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In partial fulfillment of a Bachelor of Arts Degree in Environmental Analysis and Media Studies, 2022-23 academic year, Scripps College, Claremont, California

Readers: Carlin Wing Char Miller

### Acknowledgments

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#### **Land Acknowledgment**

I am writing this thesis about Nuwuvi (Southern Paiute) land from the unceded territory of the Tongva people. I hope this essay may serve, in part, as a land acknowledgment in itself – a recognition that colonial claims to these places are anything but passive or natural, but have been built on a history, and continued legacy, of settler-colonial violence.

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## 1. Know Your Background

The stereoscope, and its attendant stereo cards, are strange artifacts of the 19th and early 20th centuries. Largely obsolete today, they filled a significant space in the parlors and classrooms of the middle-class as idle objects of entertainment. I first stumbled across them by chance in the 5C's special collections. The slides I had found, for a media studies project on science fiction, walked viewers through a tour of Zion and Bryce National Parks as part of the Keystone View Company's "Tour around the World." The box itself is faded (and mislabeled as the "West Coast of South America" for that matter), and rows of thick cardboard slides line the inside. I slip the first out and carefully hold it in front of me. Two small black and white images of the same scene are pasted side by side at the center. A "1" designates that this is the first slide in the "tour," and a label with the name and place sits below to the right. To one side of the images, a bold copywrite notice for the "Keystone View Company" as the manufacturers and publishers is emblazoned into the cardboard, with a reminder that they are "made in the USA." The other side lists a series of places: "Meadville, PA." (where the company is located), "New York, N.Y., Chicago, Ill., London, England." I flip the slide over to find a passage loosely describing and contextualizing the scene, again titled with the place name and a small notice of copyright. It strikes me that the photographers and authors go unnamed, subsumed under the company's heading. The date, too, is absent. It takes digging through the California Museum of Photography's Keystone-Mast Collection to find notes left by the photographers, Philip Brigandi and Henry Peabody (though I failed to find much more about them than their names), and a date, 1925.

I finally pick up the stereoscope itself. The apparatus is a wooden viewer with pair of magnifying glasses set into the eyeholes (think virtual reality headset). It enables your eyes to

combine two photographs taken from slightly different angles into a layered three-dimensional image. I place the slide I have chosen into a set of prongs along a thin metal ramp used to adjust the distance of the image from the viewer and bring the stereoscope to my face. My eyes take a minute to adjust as the two images combine into one; the room I am sitting is blocked by the lenses so the layered scene in front of me becomes all I see. After a time surveying the scene (reminding me somewhat of a monochrome version of the blue and red glasses used in anaglyph 3D cinema), I set the viewer down to repeat the entire process with the next slide.

Oddly enough, I found these slides in the wake of a project on science fiction and the environment. I had been reading Ray Bradbury's *The Martian Chronicles*, whose critique, though a bit outdated and stuck in a masculine imaginary, caught my attention for how it represented desert landscapes: "and from the rockets ran men with hammers in their hands to beat the strange world into a shape that was familiar to the eye, to bludgeon away all the strangeness" (Bradbury, 103). This thesis is not entirely about that. But this storytelling context through which I am thinking about these stereoscopes is critical. I specifically look at how visual entertainment perpetuates and hides colonial architectures. While I mostly focus on tearing apart these settler-colonial gazes, I want to reaffirm that I wish to do so in the hope that it serves as a reminder that these relationships have ultimately been meticulously build. I want to lay bare the roots of these colonial logics that continue to pervade current US-based relationships to the environment based on extractivism, capital gain, and a violent history against Indigenous groups. I also want to recognize outright that this thesis is not enough – it is not the ultimate solution nor a single path to tackling climate change and environmental injustice – but perhaps it can provide one method of many through which to reframe these issues as able to be addressed. The issue is large, its impacts even larger. But I want to recognize the holes in colonial narratives and create

room for other stories to be told. Therefore, I come to Media Studies as a way to tell stories, and I come to Environmental Analysis as stories to tell.

## Stereoscopes and the Keystone View Company

From its establishment in 1892, the Keystone View Company specialized in publishing stereoscope images of far-reaching places throughout the world. Founded in Meadville, Pennsylvania by B.L. Singley (a previous employee of the stereoscope publisher Underwood & Underwood), the company especially marketed their collections as an educational resource meant to teach geography, science, and social sciences (*UMASS Amherst Special Collections & University Archives*).

Published in 1925, this image tour of Zion and Bryce National Parks in Utah appears late in the stereograph's run. Originally marketed as a unique and entertaining new age device to the emerging 19th century middle classes, the stereoscope flourished after the creation of the daguerreotype and the advent of mass-produced photography. As art critic and writer Jonathan Crary explains, "only after 1850 did its wide commercial diffusion throughout North America and Europe occur. The origins of the stereoscope are intertwined with research in the 1820s and 1830s on subjective vision...The two figures most closely associated with its invention, Charles Wheatstone and Sir David Brewster" (118). In the early 1900s, marketing efforts by stereoscope companies, especially the Keystone View Company, instead propelled the medium into the realm of education and the classroom. This educational bend, however, built itself on a legacy of parlor entertainment and mass-produced leisure. Around 1925, therefore, the stereoscope looked to teach students how to view the world. In addition, part of the stereoscope's decline at this point is owed to the required intervention of its apparatus. These images cannot be entirely understood

alone (as they are presented in this paper), and any research must therefore "understand them as both images and artifacts" (Masteller, 56). However, it is precisely the reliance on the apparatus that allowed them to sink into historical memory that makes them such a curious artifact to look at.

The stereoscope's main draw was its representation of depth. Oliver Wendell Holmes, the scientist who sold the stereoscope to the public, explained that they are unique as "an instrument which makes surfaces look solid" (4). By "solid," he means seemingly three-dimensional and tangible. This connection to embodiment and physicality is critical here (and will be discussed later). The trend to claim "solidity" or reality as a distinctive attribute of the stereoscope was not confined to Holmes' marketing attempts. At the time, "various writers claim that the stereoscope makes images more tangible and thus more capable of stimulating the emotions and the intellect" (Malin, 406). Not only were stereoscopic images seemingly more substantive and material than other forms of photographic media, but individuals at the time also directly connected this "tangibility" to an ability to better provoke emotional responses from its viewers. The apparatus of the stereoscope, oftentimes specifically its mimicry of depth, therefore served a crucial role in creating a unique relationship between the image and the viewer that many pointed to as wonderous and entertaining.

## Mass Media

Critical to understanding the status of the stereoscope, mass media, as the name implies, is particularly skilled in distributing a single image across spatial and temporal scales. As philosopher and critic Walter Benjamin recognizes, "technical reproduction can put the copy of the original into situations which would be out of reach for the original itself. Above all, it enables the original to meet the beholder halfway" (4). Mass media, therefore, allows the image

of an object to move into situations and contexts it could otherwise not have found itself in. In addition, it changes the positionality of the viewer, as the object comes to them rather than them having to travel to the location of the object. This distortion of the relationship between person and place reflects "the desire of contemporary masses to bring things 'closer' spatially and humanly, which is just as ardent as their bent toward overcoming the uniqueness of every reality by accepting its reproduction" (Benjamin, 5). Reproduction ultimately bridges a gap in space and time that opens the object up to a multitude of interpretations it otherwise would not have encountered. Mass media also serves as a devaluation of the original object, as the "reproduction" ultimately rids it of its context. This reproduction can thus be placed into a culture and context away from itself and be used as a tool to forward certain ideologies.

Holmes himself recognized the importance of stereoscopes as a mass medium that looked to transport the image of an object to audiences afar. He states, "matter in large masses must always be fixed and dear; form is cheap and transportable. We have got the fruit of creation now, and need not trouble ourselves with the core. Every conceivable object of Nature and Art will soon scale off its surface for us" (Holmes, 8). Here, he forwards the stereoscope as a technology able to reduce all objects to their image. He even recognizes that this "transportability" itself is "cheap" against the "dearness" of an object, but that this movement ultimately places more value on the reproduction over the actual object, "the core." In addition, he directly acknowledges the sense of control over "Nature and Art" that reproduction affords – its ability to "create" the world rather than stay tied to what already exists. Not only was the photograph itself transportable, but because each slide requires the apparatus itself, the stereoscope as a mass medium relied on a narrative of technological innovation and transportability; "the portability of Brewster's apparatus garnered public attention and transformed it into an instrument for mass

visual entertainment" (Pietrobruno, 172). The stereoscope therefore engaged a rhetoric of distance in its status as mass media – distance in the image itself and distance from the objects the images portrayed.

