Article

Image, Environment, Infrastructure: The Social Ecologies of the Bergfilm

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Abstract: The German mountain film (Bergfilm) has received extensive critical attention for its political, social, and aesthetic implications, but has received remarkably little attention for its role in the environmental history of the Alps. This article considers the Bergfilm within the long history of depictions of the Alps and the growth of Alpine tourism in order to ask how the role of media in environmental change shifts with the advent of film. The argument builds on Verena Winiwarter and Martin Knoll’s model of social-ecological interaction, Adrian Ivakhiv’s theoretical framework for the environmental implications of film, and Laura Frahm’s theories of filmic space. Through an analysis of Arnold Fanck’s films Der heilige Berg [The Holy Mountain, Fanck 1926] and Der große Sprung [The Great Leap, Fanck 1927], which are compared with Gustav Renker’s novel Heilige Berge [Holy Mountains, Renker 1921] and set into the context of the environmental history of the Alpine regions where the films were shot, the author argues that film aesthetics serve as a creative catalyst for environmental change and infrastructure development. While some ecocinema scholars have argued that environmental films teach viewers new ideas or change modes of behavior, this analysis suggests that film aesthetics are most effective at accelerating processes of environmental change that are already underway.

Keywords: Bergfilm; ecocinema; ecocriticism; German film; Weimar film; Alpine history; environmental history; skiing; film history; film theory

1. Introduction

The German mountain film or Bergfilm has been a “case” for debate since director Arnold Fanck pioneered the genre in the 1920s. The films have been lambasted for displaying proto-fascist sentiments and for serving as the starting point for Leni Riefenstahl, several of her favored camera-operators, and possibly the aesthetic approach that would define the most prominent works of filmic propaganda in Nazi Germany. They have been celebrated as pathbreaking works of nature documentary that set timeless nature into motion and made it accessible for a mass audience. More recently, they have been analyzed as complex and contradictory works within the intellectual, social, and cinematic history of Weimar Germany. In all of these discussions, the genre’s eponymous “Berg” has remained remarkably flat and static. Critics have repeated claims that the mountain emerges as a main character or actor in the films, but unlike for any other actor in the genre, the history of the mountain beyond the scope of the film has been unworthy of interest. This oversight is worth addressing, given that the mountains themselves, not only the film industry and

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1 In this article I use the terms “Bergfilm”, “mountain film”, and “Alpine film” interchangeably. While I find the English phrase at times to be more appropriate or less awkward, it is worth noting that the German label Bergfilm has gained some degree of international acceptance. It is used for the German mountain films of the 1920s and 30s, and sometimes for a broader definition of the genre. In one instance, the French-Swiss film scholar Rémy Pithon (2005) defines le Bergfilm according to the political and heroic tendencies he sees within the German films of the interwar era. This political definition allows him to include similar films from other nations under the same heading.

2 Béla Balázs wrote an essay entitled “Der Fall Dr. Fanck” (The Case of Dr. Fanck) in 1931; the essay comments on the polarized reactions to the films that already existed in the 1920s and 30s. For details about the critical positions mentioned in this paragraph, see the review of secondary literature that begins in the third paragraph.
the social-political context, were changing rapidly. How were the mountains changing during the era in which the mountain films flourished? What role did the films play in these changes?

This article argues that German mountain films, especially in their brief heyday starting one century ago, served as a creative catalyst for the development of Alpine tourist infrastructure. Filmic aesthetics imaginatively amplified and accelerated developments in Alpine tourism infrastructure that had been underway for decades. By capturing visions of Alpine landscapes, tourist activities, and expert athletic endeavors and then fusing them together with dynamic editing, thus making full use of the transformative possibilities within filmic space, mountain films visualized an accelerated mode of tourism that would require new infrastructures and technologies in order to be realized in the physical environment. While its images seem to celebrate a timeless Alpine landscape, the Bergfilm serves as a catalyst for processes modifying that environment.

1.1. Bergfilm

The cinematic genre of Bergfilm was popular in Germany from roughly 1920 until 1940. While films focused on mountains continue to be made today, the German genre is unique for its sustained mass popularity over two decades as well as its blend of bold mountaineering feats and fictional melodramatic plots. The German genre is also remarkable for how its heroic portrayal of mountaineering resonated within the historical context of rising fascism in Germany; as a result of this context, and due to the success that mountain-film directors, especially Leni Riefenstahl, had in the Nazi film industry, much of the early critical reception of Bergfilm focused on political implications of the films.

Arnold Fanck was the leading director of the genre through the Weimar years. From the beginning, reviewers and commentators tended to “praise the mountain film’s images and scoff at its scenarios” (Rentschler 1990, p. 141). With regards to Der heilige Berg [The Holy Mountain, Fanck 1926], one of the two films analyzed below, this was certainly the case. One reviewer describes the film’s images as being among the most beautiful that had ever been created, but laments that this beauty is “destroyed” and “trivialized” by the plot (Eggebrecht 1997, p. 208). Siegfried Kracauer’s review of the film praises the film’s images but describes them as being overtaken by the “malevolent spirit of the story” (der Ungeist der Handlung) (Kracauer 2004, p. 299; cf. Rentschler 1990, p. 148). A review by Fritz Rosenfeld in the Viennese Arbeiter-Zeitung likewise praises the film as a “great tragic symphony” of nature images, then adds that this symphony “also has a plot unfortunately” (Rosenfeld 1997, p. 208). Regarding the genre as a whole, the polarized responses are most famously articulated by Béla Balázs and Siegfried Kracauer. Balázs describes Fanck in a 1931 essay as the greatest filmmaker of nature (der größte Filmbildner der Natur), writing that he brought nature into the films as a living being (ein lebendiges Mitwesen), and that he gave nature a countenance, thus creating art (Balázs 1984, pp. 287–91). Balázs notes that others had made nature films, but Fanck was the first to feature nature as an active presence and participant. Siegfried Kracauer, in his discussion of Arnold Fanck’s films in his book From Caligari to Hitler: A Psychological History of the German Film, likewise begins his discussion of the Bergfilm genre by praising the films’ images of glittering glaciers and billowing clouds. He then abruptly changes tone, condemning the films for their heroic plot lines (Kracauer 1947, pp. 111–12, 258; cf. Rentschler 1990, p. 139). The films celebrate blind loyalty and eschew rational thought; for Kracauer, the mythic cult of the mountains blends smoothly into the Führer-cult of fascism. Kracauer’s critique set the tone of Bergfilm criticism for decades, with the most influential extensions to his argument arising in Susan Sontag’s essay “Fascinating Fascism” (Sontag 1975).

