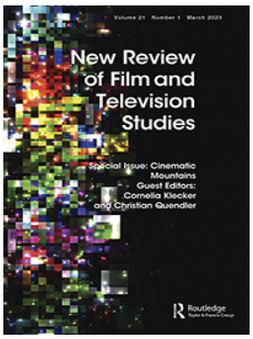

Routledge
Taylor & Francis Group

New Review of Film and Television Studies

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rfts20

Highroads and skyroads: mountain roadbuilding in U.S. government films of the 1920s and '30s

Jennifer Lynn Peterson

To cite this article: Jennifer Lynn Peterson (2023) Highroads and skyroads: mountain roadbuilding in U.S. government films of the 1920s and '30s, New Review of Film and Television Studies, 21:1, 19-37, DOI: 10.1080/17400309.2022.2102401

To link to this article: https://doi.org/10.1080/17400309.2022.2102401

Published online: 22 Feb 2023.

NEW REVIEW OF FILM AND TELEVISION STUDIES
2023, VOL. 21, NO. 1, 19–37
https://doi.org/10.1080/17400309.2022.2102401

Routledge
Taylor & Francis Group

Highroads and skyroads: mountain roadbuilding in U.S. government films of the 1920s and '30s

Jennifer Lynn Peterson

Department of Media Studies, Woodbury University, Los Angeles, CA, USA

ABSTRACT

In the 1920s and '30s, the U.S. federal government produced many educational films about national parks and national forests. These films were widely shown in nontheatrical venues such as schools, as well as in commercial movie theaters as shorts before the main feature film. Neglected for decades, these films are of interest now, in the age of global warming, for the way they represent ideas about nature and conservation from a century ago. Significantly, as much as these films depict natural scenery, they also focus on cars, roads, and roadbuilding. This essay focuses on three government films depicting mountains in the interwar years, the first era of roadbuilding in the national parks and forests. These films reveal the state's role in promoting fossil capitalism and settler colonialism, constructing what was then a new and contradictory idea of 'wilderness' in modernity.

ARTICLE HISTORY Received 01 July 2022; Accepted 11 July 2022

KEYWORDS Government films; national parks; national forests; infrastructure; petrocinema; wilderness

Thinking about mountains in cinema involves thinking through questions of center and periphery, nature and technology. I open this essay about U.S. government films with an example from a well-known Hollywood film in order to make a point about the spatialization of mountains in the context of modernity. F. W. Murnau's *Sunrise* (1927) moves between the mountains and the city, charting an influential cinematic itinerary for European-American ideas about center and periphery. Although the film's lakeside village is not assigned a specific topography – an early intertitle explains that the story takes place 'no place and every place' – the film's rural segments were shot on location at Lake Arrowhead in Southern California. While *Sunrise* is not typically discussed as a mountain film, the mountainous nature of its 5,100-foot altitude setting can be glimpsed in numerous shots, including the famous trolley scene.[1] In this scene, the two main characters – 'the Man' and 'the Wife' from the country (they are not given names) – travel to the city in a trolley car.

CONTACT Jennifer Lynn Peterson jennifer.peterson@woodbury.edu

The couple is married with a young baby, but the Man has been having an affair with a 'Woman from the City' who has been visiting their mountain village on vacation. Torn between his wholesome wife and the lascivious city woman, in the scene just before this, the Man has attempted to kill his wife by staging a boating accident. However, he could not go through with the murder, and his wife has discovered his intentions. In the trolley scene, the Wife runs away from her husband, reeling with horror as she grapples with the realization that he was trying to kill her. She flees into the nearby forest where, miraculously, she finds a trolley car approaching through the trees. She hops on board. Just as the trolley pulls away, the Man manages to jump on board too, and as he tries to apologize to his distraught wife, the setting outside the window (shown using traveling matte effects) transitions from the country to the city.

Their trip is remarkably short: In under two minutes of screen time, they reach the city center. But it's the journey that is of interest here, not the destination. Conventional ideas about wilderness isolate the country and the city from each other, but *Sunrise* connects these two spaces through the narrative device of a modern vehicle. Inside the trolley car, the woman sobs and cowers, refusing to look at her husband. Through the window we glimpse the mountain lake, which transitions to an urban landscape in just four shots. This preposterous geography makes affective sense in the scene, where the intensity of emotion renders space and time of secondary importance. The emotional distance the couple must travel to find reconciliation is no less preposterous, and the scene's blending of realism and artifice is one of many moments in which the film signals the constructedness of its love story. The trolley scene contributes to a tension between the film's location shooting and its special effects (with superb camerawork by Carl Struss) that enhances the trolley's uncanny ability to travel from the country to the city so quickly. In effect, the realism of the mountain scenery validates the drama as believable, whereas the special effects produce a world so magical that the couple's seemingly impossible reconciliation can be achieved in the relatively short duration of a feature film.

Such an evocative sequence transitioning between the country and the city could only have been dreamed up by a team of filmmakers with a European sense of geography. While the mountain scenes were shot on location, the city scenes were shot on a set (designed by Rochus Gliese) built on the Fox studio backlot. Murnau's employer, the Fox Film Corporation, had recently purchased the ranch of silent Western star Tom Mix, and was at this time constructing its new studio facility, then known as Movietone City. But the idea of taking a trolley car from the mountains to the city makes little sense in the American west, where mountain and urban settings are typically located quite far apart. (Lake Arrowhead and the Fox lot are located 100 miles distant.) Murnau does not name the locations in *Sunrise*, choosing instead to render archetypal urban and rural spaces that could be anywhere, either in Europe, the American west, or somewhere else entirely.

