built with rare earth minerals, directly linking image production to mining.¹⁸ An opportunity to ask more complicated questions about the ways in which resource extraction is entwined in our daily life through our image making and viewing practices was missed. New representational technologies are accompanied by new mineral and chemical demands, and technological histories are still very much geological histories. I draw attention to this connection not to ascribe responsibility to photography for driving climate change, or to condemn a particular way of viewing nature. Rather, there is something significant and unresolved in the link between photography's ability to produce meaning and the material effects that this infrastructure has on the environment. It points to the incredible complexity of the problem facing us, and the impossibility of considering anything in isolation.

Seeing Otherwise

While the Anthropocene is a new concept, communities in extractive zones have already experienced the transformations, changes, and destruction brought by human activity and development. The narrative of climate change has brought increased attention to environmental issues. However, this is often accompanied by an eliding of the history that created and sustained the extractive relationships to land and unlimited consumption of resources in the first place. To understand our current crisis, it is urgent to trace the historical development of our current systems: empire building, settler colonialism, capitalism, and the transformation of eco-systems

¹⁸ This connection between smartphone photography and mining was highlighted by photographer Louie Palu in a 2016 exhibition "Cage Call 25" at Alliance Française Toronto. A. Laurie Palmer's *In the Aura of a Hole* situates mining photography within histories of capitalism, the settler control of Indigenous territory, industrial agriculture and other political and economic issues.

under extraction. Gómez-Barris argues that in only studying the destructive and violent forces of extractive state and corporate power, “we are forever analytically imprisoned to reproducing a totalizing viewpoint that ignores life that is unbridled and finds forms of resisting and living alternatively.”¹⁹ In contrast, there is the “possibility of renewed perception” that can emerge when we look to “realms of differently organized reality that are linked to, yet move outside of, colonial boundaries.”²⁰

As a tangible example of an anti-extractive gaze that moves outside of colonial boundaries, it is illustrative to return to the discussion introduced in Chapter Five of the Teme-Augama First Nation. In August 1973, Gary Potts, then the Chief of the Teme-Augama First Nation, filed paperwork with the land registry office to issue a land caution on the ten thousand square kilometers of Ontario crown land, what they called N’Daki Menan. A legal mechanism developed for prospectors and miners; land cautions pause development in the context of competing mining claims. Once a caution is issued, land cannot be sold or developed until the legal ownership of territory is decided upon. The filing of the land caution connects directly to the issues that the Teme-Augama articulated in their collaboration with Frank Speck to document family hunting territory sixty-years prior. The Province of Ontario continued to ignore the requests for a reserve well into the second half of the 20th century, finally granting a reserve of one square kilometer in 1971.²¹ In filing a land caution, the Teme-Augama once again asserted

¹⁹ Gómez-Barris, *The Extractive Zone*, 3.

²⁰ Gómez-Barris, *The Extractive Zone*, 1.

²¹ In 1943, Bear Island, an island on Lake Temagami, was purchased by the Department of Indian Affairs from the Province of Ontario, in order to be designated as a permanent reserve. The Temagami First Nation refused to accept Bear Island as a reserve. It was agreed, under duress, that Bear Island would become an official Reserve in accordance with the Indian Act of Canada. In 1971, the province of Ontario granted the Teme-Augama a reserve of one square kilometer on Bear Island.

their claim over territory that predated colonial borders. The Teme-Augama used a legal mechanism developed to protect property in the context of extraction to assert an alternative way of understanding and valuing land.

The Teme-Augama argued that they since they were not signatories of the Robinson-Huron Treaty, they hadn't relinquished their traditional territory to the crown. This territory spans 10,000 square kilometers. In response, the Province of Ontario sued the Teme-Augama Anishnabai in 1978 in the Supreme Court of Ontario. In 1984, the Supreme Court of Ontario decided against the community, finding that they were included in the Robinson-Huron Treaty, despite having not formally signed in. While the decision was being appealed, the government started construction on the Red Squirrel Road, a logging route through the Temagami Forest. The Red Squirrel Road became an important flashpoint for both Indigenous communities and environmental movements during this period. While the protection of the old growth forest that the environmental activists sought to preserve did not align with the Teme-Augama Anishnabai's claims to the territory, the road was blockaded to halt development, bringing together environmentalists and Indigenous activists in an uneasy and often tense alignment against development. The Teme-Augama Anishnabai blockaded the road for six months, until a court ruling ordered the removal of their blockade and the Province Ontario was ordered to stop all construction.

In 1989, the land title issue went to the Supreme Court of Canada. In 1991, the Supreme Court of Canada ruled that the Teme-Augama Anishnabai were subject to the Robinson-Huron Treaty. The Supreme Court of Canada concluded that they never signed the treaty, but they had adhered in practice. Critically, however, the courts ruled that the Crown had breached its treaty and fiduciary obligations. Further, it affirmed the Teme-Augama Anishnabai had aboriginal title.

The land caution was not officially lifted until 1996. An official agreement wasn't ratified until 2009, but the settlement agreement has yet to be implemented. Land use and resource management are critical aspects of the agreement.

The issuing of a land caution reflected how Temagami First Nation used the legal infrastructure developed to support extraction to assert an ownership of territory that they called "Our Land." The Teme-Augama effectively halted all new development on Crown land for twenty years as the legal case snaked through the courts. As a result, all mining exploration stopped on the territory. The ongoing Indigenous presence on this territory is a latent history that has been eclipsed by the extractive gaze. In this case study, a strong challenge to the extractive view is presented that instead understands "local terrains as sources of knowledge, vitality, and livability."²² The land caution, legal battle and subsequent rulings were incomplete victories, but the struggles over Indigenous title and treaty rights in Temagami shaped Ontario and Canada's Indigenous policy.²³

The possibilities of life in the extractive zone

The story of silver is one of conquest: of nature, of Indigenous territory in the Americas, of the body of the labourer, of matter itself. But there is another story that runs alongside the grand narratives of extraction and the creation of the wealth: the stories, experiences, hopes, and struggles of people who built communities, organized workers, and contested the colonial control of territory and the dominance of extractivism. Within these shattered landscapes there are lessons. By listening to and valuing the experiences of people who have lived with

²² Gómez-Barris *The Extractive Zone*, 1.

²³ David McNaab, *No Place for Fairness: Indigenous Land Rights and Policy in the Bear Island Case and Beyond* (Montreal: McGill Queens University Press, 2009), np.

environmental disaster and eco-system collapse, industrial disease, and the wholesale changes to ways of life brought by climate transitions, we can learn important ways of coping and adapting in our current crisis. Perhaps most importantly, we can learn how to imagine otherwise. In contrast to disaster narratives, there are choices we can, and in some cases, are making in the present to mitigate some of the damage enacted by extractivism, neoliberalism, and consumerism to enact more ethical ways of living and consuming. In contrast to the Anthropocene as a universalizing concept, this dissertation argues that it is important not simply to bring climate change into view, but to document the processes that produced climate change, an understanding that can inform alternative actions that lay outside the extractivist mentalities that got us to this juncture.

In line with this, I want to caution against reading the history charted in this dissertation as an Edenic fall from grace. In this narrative, the beginning is an idealized form of wilderness, then visible human intervention, and finally, the damaged world left behind by extraction. While in many ways, this history reflects the wholesale transformation of landscapes, as Anna Tsing argues,

This is a story we need to know. Industrial transformation turned out to be a bubble of promise followed by lost livelihoods and damaged landscapes. And yet: such documents are not enough. If we end the story with decay, we abandon all hope - or turn our attention to other sites of promise and ruin, promise and ruin.²⁴

In the narrative of ‘promise and ruin,’ attention is redirected to preserve old growth-forests, rainforests and oceans. Other landscapes—such as this former extractive zone—are dismissed as damaged and, therefore, beyond saving. To imagine energy transitions, sustainable futures, and

²⁴ Anna Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015) 18.

other ways of living and knowing, the stories we tell about our collective past and experiences of the present can't end in decay and ruin.