More recently, since the 1990s, critics have desisted from simply defending (as Balázs) or attacking (as Kracauer) the Bergfilm. A number of scholars have emphasized the films’ links to technological and aesthetic modernity (Rentschler 1990, p. 145; Morris 2012, p. 95; Brandlmeier 1997, p. 80; Baer 2017, p. 283). Others have analyzed the mountain films alongside broader developments in tourist activities within Weimar society, especially with
regards to questions of gender and class (Nenno 2003, p. 70; Majer-O’Sickey 2010, p. 378; Holt 2008, p. 246), and have considered the genre’s position within questions of film genre, aesthetics, and intellectual history (Von Moltke 2005, pp. 46–52; Strathausen 2001, p. 172; Baer 2017, p. 280). Two recent studies examine the genre’s relation to intellectual history with regards to concepts of nature, human history, and time: Alex Bush analyzes the films Stürme über dem Montblanc [Avalanche, Fanck 1930] and SOS Eisberg [SOS Iceberg, Fanck 1933] and argues that the films’ emphasis on changes and shocks within the environment displays a distinctly modern sense of time that yields a historicized view of nature (Bush 2019). Nicholas Baer analyzes the film Der heilige Berg and discusses the film’s complex interactions with ideas of nature, culture, and history to argue that it presents the Alps as an unstable landscape imagined within a “dialectic between technology and the perception of nature” (Baer 2017, p. 285). These recent assessments begin the project that I seek to continue with the present study, namely, a closer analysis of the Berg that is the defining feature of the mountain film.

The Bergfilm genre contributed to modern Alpine tourism through its popularization of the sport of skiing as well as its aesthetics of speed. By creating new ways of seeing the Alps while also helping to build a culture of tourism that led viewers to visit the mountains in person, it contributed to the rise of infrastructure on the seemingly natural landscapes it celebrates. Of course, it would be flawed to think that film brought modernity to a previously untouched landscape, since humans have inhabited and made use of the Alps for millennia, and by the early twentieth century, Alpine tourism had already brought numerous changes to the region. Further, the onset of modernity in the Alps was met with resistance and conflict. Similar to the growth of infrastructure across Europe, efforts to modernize the Alpine landscape “must be viewed as a highly volatile, ambiguous, and contested development” (Högselius et al. 2015, p. 23). The celebration of tourist landscapes on film thus constituted a new and unique intervention within a dynamic and conflicted process of environmental change in the Alps.

1.2. Film, Environment, Infrastructure: Theories and Frameworks

The present analysis of environments and infrastructures in the Alps and in Alpine film builds on various frameworks that have been proposed for studying the interplay of environment, society, and cinema. In their social-ecological interaction model, Verena Winiwarter and Martin Knoll describe human society as existing at the zone of overlap between the fields of nature and culture. They visualize the model through a Venn diagram comprised of a circle representing “nature” on the left, a circle labeled “culture” on the right, and “humans and biophysical structures of society” occupying the zone of overlap at the center (Winiwarter and Knoll 2007, p. 129). Arrows pointing into and out of the overlap zone represent the interactions between nature and culture. “Representations” point from the overlap zone toward “culture;” from there, “programs” create new impacts on humans and social structures. On the other side of the diagram, an arrow labeled “work” illustrates the ways that humans change the natural environment, and another arrow labeled “experience” (Erfahrung) points back toward the center. In other words, cultural representations lead to new practices and structures of feeling, which in turn impact the work that human societies carry out on the natural world. Based on their experiences of a modified natural world, humans create new representations, and the cycle begins anew.

Of course, the distinction between “nature” and “culture” is artificial and has been criticized, but proponents of the social-ecological model argue that it still has value because it suggests a “possible means of intervention” within both spheres: “society can ultimately only be reached through communication” whereas “interventions in nature, or into the physical world, can only be effective by means of physical forces—nature is not susceptible to cultural or symbolic action” (Fischer-Kowalski and Weisz 2016, p. 21). Film forms an important means of communication that is directly tied to interventions in the physical world. The social-ecological model offers a helpful means for visualizing this interaction, but at
the same time, the example of film reveals a shortcoming of this model: Through the equal emphasis on all forces and the neat symmetry between sides of the diagram, the model suggests a steady process. All of the arrows seem to have equal and continuous velocity.

Film, I propose, acts as an accelerator: It allows representations to suddenly move faster and show more than would be possible with words or still images; it can thus move the field of representation at a rate that can far exceed the pace of change in actual experiences. We might think of film as considerably increasing the thickness of the vector moving from “humans and biophysical structures of society” toward “culture.” While some of this momentum is lost in the process, some residual speed transfers onto increased programs and projects that in turn accelerate the pace of change in the sphere of nature.

My argument here points in a distinctly different direction than much of ecocinema studies, which frequently thinks about what film can do to change people’s habits, thoughts, and actions in relation to the natural world. Scott MacDonald has argued that experimental films can create “a cinematic experience that models patience and mindfulness” and thus foster “a deep appreciation of and an ongoing commitment to the natural environment” (MacDonald 2013, p. 19). Others have examined ways that films can contribute to environmental activism (e.g., Willoquet-Maricondi 2010, pp. 23–80). Adrian Ivakhiv offers a detailed theoretical framework for considering changes between the film world and the extra-filmic world; at each stage of a film’s production, the experience of viewing a film, and interactions with the world after experiencing a film, he proposes that there are impacts in the realms of social, perceptual, and material relations (Ivakhiv 2013, p. 341). The nuanced theoretical approach, peppered throughout with tripartite categorizations inspired especially by the philosophy of Charles Sanders Peirce and Alfred North Whitehead, allows for intricate analyses of numerous individual films. However, when it comes to considering the relation between film and the outside world, Ivakhiv still produces a model that seems to move in one direction. Films impact viewers, who in turn emerge with changed relations in the broader world.

In fact, Ivakhiv’s model, especially when combined with Laura Frahm’s assertion that filmic space is inherently dynamic and transformative (Frahm 2010, p. 13; see also the final section of the present article), might serve as an enhancement to the interaction model of social ecology, while the ongoing cyclical process suggested by the social-ecological model might compensate for the context that is missing from Ivakhiv’s framework. Film certainly operates on numerous levels in terms of its immediate visual and visceral impact, the emplotment of images and characters within complex situations, its ability to capture and transform the material world into a moving film world, and its implication within complex networks of funding, production, distribution, and exhibition. By plugging all of these forces into the seemingly stable cycle of social-ecological interactions, we can use Ivakhiv’s model to appreciate the role film plays not necessarily to change individuals’ perceptions, but rather to catalyze and accelerate cultural processes that are already contributing to environmental change.

Drawing on these frameworks, the following pages consider the question, what changes when mountain films are added to the long history of cultural representations of the Alpine landscape? Within this specific landscape, how does film affect the dynamic interactions of nature and culture?