Murnau, Struss, and Gliese were of course German expatriates, and *Sunrise* bears some relationship to the German mountain film (or *Bergfilm*) tradition, whose aesthetic and political dynamic has been analyzed by numerous scholars. Revising an influential argument made by Siegfried Kracauer, for example, Eric Rentschler (1990, 131–161) argues that the *Bergfilm* signifies not only an antimodern flight into nature but also a highly modern, technological rendering of nature's transcendental force. In contrast to the pristine mountains visualized in the *Bergfilme* of Arnold Fanck, *Sunrise* embodies a more complex view of mountains in which neither the country nor the city is free from modern problems or modern potentiality.[2] What seems particularly European about *Sunrise*'s sense of space is the trolley car itself, and the short distance covered by its tracks. Rather than using a railroad train (associated with travel over long distances), the filmmakers chose to use a vehicle associated with intracity urban mass transit.[3] It's as though the mountains themselves have been modernized in *Sunrise*: They have been turned into city suburbs, accessible by a hard-built infrastructure.

The opposition between tourists (or outsiders) and locals that we see in *Sunrise* structures many classical Hollywood films set in the mountains, from *Mantrap* (Victor Fleming, 1926) to *High Sierra* (Raoul Walsh, 1941) to *Seven Brides for Seven Brothers* (Stanley Donen, 1954), and more. If we can unpack this country-city opposition in a fiction film such as *Sunrise*, we can see these oppositions with a different kind of precision in nonfiction films made by the United States federal government around the same time. While a trolley car in the forest seems incredible even in a fiction film, in fact this was the first era of significant mountain roadbuilding (though not mountain trolly construction) in the U.S., and a series of government films made in the 1920s and '30s documented this process. In what follows, I analyze three government films set in the mountains and made within a decade of *Sunrise*: *Highroads and Skyroads* (1922), *Roads in Our National Parks* (1927), and *The Land of Lofty Mountains* (1936). These nonfiction films have a great deal to tell us about how mountains and nature were envisioned in this period, and I focus on three aspects of this visualization here. First, I show how these government mountain films functioned as a form of infrastructural cinema to document the laying-in of a vast automobile network whose reach extended to the 'wilderness' of the national forests and national parks. Second, I show how films about roadbuilding on federal lands, like the national parks themselves, worked to naturalize the fossil-fuel-dependent notion of the scenic drive. As such, these films are examples of 'petrocinema': films that 'worked toward the goal of naturalizing the consumption of oil as energy and product' (Dahlquist and Vonderau 2021, 3). Third, I analyze the ways in which, like Hollywood films, these government films spatialize 'wilderness' in a dialectical relationship with the city. True to the colonialist foundations of U.S. land policy, these films erase Indigenous people and instead depict tourists and promote auto tourism.

Made for the explicit purpose of promoting U.S. national parks and forests, these films also implicitly promoted fossil capitalism and settler colonialism. As examples of infrastructural cinema, these government films represent nature primarily in terms of resource extraction. These films ask their viewers to marvel both at nature's grandeur and the infrastructure being constructed to manage it; through this process, we are invited not only to witness but to celebrate the installation of extractive capitalism in the so-called wilderness.

I. Infrastructural cinema

The government films I discuss in this essay depict an era of intensive road-building that took place in U.S. national parks and national forests in the interwar years. Like most films produced by the federal government in this period, these are short, nonfiction films made to educate the public on a range of current issues. These films (and many more like them) are held today by the U.S. National Archives and Records Administration (NARA) in College Park, Maryland, where I have been conducting archival research on government films and their related paper materials. Elsewhere, I provide more detail on the organizational structure of national park film production, distribution, and exhibition in the pre-World War II period, and narrate a history of specific government administrators, sponsors, and filmmakers (Peterson, In progress). In this article, I introduce this large and previously unstudied group of government films and broadly situate them in an environmental history context.

Government films such as these can be understood as examples of infrastructural cinema, films that foreground the construction and functioning of physical systems. I am using 'infrastructural cinema' as a descriptive term to signal that these government films lay bare the *fact* of infrastructure (whose existence is usually masked) at the same time that they present infrastructure as *necessary* – for 'progress' and indeed for modernity itself – when in fact, these roads were only necessary for modernity in the particular form that it took: a society of extractive capitalism (Marcum 2020). I do not claim that infrastructural cinema is a genre; it is not equivalent to the industrial film, nor do these films fit the form described by Salomé Aguilera Skvirsky as the 'process genre' (Skvrisky 2020). The mountain roads being constructed in these films, many of which are still used today, became systems of circulation for goods (logging) and people (workers and tourists), and therefore were necessary to extend the functions of capitalism to the mountains where roads had never existed before. It might seem contradictory that films about national forests and national parks would foreground roadbuilding, but I argue that infrastructural display is a central motif of films about nature. The implication is that human-built infrastructure is as strong and timeless as the mountains themselves. Such an implication is incorrect, but such was the belief of many in the high modernist era.

The first federal government film-producing laboratory was established by the U.S. Department of Agriculture (USDA) in 1912, and its filmmaking unit was officially launched in 1913 (Evans 1943, 20; Winn 2012, 1–12). The USDA's filmmaking studio and lab in Washington, D.C. produced hundreds of educational films, which were distributed by the USDA extension service to nontheatrical venues such as schools, lecture halls, and libraries, and were shown in commercial movie theaters as well. The USDA began issuing its annual *Catalogue of Educational Motion Pictures* in 1920, which lists film titles on topics ranging from animal husbandry to Forest Service maintenance. The National Park Service (NPS) did not establish its own in-house film production unit until 1935. Before the reorganization and increased budget that came during the Franklin D. Roosevelt administration, the NPS lacked resources for filmmaking, and could only cooperate with other film-producing government units by providing access and guidance to the parks. What this means is that while many government films were made in the national parks before 1935, the NPS did not have complete control over how the parks were depicted. Rather, a cinematic vision of the national parks and national forests was produced across several different government units, often in collaboration with outside corporate interests.