Finally, mass media finds a home in commodification, leading to the stereoscope's entrenchment in the world of spectacle and parlor entertainment. It is a "highly constructed medium that classified and broke up the visible world into parts that could be distributed and consumed as discrete commodities" (Pietrobruno, 180). By framing and capturing the likeness of an object, photographers chose which "parts of the world" to distribute and sell to audiences afar. This context of commodification is critical to understanding how those media labeled as simple entertainment or spectacle played a large role in normalizing the ideals that they embodied. By representing certain ideologies across space and time, these media embedded cultural ideals into the physical world around them, as "entertainment mediums ensured the persistence of mythology in popular culture, which in turn, boosted the regional tourist economy" (Jones and Wills, 321). By distributing the likeness of a place, people then view those places as open to commodification themselves. The practices of idle entertainment that mass media, such as stereoscopes, are embedded in have physical impacts on the worlds they portray.

### **Tourism**

Much of the visual theory in this essay is informed by John Urry's work in *The Tourist Gaze* (1990). Connected to classic theories of semiotics—that is, the study of symbols and signs—Urry explains that "tourists are in a way semioticians, reading the landscape for signifiers of certain preestablished notions or signs derived from discourses of travel and tourism" (10). Simply put, "people have to learn how, when and where to 'gaze'" (Urry and Larsen, 8). Urry fundamentally recognizes that tourists do not naturally occupy or relate to certain views. Instead,

there must already being some cultural value ascribed to the places they look at and go. In return, these places give tourists their status. Urry, therefore, centers the act of looking, albeit highly manufactured and specific, as the thing that makes a tourist a tourist. Tourism is made from a series of–socially, politically, culturally–constructed views and relationships, and is predicated on the traveler's power to look at some view that is then reduced to a consumable object.

Simply put, tourism and the stereoscope afford a certain positionality, especially in relation to the land it gazes upon. Similar to the apparatus of the stereoscope, tourism creates specific structures around viewers' experiences of the object in front of them, whether it be a landscape or stereo slide. Likewise, the mass appeal of tourism has hidden the gazes it employs behind an overlooked veneer of leisure, routine, and popular entertainment. These gazes, too, are fundamentally rooted in colonial histories and subsequently carry these relationships forward through the mass-market media. As media theorist Nicholas Mirzoeff explains, visual culture looks "to maintain the authority of the visualizer, above and beyond the visualizer's material power" (Mirzoeff, *Anthropocene* 216). The gazes, structured by the stereoscope and tourism, both relate to capitalist-colonial bids for power. Through a colonial visualization of landscape, alienation and extractivism become naturalized and set the baseline for the continued devaluation and exploitation of land. Ground zero, how you view land impacts how land is then used.

This all is not to say that the trend toward tourism in the western US is the primary or only method of exploitation. The century before this, the violence of Manifest Destiny and pioneering represents the lived ruthlessness of settler-colonialism, and it is not to be downplayed. Upwards of 75 years later, these sites of encounter lived on in the media consumed as middle-class entertainment. People often point toward grand Hollywood Westerns as a prime example of these patterns of spectacle, but the day-to-day mass consumption practices of middle-class

Americans recognizes mundane, naturalized encounters with the colonial ideals captured by representations of land and places afar. These popular histories are easy to overlook, as they often appear to be simple entertainment. As mass-media, the stereoscope's images and apparatus become devalued as a mere diversion for the general public rather than art with intentionality and a message. It is here that the settler-colonial histories, traditions, and relationships to landscape—as representation and as place—become part of the day-to-day practices of consumption.

### Zion National Park

As an occupation of Nuwuvi (Southern Paiute land), Zion National Park lies in Southern Utah. First called Mukuntuweap National Monument, it was "renamed Zion National Monument and expanded to 76,800 acres, five times its original size" in 1918 (Waite et al., 11). In 1919, the Utah senate pushed it "through the legislature, and President Woodrow Wilson signed a law on November 19, 1919, making Zion a national park, the first in Utah and the sixteenth in the nation" (Waite et al., 11). Therefore, the Zion National Park I discuss here specifically finds its roots in colonial histories, both in its creation and representation. It is a function of the state, both Utah and federally, to conserve land and subsume it into the nation. By doing so, however, they also conserve it *from* the Indigenous groups to which it is, and has been, home. While this thesis skims over this history of national parks and the conservation movement in the United States, it is nonetheless an influential narrative worth looking into for its discussion of the colonial power apparatuses at play in the creation of environmental thought. Rather than reify these colonial imaginaries and formations of land, I hope to instead reveal the limits to and violence of this vision of landscape. That is, Zion National Park is only one of many ways to envision and treat the land in this region.

Stereoscopes, as a product of mass-media geared toward giving audiences abroad access to the landscapes of Zion National Park and the American West, highlight exactly how colonial ideologies seep into the fabric of everyday experience. These are not natural ways to view and relate to landscape but have been constructed through a careful rhetoric of imagery and literature. In addition, they are not simply confined to the realm of detached viewing but are *very* much embodied in practice and approach to the land. These common customs, therefore, reactivate the legacy of colonial violence every time they are repeated. Virtually every historian dealing with the colonial histories of the American West has discussed how this area falls into myth. While this simplistic narrative has rightfully been expanded and challenged, its mythic nature often seems to be perceived as a separate consumable narrative rather than an actual experience of living on the land. But these are myths with teeth and claws. Stories that burrow and tear into bodies and land. They are not separate from settler-colonialism, but integral to it.

The apparatuses of tourism and the stereoscope ultimately cast a light on how these realities have been constructed over time through specific ways of viewing the land; they are projections of the built world colonial histories want to naturalize. Stereoscopes, like colonialism, therefore look to represent themselves as "real." All seek to naturalize these colonial gazes and relationships as a permanent narrative and as the natural way to exist in an environment. However, both cannot help but reveal the constructed nature of their images. By illustrating how these relationships have been made, current extractive relationships to the land are denied as the naturally embedded systems they purport themselves to be. "It shows that the widely circulated idea that we cannot imagine the end of capitalism is better understood as part of capitalism's self-constitution, rather than as a failure of present-day radicalism" (Mirzoeff, *Anthropocene* 219). Buying into the narrative of a natural and indestructible capitalist-colonial

system only works to maintain its authority. In other words, by revealing how capitalist-colonial relationships to the land have been built, an analysis of these stereoscope slides shows that they *can* be deconstructed and other ways can be built instead.

## 2. Make Stories Reality

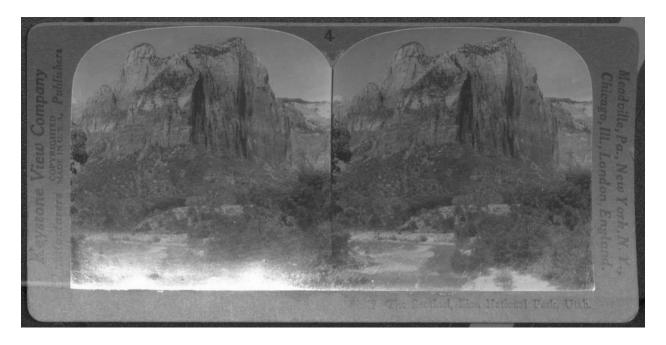


Fig 1. "The Sentinel, Zion National Park, Utah." Norman Ackerman Stereoview Collections, Claremont Colleges Special Collections, Claremont, CA.



Fig 2. "Spearhead Mountain and Cathedral Mountain, Zion National Park, Utah." Norman Ackerman Stereoview Collections, Claremont Colleges Special Collections, Claremont, CA.

"They had been conquered by man, photographed by him, and dropped into a parlor basket of stereograph cards next to sentimental depictions' of 'Visits to Grandma.' Stereographs thus literally depict-and even furthered-a tendency toward simultaneous reverence and indifference for the land. They represent awe followed by appropriation, enthusiasm degenerating into entertainment. As images and artifacts, stereographs of the West manifest the ability of Americans to revere the very land they are exploiting" (Masteller, 56).

Frontier studies often reiterate how "the American West" throughout U.S. history is ultimately a constructed myth. Photography and, to a greater extent, stereoscopy both throw this mythmaking into a highly complex and contested light. That is, "photographs capture the 'frontier experience', their own standing witness at America's creation myth on the frontier" (Jones and Wills, 307). Myths and stories are not simply ideological fictions, detached from the lived realities of the day-to-day, but rather sit at the core of how humans relate to and live within their landscapes and environments. Nevertheless, the conditions of early photography and the perceptions surrounding it immediately pinpoint the same notion of filtered gazes Urry discusses

in the tourist gaze. By capturing a scene they forward as the genuine "frontier," photographs (and their photographers and publishing company) worked to consolidate these colonial stories over any other. That is, "western landscapes are grand and important, and even aesthetically pleasing, because we collectively agree that it is so and not because of an inherent aesthetic value" (Sailor, 97). These places are not automatically considered "aesthetic" to viewers, but rather have been intentionally constructed as such to forward certain narratives. Therefore, no gaze or photograph is passive or incidental, but all implicated in a web of reinforced cultural ideologies.