2. Media and Infrastructure in the Alps

For centuries before the advent of film, literary and visual representations had been imagining and communicating new uses of the mountain landscape.3 Furthermore, infrastructures supporting travel and tourism in the Alps had been expanding since the

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3 Jon Mathieu offers a concise overview of visual and written media representations of the Alps; see the chapter “Alpenwahrnehmung—Stereotyp und Vielfalt” (Mathieu 2015, pp. 125–61). Regarding German cultural texts about the Alps, two useful resources are the essay collection Heights of Reflection (Ireton and Schaumann 2012) and the annotated translations in Mountains and the German Mind (Ireton and Schaumann 2020). For a discussion of the cultural and environmental history of the Alps in the twentieth century, with a focus on the rise of the ski industry, see (Denning 2015; Groß 2019). For an influential (although frequently critiqued) assessment of the changes in European views of the Alps, see (Nicolson 1959).
eighteenth century. In order to appreciate the changes wrought by mountain films, it is helpful to briefly review the Alpine media depictions and infrastructural projects that preceded them.

Ernst Bloch’s 1930 essay “Die Alpen ohne Fotografie” makes it clear that by three decades into the twentieth century, mountain images were extremely familiar to urbanites far from the mountains—only a saturation with touristic images would have compelled Bloch to wonder what it would be like to see the mountains for the first time, unmediated, without having already seen countless reproductions (Bloch 1965, p. 498). In fact, mass contact with the Alps as a tourist landscape extends back far earlier even than photography. Texts from the eighteenth century began to create a canon of mountain literature and included such works as the 1732 long poem “Die Alpen” by Albrecht von Haller and the novel *Julie, or the New Heloise*, first published by Jean-Jacques Rousseau in 1761; then, Johanna Spyra’s *Heidi* books propelled the popularity of Alpine stories to new heights in the late 1800s. These literary works, as well as the romantic landscape paintings that flourished during the same time period, portray nature-oriented life in the mountains as a pristine and timeless refuge or an alternative to purportedly immoral modern civilization. In the nineteenth century, the sport of mountaineering added another element to the industry of mountain media: British mountaineers published accounts of Alpine expeditions and summit races in pursuit of first ascents, while a flurry of new guidebooks led travelers through Alpine tourist destinations (Mathieu 2015, pp. 131–35).

From the mid-nineteenth century onward, expeditions to the Alps yielded photographs as well as landscape paintings and written accounts. In the first decades of the twentieth century, new uses of visual media created additional connections between art and tourism. Arnold Fanck and Hannes Schneider “perfected” the use of photography to teach skiing in their 1925 book *Wunder des Schneeschuhs* (Groß 2019, p. 88). Modernist aesthetics also played a role in portrayals of the Alps: Whereas Romantic paintings had accentuated the grand sublime feelings associated with the Alpine landscapes in the eighteenth and nineteenth centuries, twentieth-century artists such as Albin Egger-Lienz and Alfons Walde added modernist abstraction, culminating in the “Alpine modernism” that Andrew Denning locates above all in the discourse surrounding Alpine skiing (Sieberer 2012; Denning 2015).

As media were popularizing the Alps for potential tourists, new infrastructure projects were making them more accessible and comfortable for those with the resources to visit in person. Major Alpine roads had already been developed, for military more than touristic reasons, under the auspices of Napoleonic France between 1796 and 1810. As tourism developed, the first major tunnels opened between 1854 and 1882, including the Semmering, Mont Cenis, and Gotthard tunnels. The resulting train lines massively reduced the travel time required to access the Alps during the nineteenth century (Mathieu 2015, pp. 165–67). Once tourists arrived at their destinations, they continued to have access to the latest technologies, since tourist resorts were among the first locations to install electricity. St. Moritz installed electric lights in 1879, two years before the International Exposition of Electricity in Paris (Mathieu 2015, p. 172). During the same period that visual and written media were rendering the Alps as a desired aesthetic landscape and tourist destination, infrastructure likewise created a new sense of accessibility, both through the speed of travel and the comfort after arrival. Paul Edwards notes that infrastructure is significant precisely because it is not noticed (Edwards 2003); in this case, the massive investments in travel infrastructure created a situation by 1930 in which Ernst Bloch could see the Alps as a space that is accessible by default, in which it takes a deliberate effort to imagine them as something distant and unknown.

This discussion should not be read as a story of steady, unimpeded growth: Jon Mathieu points out numerous instances in which conflicts emerged during the rise of the tourism industry and the modernization of the Alpine landscape. In one instance, the Austrian province of Vorarlberg banned tourism after World War I to preserve food supplies for local residents. In another example, repeated referenda in the Swiss canton
of Graubünden banned automobile travel for more than two decades in the early twentieth century. The government initially banned cars in 1900, and it took 25 years and at least 10 referenda on the topic before the ban was overturned (Mathieu 2015, p. 166; Schwarzenbach 2016; Simonett 1993, p. 37). These contradictions lead Mathieu to argue that historians studying “modernity” in the Alps must first respond to the question, “which modernity?” (Mathieu 2015, p. 163). Still, it is undeniable that mountain tourism expanded dramatically during the nineteenth and twentieth centuries. It is equally clear that the growth of Alpine media and Alpine tourism created a cycle of mutual reinforcement, in which increasing textual and visual media drove interest in tourism, and increasing visits to the Alps led to ballooning lists of new visual and written media. But it was not without conflict, as seen in the bans on tourism in Austria or the referenda against car traffic in Switzerland. Furthermore, the pace of growth was not steady, and different media had different impacts. The interplay between media and landscape accelerated with the advent of film. The rest of this article aims to understand the aesthetics behind this acceleration more closely, especially the pivotal role played by the Bergfilm genre.

2.1. From Heilige Berge to Der heilige Berg: Gustav Renker and the Bergfilm

As discussed above, the mountain film genre emerged within a long history of media depicting the Alps. But which media provided the most immediate background to the mountain film genre? And with an eye to the mutual influences and impacts between cultural products and physical environments, what changed when the Alps were rendered on screen rather than in text? Discussions of German mountain film often mention the diverse connections to visual art traditions such as romantic landscape painting, expressionism, and new objectivity (Baer 2017, pp. 284–85; Brandlmeier 1997, pp. 72–77; Jacobs 1992; Rentschler 1990, p. 147). In terms of literature, the discussion is less robust: Assessments of Bergfilm set them into the longer genealogy that runs from Heimat art and literature of the late nineteenth century to the Heimat films of the 1950s, with literary points of contact in Heimat novels by authors such as Ludwig Ganghofer and in mountain novels by authors such as Gustav Renker (Von Moltke 2005, pp. 44–45; Höfig 1973, p. 143; Rapp 1997, p. 30; Baer 2017, pp. 286–87). One lacuna in these genealogies involves the specific texts that are known to have served as background for the films. Ludwig Ganghofer is the best-known author of Heimat literature and is frequently mentioned in such discussions, but Gustav Renker—an author whose works were very popular in the 1920s through the 1940s but who is little known today—provided the literary foundation for at least two well-known mountain films. It is widely acknowledged that Renker’s novel Heilige Berge provided the title for Fanck’s 1926 film Der heilige Berg, and Renker’s novel Bergkristall provided the plot for Leni Riefenstahl’s 1932 Das blaue Licht. Although Bergkristall has received some discussion, especially because Riefenstahl denied any knowledge of the book, to my knowledge no past studies have considered Heilige Berge as a potential source of insight into Fanck’s film, despite the fact that Fanck is known to have drawn inspiration from Renker’s novels and described Renker in a letter as “a Swiss writer, who wrote very good novels about mountains” (Zsuffa 1988, p. 454; cf. Rentschler 1996, p. 32). Since Renker’s novels are examples of popular or even trivial literature that display anti-modern sentiments and thinly-veiled völkisch undertones, the lack of attention they have received is understandable—but they are worth a brief glance for their contribution to the media history, and consequently the environmental history, of the Alps.