Although educational films constituted a large percentage of films produced and exhibited in the twentieth century, the discipline of cinema studies ignored such films for decades. Instead, film scholars worked to earn legitimacy for the new field largely by focusing on canonical feature films, prioritizing auteurist approaches and narrative analysis that aligned with existing academic disciplines such as literature and art history. However, in recent years, a group of films that fall under the banner 'nontheatrical' has become the subject of significant attention from film scholars (Hediger and Vonderau 2009; Orgeron, Orgeron, and Strebile 2012; Acland and Wasson 2011). 'Nontheatrical' is a film industry term that was used to designate films shown outside the commercial movie theaters. Nontheatrical genres include educational films, industrial films, travelogues, corporate films, science films, and the like. Analysis of nontheatrical films focuses not only on the films' sociological and cultural significance, it is also attuned to the films' formal and stylistic qualities. One of my claims here is that government films produced their ideological effects through a set of specific aesthetic strategies. These films articulate what I call a 'state ideology of nature', one in which federally-held lands were visualized as resources for scenic and recreational resource extraction. In visualizing roadbuilding in the mountains, these films did significant ideological work to naturalize the logic of fossil capitalism in the name of the state, even in the far reaches of the so-called wilderness.

What do educational films about mountains tell us that fiction films about mountains do not? With their bald-faced promotional mandate, government films depicting mountains in federally-held lands – national parks and

national forests – reveal the ideological construction of the concept 'nature' without filtering it through the distortions of narrative. This is not to say that government educational films are transparent (or lacking in their own distortions), but that their formal and structural techniques focus on different priorities than narrative, such as publicity and the conveying of information. As much as these films present nature and scenic views, they also depict road-building, trail-building, facilities construction, and resource management. While this focus on roads certainly makes sense in the case of government films made by the Bureau of Public Roads, my research shows that roads are a point of focus in films made by all branches of the federal government in this period. This emphasis on infrastructure appears so frequently across different government films that it feels like an obsession: The films work not just to promote federal landholding, but to justify the entire project of the national parks and forests in the name of the public good. Seen from today's perspective, we can read this as symptomatic of a specific moment in the historical expansion and consolidation of the state's landholding and land management practices, as well as a specific moment in the history of fossil capitalism.

Although they work to conceal tensions, upon analysis these films reveal a set of unquestioned beliefs at the heart of federal land management practices at this time. One of the first ideas these films develop is the principle that wilderness lands should be managed through the development of infrastructure, specifically through the building of roads. For example, *Highroads and Skyroads*, a USDA film from 1922, depicts road construction on national forest lands, specifically in the Cascade Range of the Pacific Northwest and the Sierra Nevada Range in California. The two films I discuss below are about national park lands, but because *Highroads and Skyroads* is about national forest lands, it is worth briefly outlining the divergent land management practices embodied by these two agencies.

Then as now, the U.S. Forest Service followed different land management practices than the National Park Service. Housed in the Department of Agriculture, the U.S. Forest Service protects and manages vast national forest lands. Established in 1905, the Forest Service was first headed by Gifford Pinchot, who was additionally the co-founder of the Yale School of Forestry with Henry S. Graves, who served as the agency's second director. Guided by then-current principles of scientific forestry, the Forest Service was not concerned with preserving wilderness for its scenic qualities (as was the NPS), but rather focused on managing multiple forest uses such as logging, grazing, and dam construction. A practitioner of efficient management practices, from 1905–07 Pinchot lobbied to transfer jurisdiction of the national parks out of the Department of the Interior and over to the Department of Agriculture in order to manage the parks alongside the national forests, but this never happened, and the two related agencies are

housed in separate departments to this day (Carr 1998, 4; Steen 2004). In the 1920s, both agencies engaged in road construction in an attempt to capitalize on the rise of auto tourism and thus prove the need for more funding from Congress. As environmental historian James Morton Turner puts it, '[o]ften, the two agencies competed with each other to promote their lands' (Turner 2012, 24). Despite their competing principles of land use, both agencies believed the automobile had an important role to play in the development of wilderness lands, as these films demonstrate.

The film's head title states that *Highroads and Skyroads* is '[c]ontributed by Bureau of Public Roads', the government unit that built these roads for the Forest Service, and directed by Fred W. Perkins with cinematography by George R. Goergens. This 10-minute (single reel) film was released silent, like all the government films I discuss in this essay; in most cases, it would have been exhibited with a live lecture, and on occasion it may have been shown with live music. The film does the ideological work of advocating for the government's roadbuilding activities, opening with a segment presenting old and new modes of travel. 'The old frontier has gone – never to return', it begins, presenting a montage of old and new vehicles, from covered wagons and prospector's pack trains to 'high-powered motor cars'. This montage of old and new modes of travel skips over railroads entirely in its rush to validate automobiles and the roads they require.