Through this ability to represent and physically archive certain constructed gazes, stereoscopes and tourism both perpetuate colonial relationships to western land. As Sailor discussed above, this joint configuration of the gaze is particularly apparent in notions of beauty. "People see what they are looking for. If you have been told that a place is beautiful, generally when you see it, the spot will appear beautiful" (Hyde, 353). And as echoed by Urry: "such 'frames' are critical resources, techniques, cultural lenses that potentially enable tourists to see the physical forms and material spaces before their eyes as 'interesting, good or beautiful" (Urry and Larsen, 2). People seek out the places they have been told are important, beautiful, or spectacular. The West, like any other place in the United States, did not contain some inherent colonially-aligned notion beauty that attracted settlers or tourists alike, but rather was seen as such through its association with Manifest Destiny and American colonialism. Here, "beauty" and "goodness" value land based on, and in order to fit into, colonial narratives and land use practices.

As a tour, the Keystone slides depicting Zion National Park directly connect the experience of these gazes to a colonial apparatus. By leading its viewers through a linearly structured experience, the format of the tour tells its viewers what they should be looking at, in

what order, and through what relationships. It ultimately directs stereoscope users toward a "proper" way to view the land depicted in the image and, subsequently, move through it.

Linearity is therefore embedded in viewers' experiences of the park, leading them through in a highly curated order that otherwise does not exist. The text on the slides often explicitly recognize this replication of the tour's sequence, pointing out vistas in the image that "we shall see later on our journey" (Fig. 1). The text also teaches viewers how to go about appreciating the site comprising each "stop on the tour." For example, on the back of the image of "The Sentinel" above, the writers melodramatically explain that "upon a base course of red and purplish rocks it rears its carmine cliffs; these fade into pinks as the eye follows them upwards and become, near the summit, pure white patterned with the green of pines" (Fig 1). By directly telling the viewer the route their eyes should take through the image, the Keystone View Company impresses their own perceptions of the land onto the "tourist." That is, the text tells the viewer how to value the places they should look and disregard the places they should not.

This emphasis on the structure of the tour and its ability to "teach" viewers how to look at Zion National Park's land fundamentally reveals how critical the text is to shaping viewers' experiences of the photographs. Without this heavy structure, viewers run the risk of interpreting the image counter to the intended colonial vision. Photographers and editors therefore looked to undermine the land's agency primarily through, among other framing devices, text. In this context, the writers' purple prose and extreme use of color reveal the act of constructing viewers' understandings of these Zion cliffs as beautiful (within a capitalist/colonial perception of value, of course). "The aesthetics of the Anthropocene emerged as an unintended supplement to imperial aesthetics—it comes to seem natural, right, then beautiful" (*Anthropocene* 220). Although discussing the Anthropocene here, Mirzoeff's analysis of the aestheticization of

industrialized extractivism fits into how these regions become "beautiful" along capitalist-colonial lines. As an image-based medium, the stereoscope reinforces these aesthetic notions as "right" – the right way to picture and live in the land.

## 3. Engage Media: Photography and the Stereoscope

Consumers and photographers alike viewed photography as a direct correlation of reality, especially in relation to distant landscapes and locales. However, as a formative aspect of photographic theory explains, cultural aspirations are always woven into the fabric of a photograph. "Americans valued the quality of veracity as they moved into western places. This insistence on the truth-telling capabilities of a photograph sought to obscure the objective choices behind the process of taking a picture" (Sailor, 95). In this context, especially considering 1925 was nearly a century after the advent of photography, the Keystone View Company and its middle-class consumers hid behind a rhetoric of photographic truthfulness to forward their own security, settled on their own construction and perception of western lands. By taking a photograph, or in this case a stereograph, viewers attempted to naturalize the capitalist-colonial gazes and framing choices behind it. "Photography provides a useful example because of the illusion that it captures truth. This illusion made photography especially effective in convincing Americans that the West could be what they wanted it to be" (Hyde, 386). Because photographs depicted these areas as open and malleable, people began to act on it as if it was.

This attempt to forwarding of photography as truth, however, was not unfounded. On a historical level, this early 1900s rhetoric relied on the previous use of landscape photography as a method of analysis for scientific and geological pursuits. Photography was especially intwined with the U.S. Geographic Survey's 1800s mission of documenting and scientifically charting out

the American West (Alexander, 76). These roots therefore track landscape photography to a history of colonial expansion and military violence in the West. The stereoscopic tour makes sure to point to the Geographic Survey in its passages, solidifying a connection between its photographic content and pursuits to extract land along colonial scientific lines. The passage on the back of the seventh image in the tour (one not pictured here) states that "Major Powell, the celebrated explorer-geologist who made the first voyage through the Grand Canyon, was the first scientific observer to visit Zion Canyon, in 1870. Ten years later came Captain Dutton, another geologist of the U.S. Geological Survey" (Claremont Colleges Special Collections). By pointing toward this colonial history, the Keystone View Company worked to portray its images, information, and history as geological truth and historical fact rather than a market construction. For example, stating that Powell was the first to voyage through the Grand Canyon ignores the vast Indigenous histories and presence in the area. This violent charting over of these extensive cultures in Zion and the West only works to further embed colonial histories in the minds of Euro-American viewers at home. That is, the appeal to science and geography simultaneously draws on the myths surrounding the primacy of colonial stories in the region and reinforces them as the dominant narrative.

Beyond photographic history, the stereoscope itself was founded in the name of science; "in devising the stereoscope, Wheatstone aimed to simulate the actual presence of a physical object or scene, not to discover another way to exhibit a print or drawing" (Crary, 122). Instead of adding to traditions of art as a noticeable interpretation of the surrounding world and its environments, Wheatstone instead spoke to the physiological science of the stereoscope as a method to capture an object's "actual presence" rather than its representation. It was only later that, with the increased portability of Brewster's stereoscope, the apparatus entered the

vernacular of mass-media. These physiological scientific roots, however, happily contributed to entertainment's rhetoric of a device able to recreate reality. The specific attribute viewers pointed toward was, again, its assumed reproduction of depth; "it was through the stereo image's illusion of depth that it became equated with reality" (Pietrobruno, 178). While photography was seen as better able to capture some objective truth than painting, stereoscopes were thought to add another medium-specific layer to this apparent reality by marketing a relationships between three-dimensionality and some sense of reality to consumers.

The actual illusion of depth, however, depended on the photographers' awareness of the science behind the stereoscope, conveniently predicated on traditional pictorial conventions familiar to middle-class audiences. Crary walks us through these requirements, noting that "some stereoscopic images produce little or no three-dimensional effect: for instance, a view across an empty plaza of a building facade, or a view of a distant landscape with few intervening elements" (124). The stereo slides therefore would fail to create the coveted illusion of depth if they simply showed a cliff face or landscape without some framing device (that is, a foreground) near to the viewer. In the image of "Spearhead Mountain," for example, the tree branch stretching across the top right corner and the bush at bottom left both serve to add this depth, as well as frame the image with these classic Euro-American conventions of foreground (Fig. 2). Without this context, it may seem strange that these plants are blocking parts of the mountain on which the image is focused. However, the necessity to maintain the stereoscope's illusion requires some sense of a traditional foreground, and therefore necessarily obscures some of the land itself.

#### 4. Make Distant Lands Familiar and Fun

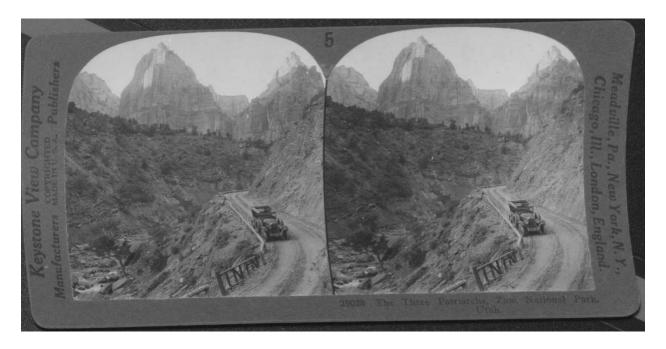


Fig 3. Keystone View Company. "The Three Patriarchs, Zion National Park, Utah." Norman Ackerman Stereoview Collection, Claremont Colleges Special Collections.

On the back of the image above, the writers praise Zion as "a Yosemite done in oils.' In its general shape as well as in many of its particular features, Zion Canyon does resemble the greate granite gorge in the Sierra of California, but with the addition of marvelous color" (Fig 3). By relating Zion to an already established and well loved park, the Keystone View Company justifies Zion's value based on other lands already subsumed into a familiar framework of beauty and recreational land use. The park's lands are dragged out of the unknown space of a vast uncharted territory and instead sold within accustomed relations to land in the West.