Renker was born in Vienna to a Swiss father and Austrian mother. He studied philology and music in Vienna, culminating in a PhD, then went on to careers as a musician, theater music director, and journalist in various cities in Germany and Austria before retiring to the mountains of Switzerland. As such, his background aligns with the elite academic circles that were prominent in mountaineering during the late 1800s and early 1900s, and also parallels the educational background of Dr. Arnold Fanck, who studied geology before becoming a prominent director of mountain films. Renker’s first literary success was his memoir Als Begsteiger gegen Italien (Renker 1918), based on his work as a
journalist on the Alpine front of World War I. Like Fanck’s films—and also Ganghofer’s literary works—Renker’s novels portray the Alps as a “therapeutic topography,” a healing landscape and refuge from the pressures of modern urban life (Von Moltke 2005, pp. 36–37), but with critical differences regarding the narrative and aesthetic links with modernity.

Although ideological and political critiques of mountain films are not the central focus of the present study, it is worth a pause to note that Renker’s novels add intriguing layers of complexity to the much-discussed topic of the relationships between mountaineering, mountain films (or novels), and fascism. Renker’s works display anti-modern and heroic ideals that fit well with the expectations of the literary market under National Socialism in Germany, and his novel Heilige Berge (first published in 1921) ranked thirty-fourth among the bestselling novels in Nazi Germany, just behind Ganghofer’s Das Schweigen im Walde (Schneider 2004, p. 85). As Wilfried Wilms has pointed out, Renker’s “ideal of masculinity,” typified in the mountaineer/fighter after World War I, “closely resembled the desires of the ultra-nationalistic forces of Germany’s shaky democracy” (Wilms 2009, p. 231). His writings thus reinforce the ideological critiques of the Bergfilm genre that he helped to inspire. However, the easy thematic alignment of his novels with Nazi ideals belies a more complicated relationship. After the start of World War II, Renker withdrew from the German book market and published only with Swiss presses through the end of the 1940s (Gradwohl-Schlacher 2011). The ambivalent relationship is explicitly thematized in his first literary work, Als Bergsteiger gegen Italien. Near the end of the book, he describes his experience at an Austrian village festival commemorating a military victory from 117 years earlier. He writes: “without the least sympathy for the Austrian monarchy as a political structure—for the democratic Swiss citizen that would be unthinkable—this wondrous notion of German existence, of German Alpine peoples (dieser wundersame Begriff des deutschen Wesens, des deutschen Alpenvolkes) drew me here and showed me to my place among the Austrian military uniforms, whose concern is also my concern: Germanness (dessen Sache meine Sache ist: das Deutschtum)” (Renker 1918, p. 70). This quotation explicitly states a militaristic and racialized affinity with German nationalist sentiments despite—in spite of and without any seeming contradiction against—internationalist and democratic identities. The book thus states explicitly the deeply problematic and contradictory political positioning of heroic portrayals of Alpinism.

Of primary interest for the present study is Renker’s novel Heilige Berge. At first glance, the novel seems to hold little in common with Fanck’s 1926 film Der heilige Berg. While both involve protagonists who go the mountains to heal or escape from the complexities of the modern world, and while both involve love triangles and climactic climbing scenes, the characters and key plot elements are quite different. Fanck’s film focuses on tourists and mountaineers in an Alpine resort, whereas Renker’s protagonist is an engineer at a dam-building project near an Alpine village. The novel’s conflict is triggered by tensions between the local Swiss village population and a new settlement of Italians who are brought in as laborers on the dam. The workers are portrayed as unrespectful, disruptive, and slovenly, a xenophobic and at times racist portrayal displaying hostility toward a nationally defined and racialized “other” that is constructed as an opposing pole to the identification with Deutschtum described above. This cast of characters bears little directly in common with Fanck’s film.

There is, however, one intriguing connection between the engineer protagonist in Renker’s novel and the two leading male roles in Fanck’s film. Eight minutes into the film, when the two characters are first seen, intertitles describe them as “‘the Friend,’ Engineer Louis Trenker” and “Vigo, Ernst Petersen, student of medicine.” These textual fragments suggest that science and engineering are relevant for the film, even if they have no part in the overt action on screen. Just before the two friends appear, an intertitle describes them as “two men from the mountains.” Immediately after this title frame, they are seen in a long, low-angle shot as they stand perched atop a stone spire that they have climbed. The juxtaposition of mountaineering endeavors and scientific professions suggests a connection between these two fields of activity. This sequence aligns with recent
suggestions by environmental historians that the engineering gaze and the tourist gaze are nearly interchangeable (Dalmasso 2001, p. 31; Speich 1999). Both arrive from outside and take the visual measure of a local landscape; both render a physical environment as commodity. Building on this insight, one can appreciate how Renker’s novel opens up a new way of understanding Fanck’s film.

Renker’s novel describes a dam-building project; Fanck’s film displays a grand hotel and at a ski resort: The engineering focus in the novel seems to have disappeared in the film. As the natural scientist Dr. Fanck, a geologist by training, adapted a plot from the humanist Dr. phil. Renker, the natural sciences seem to become decentered. I argue, however, that as the tourist takes over the role of the engineer, the vision and motion enacted through the tourist/skier, and enabled by the medium of film, take on the processes of mechanization that had previously been overtly thematized through the engineer.

2.2. Der heilige Berg

Der heilige Berg tells the story of two young male friends, one named Vigo (played by Ernst Petersen) and another laconically labeled “the Friend” (Luis Trenker), who both fall in love with the same woman, a dancer named Diotima (Leni Riefenstahl). The friends are mountain climbers, and they first encounter Diotima as she performs at the Grand Hotel in the valley after the two friends have completed a climb together. Both men are instantly enamored of the dancer and pursue her affections. As the film continues, Diotima’s relationship with the Friend is played out through joint outings on skis, Diotima’s pathos-laden performances of modern dance, and the friend’s solo mountaineering feats. Meanwhile, Diotima and Vigo laugh and frolic amidst the mass of ski tourists on the lower slopes. Crisis strikes when the Friend, after descending from one of his solitary Alpine adventures, sees Diotima with another man, whom he does not yet realize is his friend Vigo. In a fit of self-destructive jealous rage, he sets out on a winter ascent of the treacherous “Santo North Face” during bad weather. He insists that Vigo, his best friend, join him for the expedition. The two climb together into the night, finally arriving on an icy ledge. Here, the Friend finally recognizes Vigo as his rival for Diotima’s affection. He lurches threateningly toward Vigo, causing him to back away and fall from the ledge. The Friend now realizes that his highest duty is loyalty: He must save his companion or die trying. Down in the valley, Diotima’s dance in the Grand Hotel is interrupted by news that the two friends have not returned from their climb. Diotima pleads for volunteers to attempt a rescue, and when none in the audience will meet her gaze, she herself ascends to the cabin where a group of Alpine athletes have gathered for their evening revelries. A rescue attempt ensues, but Vigo has already frozen to death, and as dawn breaks and the rescuers approach from below, the Friend also plunges to his death.