In her study of former industrial forests in Oregon, Anna Tsing describes how matsutake mushroom farmers have found alternative sources of value, what Tsing describes as the “possibility of life in capitalist ruins.”²⁵ The latent history of N'Daki Menan points to one possibility of life in the Anthropocene. Over one hundred years ago, the Teme-Augama worked with Frank Speck, using both photography and mapping as tools, to prove their land title. In this process, they called a latent future into being, one where Indigenous sovereignty over land was recognized. With the land caution issued between 1973 and 1996, they showed what this might look like, in the process, halting the wholesale extraction of resources, at least temporarily. More recently, the Anishinaabeg in Timiskaming First Nation have also used mapping and photography to establish sustainable counterpoints to extractivist patterns of land-use.

Ni Dakinan, the cultural heritage and environmental stewardship office of Timiskaming First Nation has undertaken a decades long mapping project of the former extractive territories. Natural Resources Canada describes how “[t]he economic wealth of Canada’s forests has long been measured in terms of the trees used to make conventional forest products, notably softwood lumber, newsprint and wood pulp.”²⁶ In contrast to this view which locates value in extraction, Ni Dakinan is mapping ‘non-timber forest products’: mushrooms, traditional herbs, and plants. Rather than extraction which prioritizes wealth over eco-systems, this long-term project

²⁵ Tsing, *The Mushroom at the End of the World*.

²⁶ “Non Timber Forest Products,” *Natural Resources Canada*, accessed on November 19, 2019 <https://www.nrcan.gc.ca/our-natural-resources/forests-forestry/forest-industry-trade/forest-products-applications/non-timber-forest-products/13203>

promotes sustainable foraging (locating value outside of commodity systems), co-operative associations, local foodways, and the promotion of traditional foods.

One hundred years after a young boy used Kodak film to assert the coexistence of Indigeneity with modernity, Ni Dakinan uses smartphone photography to document their ongoing land use. Members of Ni Dakinan are shown in the forest, harvesting sustainably from eco-systems they nurture and care for. The images are circulated on Facebook and Instagram, documenting the changes happening on local levels within specific ecosystems and sharing information about foraging sites, harvesting techniques, and methods for processing plants and fungi. The Temagami land caution and the promotion of food systems outside of commodity systems by Timiskaming First Nation point to possibilities of life outside of extractive logics. As Jason W. Moore argues, it is politically urgent to “shift from protecting things to valuing things.”²⁷ This project shows us what that might look like.

An immersion in the incalculable

Jeff Wall writes that the messy, seeping materiality of liquid in film development processes introduces possibilities of surprise, slippage, or chance that exist within even the most controlled systems, what he terms an “immersion in the incalculable.”²⁸ Like Gómez-Barris, Wall locates a possibility of disruption in the messy mixing of materials and labour. The belief that things can be contained, isolated, separated, and controlled ignores the indissoluble connections that link things.

²⁷ Jason Moore, “The Capitalocene and its Discontents: Towards a Revolutionary Ecology,” presentation at Extraction: Decolonial Visual Cultures in the Age of the Capitalocene, UC Santa Cruz, May 12, 2017.

²⁸ Wall, “Photography and Liquid Intelligence,” 110.

The incalculable that Wall refers to “appears with a vengeance in remote consequences of even the most controlled releases of energy.” This includes something unexpected surfacing within the developed photograph, but Wall also reflects that “the ecological crisis is the form in which these remote consequences appear to us most strikingly today.”²⁹ Within extractive landscapes, we are witnessing the effects of the decisions made one hundred years ago, rooted in systems that developed over hundreds of years. These effects have surfaced unevenly. Some destruction was immediate and intense. Other processes have revealed themselves slowly over decades and centuries, the latent legacies of prioritizing economic growth over everything else. What Nixon calls slow violence we could also describe as latent violence.

Photography as representation promises to reveal something, a truth about our contemporary existence and the material foundations of our world. But more often, it hides the more complex realities. Photography is effective at separating and isolating, obscuring the entwinement of labour and the environment, of materiality and histories of technology, and the long-term costs of extraction to environments and workers. However, photography as a material process and the photograph as an image-object reveal interconnections and entanglements. By the time matter records an impression on film, it has been transformed at several stages by geological, biological, and human actors, connecting seemingly divergent histories of economics, technology, and the natural world. Photography records memories from the past into the present. Throughout this dissertation, divergent histories and experiences within the extractive zone surfaced on film emulsion. These memories carry ancient traces of geology and water, another process that links the diverse and complex histories of the human and non-human worlds.

²⁹ Wall, “Photography and Liquid Intelligence,” 110.

However, photography can provide a model for the “unknown, the unseen, and the uncontrolled” and the possibilities of seeing and valuing otherwise.

A reckoning with the past, with the histories brought into being and the histories that were foreclosed, is a future-oriented process. These questions of futurity are not abstract or utopian. If the Anthropocene marks the end of one world, it also marks the inauguration of a new one.³⁰ Demos points to the current emergence of ‘a white techno-capitalist futurity’ being driven by Silicon Valley where techno-utopians argue the limits to growth can be overcome by human ingenuity and geo-engineering projects.³¹ At the moment, these proposals are actively producing our near future. What this future looks like is contested, but the concept of the Anthropocene itself, in many ways, continues to propagate the myth of mastery over, and separation from, nature. Climate emergency is thus used a narrative to consolidate power and access to resources and ignore the more structural causes of catastrophe. As Walter Benjamin reflected, catastrophe is not an event that threatens to occur, rather it is structural: catastrophe is what is given at any given moment.³² In contrast to eco-modernist fantasies that reify human mastery over nature, there is the possibility of building a future based in social, economic and environmental justice.³³ Rethinking what kind of future we want requires dealing with the lost moments in history that have often been overlooked by historians. The unfinished possibilities that surface in this history of extractivism reveal a few of the possibilities left unfinished: of workers organizing against

³⁰ Mario Blaser and Marisol de la Cadena, “Introduction: Pluriverse: Proposals for a World of Many Worlds,” in *A World of Many Worlds*, ed. Marisol de la Cadena and Mario Blaser (Durham: Duke University Press, 2018) 16.

³¹ T.J. Demos, “To Save a World: Geoengineering, Conflictual Futurisms, and the Unthinkable,” *E-Flux*, Journal #94 - October 2018, np.

³² Walter Benjamin, “Theses on The Philosophy of History.” In *Illuminations*, edited by Hannah Arendt, 253-264. (New York: Schocken Books, 2007)

³³ Demos, “To Save a World,” np.

precarious work, exploitative conditions, and capitalism as a structure; of commensality and solidarity; of Indigenous communities halting extraction. All of these possibilities reveal fractures and cracks in the seeming triumph of neo-liberal capitalism and the role the state has played in securing land for extraction.

In conclusion, I turn to the silver that doesn't get fixed into the photograph: the silver halides that aren't exposed to light and don't come into visibility. The traces of silver written on film become part of history, shaping our understanding of the past. This process of structuring memory also shapes what we consider to be possible, what futures we call into being. The silver halides that aren't exposed to light are washed away, but they can be recovered and recycled. Only 10% of silver used in the film process becomes fixed in the image.³⁴ The silver that gets washed away forms an analogy for the histories that were displaced by extraction, for the futures that were promised but didn't come into being. Yet these histories, narratives, lessons, and dreams can be recovered, and we can try again. Within this landscape, there is latent destruction, but there are latent potentials of hope. Recovering other histories requires returning to this shattered landscape: facing the choices that were made. As Donna Haraway reflects, "yearning towards resurgence requires inheriting hard histories, for everybody, but not equally and not in the same ways."³⁵ Inheriting hard histories requires us to confront the limits of our knowing and to accept the future as a site of becoming. It opens up the possibility for a radical future grounded in social justice.