Tourism is ultimately dependent on drawing a difference between the "here" and the "distant." Tourists "gaze upon or view a set of different scenes, of landscapes or townscapes which are out of the ordinary. When we 'go away' we look at the environment with interest and curiosity" (Urry and Larsen, 2). Tourism itself is therefore founded on the perception of

difference, so a place becomes worthy of gazing upon because of something unfamiliar to the daily patterns of their own lives. To "go away," however, tourists must define some sense of "here." That is, "tourism results from a basic binary division between the ordinary/everyday and the extraordinary" (Urry and Larsen, 10). In this sense, the tourist gaze that Urry discusses works to highlight what a culture identifies as unique and what it defines as the everyday. In terms of landscape, these boundaries reveal what in the Southwestern desert was perceived as "interesting" or "extraordinary," thus laying bare how tourists were fashioning western lands as different from their own environments "back home." The constructed nature of this gaze reveals how these differences are a matter of careful composition and therefore only highlight difference when it is beneficial or safe to do so.

For all this focus on "difference," tourism works as a method to control and absorb this difference. The gaze effectively neutralizes places out of the ordinary, and landscape becomes pictured and viewed along familiar aesthetic lines. That is, "place-making reached a fevered pitch with the advent of photography in America in 1840. The medium accompanied exploration and immigration, playing an important role in making landscapes familiar to newcomers and faraway populations" (Sailor, 92). Images then act as a method to bring distant places across the American continent into the minds and gazes of audiences afar, especially white middle-class consumers. In this sense, the ability to gaze upon a landscape works in tandem with physical colonization. Tourism becomes a way to continue the familiarization of western places on the "edges" (frontiers, if you will) through a direct acknowledgement of difference. By fitting distant lands into a familiar worldview, tourists could use well-known aesthetic tropes and ideals to safely frame places they found odd. Urry's dichotomy of ordinary vs extraordinary fits strange

landscapes directly into their own known structures, thus including them within their comfortable ideologies.

The pictorial conventions these stereoscopic images are emulating demonstrate the active ways in which photographers framed western land through familiar tropes and devices. They often relied on customs used in Euro-American landscape paintings and photography, especially those "guaranteed to attract a wide popular audience: a knowledge of the landscape tradition, an ability to adapt that tradition to Western views," and a keen awareness of depth (Masteller, 66). Paradoxically, in order to impress their audiences with "strange" or wonderous scenes, photographers had to frame these views through methods familiar to the audiences buying them. For example, "the Picturesque, the Beautiful, and the Sublime were well defined aesthetic tropes in western culture of the nineteenth century that prescribed the manner in which people not only represented the western landscape but how they saw and experienced it as well" (Sailor, 97). For context, the picturesque refers to scenes that are pretty, quaint, and charming while the sublime to those that were awe-inspiring, grand, or terrific. Seeing images that adhered to these tropes therefore framed the land itself as familiarly aesthetic. Landscapes became palatable to viewers in distant environments, not just as a picture, but as a place. Photographers therefore literally framed Zion and the west as a land subsumed within notions of control and familiarity.

Though not directly stated, the image above relies on this sublime framing (Fig 3). For example, the image is composed so that what Zion names "Three Patriarchs" in the background seem vast in comparison to the dark foreground closest to us. Their light faces, too, give the perception of distance, as they seem to fade into the atmosphere. Aside from this structured "grandeur," the directional lighting of their peaks adds a sense of drama and substance. The photographer's notes clarify the intentional choices they made to frame the buttes along

appealing, familiar lines. They state that the monuments "are so large and so in line that it is impossible to include the three in one shot even using wide angle unless a two days trip is taken and is necessary to climb among rock all the way to a Mt. No trail and then there would be not foreground" (UCR Keystone-Mast Collection). Their direct bid to a "foreground" aligns with standing European painting and photographic landscape techniques of structuring a scene based on a foreground, a middleground, and a background. For example, this image, especially, shows a clear use of these conventions, as the dark ridge cuts a very clear line between the middleground and background peaks. They therefore sought out a view that adhered to commonheld Euro-American traditions to drive home the majesty of the land, but only on their own terms. This language on the one hand locates the Keystone View Company within the landscape of the image. On the other, it also locates the photographers within a history of painterly intentionality; they are purposefully choosing views that relate to the framing device of foreground and background.

However, in the end, it is a bit odd that the landscape itself dashed their attempt to adhere to the colonial naming of "Three Patriarchs" and capture all three buttes together. While the card itself does not admit to it, the photographers' notes explaining that it would take "two days trip" to capture the ideal view on camera and that they would be forced to "to climb among rock all the way to a Mt. No trail" reveal the troubled reality of abiding by their traditional practices. The description of the land as a type of adversary itself reveals the difficulty in actually enforcing the ideal of a submissive western landscape. Even if they embarked upon the trek, they would lose their precious foreground and thus not adhere to the demands of accepted pictorial convention. In this way, the very land they are trying to portray within familiar practices of domination and control subverts these attempts. The ease of which the landscapes defy the very notions of

familiar beauty that the photographers were attempting to push, or at least abide by, highlights the importance of the text on the slides' reverse. While the photographers attempted to control the content of image, often, the landscapes themselves evaded these categorizations. The text therefore offered another layer of orientation for stereoscope viewers.

Pressing too much difference or unknown, however, would threaten certain cultural norms, call into question systems taken for granted, and not sell. As commodities, tourism and the stereoscope needed to maintain their veneer of idle entertainment to turn a profit. Images of strange lands, but ones that have been assimilated into dominant binaries, were "safe" to distribute, as their "strangeness" was carefully bounded. Therefore, "the 'frontier experience' replicates the positive elements of frontierism only – unsurprising given that tourists want, first and foremost, an enjoyable holiday" (Jones and Wills, 307). This logic can be extrapolated to stereoscope consumers, imagined as tourists, as companies presented land in a way that easily fit into accepted notions of the American West. They had to neutralize these differences, whether through framing or text, to further cement the ideals that viewers found "familiar." This easy familiarity, too, brought representation to the realm of enjoyable and idle entertainment. This form of entertainment around land created a space for comfortable colonialism, one that further pushed its own ideals into a naturalized, mundane space. Furthermore, familiarity impacted the ways photographers and viewers alike pictured and imagined land in the West. "What white Americans expected and what was familiar had great impact on what they found in the Far West in the early nineteenth century" (Hyde, 354). In this sense, the familiarity found in stereoscopes aided the imaginative and physical push for the West to reflect these ideals by recreating only the "positive" parts of settler experience. Images therefore helped forward the sense that, for all their "strangeness," these landscapes could be utilized and assimilated into colonial land use practices the same as anywhere else.

Consumers, photographers, and companies picture land and history in a way that can be consumed and fit into certain ideologies. "Recreation is squarely founded on the principle of recreation – the return of the frontier. However, that frontier is always imagined" (Jones and Wills, 308). Difference therefore becomes a recreational tool. What may have once been different is carefully imagined and neutralized by its fit into consumerist culture. Yet, to "re-create" anything at all, the history (or stories) consumers and tourists were "re-creating" must be known. Colonial myths, therefore, found themselves used both to make these landscapes familiar and to circuitously push these colonial histories and representations of the land further into everyday practice. The colonial "imagined frontier" therefore slowly became enacted in the day-to-day and further cemented as a core, or even "real," historical narrative. This recreational naturalization is mirrored through the stereoscope's place in consumerism and mass-media. Fitting with Benjamin's conception of reproduction, through the entertainment of the stereoscope, "the awesome thus became the familiar, and finally the inconsequential" (Masteller, 67). Although not reducing Zion and the West's landscapes to "the same" land as back home, they instead became knowable, and thus, in a colonial imaginary, controllable. As Masteller recognizes, this familiarity ultimately demotes Zion's landscapes to what is understood as trivial entertainment. Rather than acknowledge the land as a force in itself, one that often transgresses known cultural norms and pushes boundaries, these stereoscopes represent land as simply another consumerist object.

Again, though these ways of imagining seem inconsequential, they actively shaped the land. For example, another strange aspect of this photograph is its focus on the car and road.

While the backgrounding of the buttes it claims to focus on certainly makes sense in terms of capturing their full height and sublime distance from the viewer, it also serves to "background" them. Much of the interest in the photograph therefore becomes its human-made elements. The line of the road, accentuated by the fence, weaves diagonally back through the plane of the image, focusing the viewer's eye on this dynamic line. With the dimensionality of the stereoscope, this road becomes one of the areas with the most "depth," further asserting its centrality. In discussions of familiarity, however, this focus makes sense. By foregrounding how white American settlers have directly dropped their own familiar built environments onto the land, they effectively become a safe space, already "conquered" by common technologies. Viewers therefore already have a familiar fixture to guide them through their interpretation of the park's land along their own notions rather than challenged to recognize the primacy of the land itself.

A common Edenic narrative, too, winds its way through these slides. The company's writers construct an image of a park "watered by cool springs dripping from mossy cliffs and dashing streams where grow prickly pears and other cacti, yucca, sage brush, pines and many lovely wild flowers" (Fig 3). Although they recognize the flora native to the region, these descriptions point toward a type of distant "garden paradise" that no longer exists, familiar to Christian-based audiences. Therefore, Zion's "difference" only rests on its status as a place lost to the audiences viewing it. It exists in stories, and Zion offers a chance to regain it. By describing the abundance of water in the park, the Keystone View Company feeds the belief that "the semiarid plains could be made into agricultural bonanzas, while the deserts and mountains could flower with irrigation and mining" (Hyde, 358). These tourists, stereoscope viewers, and

photographers alike therefore looked to imaginatively, and thus physically, transform Zion into what they imagined a productive land to be, both as a resource and an ideology.