Despite a plot that centers around the mountains as a site of sublime sentiments and a battleground for humans to struggle against the primal forces of nature, the film’s landscape is by no means a pristine wilderness. The Grand Hotel and a man-made ski jump feature prominently in the film, showing a landscape that is “a means to an end” and that has been modified to “[serve] a wide range of constituencies, from Alpine skiers and mountain dwellers to hoteliers and investors” (Denning 2015, p. 169). Furthermore, special effects and massive constructed sets are used at key moments, including the superimposition of a mountain over the sea that serves as the film’s establishing shot, the towering ice cathedral near the film’s conclusion, and the studio-created icy ledge featured in the climax. A number of Fanck’s later films display a fascination with technological instruments shown on screen such as airplanes flying over the Alps, a massive telescope in a high-tech observatory, and a weather station outfitted with numerous electronic instruments for measuring the

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4 In the passage cited here, Denning discusses postwar landscape modifications in Chamonix. While the context is different in Switzerland where Fanck filmed the Alpine scenes for Der heilige Berg, the film likewise shows significant landscape modification in service of tourism and sport.
weather and communicating with the valley below. Contemporary reviewers celebrated the “synthesis of mountains and machines” represented by the Bergfilm (Rentschler 1990, p. 145; cf. Morris 2012, p. 42). But the emphasis on technological instruments is only a small factor in this film’s modernist feel: Instead, Fanck’s modernism emerges primarily through editing in Der heilige Berg (Brandlmeier 1997, p. 72; Baer 2017, p. 284). Fanck himself described the static quality of the mountains as the primary challenge of filming in the Alps. The landscape lacked motion, so as a filmmaker, he needed to find ways to create it (Fanck 1997, p. 152; cf. Rapp 1997, pp. 78–91). This perspective explains a seeming contradiction between text and image at the outset of Der heilige Berg. An opening scrolling text declares that the stunts and landscapes shown are all authentic, but immediately afterward, the first image of the mountains is shown as a special effect: a jagged peak superimposed over a rocky ocean coastline. Fanck claims that the technology of the camera was required for nature to gain expression (Rentschler 1990, p. 146); he thus implies that there is no contradiction between the text’s assertion of authentic mountain landscapes and the subsequent cinematically manipulated images. Reviewers were convinced by this fusion of cinematic manipulation and physical landscape: Fritz Rosenfeld writes that “the sea, the mountains, the snow, the sun shrouded in fog, the moon that has been dipped into clouds, the frenzied speed of skiing (which is assimilated into the natural events and is fully equivalent to the descent of an avalanche in its effect), the wayward torches in the night time snowfield, the morning over the mountains, the innumerable sparkles in the ice crystals—all of this is the material of the film art” (Rosenfeld 1997, p. 209). Beyond explicitly stating that skiing is equal to the “natural events” of the film, the review also creates equivalence through its syntax by inserting the skiing and torch procession as two items sandwiched between seemingly natural images. The review thus provides evidence that Fanck’s film inspires a view in which touristic activities (and the technologies and infrastructures that enable them) are integrated into the Alpine landscape. Whereas in Renker’s novel, mountains are transformed by engineers within the story, Fanck’s editing as well as comments by Fanck and reviewers suggest a view in which transformation of the mountains through the technology of the moving image is an inherent part of the Alpine landscape.

2.3. Aesthetics of Acceleration and Immediacy

Historian Andrew Denning has compellingly argued that skiing served as the emblem of modernity in the Alps through its fusion of unbridled speed and the seemingly unmediated experience of nature. Denning points out that mountain films—especially the ski films made by Arnold Fanck with star skier Hannes Schneider—emphasized speed and athleticism rather than scenery: “the skiers, not the mountains, are the stars” (Denning 2015, p. 103). The analysis below extends on Denning’s discussion. Fanck’s ski sequences certainly participate in the discourse of speed, but the manner in which they do so cannot be encompassed through relative significance of scenery or skiers; instead, film aesthetics add new ways of experiencing, and accelerating, the Alpine environment that are only possible in filmic space.

2.3.1. The Ski Race in Der heilige Berg

In Der heilige Berg, a sequence displaying a ski race takes up 10 min of screen time in the middle of the film. The sequence displays numerous shots of skiers zooming downhill, aligning with contemporary portrayals of downhill skiing that emphasized speed and athleticism, in contrast to the solitude and beautiful landscapes emphasized in discussions of touring skiers (Groß 2011, p. 112). Intriguingly, the text that introduces the scene makes it explicitly clear that the race is not an example of downhill skiing. The ski race is described in the German intertitles as a Dauerlauf and translated into English as a “long-distance run.” Such races were a major event in the Arlberg region where Fanck filmed many of the ski sequences for his films. To think of them as primarily downhill would be far from the mark: They involved extensive climbing and cross-country as well as
downhill portions, and often took hours to complete. One competition, the third-annual “Arlbergrennen” ski race in 1906, covered 16.5 km of distance and required competitors to climb a total of 1140 m (Dettling 2009, p. 56). Yet in the “long-distance run” shown in Der heilige Berg, the vast majority of the footage shows skiers speeding downhill. Flat cross-country segments are rare and insignificant compared to the repeated shots that put all emphasis on speed and athleticism. In several examples, a broad snow-covered slope is shown in an extreme long shot filmed from the opposing slope as a crowd of dark-clad skiers zigzag down the mountain or shoot downhill in a straight line. Some shots display a sharp turn or gravity-defying jump, but the visual energy comes not through the athletic feat itself but through the rhythmic repetition, either through numerous skiers making the same turn one after another, or through rapid cuts between short takes of numerous skiers going over a jump. Other shots show skiers at closer range zooming toward, and past, the camera; or the skiers are seen from behind as they shoot past the camera and continue down the mountain and off the edge of the frame. These images draw attention to offscreen space, thus emphasizing the vastness of the Alpine slopes as well as the speed with which the skiers traverse that space (Strathausen 2001, p. 172). In contrast to these images that emphasize the static camera’s inability to contain the speed of the skiers within the frame, other shots emphasize motion through the use of a camera mounted on skis, a technological feat that exemplifies Fanck’s simultaneous fascination with mountain sports and camera technologies (Fanck 1973, p. 166). As a whole, the ski race sequence displays the “continuous movement” that was the hallmark of Fanck’s ski films, with a sense of motion achieved through the juxtaposition of numerous shots displaying movement across the frame, rather than through any sense of continuity from one shot to the next (Strathausen 2001, p. 172). Despite the race’s designation as a long-distance (and, we can safely assume, uphill as well as downhill) event, Fanck’s choice of shots and editing creates an overwhelming focus on downhill portions, and above all, on speed. Contemporary reviews indicate that the emphasis on speed made more of an impression than the long-distance title. Even a review from the Mitteilungen des Deutsch-Österreichischen Alpenvereins, representing the perspective of mountain sports enthusiasts who were well aware of different approaches to skiing and mountaineering, describes the sequence as a “wild downhill ski-race” (ein tolles Abfahrts-Skirennen) (Dyhrenfurth 1997, p. 208).