Through the relationship between light and the properties of the metal, silver facilitated an intangible phenomenon that made our own world visible. In photography, silver registers a

³⁴ For a description on recovering silver, see "Sources of Silver in Photographic Processing Facilities," *Kodak Environment*, 1998.

³⁵ Haraway, *Staying with the Trouble*, 89.

physical trace, but also an affective trace of the associated narratives, experiences, and memories. The scars of the landscape; the exploitation of labour; the futures and possibilities that were foreclosed. The physical remnants of extraction written in the landscape remind of us of complicated histories: of deregulation, of prioritizing profit over sustainable extraction, of the cost of industrialization to the health of the community and the ecosystem. As Laura Wexler reflects, photographs reveal “a record of choices.” What we learn from these records: “how it happened and at what cost” is central to meeting the ethical and moral challenges of our present.³⁶

³⁶ Wexler, *Tender Violence*, 133.

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Appendix

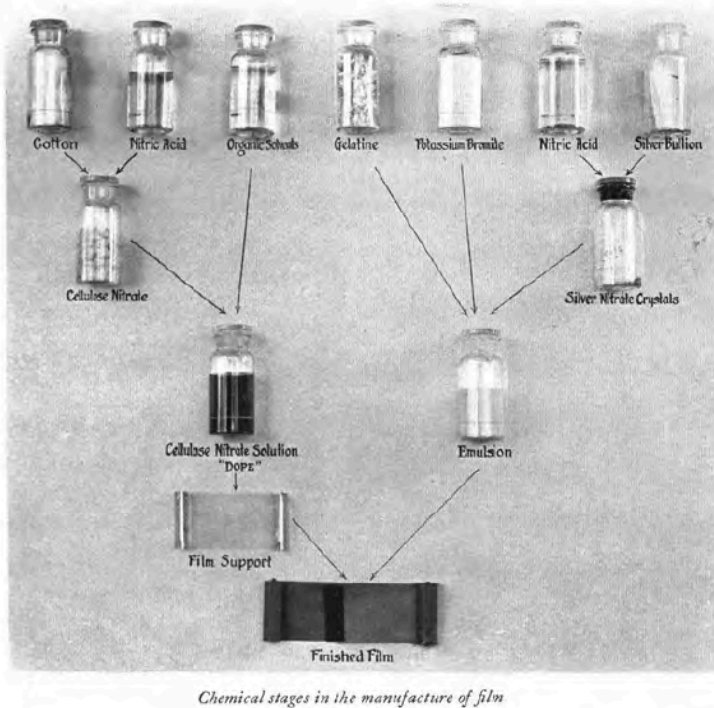


Figure 1: The chemical stages in the manufacture of Kodak film. Reproduced in *The Home of Kodak*, 1929. Page 21.

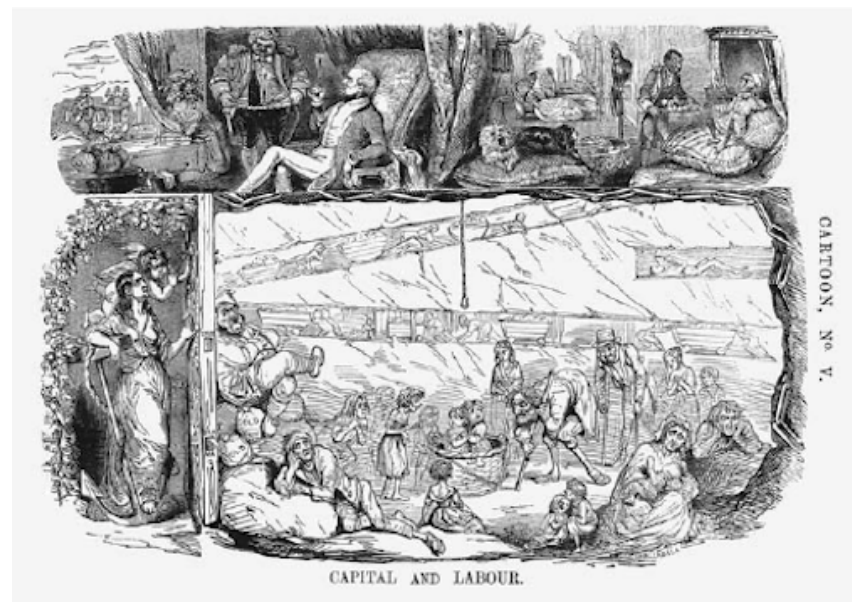


Figure 2: “Capital and Labour, Cartoon, No. V,” *Punch*, Vol. 5, 1843. As Jussi Parikka explains, the cartoon “underlines the ontology of labor as one of underground: capitalism works in the depths to find an infrastructural level that sustains the pleasant consumerized life above the ground and yet stays invisible.” (*A Geology of Media*, 17)



Figure 3: Silver bullion at the Kodak Park Plant. The Home of Kodak, 1929. Page 23.



Figure 4: Silver bullion ready for shipment. Courtesy Cobalt Mining Museum



Figure 5. The First House in Cobalt. Originally held in the Archives of Ontario, this copy is housed in the Cobalt Historical Society Archives.



Figure 6. The First House in Cobalt. Courtesy Cobalt Mining Museum Archives.

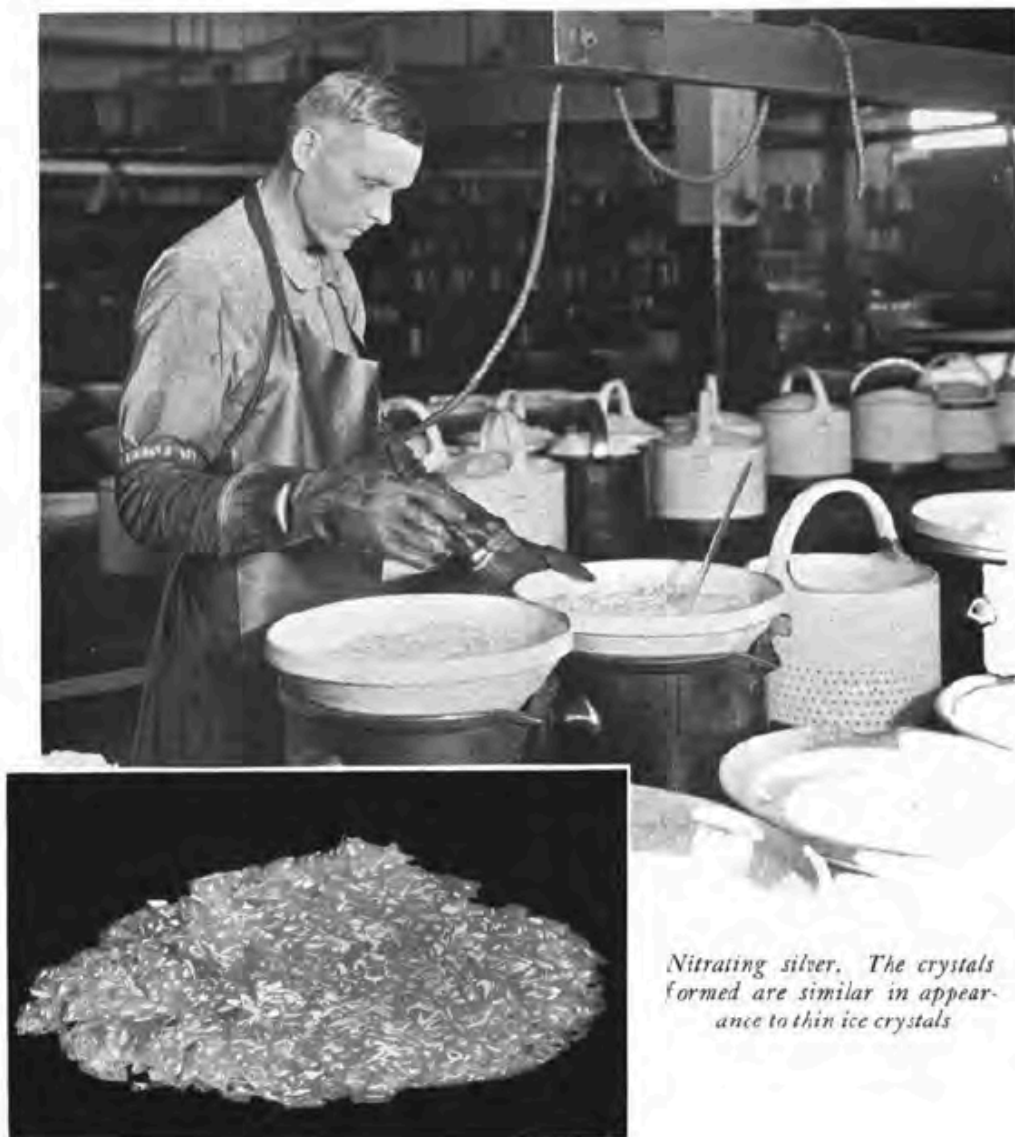


Figure 7: Detail of The First House in Cobalt.