Looking at the image and landscape, however, none of this supposed "Eden" is all that apparent. Like many of these slides, there is a stream running along the road, indicating water, but the "mossy cliffs" and "lovely wild flowers" are absent. The text again becomes critical in framing what viewers are supposed to see. This textual structure reflects "the power of the cultural filter Americans used to view the region. The first method involved denying the facts of the landscape and insisting that the entire region would support traditional American patterns of living" (Hyde, 358). Instead of recognizing the desert for its own merit, settlers looked to represent the land as useful to a colonial and extractivist conception of value. The lack of these elements ultimately reveals how the Eden they were praising was carefully created. But because they wanted to recreate this traditional verdant landscape, they represented the area as such, returning to Hyde's sense of "denial" of the authority of the land itself. The auto-road serves as further assurance that these fantasies are able to be implemented and that the West is a malleable "Tabula Rasa." In addition, this insistence on the "beauty of the nature" in Zion reflects an assumption that the environments within which the viewers and photographers were living were fundamentally *not* nature. The idea of "nature" is placed far from cities, reinforcing a strict boundary between urban spaces and "nature." This all not to mention that the garden environment they coveted in the West did not actually exist but was simply another colonial fantasy.

## 5. Embody, Distance, Alienate

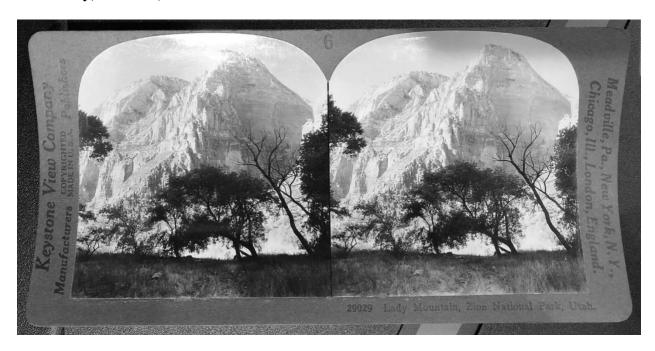


Fig 4. "Lady Mountain, Zion National Park, Utah." Norman Ackerman Stereoview Collection, Claremont Colleges Special Collections, Claremont, CA.



Fig 5. "The Mountain of Mystery, Zion National Park, Utah." Norman Ackerman Stereoview Collection, Claremont Colleges Special Collections, Claremont, CA.

By combining the stereoscope and the tour, the Keystone View Company blurs the lines between the virtual and ideological – the tangible and physical. That is, the semblance of depth, engagement, and embodiment in the stereoscope reveals just how virtual embodiment under logics of colonialism and capitalism are. And in reverse, embodiment tears representation out of an abstract mythic space and demonstrates how it becomes physical and inscribed in the landscape. Each is fundamentally entangled in the other. As something purported to be an entirely physical act of movement, the Keystone View Company has used the tour as another layer to solidify the supposed "reality" and "tangibility" of the stereoscope images. However, this use of the tour actually reveals how constructed relationships to the land are; we see what we are taught to see. Finally, stereoscopes, as mass-media, wrap all these forms of embodiment up in a physical distancing from the land. That is, all the methods the Keystone View Company deploys to naturalize the colonial gaze of the west rather expose the methods each are relying on to build these relationships.

As we have seen again and again, at the time, stereoscopes were lauded for their perceived ability to transport viewers into the image and its depicted landscape. From the comfort of their parlors, members of the middle-class could gaze into a seemingly 3D scene. "People viewing stereographs became more than mere observers; to sit in a New England parlor and literally see over a precipice into the Grand Canyon" (Masteller, 67). The stereoscope's greatest appeal was therefore its apparent immersion of the viewer into some remote location's landscape. As Masteller explains, viewers could believe they were more than detached "observers" of an image but instead entirely engaged within the scene. This engagement, however, centers the act of gazing in the experience of place. It therefore creates a relationship to place based on the power

structures found in a certain gaze rather than full-bodied experience. Stereoscopes "transformed...the stationary pastime of viewing the splendours of the world through stereo cards into a 'live' voyage" (Pietrobruno, 180). Viewers felt themselves transported out of their parlors or classrooms and instead swept into an active distant landscape. Pietrobruno recognizes how viewing is often characterized as passive or "stationary," but by engaging a rhetoric of three-dimensionality, the stereoscope reveals the ways the of the viewer is engaged in the act of viewing place.

The stereoscope pushed this gaze-centric experience of place as the natural way it should be experienced, and viewers of western land thus increasingly fed into alienated relationships to the land. It feels paradoxical, that "the desired effect of the stereoscope was not simply likeness, but immediate, apparent *tangibility*. But it is a tangibility that has been transformed into a purely visual experience" (Crary, 122). The stereoscope's tantalizing assumption of depth, therefore, looked to engage the body and draw viewers' attention to it, even if realistically, viewers remained in their chairs. It reformatted the role of the body as something to supplement and direct the gaze where previously, the act of being somewhere, picking your way across unstable rocks or brush, meant a certain recognition of the landscape. It is not that the stereoscope completely omitted the body, but rather restructured its role in support of the gaze rather than a form of knowledge and experience in its own right.

Benjamin's concept of the "aura" is useful here to represent how virtuality and the reproduction of images cannot actually recreate the experience of being in a landscape. "Even the most perfect reproduction of a work of art," he explains, "is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be" (Benjamin, 3). The stereoscope cannot reproduce the physical realities of being in a place, "for aura is tied to

his presence; there can be no replica of it" (Benjamin, 10). The embodiment of a landscape, or a knowledge of yourself in a place, is therefore an illusion through the stereoscope. By structuring place-making around the temporary constructed gazes of tourism and the stereoscope, landscape becomes devalued as fleeting and distant. In addition, while the Keystone View Company attempts to use the tour as a way to reinforce the "solidity" or "tangibility" of stereographs, it actually does the opposite and instead highlights how tourist experiences are themselves virtual and ideological.

Holmes' account of his experience with stereographs points to the importance of dimensionality in the act of a colonial envisioning and conquering of space. He praises the apparent ability of the stereoscope to transport his body into an image's depths – the realities captured "in this small library of glass and pasteboard! I creep over the vast features of Rameses, on the face of his rockhewn Nubian temple; I scale the huge mountain-crystal that calls itself the Pyramid of Cheops" (Holmes, 6). He knowingly refers to the seeming inconsequence of these cards, characterizing them as "glass and pasteboard," but opens them up to infinite experience and knowledge. Already setting the precedent for the assumption of an all-knowing colonial vision, his description of his seemingly embodied experience further cements this relationship to the scenes and land within. Through the stereoscope, Holmes actively "creeps" over "vast features" and "scales" a "huge mountain." This description, too, equates distant monuments to curious parts of the landscape rather than built human architecture and culture. As Holmes recognizes, the stereoscope creates a "feeling of involvement and the sense of discovery imparted by the three-dimensional realism" (Masteller, 58). Again, although this embodiment was ultimately illusory, the imaginative conquering of land directly lends itself to the continued physical exploitation of landscapes in the West.

The inclusion of a small group of figures in Figure 5's scene give viewers access to this colonial involvement. As the text on the back notes, "beyond, there is no trail but the winding stream which reaches from wall to wall," but "with a competent guide the adventurous traveler may follow the Wet Trail for several miles northward on horseback" (Fig 5). These explorers stand in for the viewer, signaling that the landscape in the image is approachable and that they too can adventure into it. Viewers could therefore feel involved in the prospect of adventuring into a dangerous and often unseen landscape, one without a road or trail. Instead, the path is said to be perilously made of the rushing stream taking most of the gorge's floor in the image. In addition, the group's small size speaks to the vastness of the landscape they are exploring, adding to the sense of a grand adventure. Beyond this point captured on the slide, the writers' description of the journey only becomes more fanciful, speaking of the depth of a canyon "completely excluding the rays of the sun and the stars may be seen by day" (Fig 5). This fantastical description of adventure (as a reminder, one on the back of a slide specifically intended to be used as education) reveals how viewer involvement in the slide is predicated on embodying and journeying through an imagined place. The writers therefore directly the recognize the power viewers had to physically reiterate certain colonial stories.

By making experiences of land visual, the West suddenly became tame and "safe." The realities of land's "vastness shrunk to a tiny scale could be accessed and manipulated by viewers within the safe and secure confines of the home" (Pietrobruno, 176). To travel and experience to land in the West became a secure practice; viewers at home had a sense of physical control over the landscape with the assurance of their continued comfort and safety. If there is no danger of harm, or even struggle, audiences did not have to pay attention to the land that has the ability to physically threaten them. As such, these stereoscope-based "luxuries took the threat out of the

wilderness and made it something to enjoy" (Hyde, 363). The illusion of involvement without physical stakes meant that audiences saw the land as disconnected and passive against their gaze. This narrative of compliance served to idly entertain, educate, and continue to assume a narrative that white Americans that they had complete control of the land, especially that perceived as "desert" in the west.

