WHAT J.W. CLARK SAW
IN BRITISH COLUMBIA,
OR, NATURE AND THE MACHINE:
*A Photo Essay*

JAMES MURTON

In 1931 John William (J.W.) Clark donated a collection of 1,400 photographic lantern slides to the BC government, directing that they be used “in the interests of Truth and for British Columbia.” Had anyone asked him, Clark would surely have said that he had been using his lantern slides just so for over a decade, presenting illustrated lectures explaining the development of BC dams and irrigation canals, mountains and rivers, and farms and gardens to audiences from Victoria to Bombay. Now he was giving up control of his project, donating his carefully assembled slides to the Department of Lands’ Water Rights Branch, in whose service over the last ten years he had promoted irrigation and hydroelectric development.

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1 Clark’s directive from a note included with the accession record for Clark’s collection of photographs, accession 198210-004, Clark, John William Collection, British Columbia Archives (BCA). This collection includes an estimated 1,400 lantern slides, according to the accession record, along with an estimated 1,300 negatives of these slides (Clark noted when donating the collection that most but not all the lantern slides had matching negatives). It also includes other photographic material—prints and film negatives—covering the same subject matter as the lantern slides (many of these are likely duplicates of the lantern slides, but, as the accession record does not include an index to the prints or film negatives, it is not possible to say precisely how many). Lantern slides were glass plates about twice the size of modern slides.

2 This article is based on an analysis of five standard lectures preserved as part of the Clark Collection. In the late 1920s Clark produced two lectures featuring material on irrigation in the southern Okanagan valley: J.W. Clark, “Illustrated Lecture on British Columbia Featuring Oliver and the Okanagan Valley,” 7 November 1928; and “Illustrated Lecture on British Columbia Featuring the Okanagan Valley,” 23 April 1929, file “Lantern Slide Lectures: Okanagan,” box 1, Clark Collection, BCA. A few years later he produced three lectures with a large amount of material on the development of hydroelectricity: J.W. Clark, “Wonderful Waters of British Columbia, Standard Lecture No. 1,” 16 May 1931; “Wonderful Waters of British Columbia, Standard Lecture No. 2,” 18 April 1931; and “Wonderful Waters of British
Historians have tended to use photographs primarily as a way of illustrating texts. Clark's images, though—used in the service of the state and presented in the form of "illustrated lectures"—have a history and a context that should not be ignored. They need to be understood in terms of the forces that brought them into being, gave them meaning, and put them to work. Clark's lectures used photographs to shape an argument about the relations between nature and development. This article explores that argument. Readers are invited, first, to view a selection of Clark's images, which I arranged to follow their original order in his presentations. Then I outline several possible ways these images might have been "seen," or understood, within the historical context in which they were presented. The interpretation I favour should be clear, but the advantage of the photo essay format is that readers, with access to a significant chunk of the primary evidence—that is, the photographs themselves—should find it easier than normal to argue back.

BACKSTORY

J.W. Clark is a convenient figure to place at the centre of an essay on development and nature in interwar British Columbia. This is because his views were so aggressively normal for his day that he makes a convenient stand-in for his society as a whole. Clark believed in the need to foster the development of a settled Anglo-Canadian society in British Columbia. He was convinced of the virtue of marshalling the province's environmental assets to support this goal and argued that, in order to achieve it, First Nations peoples had to be dispossessed of as much of their land as possible. In all these matters he was, as Cole Harris has said recently, "as staunch a representative of settler society as could be found."

Clark arrived in British Columbia in 1905 and settled in the vicinity of Kamloops, where he worked as a rancher and, later, as superintendent of the nearby prison farm. A veteran of the South African War and a major in the Rocky Mountain Rangers (a BC militia unit), Clark made repeated attempts to join up for service in the Great War but was rejected, initially, for health reasons. Successfully enlisting in 1916, Clark was sent to France,
Image 1: Image Courtesy of BC Archives, 1-52698.
Image 2: Image Courtesy of BC Archives, 1-52714.
Image 7: Image Courtesy of BC Archives, 1-52718.
Image 8: Image Courtesy of BC Archives, 1-52537.
Image 9: Image Courtesy of BC Archives, r-52108.
Image II: Image Courtesy of BC Archives, 1-67690.
where he served in the trenches before being seconded to the British 3rd Army as the agricultural officer. This placed him in charge of organizing the work of French farmers supplying the army. In 1918 he was injured while on leave when a streetcar hit his automobile. After recovering in hospital in England, he was sent back to Canada and discharged.5