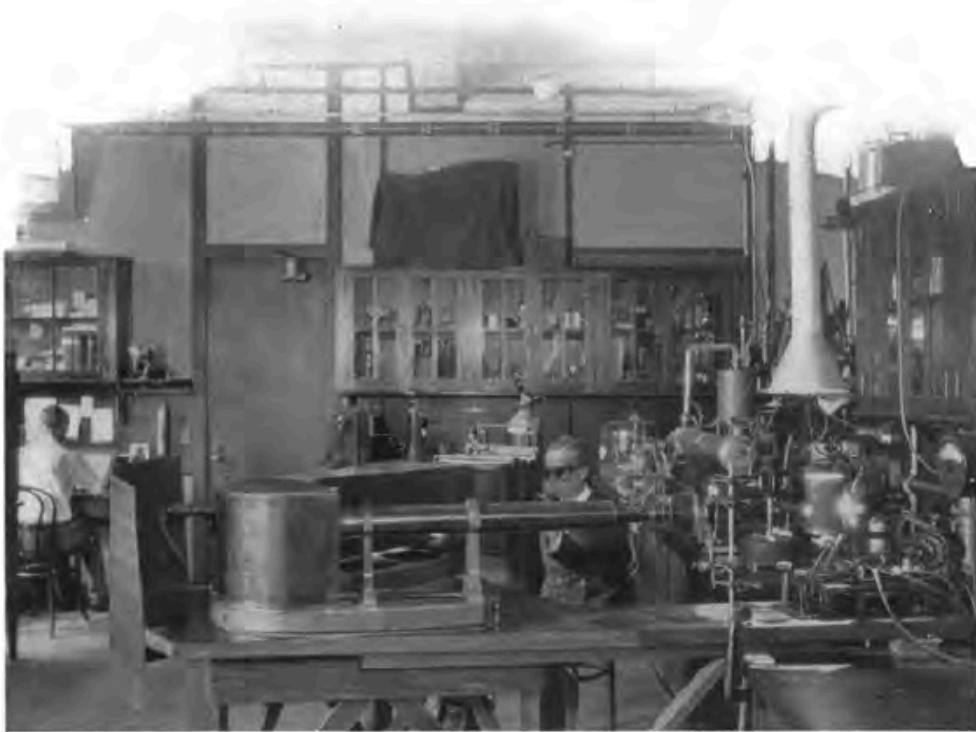
A—PROJECTING MOUTH OF CONDUIT. B—PLANKS FIXED TO THE MOUTH OF THE CONDUIT WHICH DOES NOT PROJECT.

Figure 8: Illustration from *De Re Metallica*, book VI. The woodcuts present nature as a resource: water is diverted, trees are cut down, and ore is removed. This image shows an apparatus used to capture wind to provide air to miners underground. In his illustration, the wind is anthropomorphized with a face, borrowing from a cartographer's convention. In the background, the city signifies the necessity of metals to contemporary economies, and, of course, art.



Nitrating silver. The crystals formed are similar in appearance to thin ice crystals

Figure 9: Silver nitrates were developed in the in the 13th century, a by-product of using nitric acid to separate gold from silver by dissolving the silver. Here the chemist evokes the alchemist, separating compounds to isolate light-sensitive compounds for film development. Reproduced in The Home of Kodak, 1929. Page 24.



Physics laboratory, where the sensitivity of photographic materials to light invisible to the human eye is determined

Figure 10: Physics Laboratory. Reproduced in *The Home of Kodak*, 1929. Page 33.



Before the Kodak and film photography were born. Equipment necessary for the amateur during the "wet plate" days

Figure 11. Before Kodak and film photography were born. Illustration from *The Home of Kodak*, 1929. Page 5.



In the Developing and Printing Department, Harrow Factory.

Figure 12: In the Developing and Printing Department, Harrow Factory,. Reproduced in *The Kodak Properties*, a periodical produced for Kodak stockholders and dealers by The Eastman Kodak Company in February 1906, page 49.



Figure 13: CF Lewis, McKinley-Darragh, 1907. Courtesy Cobalt Mining Museum Archives.



Almost a ton of native silver in a solid block.

Figure 14: Almost a ton of native silver in a solid block. Reproduced in "To Cobalt and Back," *Canadian Life and Resources*, 1909.