The images, too, often play on this type of passive danger for entertainment without requiring a lasting relationship to the land. For example, the writers state that the peak of "Lady Mountain is one of the few peaks of Zion that may be climbed without danger. A trail leads to its dizzy tip, and it is one of the most thrilling trails in any of the National Parks" (Fig. 4). They again hint at danger, but because of the lack of embodied stake in the landscape, it only gives the semblance of a thrill. The existence of a trail in the image, too, indicates repetition, or intended repetition, of this experience in a safe and mediated manner, undercutting the sense of danger. This reenactment of a distant danger directly relates to Mirzoeff's connections between the body and vision; "seeing is not believing. It is something we do, a kind of performance" (Mirzoeff, How to See the World 14). By framing the vision of someplace as a performance, Mirzoeff points to how these perceptions become practiced in the landscape. That is, the lack of danger in the stereograph is not the point. Rather, by performing danger and exhilaration, these sublime characteristics become practiced in the viewers' bodies and perceptions of the park. Again, the stereoscope does no eliminate the body, but rather places it into a relationship with land where viewers did not have to worry about it posing a danger to their health.

Along these lines of safe embodiment, the stereoscope allowed viewers to simply leave the scene. As armchair tourists, they could take the apparatus of the stereoscope away from their face and therefore effectively exit the landscape, practically eliminated the necessity for viewers

to form a relationship to distant landscapes through connection or care. Tourism and the stereoscope are predicated on the fact that you can simply leave the landscape whenever desired. "Their inexpensiveness made them a cheap thrill, one that people could repeat effortlessly, or one they could vary just as easily by alternating Western images with sentimental scenes of domestic life" (Masteller, 68). The stereoscope thus created a sense of passing and devalued entertainment, one that could be recreated at will or leave whenever they grew tired of it by removing the card. Mass-media, too, throws the physical distance between the viewer and the object into relief. If tourism relies on the closeness of an object or landscape, the reproduction afforded by mass-media brings these distant places to the viewer. As Benjamin notes, "every day the urge grows stronger to get hold of an object at very close range by way of its likeness, its reproduction" (Benjamin, 5). By doing so, however, viewers leave the experience of being within and surrounded by a landscape behind.

The stereoscope relies on the presumed embodied experience of the tourist to assert the colonial notions of landscapes shown on the slides. As Urry recognizes, tourism is traditionally understood as a movement-based practice, where the "corporeality of movement produces intermittent moments of physical proximity, to be bodily in the same space as some landscape or townscape" (Urry and Larsen, 13). The bodied movement found in tourism therefore reflects the rhetoric of bodied movement into the depths of a stereoscopic slide. As we know, however, these depths are illusive in the same way that tourism itself obscures its ideological foundation.

Through the nature of its learned and intentionally made gazes, "tourism as a concept is based on a constant interplay between physical and virtual destinations, between landscape and mindscape. The tourist imagines a destination before going there" (Jensen, 215). Tourism becomes partially a mental experience rather than only embodied. Therefore, tourism and the

stereoscope each reveal what the other hides: that tourism is partially virtual and that the stereoscope's image is partially embodied. The attempt to enhance the illusion of embodied depth in the slides falls apart through the reality that tourism is itself ideologically constructed.

The stereoscope is inherently physical, engaging the body through the practice of working through its apparatus. Unlike photographs, which make sense without technological visual support, stereographs require a stereo viewer to combine the image for the eyes. The stereoscope therefore necessitates an "inexhaustible routine of moving from one card to the next and producing the same effect, repeatedly, mechanically. And each time, the mass-produced and monotonous cards are transubstantiated into a compulsory and seductive vision of the 'real'"(Crary, 132). The viewer's body itself is therefore fundamental to "moving through" the scenes of a stereographic tour. The routine it engages brings it into mundane practice, embodying these "mechanical" ways of seeing land day to day. While the stereoscope does not engage the body in the same way as walking through a landscape does, "the actual readjustment of the eyes from plane to plane within the stereoscopic field is the representation by one part of the body of what another part of the body, the feet, would do in passing through real space" (Krauss, 314). The bodied movement supporting the act of gazing through a stereoscope ultimately reconfigures the role of the body in relationships to land.

The apparatus, therefore, plays a critical role, even if it is supposed to go unseen. The physical structures called to mind are entwined with the ideologies they reproduce. "The equipment-free aspect of reality here has become the height of artifice; the sight of immediate reality has become an orchid in the land of technology" (Benjamin, 13). The denial of the stereoscope that so much of the "depth" rhetoric is centered on fundamentally reveals how the gaze is structured. Like the strange repositioning of the body, these perceptions of land and place

are supposed to be natural and automatic. The need for a VR-like headset, however, directly ties these gazes to ideological and physical constructions that support and solidify them. As Urry discusses, "the power of the visual gaze within modern tourism is tied into, and enabled by, various technologies" (Urry and Larsen, 3). Tourism and its gazes can therefore be disseminated over distance and time by the technologies that reproduce its gazes.

In the end, the physiological depth Holmes and others at the time held so dearly is only an illusion. As Crary explains, "the apparently passive observer of the stereoscope and phenakistiscope, by virtue of specific physiological capacities, was in fact made into a producer of forms of verisimilitude. And what the observer produced, again and again, was the effortless transformation of the dreary parallel images of flat stereo cards into a tantalizing apparition of depth" (Crary, 132). Even the three-dimensionality that at the time was praised so deeply is a learned construction or way of gazing. This illusion recenters a detached body in the experience of viewing landscape as well, as the "physiological capacities," aka the eyes, create the depth by combining two separate images on pasteboard.

Crary pinpoints the ultimate recognition that the apparatus, stereoscope and gaze, through which the strangely alienated relationships to the land rest on are illusive despite their perceived "naturalness." "Even though they provide access to 'the real,' they make no claim that the real is anything other than a mechanical production... They refer as much to the functional interaction of body and machine as they do to external objects." (Crary, 132). While claiming a "reality," as Crary notes, the stereoscope ultimately interrupts the illusion by drawing too much attention to the physical structures that condition the ways viewers relate to place and landscape. If this illusion is the pretension that these relations are "natural," then the structure of the stereoscope, from the binocular apparatus itself to the inability to glance at the slides and see the landscape in

total, reveals how the illusion is made, both made-up and physically constructed. Crary ultimately forwards this lack of "camera obscura" as the reason the stereoscope ultimately fell out of favor. Too much of its illusion rested on a structure much too overt to hide or claim as a "natural gaze," no matter how spectacular or entertaining.

This mixing of myth and embodiment plays into physical ramifications for the landscapes in the West, as the turn toward an active embodiment, whether illusion or not, speaks to the ways ideology enters into the body and physical space. Zion National Park specifically plays to these tensions between imagining a space and physically acting on it. For example, "tourists are encouraged to imagine themselves in the Old West, to take part in the familiar narrative of discovery and conquest" (Jones and Wills, 307). Tourists therefore enact the imagined stories of the past in real time as they engage with the landscapes they look upon. The "Old West" they seek to visit is ultimately mythic, created as a force to forward control and conquest of the land. But by actively embodying the narrative, tourists are asserting its ideologies as the primary narrative. That is, tourist visual experiences are built on the perception "that spectators can have direct experience of the nation's heroic, mythical past" (Malin, 410). This tourist recreation in part led to the land's devaluation today, as it continues to be shaped as a consumer object. In addition, these reenacted histories continue to be asserted as the natural relationship to land built on capitalist-colonial extraction and use.

One Yale 360 article comments on the physical legacies of placing so many hopes of naturalized Americana on one landscape. By selling Zion's land as an Edenic nature, "instead of coming to get a sense of nature transcendent, people wait an hour or two in traffic just to get through the park gates" (Robbins). In addition, "all of these feet trample vegetation, aquatic insects, and fish habitat" (Robbins). By making Zion into on specific area that epitomizes the

grandeur of land in the Southwest, tourists flock only to its designated "beauty spots" instead of finding all land in the region important. This concentration of tourism therefore degrades the very environments tourists come to see. This trend is repeated throughout the region as a whole; "the cultural determination to recreate the West to suit white American needs left a legacy of environmental destruction and abandoned farms, resort areas, and mines" (Hyde, 360). The entire system of extraction in the Southwest set up because, *and in support*, of distant and visual tourist imaginaries therefore left physical environmental impacts in its wake. In addition to unchecked resource extraction and violent land grabs, the apparatus needed to even maintain colonial ideologies themselves were therefore environmentally harmful.