Highroads and Skyroads argues that wilderness should be made accessible to the public. An intertitle announces the second segment of the film, explaining: 'In America's great National Forests of 156,000,000 acres, good roads are on the way'. A panoramic extreme long shot of mountain forest follows next, followed by a series of three intertitles providing justification for mountain roadbuilding: 'These roads mean a better chance for the isolated rancher . . . ' ' . . . development for the remote town . . . ' ' . . . and easier defense against the forests' dread enemy, fire'. The 'isolated rancher' and the 'remote town' are each visualized in a single shot, with no context or history, nor any indication of where this is. The assumption is that development is a good thing, and that nature must be controlled at all costs. There are several shots of overall-clad firefighters hacking away at trees and brush. Nature must be domesticated, this film argues, and the government is doing that job. Next follows a sequence celebrating the work of the Bureau of Public Roads and casting engineers as heroic figures. An intertitle tells us, '[t]he forest roads, constructed by the Bureau of Public Roads, and paid for by the Federal government alone, or by nation, state and county, involve the most difficult highway work in this country'. Shots of men cutting down trees and machines clearing away earth are followed by engineers on rocks taking measurements. The film is concerned to show men engaged in hard work; by emphasizing the labor involved in constructing remote roads, the film reveals 'pristine wilderness' to be a construction; at the same time it implicitly produces the wilderness as a masculine space.

The visual disjunction of automobiles in remote mountain landscapes is one of the more striking aspects of this film; in fact, this disjunction is a key aspect of the film's modernity (Figure 1). These roads and automobiles are celebrated as triumphs of modern progress in the film, but seen in retrospect from the present perspective, this triumphant ideology rings hollow. These films express the ideology of the federal government with clarity, summing everything up with the intertitle: 'But always, THE ROAD GOES THROUGH'. The film verifies this claim in a series of panoramic extreme long shots that conclude the film, showing a network of roads crisscrossing the mountains, and ending with a classic sunset over the mountains shot.

Figure 1. Frame enlargement from *Highroads and Skyroads* (USDA, 1922).

II. Naturalizing the scenic drive

National parks have always been bound up with forms of art and media. When the concept of setting aside areas of land for recreation and public use began to gain traction in the mid-nineteenth century, it was the landscape paintings of Albert Bierstadt and Thomas Moran that helped secure public support for the first two national parks, Yosemite and Yellowstone. These paintings were reproduced and circulated widely in the visual culture of the late nineteenth century, along with photographic images by Carleton Watkins and Eadweard Muybridge. These influential images initiated the

tendency to visualize federal wilderness lands – and indeed nature itself – in terms of landscape, a tendency that was significantly expanded and consolidated by motion pictures in the silent era. Films have been made in national parks since the 1890s. The first films were made by outside commercial and corporate interests such as the Edison Manufacturing Company and the American Mutoscope & Biograph Company in the 1890s. Two decades later, Burton Holmes produced a national park film series for Paramount from 1915 to 1921, and the Ford Motor Company made many national park films in the 1920s (Grieveson 2012, 25–51).

What is less well-known is that beginning in the mid-1910s, the federal government began making films as a way to justify and promote its activities and to educate viewers. While federally-produced national park films are not monolithic, in general they worked to depict nature as a space in need of taming and controlling, either through conservation (the so-called 'proper use' of nature) or preservation (the protection of nature *from* use within prescribed boundaries). The debate between these two approaches – conservation vs. preservation – has defined the national parks for the last 150 years. What interests me is how film was used to consolidate a specific concept of the national park as a commodified nature space, one in which the so-called wilderness is evacuated of Indigenous presence and repopulated with modern tourists. Through this process, stunning natural landscapes become commodities of scenic wonders. Produced in the interwar years long before the popular concept of nature shifted into an environmentalist rhetoric of endangerment, the earliest federally-produced national park films showed that wilderness should and could be tamed. These films presented famous national park landscapes like stage sets, with footage shot from roads that guide the viewer through the scenery. The paradox here is that it is through modern technologies – the automobile and the cinema – that these visions of primeval nature were produced.

These films display what were then state-of-the-art ideas about land use and conservation, and they construct an idea of wilderness as land in need of managed development. Following Richard Grusin's (2004) argument that national parks can be seen as 'technologies for the reproduction of nature', I argue that national park films, like the national parks themselves, refigured undeveloped land as nature spaces. Here again the distinction between Forest Service and National Park Service policies is instructive. The Forest Service did not initially support the preservation of forests for their scenic value alone; Pinchot said that a special park bureau was 'no more needed than two tails to a cat' (Hays 1960, 196–197; Steen 2004, 114). But the mission of the Forest Service was to manage extractive industries, while national park advocates were opposed to logging, grazing, and dam construction. In arguing for the creation of a separate National Park Service as an agency of the federal government, '[p]ark advocates needed to justify other uses for these places. Tourism, they argued, would create economic activity, prevent Americans

from spending their money abroad, and inspire patriotic sentiments among an increasingly diverse population'. As this justification makes clear, tourism is another form of resource extraction. In tourism, the main commodity is scenery, along with a host of other hard-to-quantify qualities such as recreation, relaxation, quiet, health, and a connection to nature. Tourism was described as a 'dignified exploitation' for national parks, and it had the benefit of generating profits for a host of ancillary businesses such as railroads, hotels, and concessioners (Carr 1998, 4).

The idea of national parks – and the more generic concept of a nature space set aside for conservation – was invented in the city, created by urban elites and deeply shaped by the nineteenth-century parks movement. Landscape architect Frederick Law Olmsted, the designer of many landmark city parks in the nineteenth century, played an influential role in the formation of Yosemite National Park. National park historian Ethan Carr describes how Olmsted's original concept for the Yosemite Valley grew out of the aesthetic principles he used for his design of New York's Central Park. Carr writes that 'scenic preservation on the state or national scale was not entirely independent from the precedent and influence of the landscape park as it was being advocated within the contemporary municipal park movement' (Carr 1998, 26). Olmsted and his senior design partner Calvert Vaux drew upon picturesque landscape principles for their designs of Central Park and Prospect Park in Brooklyn, in which nature was to be altered as little as possible, constructed as a series of scenic views best seen from the moving perspective of a walk or a drive through the park. The idea of accessing nature through a moving perspective of walking or riding (on a horse or eventually by automobile) was central to the picturesque notions of landscape that informed the national parks; likewise, this aesthetic principle of movement was readily adapted to motion pictures when they emerged.