On returning to British Columbia, Clark was appointed to a post in the BC government’s Ministry of Lands, coordinating the distribution of land for Great War veterans wanting to become farmers. This was the first of a variety of posts Clark held in the government, in particular in the Ministry of Lands and its Water Rights Branch. Clark’s first lantern slide lectures were designed to promote the South Okanagan Irrigation Project, a major initiative of the Water Rights Branch in the years following the war.6 Over the next ten years, Clark’s illustrated lectures promoted ideas and projects important to the Water Rights Branch as well as to the Ministry of Lands in general. At first this meant support for rural settlement, which the government regarded as critical to implanting a Euro-Canadian society in British Columbia.7 Support for irrigation flowed from this concern for rural settlement.8 Later, Clark supported hydroelectric developments, which grew enormously in the interwar period as hydroelectricity became the preferred way to power the province’s growing cities and industries.9

IMAGES OF DEVELOPMENT

We can understand Clark’s lantern slide lectures first as illustrations of development activities in the province. An analysis of that portion of the collection that has been scanned and catalogued shows that the majority

6 The South Okanagan Irrigation Project created an irrigation system and subdivided and sold land south from the town of Oliver (itself planned and constructed as part of the project) to the US border. See James Murton, “Creating a Countryside in British Columbia: An Alternative Modernity, 1919-1935,” (PhD diss., Queen’s University at Kingston, 2002), chap. 6.
(55 percent) of the images depict either resource development activities – mostly dams and irrigation works – or developed fields and orchards. Images of settlements, industrial activities (factories and mills), and mixed resource development and wilderness make up a further 20 percent of the scanned collection (see Figure 1).

These photographs were the raw material for Clark's illustrated lectures. Lantern slides are glass plates (about twice the size of modern slides) containing a positive image. In use up to the 1950s, they were commonly found where visual information needed to be displayed. University art and architecture departments relied on them, and "magic lantern shows" were popular as a way of presenting exotic foreign scenes to audiences. Canadian government immigration agents used lantern slide lectures to entice potential emigrants. Clark himself travelled to India with his South Okanagan Irrigation Project lectures, and on his return gave at least two
public lantern slide lectures illustrating the wonders of the subcontinent. These presentations, one sponsored by the parent-teacher association at a local high school in Victoria and one given to a Kiwanis Club luncheon in the same city, were intended to entertain and inform local audiences by showing them the wider world. Clark’s lectures on British Columbia were likely presented and received in a similar light, as promotional inducements and as illustrations of the progress of development in the hinterlands of the province.

Yet Clark’s illustrated lectures did more than this. Historical geographer Joan Schwartz has argued that photographs like those of J.W. Clark were important in constructing the meaning of new places emerging from Euro-Canadian settlement and development in Canada. The power of photographs in shaping “imaginative geographies” comes from the gap that exists between the apparent objectivity of photographs and their contingent meaning. Following the invention of photography (traditionally pegged to the announcement of the daguerreotype in 1839), the photograph was widely

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celebrated as a faithful capturing of visual reality. Victorians assumed that photographs could be used to “extend the reach of the observer” by providing an unmediated view of places and things.  

Photographs do not, however, offer an unmediated picture of reality. For example, they render a three-dimensional scene in two dimensions. They put a frame around scenes and focus or blur elements within it, suggesting relationships that may not be apparent to a physical observer. Photographs, like other cultural artefacts, need to be “read” to determine the meaning of the signs they contain. Photographs also remove their subjects from the context of time, location, and human relationships that brought them to the spot where the photograph was taken. Therefore, the meanings of photographs are shaped by whatever new context in which they appear. The gap between the photograph and what it appears to faithfully represent – between the photographic signifier and the signified – allows for photographs to be used for the creation of a variety of meanings.