In their angular composition, emphasis on speed, and presentation of downhill motion abstracted from broader infrastructures, Fanck’s films introduced aesthetic touches essential to the way the ski industry would subsequently represent itself (Figures 1 and 2). Images from ski resorts of the 1930s display aesthetic qualities strikingly similar to ski sequences from Fanck’s films. In a 1938 advertising brochure from Vorarlberg, the emphasis on diagonals and the trail of flying snow behind the skiers, combined with the contrasting directional flows between the two images, display an affinity for the angular composition and disjointed editing prominent in Fanck’s ski sequences. It is worth remembering that the embrace of speed was not universal. The ski sequences in Der heilige Berg were filmed in 1925–1926 in Lenzerheide (Schöning 1997, p. 242), a town and ski resort in Graubünden, Switzerland, which had just overturned its ban on cars in 1925. The emphatic focus on speed in Fanck’s films sits in tension against regional trends of resistance against the coming of tourism and mechanized speed. Within this field of tensions, the sublimated engineering gaze seen in Fanck’s film intervenes into an ongoing conflict regarding the triumph of speed in the Alps.
Both the brochure and Fanck’s ski sequences concentrate on the speed and power of downhill skiing, while excluding from the image the forces that help to create that speed. While visual artists can create images that focus exclusively on thrilling descents simply through their choice of what to include and exclude within the frame, the physical ski resorts of the Alpine tourism industry could only achieve a similar focus on descent by installing machines to decrease the time and effort involved in the ascent. In interwar Europe, during the same years that Fanck was pioneering the Bergfilm genre, Alpine tourist resorts were developing infrastructure specifically for skiing. Robert Groß describes ski lifts as the basis for structural change of both the economy and the environment starting in the 1930s (Groß 2019, p. 26). The change began with a ski vacation that engineer Ernst Constam took to Davos in the late 1920s. Constam applied his training in systems engineering and efficiency monitoring to the practice of skiing and noticed that for every hour of instruction in a ski school, only 6 minutes were spent descending the slopes (Groß 2019, p. 92). He therefore designed a machine that would take over the work of the slow and physically draining ascent. Constam patented the first tow lift in 1930 and the first lift opened at Davos in 1934. It was a huge success; demand grew quickly after 1935, so that the capacity of the initial lift was increased and new lifts were opened across the Alps and abroad (Groß 2019, p. 95). The transformation of the Alpine tourist landscape continued and accelerated, with lifts as only one part of a broad process of landscape modification: “before skiing could become a pillar of the modern Alpine economy, the landscape, too, had to be modernized. To satisfy skiers’ demands for both speed and safety, tourism advocates built lifts, blasted terrain, and managed snow resources” (Denning 2015, p. 168). Thus, while Fanck’s images display only a skier in a landscape, they are inextricably linked to the rise of machines in the same environment, for the popularity of downhill skiing was in large part linked to the rise of motorized lifts. In the decades that followed, the lifts would become nearly as invisible on the mountain as they are in Fanck’s films (cf. Groß 2011, p. 128), in that they became accepted as infrastructures—existing within a “naturalized background” of mountain scenery, “unremarkable to us as trees” that line the clear-cut ski slopes—which

Figure 1. Image from the advertising brochure “Vorarlberg, Österreich,” dated before 1938 (Groß 2011, p. 136; original document in Vorarlberger Landesarchiv, Fremdenverkehr, Schachtel 25).

Figure 2. Still from Der heilige Berg.
have themselves become an infrastructure that is simply accepted as part of the natural landscape of the Alps (Edwards 2003, p. 185). Fanck used the machines of the cinema to create, in filmic space, the same effect that manicured terrain and industrialized networks of lifts would soon enact on the slopes. The sublimated engineer from Renker’s *Heilige Berge* returns as the systems engineer Ernst Constam to enable the downhill skiing that Fanck has envisioned in *Der heilige Berg*.

2.3.2. Bergfilm/City

Fanck’s *Bergfilme* naturalize the new infrastructure of the ski industry through the aesthetics of formal montage; as such, they envision the mountains in a similar way to how contemporary filmmakers were documenting the metropolis. Fanck describes one of his films as a mountain symphony, and the same years that saw the rise of the Bergfilm also witnessed the peak of the film genre of the city symphony (cf. Brandlmeier 1997, pp. 72, 80; Rentschler 1990, p. 148; Möbius and Vogt 1990, p. 42). These films take cinematic measure of the modern metropolis, gathering their shots in authentic locations but editing them together in an artistic structure to create a semi-documentary film. They are guided by the musical form of the symphony, with individual shots and sequences being assembled to create rhythmic patterns and continuous sequences within a number of individual movements or acts, all of which combine to form the entire “symphony.” They frequently employ innovative editing and create their effects through montage rather than continuous narrative action. They focus on the city as a whole rather than individual human inhabitants: “the substance of these works was the city itself—or rather, its cinematic representation—and the effect that was achieved was more poetic than expository in contrast to earlier scenic or travelogues that focused on touring urban landscapes” (Jacobs et al. 2019, p. 4; cf. Hake 2008, p. 259). The affinities with Fanck’s films are numerous: editing based on rhythm and formal montage; a sense of an environment created by showing the landscape as a series of interchangeable patterns; and a combination of narrative, documentary, and musical elements creating a semi-documentary effect.

The most famous exemplar of the city symphony genre is Walter Ruttmann’s *Berlin: Die Sinfonie der Großstadt* [Berlin: Symphony of the Metropolis, Ruttmann 1927]. Ruttmann and Arnold Fanck can both be categorized within the artistic movement of New Objectivity, based on their conservative fascination with and detailed depiction of modern technological systems and environments (Brandlmeier 1997, p. 73; Jacobs 1988, p. 28; Rentschler 1990, p. 148; Möbius and Vogt 1990, p. 42). Fanck recognized the commonalities between his work and Ruttmann’s city symphony: When he needed to hire an additional film editor in order to meet the deadline for his documentary about the 1928 Winter Olympics in St. Moritz, *Das weiße Stadion* [The White Stadium, Fanck 1928], he chose Walter Ruttmann. Ruttmann had made his influential city symphony a year earlier. In Fanck’s autobiography, he writes that Ruttmann was the one filmmaker skilled enough for the job of cutting without a script to serve as a guide:

“Only I myself could edit this film because there was no written script from which another editor could have worked. There was just one other person who had also mastered this free fantasy-play of montage (dieses freie Fantasiespiel der Montage)—of combining units into a poetic whole (des Zusammendichtens): the director Ruttmann, who had made the successful Berlin film” (Fanck 1973, p. 193).