Like the parks themselves, these films participate in a form of scenic resource extraction: With the establishment of the national parks, scenery became an alternative form of commercial value. 'Just as Central Park was set aside as a scenic reservation in the otherwise relentless grid of streets and avenues on the urban frontier of northern Manhattan', Carr writes, 'Yellowstone was reserved out of another comprehensive, rectangular grid – on a much vaster scale – the federal land ordinance' (Carr 1998, 33). Commercial interests defined land use by the late nineteenth century, but through the invention of scenic resource extraction, certain lands – not only national parks but also state parks – were saved from traditional development. These lands were still defined as property, marked off by clear boundaries and subject to commercial exploitation, but this exploitation was dramatically less invasive than the dams and clearcutting that took place in many of the national forests. Scenic resource extraction is well-suited for exploitation by motion pictures, but it also became tied to transportation technologies.

Transportation plays a central role in the history of the National Park Service. The earliest parks were established at the peak of the railroad era, and the first national park, Yellowstone, was accessed by a spur line built in 1883 by the Northern Pacific Railroad to the park's north entrance. When the National Park System was established in 1916, car culture was still in its infancy, but by the 1920s, national parks came to be defined by their relationship to the automobile. Indeed, automobile tourism and the National Park Service grew in tandem with each other, and the history of the National Park Service is inseparable from the history of the automobile. National Park Service historian Timothy Davis writes that 'roads and parks have been integrally related for centuries and the enjoyment of scenery in motion was historically considered one of the highest forms of landscape appreciation' (Davis 2016, 2). Films provided another way of extending this idea of scenery in motion. Stephen P. Mather, the first director of the NPS, was an auto enthusiast who believed that automobiles were important not only for expanding access to the parks but for building public and political support for the park system. Already in 1916, he exclaimed, '[n]o policy of national-park management has yielded more thoroughly gratifying results than that which guided the admission of motor-driven vehicles' (Mather 1916). Indeed, by 1921, 65% of visitors to national parks arrived in automobiles, and park visitation reached one million visitors (at all parks), up from 235,193 visitors in 1914 (Davis 2016, 76). Congress allotted $7.5 million for road construction in the national parks in 1924, and another $51 million in 1927 (Catton 2013, 57). Mather was not alone in his appreciation for automobiles in the national parks. In still photography and postcards set in the parks, automobiles were a popular trope in the 1910s and '20s, evoking a contrast between technological modernity and primeval nature. As we have seen, the same is true in motion pictures.

These details constitute an important part of the history of the national parks and national forests, as recounted with a fidelity to the past. But today, as we face an accelerating crisis centered on global warming and its catastrophic effects, these films also resonate with the present. In their hybrid depiction of natural wilderness and transportation technologies, I argue that these government films are significant for constructing a history of global warming. As Andreas Malm writes, 'in times of global warming, iron laws of economics and geophysics boost the past from behind, so to speak'. Malm argues that what he terms 'fossil capitalism' deserves a special focus from historians, not only for understanding what happened in the past but for learning how we might switch tracks in the present. He writes, '[n]atural scientists have so far interpreted global warming as a phenomenon in nature; the point, however, is to trace its human origins. Only thus can we retain at least a hypothetical possibility of changing course' (Malm 2016, 9, 19).

Emphasizing a contemporary perspective alongside our historical interest, these films of roadbuilding on federal lands take on new resonance. *Roads in Our National Parks* (1927) shows road construction and repairs carried on by the Bureau of Public Roads in six national parks in the Western U.S.: Glacier National Park (MO), Mt. Rainier National Park (WA), Rocky Mountain National Park (CO), Yosemite National Park (CA), Grand Canyon (AZ), and Crater Lake (OR). Like *Highroads*, this film was photographed by George R. Goergens. Also like *Highroads*, this is a USDA film, but it contains an intertitle stating, '[p]roduced in cooperation with the U.S. Department of the Interior'. This film was made several years before the National Park Service (housed in the Department of the Interior) was given a budget to establish its own in-house motion picture production unit. *Roads in Our National Parks* is a fascinating example of a government-sponsored film in which the state portrays itself as a co-participant in the logic of fossil capitalism. The film shows spectacular views of nature and the roads that were then being built so that citizens could have access to them. The film alternates between shots of roads and roadbuilding and classic landscape shots of the most famous views in these parks, as though to say, here are the views, and here's how you'll get there. The paradox is that modern technologies – the automobile and the cinema – are what produce these visions of supposedly untouched wilderness. The engineers from the Bureau of Roads are depicted as heroic figures, like explorers or stunt men.

The film opens with a panoramic shot of Yosemite's Half Dome, which is common enough, but the camera tilts down to show a man standing on a rocky outlook who does not behave like a tourist, which is uncommon in such films. An intertitle follows, telling us that '[t]he man on the rock is a Government highway engineer'. Moving to a medium shot, we see this fedora-clad man adjusting a measuring device (Figure 2). The next intertitle explains that he is doing '[r]econnaissance work for a new road in Yosemite National Park'. Soon after, we see a man rappelling down a rock face. We are told in an intertitle, '—these boys, also, are field men of the Bureau of Public Roads'. Another title explains, '[t]hey are locating an extremely difficult piece of road construction'. Indeed, the next two shots, taken from above and along the side of the same rock face, show the steepness and height of the mountain they are measuring. Like the previous film, *Roads in Our National Parks* depicts roadbuilding as a masculine endeavor.