Understanding what Clark’s images told him and his audiences about the BC wilderness requires that we place them within the context in which they were shown. Clark’s presentations clearly placed the waters and lands of British Columbia within a discourse of development. Lectures were typically organized into parts, starting with wilderness-style views of lands that presumably were waiting to be developed. Clark’s “Illustrated Lecture on British Columbia Featuring Oliver and the Okanagan Valley,” for example, began with a panorama of the “South Okanagan looking south in 1920,” and the first image in “Wonderful Waters of British Columbia: Standard Lecture No. 2” was a view of the snowy peaks of the Rocky Mountains (Image 1). The typical illustrated lecture ended with “scenic


15 Clark, “Oliver and the Okanagan”; and Clark, “Wonderful Waters No. 2.”
views" taken in and around Victoria, often of the very ordered Beacon Hill Park (Image 11).\textsuperscript{16} Clark's lectures therefore charted a narrative of development – from the undeveloped to the oldest patch of European landscape in British Columbia.

Reading individual images within this context gets us a long way. As Figure 1 indicates, approximately 23 percent of the photographs in the collection are images of "wilderness," by which I mean they contain little to no evidence of anthropogenic landscapes. For example, Clark's view of the Lime Dyke range in the Rocky Mountains (Image 1) is all soaring, craggy peaks, dramatic fissures, and lonely trees. In presenting this slide in one of his standard "Wonderful Waters" lectures, Clark simply noted its name and location, presumably letting the drama of the image speak for itself. A second picture of the same range, however, was interpreted more fully. "The eternal snows," Clark noted, "form an unfailing source of supply of water not only for domestic use but also for irrigation and for the development of hydro-electric power."\textsuperscript{17} Where some might see only pure wilderness, Clark also saw a supply of water, a source to fill irrigation canals and to turn the turbines of hydroelectric plants. Image 1 was not only a view of mountains but also an image of development.

IMAGES OF RESOURCES

Seeing Clark's lantern slide lectures as arguments for development fits nicely with what we know about the more general support for development activities within the BC government at this time. What sort of understanding of nature, though, allowed Clark, and presumably his audiences, to see development where we would likely see wilderness?

One possibility is that Clark understood nature in instrumentalist terms, which is to say, he saw nature as important primarily to the extent that it could be made to serve human purposes. According to environmental historian Donald Worster, an instrumentalist view of nature was common among those Americans who spearheaded the development of irrigation and hydroelectric works in the first three-quarters of the twentieth century. At the centre of these developments was the US government's Bureau of Reclamation, which was set up by an act of Congress in 1902 to develop irrigated farmland in the west. The bureau, argues Worster, quickly fell in love with gigantic technological megaprojects intended to make nature more rational and ordered. Water that was not run through a turbine or

\textsuperscript{16} Of the five lectures analyzed in this paper, only "Wonderful Waters No. 1" does not end with an image of the duck pond and stone bridge in Beacon Hill Park (Image 11) – and it, too, ends in the park, with a view of the Olympic Mountains across the Strait of Juan de Fuca.

\textsuperscript{17} Clark, "Wonderful Waters No. 1."
applied to a field was considered by the bureau's engineers to be wasted.\(^{18}\) In the instrumentalist view, nature was simply a collection of resources to be used at will and to advantage.

The promotional rhetoric of the South Okanagan Project likewise celebrated transforming the arid valley lands into a useful rural landscape appropriate to the needs of humanity. “Where apples grow best,” one pamphlet declared, “man lives best.” This pamphlet, which featured a number of photographs from Clark’s collection, made it clear that the purpose of the project was to impose an improved order on the environment by running pipes under “vagrant stream-bed[s]” and meeting the “varying disposition of the topography” with ditches, pipes, and flumes.\(^{19}\)

Clark’s lantern slide lectures also spoke this language of order and the rationalization of nature. In one lecture, Clark introduced his presentation by noting that the South Okanagan Project received its power from the hydroelectric plants of the West Kootenay Power and Light Company across a mountain range in the Kootenays. Thus, Clark emphasized the reordered geography of the province, in which power lines joined previously separate regions. He then presented an image of the “South Okanagan Valley looking south before irrigation days,” critically noting the disordered, “tortuous course” of the Okanagan River. Following this image was a consideration of the various engineering works contributing to the transformation of the valley, such as the main dam (Image 3) and the large pipe, or flume, that carried water across the Okanagan River near the town of Oliver (Image 4).\(^{20}\) In Image 3 the main dam juts out towards the viewer, dramatically showcasing the outlet to the main canal on the right, the dam’s fish ladder in the centre foreground, and, to the left, the straight, hard-as-a-ruler line that the dam imposed on the river. Image 4 offers a tight, dramatic close-up of the flume slicing across the frame.