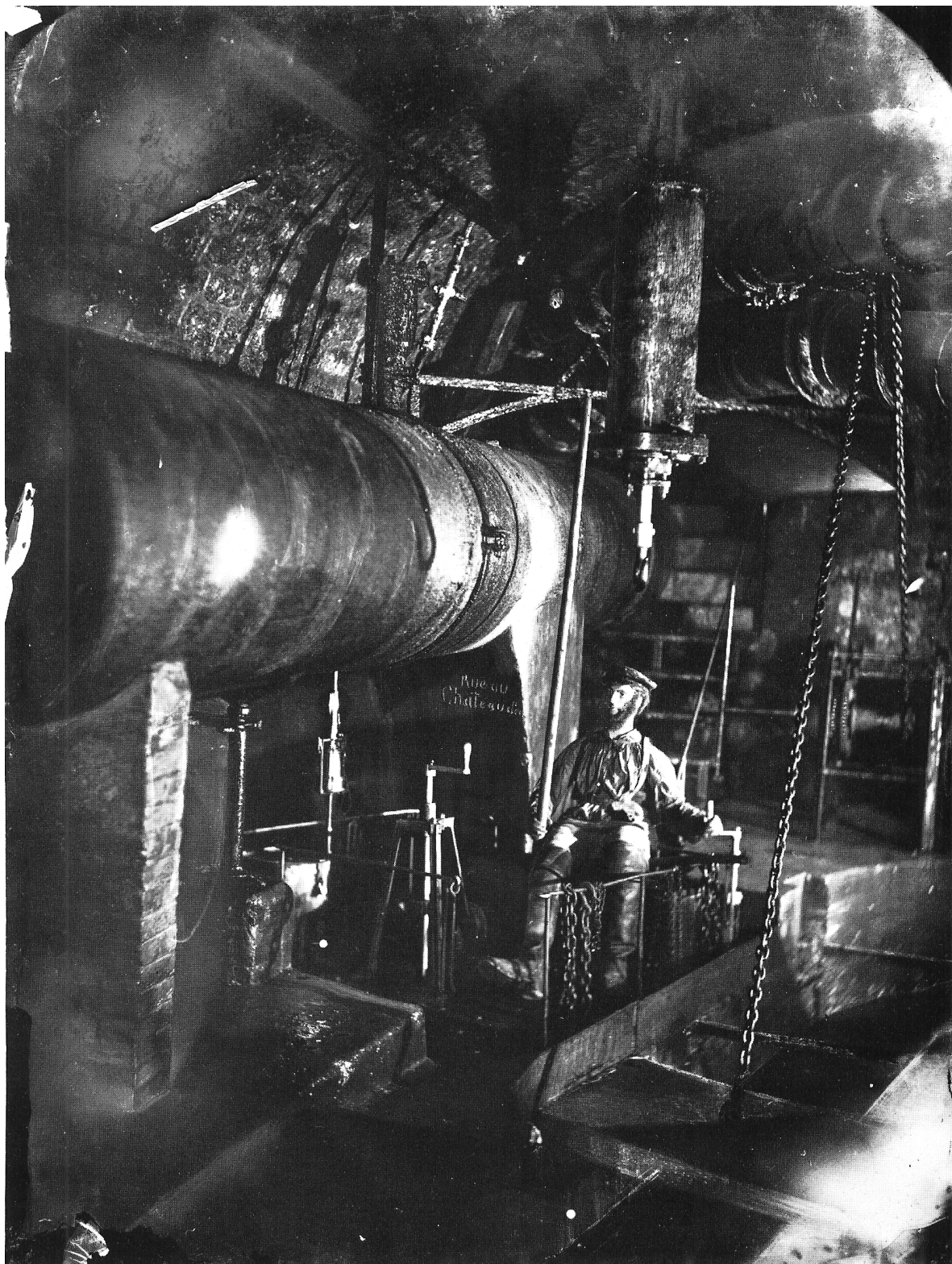


Figure 15: Nadar, Égouts de Paris, 1861. Courtesy Wikimedia Commons.



Figure 16: Uncredited underground photograph of a mine in Cobalt. Courtesy Cobalt Mining Museum.



Figure 17: Real photo postcard of the Cobalt Miner's strike in 1907. Courtesy Cobalt Mining Museum archive.

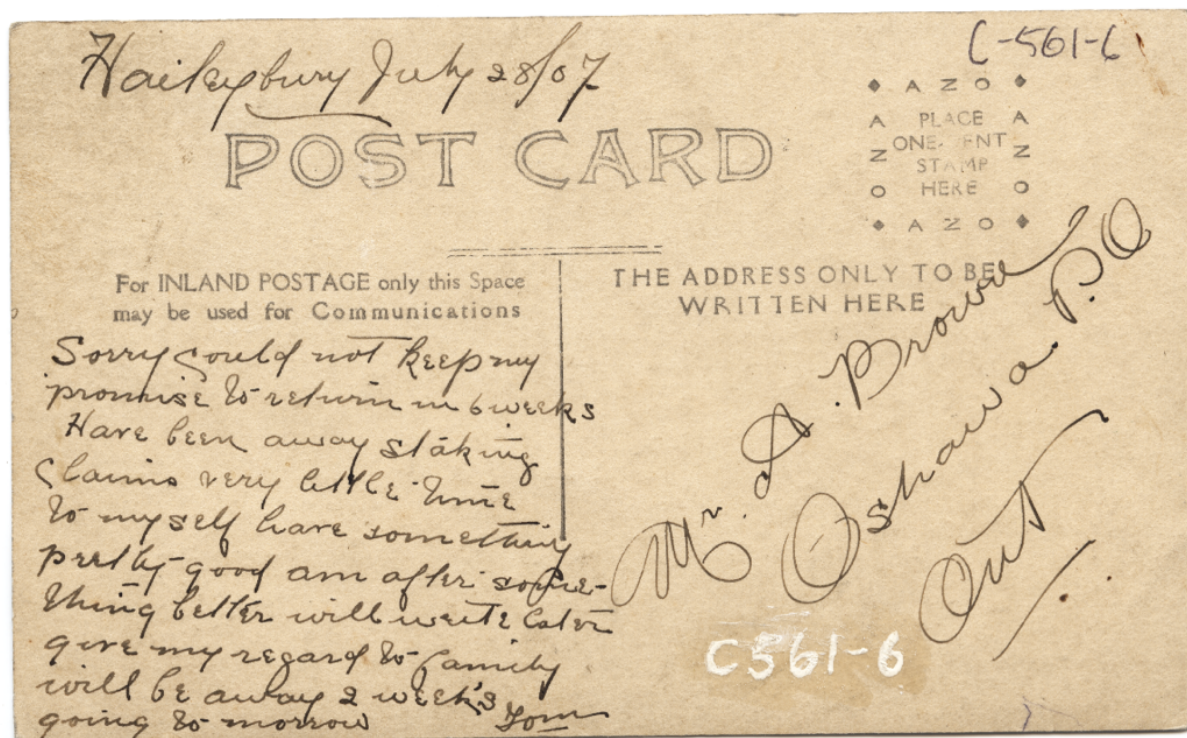


Figure 18: Back of real photo postcard of the Cobalt Miner's strike, 1907. Courtesy Cobalt Mining Museum archive



A view typical of the country in the immediate vicinity of Cobalt.

Figure 19: A view typical of the country in the immediate vicinity of Cobalt. Reproduced in *Canadian Life and Resources*, 1909.



The waters of Temagami glimmering in the golden sunshine of September.

[11]

Figure 20: The waters of Temagami glimmering in the golden sunshine of September. Reproduced in *Canadian Life and Resources*, 1909.



Figure 21: “A New Place to Shoot and Fish.” *The Canadian Magazine*, October 1909. Courtesy The Archives of Ontario.

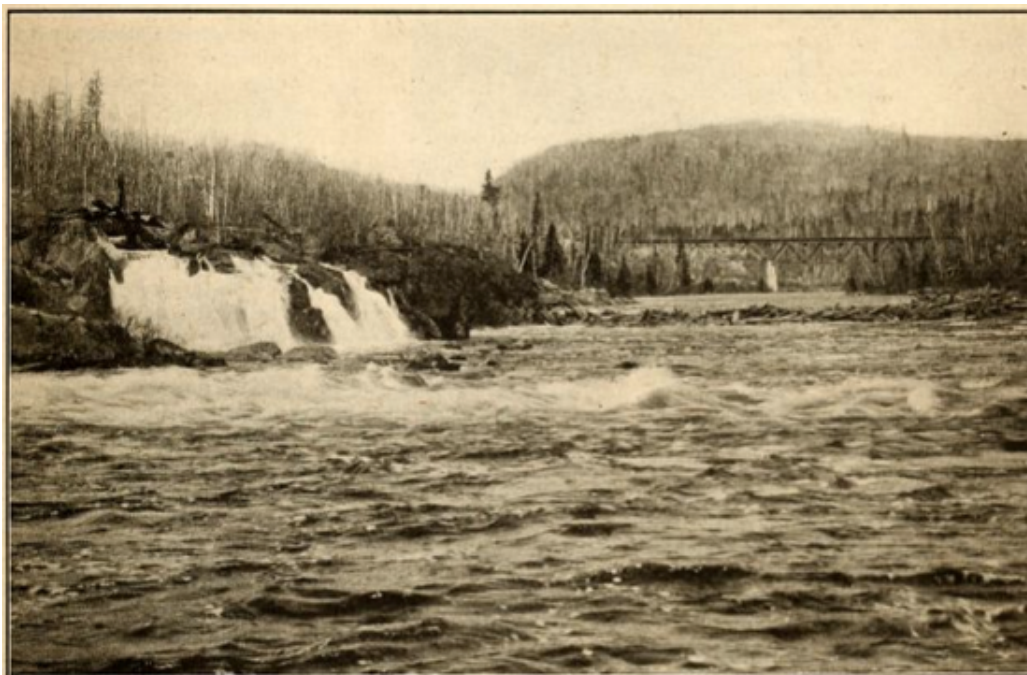


Figure 22: A Midsummer Trip through the Eldorado of the North. In *Mer douce*, September-October 1921. Courtesy The Genealogy Center, Allen County Public Library



Figures 23 and 24: The Lawson Vein, known as the silver sidewalk. Courtesy Cobalt Mining Museum Archives



Figure 25: Rapids on the Montreal River. Courtesy Cobalt Mining Museum Archives



Figure 26: The Ragged Chutes geyser on the Montreal River, 1910. Courtesy Cobalt Mining Museum.