## 6. Embed Ideology: Colonialism



Fig 6. "The Altar of Sacrifice and the Towers of the Virgin, Zion National Park, Utah." Norman Ackerman Stereoview Collection, Claremont Colleges Special Collections, Claremont, CA.



Fig 7. "Panorama of Zion Canyon from Observation Point, Utah." Norman Ackerman Stereoview Collection, Claremont Colleges Special Collections, Claremont, CA.

As a medium so entwined with narratives of myth and reality, the stereoscope provides a unique platform through which to question the relationship between representation and enactment, especially in relation to the landscapes which it displays. It is a technology that blurs the border between fantasy and practice, between theory and the day to day. By centering a gaze specifically curated around a tourist experience of Zion National Park, something traditionally requiring movement to and away from the landscape, the stereoscope specifically questions how we live between place and representations of place.

Through a recentering of embodiment, memory and history become physical, embedded in the land. This sedimentation directly contradicts the western academic trend to view ideas and ideologies as abstractions, unconnected with a grounded day-to-day existence. Colonial logics of fragmentation and alienation carry forward and embody certain histories over others. Better yet, colonial states push this overwriting of histories as natural rather than continually constructed and reconstructed. These moments ultimately draw attention to the role of the body in

discussions of memory and reveal how colonial histories are both fragile in their fabrication and enduring in their physical remains.

These slides, specifically, play on these fantasies of embodied control. Both images include what European painterly tradition calls a "Rückenfigur," which, as Alexander explains, is the perspective of a figure's back as they look away from the camera and over some scene in front of them (101). Viewers are supposed to, in some sense, embody the figure in the image and take on his positionality. These male figures, with all the accompanying notions of patriarchal power and control, therefore serve as the imposition of the viewer in the land of the image. Furthermore, this assumption of an all-encompassing gaze directly plays off previous histories rooted in the U.S. Geologic Survey. By laying out the land in front of the viewer, they assume an all-encompassing gaze where the land may be shaped by their imaginations. In addition, along with being places that can be "virtually" visited through their images, these views also set the precedent for the spots tourists still travel to today.

This transportation into the image is further exaggerated by the distant position of the figure, removed from the landscape he is gazing over. This "prospect view was a pictorial convention that gave viewers a wide, overlooking view of a landscape that was meant to symbolically imply future potential for industry, agriculture, mining, or other acts of commercial progress. It was a view that presupposed a 'virgin land' or tabula rasa interpretation of the West" (Alexander, 101). In the context of the stereoscope, however, this figure and its gaze directly relate the body of the figure to the body of the viewer back home. That is, even though the man in this slide is physically in Zion National Park, he is bodily distant from it. He views it from afar and by looking down from a vantage point above. By gaining a "prospect view," as Alexander calls it, the man mimics the same view through which stereoscope viewers were looking at

landscapes, from afar and as a wide shot. The image, therefore, pushes a gaze-centered experience as the "natural" or "correct" way to view and relate to land even when you are physically there (as the man in the image is). This image asserts that gaze viewers in their parlors were taking was not because of the distance of mass-media, but because a framework of distance is how land should be viewed at all times. As Alexander further explains, this distance allowed viewers and settlers alike to image the land along commercial or extractivist lines; if you are perpetually not a part of the land, safe and bodily different, then there is no harm to grapple with in implementing any imagined extractivist or value-based logic onto the landscape.

These gazes solidify the physical nature of history and memory, reflected in both place and the body. As environmental author and professor Lauret Savoy states, "this country's stillunfolding history has marked the land, this society, and every inhabitant, whether Indigenous or recent immigrant or descendant of generations here" (14). These histories are not confined to the past, as colonialism in the U.S. purports itself to be. Rather, by carrying memory forward in the land, history becomes present through the pieces scattered and accumulated in the surrounding world. The true insidious nature of these colonial histories, therefore, is the tendency to bind it to some realm of abstraction and ignore the physical roots that keep it alive. As Savoy explains, this fragmentation and dislocation has "made certain ways of inhabiting and relating to this place called 'America' natural. It made particular points of view normal" (52). By naturalizing these modes of linguistic and ideological settlement, such as renaming and fragmentation, colonial histories look to counter the fragility of constructed memory. To acknowledge the places – ideologically, linguistically, physically – where one history is asserted over another means to highlight the cracks in a manufactured history, deadly to a colonial logic that looks to maintain power through a narrative of what has "always been."

By covertly carrying historical displacement and capitalist-colonial narratives through time, media production becomes a strange form of Rob Nixon's "Slow Violence." That is, it is "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all" (Nixon, 2). These images, perceived as idle entertainment, therefore fall under the realm of a violence that "is not viewed as violence at all." The stereoscope and its slides demonstrate how systems of thought and violence often said to be confined to the past rather continue into the present. These present manifestations are not simply ideological, but physical as well, leaving marks and holes in the landscape. Nixon's proposed solution is "to engage the representational, narrative, and strategic challenges posed by the relative invisibility of slow violence" (Nixon, 2). In the case of the stereoscope and its images, however, the representation itself is the slow violence. The ability for narratives to carry forward and reassert certain histories and relations to land over others therefore poses another layer of difficulty in the communication of environmental and climate issues. Revealing the narratives embedded in environmental media itself is therefore a critical step to better telling environmental stories. Colonial stories are "made" and can therefore be unmade, overwritten, and changed. Pinpointing the places memory finds physical form in the body and the land is not a concession to some immutable colonial force, but rather an acknowledgement of how structures transform and shift.

Savoy specifically points to naming as an example of a deceptively embodied practice, as it draws explicit attention to the presumed boundaries between language-based abstraction and physical experience. Savoy explains, "names encode meaning and memory" (78). They "orient and transform a vast unknown into a knowable new chance. Naming and mapping would work as twin projects in the courses of empire" (78). Names represent certain modes of cultural

knowledge and subsequently "encode" them across time and space; they allow ideas to be disseminated and institutionalized. Here, then, the process of naming occupies a strange spot between transformation and sedimentation. On one hand, it allows room for an active and intentional reconfiguration of space and land. On the other, when unquestioned, it naturalizes certain systems of thought and their histories into common experiences of place. By giving name to the unknown, both body and land, colonists created an imaginative and physical area to claim. But it is by uncovering *how* colonialism and capitalism have created structures of memory and built one sense of past over all others that Savoy ultimately points toward the fragility and change inherent to history. People can, and have been, actively working to fight for place and self in a system that looks to cover them is the first step to remembering manifold histories defined by relationships between land people.

This colonial renaming runs rampant in Zion, as "what is being preserved is not merely a place but a particular conception imposed on a place by its naming. It is not simply the preservation of a natural resource but a monument to the mindset of those exploring or inhabiting the land, as captured in the name" (Waite *et al.*, 3). Similar to Savoy's earlier notes on the embodiment of naming, Waite *et al.* explain that Zion's naming conventions encode the perceptions of its settlers into continued practice. These naming conventions are most apparent in the final slide, as the "tour" ends with viewers "standing upon a lofty promontory called Observation Point" (Fig 7). Already, the naming itself recognizes the primacy of viewing the land from the perspective of an overall survey. As discussed with the U.S. Geologic Survey, this distant all-encompassing vision directly relates to the violent military history in this area and makes room for further extractivist mindsets to be implemented. The name of the vista, therefore, serves as what Wait *et al.* call a "monument" to this exact way of envisioning land and

carries it onwards through every person who stands there. For example, from this point, the back of the slide makes sure to name every butte and feature, especially those highlighted throughout the stereoscope tour: "Big Bend," "the Virgin River," "Angels Landing," "Sentinel Peak," "the Great White Throne," "Red Arch Mountain," and "the East Temple of the Virgin" (Fig 7). By gathering these names before the viewer as the last view of Zion, the slide asserts that they can be fully known and imagined as a type of "prospect view" of the colonial vision of the land.

With these histories of naming, I should finally address the elephant in the room: religion. This is a complex and topical history in and of itself, but it is ultimately not one I am choosing to focus on. Nevertheless, the Mormon church plays a central role in defining Zion National Park and serves as an undercurrent to many descriptions of the region in this tour. Naming the land Zion, for one, is a direct bid to Heaven, a temple, and a space of worship. Settlers came to a land that they saw as already associated with some sense of the sacred, and instead renamed it, and many of its features, along their own perceptions of religion. In what is one of the few acknowledgements of Indigenous presence, the writers devalue their sense of sacredness by explaining they "sometimes fancied that lights were kindled on these inaccessible pinnacles by friendly spirits" (Fig. 6). By directly acknowledging the sacredness of the land, they instead coopted it and insisted that their Christian form of worship as more valid. These practices of renaming the land along Christian lines exposes "the values that different people brought to their encounters with the canyon, as well as the values and meanings they assigned to the canyon. Even more than the names we attach to a location, the stories we tell about it outline the contours of the place in our cognitive maps" (Waite et al., 6). That is, settlers saw the land and told themselves that it was an "Eden" or "Heaven on Earth," named it as such, and thus began to treat it as if these stories were reality.