This film features an animated map that points out the location of each of the six Western-state national parks it depicts. Each park is shown in just a few shots, and some are shown in only a single shot. The effect is a highly fragmented view of the national parks as a system, emphasizing the vast reach and sweep of federal land management practices. Halfway through the film, a title explains, '[t]his road work is being done for the National Park Service, Department of the Interior, by the Bureau of Public

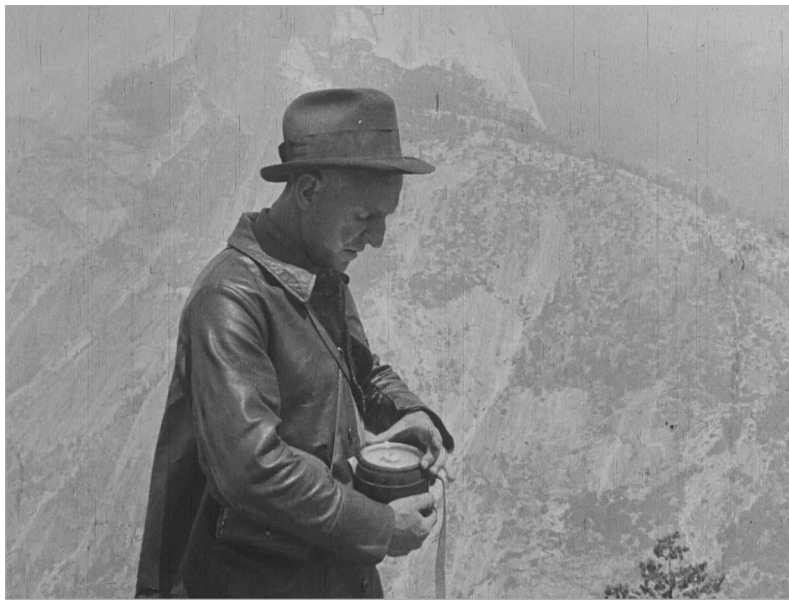

Figure 2. Government highway engineer in Yosemite National Park. Frame enlargement from *Roads in Our National Parks* (USDA, 1927).

Roads, Department of Agriculture'. It is indeed fascinating to see surveyors measuring roads that remain to this day, but it is unsettling to watch as old-growth trees are cut down and bulldozers scoop rocks, tossing them haphazardly down the side of the hill. 'The new roads involve some of the most difficult work in highway history', we are told, as the government's efforts are framed in the most valiant terms possible. Next comes a justification sequence much like what we saw in *Highroads*. 'They will replace old roads', an intertitle tells us, followed by a shot of a Model T bouncing along an unpaved mountain road. 'The new roads will open beautiful country accessible now only on foot or by pack train', the next intertitle announces, followed by shots of beautiful mountain scenery and tourists on horseback riding on trails that look just fine without automobiles. Next follows a montage of spectacular mountain scenery in several national parks – Glacier, Rocky Mountain, Mount Rainier, Grand Canyon, and Yosemite – preceded by an intertitle explaining that the new roads will make all these 'scenic wonderlands' easily accessible. The irony that cinema is what actually makes these views easily accessible goes unmentioned.

In showing the laying-in of a massive infrastructure, these federal films show the transformation of land into property. It was the state that protected these lands from development, as these films like to emphasize

with intertitles praising the concept of federal lands for the public good. And it was the state that authorized funds to install the massive infrastructure of roads that made these lands accessible, plugging them into the grid of free-flowing capital. In deciding to support the automobile industry by subsidizing road construction, the state colluded with corporate interests (the Ford Motor Company, for example), then used the ideological power of cinema to sell the decision as a measure of progress and modernity. This decision did not have to be made. While it is beyond the scope of this essay to speculate what alternative forms of knowledge might have been employed to determine federal land use policy in the 1920s, we face another crucial moment for federal decisions about land and environmental policy in the current moment. We can only hope that past examples of state land use policy can serve as lessons for the present crisis.

III. The 'wilderness' in modernity

The wilderness and the city exist in a dialectical relationship, a spatialized interaction between center and periphery. This dialectic is complex and can be teased out in several directions. The notion that mountains and mountain cultures exist apart from the rest of society can be illuminated by Michael Hechter's (1975) notion of 'internal colonialism', in which 'primitive' or 'traditional' geographical regions are marked off as separate from the rest of the culture, a 'society within a society' controlled by the 'dominant classes and institutions of the metropolis'. This term 'internal colonialism' has been largely superseded by the term 'settler colonialism' in American academic scholarship, but I believe it has continued resonance for mountain studies. As Lorenzo Veracini writes, '"internal colonialism" emerged in the 1970s, focusing on the resilience of colonial relationships within a specific polity – a predicament that could not be approached by envisaging the ultimate sovereign independence of the colonized. It was eventually applied to a remarkable variety of polities and realities, including Apartheid South Africa, Appalachia, the position of African Americans and the Celtic "fringe"' (2016, 2). The dynamic of internal colonialism maintains a hierarchy in which the urban 'center' of power dominates the rural 'periphery'; indeed, this hierarchy is emphasized.