Figure 27: Blasting in Cobalt, 1904. Courtesy Cobalt Mining Museum.



Figure 28: Postcard of the Coniagas and Trethewey Mines. Courtesy Cobalt Mining Museum



Figure 29: Hydraulic hoses used to clear off overburden, or surface material, Nipissing Mine, ca. 1906. Courtesy Cobalt Mining Museum



Figure 30: The Right of Way Mine. Not dated. Courtesy Cobalt Mining Museum Archive



Figure 31: Harold Whittingham posing with dynamite, Nipissing Mine, 1907. Courtesy Cobalt Mining Museum



Figure 32: Worker posing with dynamite, Nipissing Mine, 1907. Courtesy Cobalt Mining Museum



Figure 33: Louis Daguerre, Boulevard du Temple, Paris, 3rd arrondissement, 1838. Daguerreotype



Figure 34: Three Prospectors. Not dated. Courtesy Cobalt Mining Museum.



Figure 35: Portrait of Daniel J. Butler with gold and mining tools, 1850. Collection of the Canadian Photography Institute of the National Gallery of Canada.

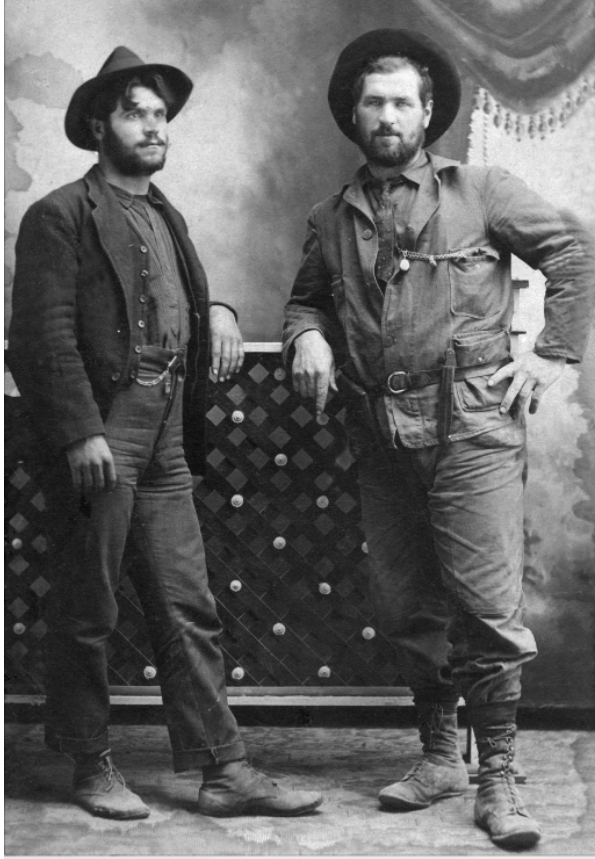


Figure 36: Studio portrait, men dressed as cowboys. Not dated. Courtesy Cobalt Mining Museum.



Figure 37: Studio portrait, women posing as cowboys. Not dated. Courtesy Cobalt Mining Museum.



A LADY

is so seldom seen at the mines and in the camp that we thought that the very picture of one would be welcome. Photographic cameras, lenses and apparatus for mining, engineering and surveying. Outfits for exploring expeditions, surveys, prospecting parties, etc. American Optical Company's cameras, Morrison wide-angle lenses, Steinheil and Ross lenses of all styles, Eastman roll holders, dry-plates of all the leading brands, "ivory" films, chemicals, flash light cartridges, etc., etc. Every possible photographic requisite. Send for specimen copy of the "Photographic Times." Catalogues, estimates and information cheerfully supplied on application.

THE SCOVILL & ADAMS CO.,

423 Broome Street, New York.

Figure 38: An 1889 advertisement for The Scovill & Adams Company promoting cameras and dry plates that ran in The Engineering and Mining Journal.



Figure 39: Mattie Gunterman, Two miners drilling inside the Nettie L. mine in Ferguson, 1902



Figure 40: H Peters, Porcupine's Lady Prospector, 1911.



Figure 41: Board of Directors, Temiskaming and Hudson's Bay Mining Company Limited.
Courtesy Cobalt Mining Museum



Figure 42: The King Cobalt Silver Mine, Cobalt, Ont. Postcard. Courtesy Cobalt Mining Museum

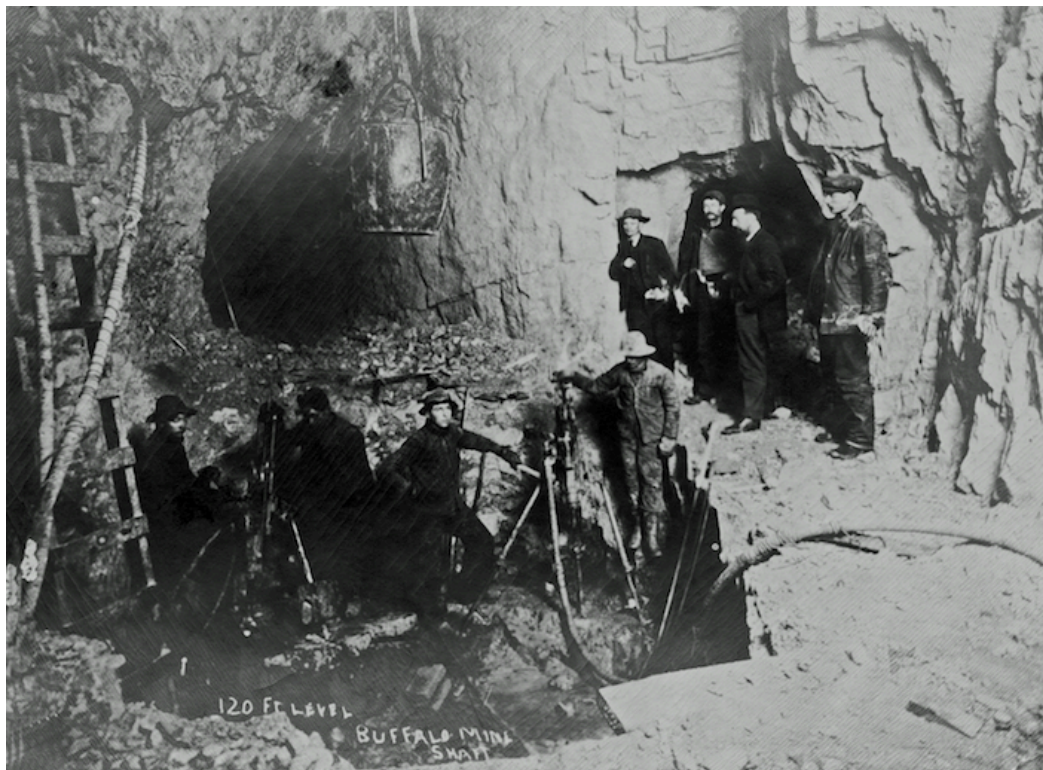


Figure 43: 120-foot level, Buffalo Mine Shaft. Not dated. Courtesy Cobalt Mining Museum



Figure 44: Representatives of Local 146, the Cobalt Miners' Union. Not dated. Courtesy Cobalt Mining Museum



Figure 45: Striking workers marching with a banner, 'the capitalist is the only foreigner.' South Porcupine, 1913.



Figure 46: T.W. Foster, "Too Much Grease for Dick, August 20, 1909." Courtesy John Weatherburn



Figure 47: T.W. Foster, "Hard at it, Cobalt, August 19, 1909." Courtesy John Weatherburn



Figure 48: T.W. Foster, "Dick Ready to Walk Greased Pole at "Cobalt Aquatic Sports, August 20, 1909." Courtesy John Weatherburn



Figure 49: Street scene. Not dated. Cobalt Mining Museum Archives.