The subsequent lantern slides celebrated the transformation of the valley by offering images of developed fields (sometimes with comments on their commercial possibilities) and a few images of settlers’ homes. This section of the lecture ended with a dramatic visual argument. “Now with two slides I wish to show you the transformation,” Clark said, “from a semi-arid desert providing only poor grazing for a bunch of cayouse” – what he elsewhere described as “a dusty, cheerless waste” (Image 6) – “to a fertile valley due to the wonders of irrigation” (Image 7).\(^{21}\)


\(^{19}\) “Government Irrigation Project: Opportunities for Home-Seekers,” pamphlet, 1921, Library Collection, BCA.

\(^{20}\) Clark, “Wonderful Waters No. 2.”

\(^{21}\) Ibid.; and Clark, “Wonderful Waters No. 1.”
In addition to this visual and textual rhetoric about the bringing of human order out of natural waste and chaos, Clark’s magic lantern presentations, like Donald Worster’s irrigation engineers, gloried in the heavy machinery used to convert water into electricity. Image 9 is a good example of what David Nye has called the “technological sublime,” a discourse that, he argues, permeated American culture in the nineteenth and twentieth centuries. Heavy machinery was sublime in the classic sense of the word: it inspired a deep sense of awe and respect by virtue of the danger and power it exhibited.\(^{22}\) Clark was clearly fascinated with the construction of hydroelectric facilities and impressed by the size and power of the equipment. The lecture entitled “Wonderful Waters: Standard Lecture No. 1” had 171 slides, of which eighty-nine featured machinery, dams, or canals. Image 9 appeared in this show within a consecutive run of fifty-five slides detailing various hydroelectric projects around the province.\(^{23}\)

Clark’s presentation of hydroelectric projects tended to be heavy on technical details. For the larger projects he would start with a sketch or two detailing the engineering. This would be followed by images of construction and machinery. In presenting an image of a shaft connecting a turbine with a generator, Clark outlined all the technical particulars, explaining that “weight of turbine and generator together with hydraulic thrust is 500 tons (1,000,000 pounds) all borne on one shaft 30 inches in diameter and which revolves @ 120 to the minute.” Of Image 9, Clark noted that it showed “3 of the generators at Powell River, 2 of 2,800 kva [Kilovolt amperes] and one of 3,750 kva hp.”\(^{24}\)

We could see Clark and his illustrated lectures, then, as displaying a typically instrumental, exploitative, Euro-Canadian attitude towards nature. Nature was there for the use of humanity. It was not an inter-connected, independent ecosystem that needed to be respected on its own terms but simply a collection of discrete resources. Mountain snows were just sources of water. Rivers were (or should be) canals. Technology was wondrous, allowing for the conquest and control of nature.

IMAGES OF HYBRIDITY

Despite Clark’s obvious love of resources, heavy machinery, and rural landscapes, it is not clear to me that his lantern slide lectures fully equated “nature” with “resource” or that, like Worster’s irrigation engineers, he was interested in water only to the extent that it could be run through a turbine. Though Clark certainly did see the snows of the Lime Dyke


\(^{23}\) Clark, “Wonderful Waters No. 1.”

\(^{24}\) Ibid.
range as a resource. Image 1 is also celebratory, featuring the craggy peaks of the Rockies jutting into a vast open sky. Throughout the lectures Clark presented dramatic and beautiful wilderness images with no commentary on their resource potential. For example, his 1928 lecture on Oliver and the Okanagan Valley featured eleven photographs of scenery north of the irrigation area. Photographs included one of MacIntyre Bluff, described by Clark in another lecture as "a remarkable precipice some 600 feet high dominating the landscape for several miles around" (Image 2).  