Fanck views his filmmaking as formal play and recognizes the similarity to Ruttmann’s rhythmic montage. Filmmakers portraying cities in the Weimar era also saw the affinity with ski films. Ruttmann’s *Berlin* includes a brief ski sequence in its final scene, displaying a ski hill that was erected indoors, in Berlin’s Sportpalast, in 1927. Furthermore, the 1925 edition of László Moholy-Nagy’s manuscript for an abstract urban film, *Dynamik der Gross-Stadt*, includes two photos of skiers clipped from the 1925 book *Wunder des Schneeschuhs* by Arnold Fanck and Hannes Schneider (Moholy-Nagy 1978, p. 134). The links between Fanck’s films and city symphonies further illustrate that the sense of motion in the mountains creates an implied infrastructural foundation for that motion, no less
than the perpetual motion in the metropolis relies on the train lines, vast street networks, sewers, and energy infrastructures that enable urban mobility while often remaining hidden from view. Film catalyzes environmental change and accelerates the processes of social-ecological interaction: In this case, the perpetual motion and speed of both skiing in the Alps and traffic in the city, shown on film through innovative editing, imply infrastructures that can support such speed on the ground.

2.3.3. Der große Sprung and the Erasure of Distance

One year after Der heilige Berg, another film directed by Arnold Fanck was released. However, Der große Sprung [The Great Leap, Fanck 1927] does not follow the pathos-laden tragic storylines of Fanck’s prior films; instead, it offers a lighthearted comedy that “skillfully satirizes” some of the traits of Fanck’s own films (Horak 1997, p. 35). It features Hans Schneeberger as Michel Treuherz, a wealthy urbanite who comes to the mountain to recover from the stress of his life in the city. While there, he falls in love with a local goatherd, Gita (once again performed by Leni Riefenstahl). Michel’s rival for Gita’s affections is Toni, played by Luis Trenker and described as a local “son of the mountains.” To settle the rivalry between Michel and Toni, Gita declares that a suitor must win the upcoming ski race in order to claim her hand. What follows is a mixture of ski acrobatics and slapstick misadventures. Whereas Toni is already comfortable climbing and skiing in the mountainous terrain, Michel has no experience in the mountains. Eventually, through lucky coincidence and the clever intrigues of his loyal servant Paul as much as through the development of his own skills, Michel wins the race and stays in the mountains with Gita rather than returning to the city. As a whole, Der große Sprung offers a remarkable contrast to Fanck’s other films. While his pathos-laden mountain dramas tend to glorify the mountains as a site of mythic struggle and naïve innocence, far removed from the complexities of modern life in the lowlands, this film—through its comic portrayal of both Michel and Toni—pokes fun at these same sentiments, extending urbanites’ stereotypes about the Alps to the point of absurdity just as Ernst Lubitsch had done in his 1919 comedy Meyer aus Berlin (Horak 1997, p. 35).

Although the comedic tone in Der große Sprung is very different than that of Fanck’s other films, the treatment of skiing carries out the same transformation of the landscape through aesthetics. As in Der heilige Berg, a pivotal ski race features frantic descents and rhythmic editing. The character of Michel Treuherz adds a new element of technology: Michel and Paul create a series of special-effect innovation such as an inflatable suit that is designed to cushion Michel from falls. In the eponymous “great leap” near the end of the film, this inflatable suit helps Michel to float through the air and gain extra distance on a jump that carries him past the competition to the finish line. In response to the obvious athleticism of the skiers on screen, combined with playful creative and technological innovations, a review in Das Kino-Journal described the film as being marked by “tempo, excitement, a frenzy of beauty and athletic achievements so unfathomable that one asks oneself where reality ends and special effects begin” (M.J. 1928, p. 13).

Beyond the acceleration and fusion of modernist speed into the Alpine landscape through special effects, elements that had already appeared in Der heilige Berg, the presentation of the Alpine landscape in Der große Sprung offers a new trait: the erasure of distance in order to make remote Alpine sites accessible. Immediately after the film’s opening sequence in which the main characters and setting are introduced, an intertitle introduces a new site of interest: “the Window Towers (Fenstertürme), Gita’s refuge from burdensome suitors.” The progression of shots suggests that these towers are located just outside of the village. Just before the intertitle, Gita has been seen walking through the village with her flock of sheep. At the edge of town, she passes Toni, and once the last of Gita’s goats has passed, Toni follows down the same path. A long shot shows Gita crossing a bridge over a stream ahead of her flock. The final shot before the intertitle shows Gita in a flat pasture, at medium distance, looking into the distance behind the camera. The cut to the intertitle, followed by a dissolve to a long shot of the “window towers,” suggests that these spires are
what she sees from her streamside pasture in the valley. This impression is confirmed in a cut from the towers back to a close-up of Gita looking into the distance. Toni arrives, and in a brief dialogue, Toni declares that he will come with her to climb the towers. Cut to a shot of Gita running barefoot up a short distance of a grassy slope, and then a shot of Toni at the crest of a small hill—still with grass beneath his boots—and in the next shot, Gita is already walking across a short flat section of rock that leads to two vertical, finger-like stone spires. This sequence suggests that the spires are situated just above the pastures outside the village; they can be reached by means of an easy barefoot scamper up a hill.

It is not at all remarkable for film to cut between sites that are distant from each other in order to create a filmic geography in which these sites are suggested to be in close proximity. What is impressive in this scene is the scale at which this erasure of distance takes place. In an extreme long shot when Gita and Toni have reached the towers and Gita has begun climbing, the two stone fingers occupy the lower right quadrant of the screen. The upper left quadrant is dominated by a massive stone arch. Gita can be seen climbing up the center of the arch, with one foot on each side of the arch and an arm reaching to the left for support (Figure 3). The arch and two spires each appear to be about 30 feet tall. The formation’s distinctive appearance would lead one to believe that it should be easily identifiable. Yet despite the remarkable appearance of the arch and spires and their location within a well-known region for Alpine tourists and mountaineers, the site is little known and rarely visited. It is referred to as das gespreizte Mandl and is located in the Rosengarten area of the Dolomites. As of January 2021, a google image search for “Das gespreizte Mandl, Dolomiten” yields only two images of the formation, both from old postcards. In the age of Alpine selfies, this paucity of images is remarkable and underscores the fact that this impressive rock formation is, in the words of Alpine guide Christian Kaufmann, “rather remote” (quoted in Fanck 2020). And while filmic environments cannot be directly equated with the physical geography of the non-filmic world, Fanck himself insists repeatedly, in both his writings and his films, on the authenticity of the mountain landscapes in his films. Der große Sprung is no exception: Immediately after the opening credits, an intertitle declares that “the following athletic achievements in climbing have been filmed exclusively in the Dolomites, the skiing scenes in the famous Arlberg ski region.” While Fanck’s film Dolomites are not the same as the real thing, his insistence on environmental authenticity certainly invites the viewer to consider the non-filmic mountains as a point of reference. Compared to the physical mountains, the mountains on screen feature the same spectacular rocky features, rendered immediately accessible through film editing.