But in the U.S. context, the framework of internal colonialism is complicated by the settler colonial project that defines the history of the nation. In settler colonialism, an external settler society invades the land of an Indigenous population with the intention of staying. Unlike, say, the British colonial occupation of India (which eventually came to a close), under settler colonialism settler culture replaces the Native population and

culture with its own population and culture, and continues into the present; thus settler colonialism is 'a structure, not an event', in Wolfe's (2006, 388) well-known formulation. Thus, as Veracini puts it: 'Unlike the other colonial formations, settler colonialism supersedes rather than *reproduces* the colonial rule of difference; settlers win by *discontinuing* unequal relationships rather than maintaining them'. (Veracini 2016, 3). All of the Hollywood films I mentioned above erase any hint of Indigenous presence in their mountainous settings. Likewise, the three nonfiction films I discuss in this essay also erase all traces of Native American history and life from the Western mountain regions they document. This erasure is thorough and systematic, part of the ongoing settler colonial process of dispossession in the government's acquisition of 'public lands' (Spence 1999).

Concepts such as 'nature' and 'wilderness' figure significantly in this dialectic, for as Taylor (2016) has demonstrated, the concept of preserving wilderness spaces such as mountains began in the city among urban elites. Of course, wilderness and mountains are not equivalent: Mountains are actually existing landforms, whereas wilderness is an idea; mountains have specific regional histories and meanings, while wilderness is a broad cultural category. But mountains as a spatial category have been defined largely through discourses of wilderness. Film is a useful medium through which to analyze this tension between mountains as landforms and wilderness as ideology, for film presents realistic representation (photographic images of actually existing places) through the ideological apparatus of cinema technology. What I want to get at by emphasizing this dialectic between center and periphery is the extent to which our thinking about mountains is shaped by the ideas of those who hold the power in that dialectic: the people from the city. Echoing Taylor, I argue that these films demonstrate the ways in which 'wilderness' is a modern, settler colonial concept constructed by urban elites who reside far away from the wilderness.

If one of the tasks of the environmental humanities today is to think through the relationship between nature and culture – or rather, the relationship between actually existing material categories (such as mountains) and cultural constructs (ideas such as wilderness), then it is instructive to think through the relationship between mountains and wilderness. The United States Wilderness Act of 1964 defines wilderness as 'an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain'. While this definition may describe the experience of a mountaineer, its problems should be apparent to any scholar today: This definition disavows the history of Native American peoples, who inhabited North America for centuries before Europeans arrived; moreover, the masculinism of envisioning humans as 'man' (twice) underscores the patriarchal values alive in this definition. In 1996, William Cronon published his influential essay 'The Trouble with Wilderness', in which he argued that

because there is no such thing as virgin land or nature untouched by humans, what we think of as wilderness does not actually exist (7–28). This critique, too, needs an update: Cronon's argument elided – but is dramatically strengthened by – a consideration of Indigenous history and continued presence in so-called wilderness regions.

In November 1935, the Department of the Interior launched its Division of Motion Pictures, the production unit that made the final film I discuss here (Hearon 1938, 147–162). Tourists are the main focus in *The Land of Lofty Mountains*, a U.S. Department of the Interior film from 1936 depicting Rocky Mountain National Park (Figure 3). The film foregrounds tourist infrastructure (roads, cars, boats, tents, mountain lodges) as much as the scenery of the park. Like many educational films from this period, this film begins with a map illustration; this map depicts the park in relation to its distance from Denver, the nearest city. We are then shown two landscape shots that foreground the roads that have been built in the park; we view Trail Ridge Road in an extreme long shot with cars driving along it, and we are shown a sign that lists its elevation at 12,183 feet.

Next follows a brief sequence of park rangers on skis escorting a group of women in bathing suits across a snowbank to a mountain lake – the visual joke being that at this high elevation the weather conditions are so unusual that it's possible to sunbathe and ski at the same time. (The water

Figure 3. Head title, *The Land of Lofty Mountains* (National Park Service, 1936).

is clearly freezing, however, and the women only dip their feet in and pose for the camera in the snow.) Unlike the virile roadbuilding men of the previous two films, in its promotional function, this film is concerned to define the wilderness as a space that accommodates (white) women. Subsequent shots continue to center the roads within the landscape. Another group of visitors pulls up in a car caravan; we watch as these tourists are shown a mountain lake with a beaver dam. This is followed by a delightful illustration of a beaver dam, followed by shots of beavers, and another illustration explaining how a beaver burrow works. The next sequence shows a man fishing and returning to his tent where his wife cooks the fish, foregrounding a traditional patriarchal division of labor. We see a mountain lodge, sailboats, and several shots of the landscape in different seasons, including a winter snow. *The Land of Lofty Mountains* gives no indication that Native Ute and Arapaho people once lived on this land; instead, the mountains are presented as unpeopled, 'pristine' wilderness. Government films such as *The Land of Lofty Mountains* follow the logic of internal colonialism, showing the land as peopled only by tourists from the city.

By looking at how cinema rendered natural settings during the so-called classical era, we can understand the ways in which mainstream concepts of nature were defined in modernity. This is important, for providing a picture of 'old nature' will help us understand what is happening with 'new nature' in the time of global warming. The process of anthropogenic climate change, deforestation, and habitat loss may seem slow in human terms, taking place across decades and even centuries, but when measured against the geological time scale of the planet, it has happened with extraordinary speed. Although films such as these are ostensibly films about wilderness spaces, federally-produced films about the national parks show how modernity's ideas about nature contributed to this transformation. In showing the laying-in of a massive automobile infrastructure, these federal films show the process of large-scale transformation of ecosystems in action. As we awaken to new forms of ecological thinking and action today, it is time for a new understanding of cinema's contributions to the conceptualization of nature in modernity.

Notes

1. *Sunrise* has, of course, been the subject of a great deal of scholarly writing. An extended analysis of the film's use of landscape can be found in Latsis (2015); see also Keating (2019, 72–74).
2. In contrast to Rentschler, Nicholas Baer argues that the *Bergfilm* foregrounds some of the ways in which history and nature 'were being jointly renegotiated during the interwar period' (2017, 297).