Figure 50: T.W. Foster, Gowganda or Bust, at Elk Lake, 1907. Courtesy John Weatherburn



Figure 51: T.W. Foster, 1st July 1909. Courtesy John Weatherburn



Figure 52: T.W. Foster, Portrait of Mary Foster. Not dated. Courtesy John Weatherburn

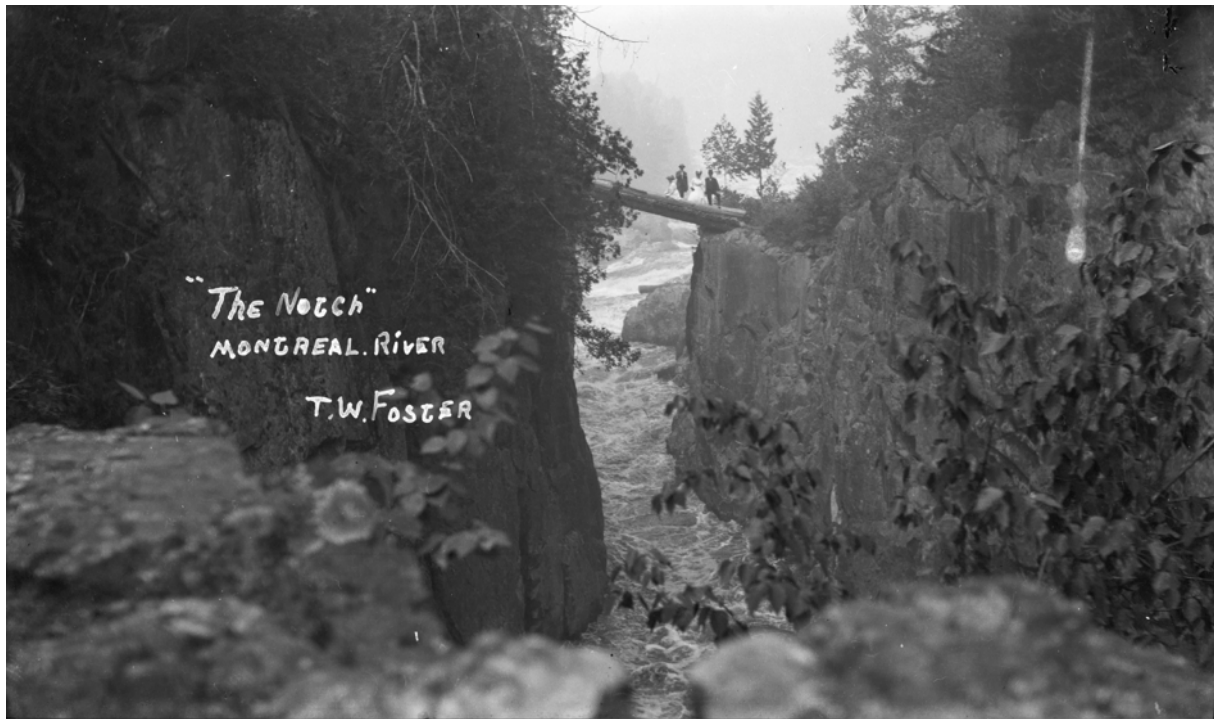


Figure 53: T.W. Foster, "The Notch," Montreal River. 1909. Courtesy John Weatherburn



Figure 54: T.W. Foster, "Tonight at Grand." Not dated. Courtesy John Weatherburn



Figure 55: T.W. Foster, Cobalt, July 4th, After the fire. 1909. Courtesy John Weatherburn

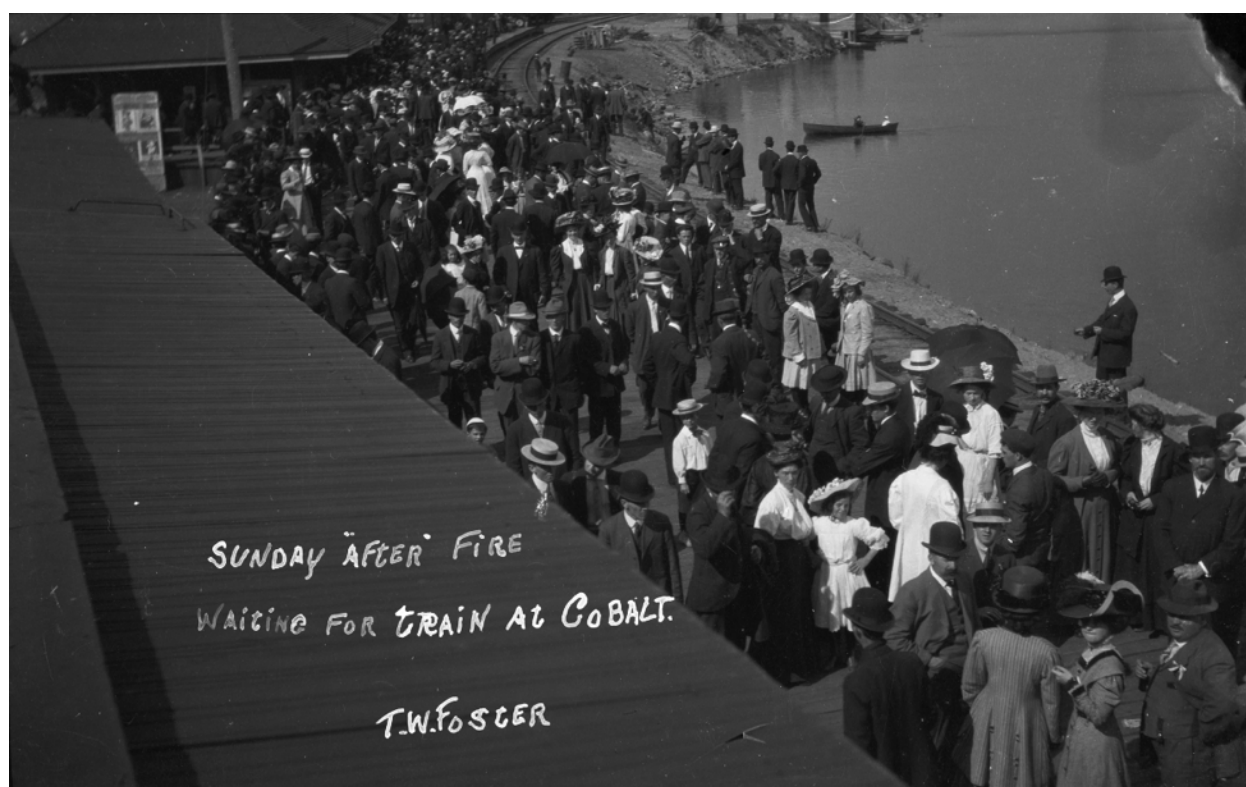


Figure 56: T.W. Foster, Sunday After Fire, Waiting for Train at Cobalt, 1909. Courtesy John Weatherburn



Figure 57. The Four Nations Mine, Kenagami, Ontario. Not dated. Courtesy Valerie Macpherson



Figure 58: Train station at Swastika. Not dated. Courtesy Valerie Macpherson



Figure 59: Dick Elliot. Not dated. Courtesy Valerie Macpherson



Figure 60: T.W. Foster, T&NO Railroad Train Wreck, June 24, 1909. Courtesy John Weatherburn



Figure 61: Crew of the HBC Longboat at Dinner. 7-19-F. Frank G. Speck Papers
Mss.Ms.Coll.126, 7-19(a-l). Ojibwa #1 (Temagami). Courtesy American Philosophical Society



Figure 62: Detail, Crew of the HBC Longboat at Dinner. 7-19-F. Frank G. Speck Papers
Mss.Ms.Coll.126, 7-19(a-l). Ojibwa #1 (Temagami). Courtesy American Philosophical Society



Figure 63: Edward S. Curtis, In a Piegan Lodge, 1910. photogravure.



Figure 64: Edward S. Curtis, In a Piegan Lodge, 1911. *The North American Indian*, Volume 6, portfolio plate 188, photogravure.