Figure 3. Gita climbing the “Window Towers” in Der große Sprung.

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5 After failing to identify the location on my own, I was finally able to identify this rock formation by means of an email chain involving mountain film scholar Kamaal Haque; Mathias Fanck, grandson of Dr. Arnold Fanck; Martin Kaufmann, a film expert in South Tyrol; Christian Kaufmann, leader of an Alpine Club section in the Dolomites; and Sergio and Daniele Rosi, mountain guides and owners of an Alpine hut near the rock formations in question.
The film transforms this remote Alpine setting into an accessible attraction that can be reached in the span of seconds by means of an easy uphill jaunt. Within the filmic environment, it carries out a complementary task to the acceleration seen in the skiing sequences in both *Der heilige Berg* and *Der große Sprung*, along with numerous other ski films. *Der große Sprung* is a useful addition because it does not focus on expert skiers or intrepid mountaineers as its heroes and does not seek to show climbers venturing off toward distant peaks. Instead, it portrays an idyllic village scene and a weary urbanite protagonist who arrives as a *Sommerfrischler*, or leisurely summer tourist (Holt 2008, p. 75). While *Der heilige Berg* idealizes the mountaineer and skier, this film features a run-of-the-mill visitor. Such tourists had long been a part of the Alpine tourism industry, but in the years leading up to the film’s release, their numbers had increased tremendously, and prior infrastructure was no longer sufficient to support them. While the number of Alpine huts increased only 8% between 1913 and 1928, the number of visitors increased 280% (Holt 2008, pp. 71–72). By 1927, the German and Austrian Alpine Club had shifted its focus toward protection of the Alpine landscape as a main task rather than expansion of access (Peniston-Bird et al. 2010, p. 149). At the same time, and often in tension against the *Alpenverein*, local entrepreneurs worked to increase tourist access by continuing to develop transportation infrastructures (Anderson 2016, p. 68). Through the construction of paths, gondolas, ski areas, and lifts, the Alpine landscape “became an environment engineered for speed, ease of access, and safety” (Denning 2015, p. 156), and these changes served the leisure tourist no less than the mountain sports enthusiast. *Der große Sprung* was released near the peak of the surge in visitors to the Alps. It compresses and delimits the experience of space in similar ways to what would soon occur through the construction of lifts: The “bounded mobility” (Denning 2015, p. 159) provided by ski lifts was preceded by the bounded *visibility* provided by film. While much of the mountain remains unseen, Fanck renders one specific remote landscape of arches and spires easily accessible. Andrew Denning has argued that the rise of the sport of skiing exemplified the Italian futurists’ claim that “Time and Space died yesterday” and that traditional notions of space had been replaced by “velocity which is eternal and omnipresent” (Denning 2015, pp. 99–100). The ski sequences in *Der heilige Berg* emphasize velocity and eliminate time; meanwhile, the ease of access in *Der große Sprung* compresses space. These interventions into the filmic space of the Alps served as a creative vision of environmental transformations that would be realized on the ground through the “proliferation” of lifts in the 1930s (Denning 2015, p. 156).

### 3. Conclusions

To some extent, the transformed vision of the environment through erasure of distance, increased access, and an emphasis on speed, seemingly without infrastructure needed to make such speed and access possible, could be seen as a reflection of the inherently dynamic status of filmic space. Laura Frahm describes filmic space as being inherently constructed, moving, and transformative. Filmic spaces are always in flux; movement is a founding element, not something that is done to initially stable images (Frahm 2010, p. 15). Frahm builds on much older discussions that have asserted movement to be a core element of film from the beginnings of film theory; her key addition is that the movement is unrelated to plot. It renders space dynamic rather than serving to further a human story (Frahm 2010, p. 146). Frahm’s emphasis on movement and transformation is echoed by Arnold Fanck’s goal, as a director of mountain films, of showing movement in a moving way (*Bewegung bewegt wiederzugeben*) (Horak 1997, p. 23).

Frahm describes filmic space as a product of filmic topography, the physical sites captured by the camera, and filmic topology, the ways these sites are brought together as a series of visual experiences (Frahm 2010, pp. 189–90). Fanck draws from a filmic topography that consists of rocky peaks, glaciers, crevasses, idyllic mountain slopes, and valley villages. Meanwhile, his topology sets the mountains into motion: The ski sequences break up the slopes into abstract moments; slower climbing sequences use
dissolves and framing to create a dynamic impression. According to Frahm, topological and topographical aspects of film continually overlay each other until they have created a new spatial entity that exists beyond traditional Cartesian understandings. Space becomes “unstable and mutable;” it is “governed by the process of its own visible transformation” (Frahm 2010, p. 190). Frahm describes this transformative status within urban filmic space, but Fanck’s films demonstrate that Alpine filmic space can be equally dynamic.

While film aesthetics help to account for Fanck’s filmic environments, the transformative aesthetics of speed and access in his films were not created from a historical vacuum. Rather, through film, Fanck was able to visually intensify the process of acceleration that was already underway in the physical spaces and textual discourses of the Alps. Der heilige Berg and Der große Sprung envision environmental transformations that cannot yet be realized but that are imaginable as an accelerated trajectory of infrastructure projects that were already underway. The infrastructures are only implied, not seen. Paul Edwards writes that “infrastructures function for us, both conceptually and practically, as environment, as social setting, and as the invisible, unremarked basis of modernity itself” (Edwards 2003, p. 186). Infrastructures are generally invisible, Edwards suggests, and in Fanck’s films the infrastructures of industrialized ski tourism remain unseen—yet the accelerated motion and immediate access that they facilitate implies their existence.

By giving viewers a filmic experience of downhill skiing, erasing the distance to remote peaks, and creating an aesthetic proxy for the infrastructures needed to support such speed and access outside the movie theater, Der heilige Berg and Der große Sprung demonstrate the catalyzing power of film within the socio-ecological interactions described by Winiwarter and Knoll. These films do not only describe the speed of skiing, as could be done in a poster or written advertisement. They let viewers experience speed and move through remote spaces. In addition, with UFA as the studio behind Der heilige Berg and Der große Sprung, the films marketed this experience to millions of moviegoers, while also dramatically raising the profile of the Bergfilm genre so that the impacts of these films would be multiplied by successive films in the years that followed. Within the history of Alpine tourism and infrastructure development—in which pre-filmic media had long contributed to conflicts over land use—these mountain films not only contributed to, but also catalyzed, changes in the land.

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References