Certainly Clark was no champion of ecological integrity, at least by today's standards, as his triumphant before-and-after views of the transformation of the southern Okanagan Valley show (Images 6 and 7). Yet the arid landscape whose demise Clark celebrated had few friends in the 1930s. Even parks and wilderness advocates tended to focus on nature that was scenic or picturesque, or that was valuable as a recreational space or as a source of spirituality or healing. The first commissioner of what was initially called the Dominion Parks Branch (Parks Canada), James Harkin, frequently explained that the parks needed to be preserved because a tired, hard-working public needed invigorating, spiritual, healthy places to restore themselves. Clark was not unfamiliar with such sentiments, at times presenting nature as both healer and temple. Many settlers, he noted, liked to leave "health-giving pines" around their gardens and houses. In one lecture, images of the dense coastal forest near Port Alberni on Vancouver Island — "the majestic timbers of our BC coast" — drove Clark to declare that "the Groves [sic] were God's first temples." One image showed a "woodland glade" made up of "the grey old trunks that high in heaven mingle their mossy boughs."  

Clark's lectures were not a call for conservation, and it is not my intention to suggest that they were. What these examples do suggest is that Clark fits uneasily into current dichotomies that pit preservation against use, or nature against the machine. Environmental historians such as Richard White and Mark Fiege have recently argued that such dichotomies do not work well in the interwar period. Fiege argues that at least some irrigation promoters thought of irrigation as bringing together industrial techniques and the environment to create an improved landscape containing elements

25 Clark, "Wonderful Waters No. 2."
28 Clark, "Wonderful Waters No. 2."
of both nature and humanity, an “industrial Eden” in his words. According to White, supporters of the Grand Coulee Dam in Washington State argued that the dam mimicked or completed nature, taking advantage of the gravel left at the site and the “bed of impervious blue clay underlaid by watertight rock.” Similarly, in 1897 surveyors discovered the potential of British Columbia’s Stave Lake for power generation: eighty-foot-high falls could be harnessed, while the lake itself would make a convenient site for storing water behind a dam. So impressed was one Vancouver-area newspaper by this natural dam site that it wondered “if an All Wise Providence did not have an electric power plant in mind when fashioning this part of the face of the earth.”

A good many of Clark’s images rest on this understanding of the possibility of a fusion between nature and the machine. Telling are the photographs where irrigation and hydroelectric works are part of, or subordinated to, a larger wilderness scene. Take another look at Image 3. Though the concrete engineering works dominate the foreground of the image, the base of MacIntyre Bluff looms over them, and the table-top surface of the water fills the scene. In contrast to Image 4, which is all about engineering prowess, Image 3 is framed to emphasize nature at least as much as the works of humanity. In Clark’s second “Wonderful Waters” lecture, Image 2 was followed immediately by Image 3’s depiction of the dam, and Image 3 was followed in turn by a photograph of the main canal dwarfed by MacIntyre Bluff. In several following slides, Clark took pains to emphasize the integration of the concrete-lined canal into the existing landscape. “Several miles south of Oliver the main canal skirts rocky bluffs,” he explained. “At this point one side of the canal is vertical, the other conforms to the rocky slope.” For the next photograph – of a flume winding its way amongst scrub bushes on a hill overlooking the valley – Clark directed his viewers to “note how it conforms as much as possible to the topography.” Clark said of a third image only that it showed one of the small, secondary canals that come off the main irrigation canal. Yet in the image the canal is dwarfed by the large hill on the left of the frame.

31 Columbian, 13 August 1910, BCER CF, UBC Special Collections, quoted in Evenden, “Fish vs. Power,” 113. White argues that, after the Second World War, the linkage between development and reform broke down, leaving only growth as the ideal. See White, Organic, chap. 3. Arn Keeling and Robert McDonald note the nearly universal embrace of growth for growth’s sake in postwar British Columbia, while exploring the possibility that other visions remained possible: “The Profligate Province: Roderick Haig-Brown and the Modernizing of British Columbia,” Journal of Canadian Studies 36 (2001): 7–23.
32 Clark, “Wonderful Waters No. 2.”
and the surrounding countryside, suggesting that Clark wanted to show the canal to be part of the larger landscape.