Figure 65: (Aleck) Wabunosa, Ojibwa Brave. Detroit Photographic Co., 1903. 7-25-F. Frank G. Speck Papers Mss.Ms.Coll.126, 7-25(a-g). Ojibwa #7 (Temagami).



Figure 66: Walter Ferguson, Geronimo behind the wheel, 1905.



Figure 67: Indian family in a camp in the bush. Postal Card. 7-19-i. Frank G. Speck Papers Mss.Ms.Coll.126, 7-19(a-1). Ojibwa #1 (Temagami). Courtesy American Philosophical Society



Figure 68: Peenay “partridge” smoking a moose skin after tanning. DOM #23940, August 12, 2913. 7-22-C. Frank G. Speck Papers Mss.Ms.Coll.126, 7-22(a-n). Ojibwa #4 (Temagami). Courtesy American Philosophical Society



Figure 69: "PENN PROFESSOR'S DISCOVERY CONFOUNDS INDIAN 'HISTORY': Doctor Speck Establishes That the American Redskin Hunts on His Own Family Ground, is a Protector of Game, and is No Mere Rover Through the Forests." *Public Ledger*, November 1913. Frank G. Speck Papers Mss.Ms.Coll.126, II(3B1k). Courtesy American Philosophical Society



Figure 70: Old Misabi, The Giant, an Ojibway storyteller. Dept. of Mines #23978, Feb. 5, 1914. Frank G. Speck Papers Mss.Ms.Coll.126, 7-22(a-n). Courtesy American Philosophical Society.

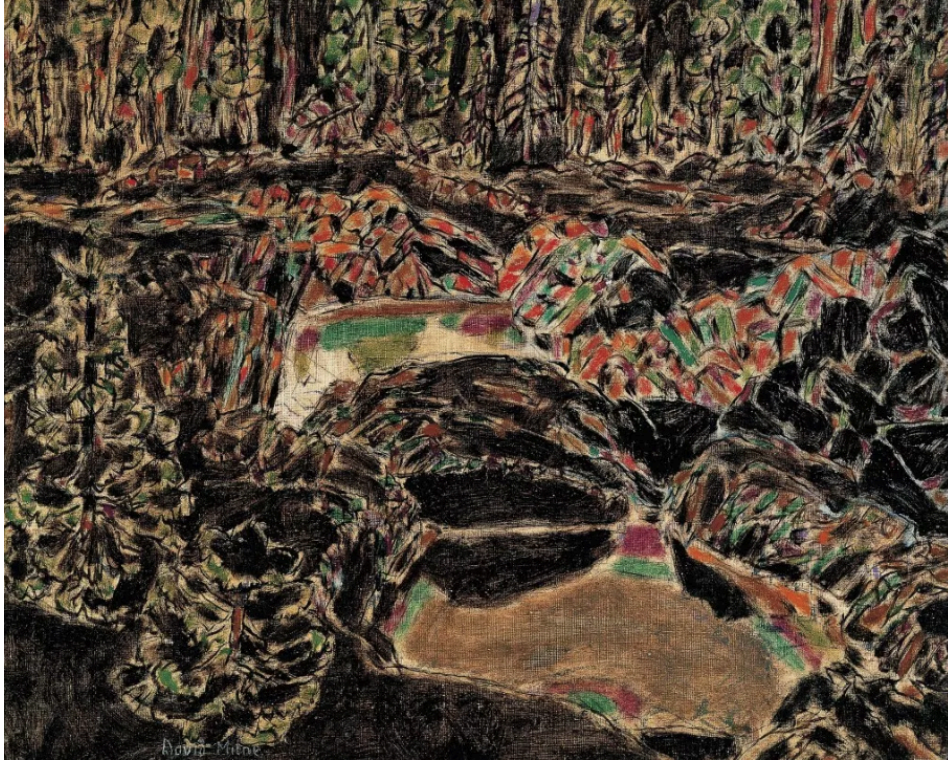


Figure 71: David Milne, Dark Pool, Ti Magami, 1929. Oil on canvas. 50.8 x 63.8 cm. The Montreal Museum of Fine Art.



Figure 72: AY Jackson, Terra Sauvage, 1913. Oil on canvas. 128.8 x 154.4 cm. National Gallery of Canada.



Figure 73: Charles Comfort, Smelter Stacks, Copper Cliff, 1936. Oil on canvas. 101.9 x 122.2 cm. National Gallery of Canada, Ottawa.



Figure 74: Lawren Harris, Miner's Houses, Glace Bay, 1925. Oil on canvas. 107.3 x 126.9 cm. Collection of the Art Gallery of Ontario.



Figure 75: Charles Comfort, *The Romance of Nickel*, 1937. Oil on canvas. 213.5 x 610 cm. National Gallery of Canada.



Figure 76: Charles Comfort, *Exterior Frieze*, Toronto Stock Exchange.



Figure 77: Yvonne McKague Housser, *Silver Mine, Evening*, 1932. Oil on canvas. 61 × 76.2 cm. Art Gallery of Ontario.



Figure 78: Franklin Carmichael, *A Northern Silver Mine*, 1930. Oil on canvas. McMichael Canadian Art Collection.

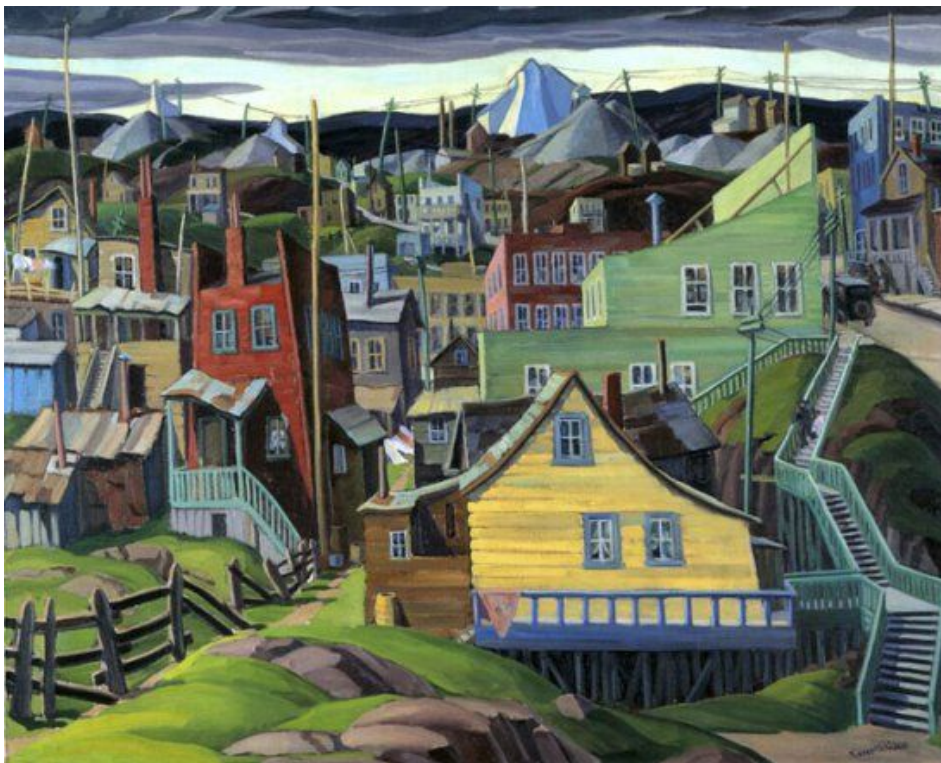


Figure 79: Yvonne McKague Housser, *Cobalt*, 1931. Oil on canvas, 114.8 x 140 cm. National Gallery of Canada.



Figure 80: AY Jackson, Autumn, Cobalt, Ontario, 1935. Oil on wood. 21.6 x 26.7 cm. The Thomson Collection at the Art Gallery of Ontario.



Figure 81: AY Jackson, Ontario Mining Town, Cobalt, 1933. Oil on canvas. 53.3 x 71.8 cm