3. The trolley car itself was German and featured German writing on the exterior (not visible in the film), as pictured in Latsis, Figure A247, 387.

Acknowledgments

I would like to thank the audience at 'Mediating Mountains', the 46th International Conference of the Austrian Association for American Studies held at the University of Innsbruck, where I delivered an early version of this piece in November 2019. Thanks in particular to Christian Quendler and Cornelia Klecker.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Jennifer Lynn Peterson is Professor and Chair of the Media Studies program at Woodbury University in Los Angeles. She is the author of Education in the School of Dreams: Travelogues and Early Nonfiction Film (Duke University Press, 2013). Her essays have been published in Representations, JCMS, Feminist Media Histories, Camera Obscura, Moving Image, and numerous edited volumes. She is currently writing a book on American film history and the environment from the 1920s-1950s.

References

Acland, Charles R., and Haidee Wasson, eds. 2011. *Useful Cinema*. Durham, NC: Duke University Press.

Baer, Nicholas. 2017. "Natural History: Rethinking the *Bergfilm*." In *Doch ist das Wirkliche auch vergessen, so ist es darum nicht getilgt': Beiträge zum Werk Siegfried Kracauers*, edited by Jörn Ahrens, Paul Fleming, Susanne Martin, and Ulrike Vedder, 279–305. Wiesbaden: Springer.

Carr, Ethan. 1998. *Wilderness by Design: Landscape Architecture and the National Park Service*. Lincoln, NE: University of Nebraska Press.

Catton, Theodore. 2013. "The Hegemony of the Car Culture in U.S. National Parks." In *Public Nature*, edited by Ethan Carr, Shaun Eyring, and Richard Guy Wilson, 55-70. Charlottesville: University of Virginia Press.

Cronon, William. 1996. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature." *Environmental History* 1 (1): 7–28. doi:10.2307/3985059.

Dahlquist, Marina, and Patrick Vonderau, eds. 2021. *Petrocinema: Sponsored Film and the Oil Industry*. New York: Bloomsbury Academic.

Davis, Timothy. 2016. *National Park Roads: A Legacy in the American Landscape*. Charlottesville: University of Virginia Press.

Evans, Raymond. 1943. "The USDA Motion Picture Service, 1908–1943." *Business Screen* 5: 19–21, 32–33.

Grieveson, Lee. 2012. "The Work of Film in the Age of Fordist Mechanization." *Cinema Journal* 51 (3): 25–51. (Spring 2012) doi:10.1353/cj.2012.0042.

Grusin, Richard. 2004. *Culture, Technology, and the Creation of America's National Parks*. Cambridge, UK: Cambridge University Press.

Hays, Samuel P. 1960. *Conservation and the Gospel of Efficiency: The Progressive Conservation Movement, 1890-1920*. Cambridge, MA: Harvard University Press.
Hearon, Fanning. 1938. "The Motion-Picture Program and Policy of the United States Government." *Journal of Educational Sociology* 12 (3): 147–162. doi:10.2307/2261882.
Hediger, Vinzens, and Patrick Vonderau. 2009. *Films That Work: Industrial Film and the Productivity of Media*. Amsterdam: Amsterdam University Press.
Hetcher, Michael. 1975. *Internal Colonialism: The Celtic Fringe in British National Development*. Berkeley: University of California Press.
Keating, Patrick. 2019. *The Dynamic Frame: Camera Movement in Classical Hollywood*. New York: Columbia University Press.
Latsis, Dimitrios. 2015. "Nature's Nation on the Move: The American Landscape Between Art and Cinema, 1867-1939." PhD diss., University of Iowa.
Malm, Andreas. 2016. *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming*. London: Verso.
Marcum, Joni. 2020. "Harnessing Excess: Water in American Infrastructural Cinema of the 1930s." Paper presented at the *Orphan Film Symposium*, New York, May 28.
Mather, Stephen P. 1916. *Progress in the Development of the National Parks*. Washington, D.C: Government Printing Office.
Orgeron, Devin, Marsha Orgeron, and Dan Strebile, eds. 2012. *Learning with the Lights Off: Educational Film in the United States*. New York: Oxford University Press.
Peterson, Jennifer. In progress. *Working title: Cinema's Ecological Past: Film History, Nature, and Endangerment Before 1950*. New York: Columbia University Press.
Rentschler, Eric. 1990. "Mountains and Modernity: Relocating the *Bergfilm*." *New German Critique* 51 (51): 137–161. doi:10.2307/488175.
Skvrisky, Salomé Aguilera. 2020. *The Process Genre: Cinema and the Aesthetic of Labor*. Durham, NC: Duke University Press.
Spence, Mark David. 1999. *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks*. New York: Oxford University Press.
Steen, Harold K. 2004. *The U. S. Forest Service: A History*. Seattle: University of Washington Press.
Taylor, Dorceta E. 2016. *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection*. Durham, NC: Duke University Press.
Turner, James Morton. 2012. *The Promise of Wilderness: American Environmental Politics Since 1964*. Seattle: University of Washington Press.
Veracini, Lorenzo. 2016. "Settler Colonialism as a Distinct Mode of Domination." In *The Routledge Handbook of the History of Settler Colonialism*, edited by Edward Cavanagh and Lorenzo Veracini, 1–8. Abindgon: Routledge Press.
Winn, J Emmett. 2012. "A Brief History of the USDA Motion Picture Service to 1943." In *Documenting Racism: African Americans in U.S. Department of Agriculture Documentaries, 1921-42*, 1–12. New York: Continuum.
Wolfe, Patrick. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of Genocide Research* 8 (4): 387–409. doi:10.1080/14623520601056240.