More dramatic is the way that hydroelectric power could be seen as an integral part of the natural landscape. In developing his treatment of the Alouette plant on the Stave River, Clark first presented a topographic map and a schematic drawing explaining the workings of the system. He offered a "close-up view" of the powerhouse, pointing out various structures, including the "top of surge tank which is bored up through solid rock" (Image 8). The powerhouse and other structures sit at the base of a hill that has been mostly stripped of trees. Nevertheless, this celebration of engineering features an expanse of rippled water in the foreground, in front of the glowing white structures on the edge of the water. "Note reflections [of the powerhouse and other structures] in lake," Clark directed his viewers, pointing out the care he had taken to emphasize the beauties of the scene. And, indeed, the reflections are dramatic, the distorted white reflections stretching out towards the viewer.\(^{33}\) The human-made structures here blend with the natural lake, creating the central beauty of the photograph and suggesting the coming together of the human and the natural. Similarly, in Image 10, which Clark identified as simply being a photograph of the powerhouse and related structures taken for the Coquitlam-Buntzen hydroelectric project, the long, low lines of the powerhouse parallel the long, low lines of the hill behind, while all of the structures are dwarfed by the dramatic, tree-covered mountain slope in the background.

Clark's agricultural scenes brought together wild and anthropogenic landscapes as well. Backcountry farms featured soaring mountain peaks in the background, and no photograph of an Okanagan orchard was complete without a background of Okanagan Lake and the low mountains of the Okanagan Valley. In Image 5 we see an image of a home in nature. A substantial house sits protected by trees, while a developed orchard runs down towards the lake. The lines of the orchard trees and of the evergreens emphasize the lines of perspective, drawing the viewer’s eye to the lake and the hills that stretch across the back of the scene, anchoring the home in nature.

Finally, the arrangement of the lectures also suggested the idea of the fusion of nature and humanity. Clark not only placed a few wilderness images before many images of dam and canal construction (suggesting, perhaps, that nature is best used as fodder for human purposes) but also placed wilderness images after them (suggesting that nature could survive human work and even be enhanced by it).

\(^{33}\) Clark, "Wonderful Waters No. 1."
Clark’s lantern slide lectures constituted a powerful and, likely, persuasive vision of a British Columbia in which development was natural and was proceeding more or less in partnership with the existing environment. They suggested that irrigation and hydroelectric development were natural and positive. If we now picture such development more in terms of Image 4 – an ugly and potentially dangerous imposition of technology on the environment – the essence of Clark’s illustrated lectures, I contend, is better expressed by Images 3, 5, 7, 8, and 10, in which the works of humans function within the existing landscapes.

CONCLUSION: PHOTOGRAPHS AND HISTORY

Clark’s lantern slide lectures were not the only source of support for the development of irrigation and hydroelectric works in British Columbia. Other media – daily newspapers, promotional magazines (such as Vancouver’s Fruit Magazine), and government-issued pamphlets – contributed as well. However, Clark had advantages. Making arguments with photographs, with their unique claims to being transparent, objective representations of visual truth and their susceptibility to interpretation, was especially powerful. As we have seen, Clark could employ a variety of techniques to shape the meaning of his illustrated lectures. How the photographic images were framed conveyed meaning, as did the way in which they were ordered, whether they were presented along with maps and plans, and, especially, how they were inscribed within Clark’s textual commentary. Clark could appear to be presenting the unadorned, photographic truth while actually presenting an interpretation of visual reality.

In this article I suggest the different ways that viewers might have “seen” Clark’s images. Viewers were unlikely to have been as precise as I have been in categorizing these perspectives, and the different visions of British Columbia presented here were probably not mutually exclusive. What is clear, nonetheless, is that these magic lantern lectures offered contemporaries particular ways of seeing, and therefore of understanding, the development of the province. Seeing, in other words, was believing. By using these photographs to construct a way of seeing British Columbia, audiences came to understand what the building of hydroelectric dams or irrigation systems meant for them and for their province.

Photographs give us an opportunity to get a sense of how people in the past saw their world. They do this not because they offer us an unmediated glimpse of reality but, rather, because they were an important part of the cultural construction of visual meaning. As such, these photographs give us insight into what J.W. Clark (and those whom he influenced during the interwar period) saw in British Columbia.