As the writing on Fig 6 explains, viewers and settlers alike perceived and shaped Zion National Park as a pastoral wonderland, illustrating that "the charms of the frontier land in which it lies is its remoteness from the main-traveled ways of civilization. Wild mustangs roam the adjacent plains; mysterious cliff dwellings are hidden in side canyons; cougars occasionally descend from the forests to prey on deer. Th [sic] poplar-shaded villages of the hardy Mormon settlers along the Virgin River are pictures of pastoral peace and plenty" (Fig 6). Like notions of Eden, these "pictures of pastoral peace and plenty" are not actually framed in the image itself but instead reflect what Keystone and settlers wished to see. Without the text, the environment seems to stand tall on its own right as a formidable agent before the man in the slide. Instead of opening an opportunity for viewers to misinterpret the park's land as unknowable or unconquerable, the writers reinforce an imagined pasture just beyond the edges of the frame. As Mirzoeff reminds us, "a visual culture is the relation between what is visible and the names that we give to what is seen. It also involves what is invisible or kept out of sight...we assemble a worldview that is consistent with what we know and have already experienced" (How to See the World 10). As such, settlers, and stereoscope viewers, looked upon the land in the hope of forcing their own visions of value onto it. They constructed narratives about the uses they wanted to see in the land and turned from those they did not (or those that outright conflicted with capitalist-colonial notions of worth).

Again, these gazes should not be mistaken as immaterial or detached but must always be understood to have consequences by embedding long-term structures in the physical environment. As Savoy highlights, "names would then obscure that knowledge from its context, as Indigenous people themselves were removed from the land" (78). This overwriting and charting-over are not simply resigned to paper, but directly mirror the violent dislocation of

Indigenous groups and extractivist policies. "Colonial logics" are therefore not confined to names and ideas, but rather structure the very ways people exist in the land. "Even if deserts did mar the landscape, they presented a challenge to be met, not a barrier to development or understanding. The perception of the Far West as a potential wonderland was far too strong" (Hyde, 356). In the end, the stereoscope, through its reliance on tourists gazes, reveals how settler-colonial structures have naturalized their stories as reality, and how these narratives continue to have ramifications for Indigenous communities and current U.S. relationships to land today. The logics and gazes embedded in stereoscopes, too, fundamentally allowed its viewers to perceive their imagined Zion as embodiable and enforceable.

## Conclusion

Virtual Reality technologies are currently being sold as the "new up-and-coming" entertainment experience. From *Neuromancer* to *The Matrix*, immersion into another world or place has always been an alluring fantasy of escapism. Now with companies like Meta launching Metaverse, these dreams are slowly becoming part of our day-to-day. However, like media scholars continually point out, these technologies are far from new. In this case, the stereoscope confronted the issues in assuming the virtuality or mundanity of images that purport to show depth almost 200 years earlier. The stereoscope warns of the dangers in seeing online environments as disconnected and unembodied, instead urging us to remember how they are reformatting our relationships to the land around us. It asks us to recognize how the fantasies we are playing out in our virtual worlds directly impact how we shape and live in our own environments.

On a more philosophical note, I ask myself what the use in telling stories is. What does highlighting the holes in and shifting the environmental narrative practically do for the very real violence of colonialism and climate change? Is making room for alternate rhetorics and stories a lost cause? Death, in Terry Pratchett's Sci-fi series *Discworld*, replies with a meditative "no. You need to believe in things that aren't true. How else can they become" (Pratchett, 247). I want to dismiss this paragraph as a silly platitude – as disconnected, idealistic, and needlessly philosophical rather than actionable change. But this thesis is in part founded on the tenants of storytelling, an assertion that imagination and mythmaking are not hopeless endeavours but are at the core of how we physically live in the world. I want to reiterate that the ideological shifts I highlight here are not the sole solution to counter the violence of climate change. Community care, policy, and actionable change are critical. Rather, it is a personal reminder to always remember what could be.

This essay, too, is not meant to demonize these media consumption. I simply wish to draw attention to the ways that the ideals embedded in media structure our experiences of the world along certain lines. If those in power truly called these places home, were not simple tourists dwelling in a place they think they can easily slip away from, then perhaps they would not be so quick to exploit without consequence. This too is not to say photography and stereographs are themselves colonialism manifest. Rather the technological apparatuses of the stereoscope, both physical and ideological, have been intentionally coopted to push capital-colonialism as the "true" or "inevitable" way to live with our environments.

I ask myself where the hope is in this; the continual reiteration of the logics surrounding us constantly. It's tiring; it sometimes feels defeatist or frustrating. But perhaps this thesis can serve as a recognition that these structures were constructed, as much as they seem not to be, and

thus can be deconstructed. Yes, extractivism and violence seemingly undergird so many current approaches to the land, fighting to be understood as "natural" or "inherent." And, again, nothing can undo the violence of colonial histories and their ongoing impacts. But all too often, history focuses on how dominant ideologies become solidified without explicitly recognizing the change inherent to our narratives. If nothing changed, there would be no history. By placing western relationships to the land within these histories of change and intentional production, I hope to emphasize that things do change and that the relationships that seem so inherent are anything but. They are systematically built and thus can be, maybe not easily, changed.

## Works Cited:

- Alexander, J. A. P. "Landscape and Power." Perspectives on Place, Routledge, 2015.
- Benjamin, Walter. The Work of Art in the Age of Mechanical Reproduction. p. 26.
- Bradbury, Ray. The Martian Chronicles. 1950.
- Crary, Jonathan. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Cambridge, Mass.: MIT Press, 1990. *Internet Archive*, http://archive.org/details/techniquesofobse0000crar\_i9a2.
- Holmes, Oliver Wendell. "THE STEREOSCOPE AND THE STEREOGRAPH." *The Atlantic*, 1859.
- Hyde, Anne F. "Cultural Filters: The Significance of Perception in the History of the American West." *The Western Historical Quarterly*, vol. 24, no. 3, Aug. 1993, p. 351. *DOI.org* (*Crossref*), https://doi.org/10.2307/970755.
- Jensen, Jakob Linaa. "Online Tourism: Just like Being There?" *Re-Investing Authenticity Tourism, Place and Emotions*, edited by Britta Timm Knudsen and Anne Marit Waade,

  Channel View Publications, 2010.
- Jones, Karen R., and John Wills. "Re-Creation and the Theme Park West." *The American West*, Edinburgh University Press, 2009, pp. 305–23. *JSTOR*, https://www.jstor.org/stable/10.3366/j.ctt1s473v5.16.
- "Keystone View Company." University of Massachusetts Special Collections & University Archives. http://scua.library.umass.edu/keystone-view-company/. Accessed 11 Dec. 2022.
- Keystone View Company. "Bryce and Zion National Parks." Norman Ackerman Stereoview Collection, Box 1, Claremont Colleges Special Collections, Claremont, CA.

- Krauss, Rosalind. "Photography's Discursive Spaces: Landscape/View." *Art Journal*, vol. 42, no. 4, 1982, pp. 311–19. *JSTOR*, https://doi.org/10.2307/776691.
- Malin, Brenton J. "Looking White and Middle-Class: Stereoscopic Imagery and Technology in the Early Twentieth-Century United States." *Quarterly Journal of Speech*, vol. 93, no. 4, Nov. 2007, pp. 403–24. *DOI.org (Crossref)*, https://doi.org/10.1080/00335630701593998.
- Masteller, Richard N. "Western Views in Eastern Parlors: The Contribution of the Stereograph Photographer to the Conquest of the West." *Prospects*, vol. 6, Oct. 1981, pp. 55–71.

  \*\*DOI.org (Crossref), https://doi.org/10.1017/S0361233300003355.
- Mirzoeff, Nicholas. How to See the World: An Introduction to Images, from Self-Portraits to Selfies, Maps to Movies, and More. Basic Books, a member of the Perseus Books Group, 2016.
- ---. "Visualizing the Anthropocene." *Public Culture*, vol. 26, no. 2, 2014, pp. 213–32. *DOI.org* (*Crossref*), https://doi.org/10.1215/08992363-2392039.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*. Harvard University Press, 2011.
- Pietrobruno, Sheenagh. "The Stereoscope and the Miniature." *Early Popular Visual Culture*, vol. 9, no. 3, Aug. 2011, pp. 171–90. *DOI.org (Crossref)*, https://doi.org/10.1080/17460654.2011.601159.
- Pratchett, Terry. *The Hogfather*. HarperCollins Publishers, 1996.
- Robbins, Jim. "How A Surge in Visitors Is Overwhelming America's National Parks." *Yale E360*, 31 July 2017, https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks.

- Sailor, Rachel McLean. "Western Landscape Photography: Then and Now." *Oregon Historical Quarterly*, vol. 116, no. 1, 2015, pp. 92–109. *JSTOR*, https://doi.org/10.5403/oregonhistq.116.1.0092.
- Urry, John, and Jonas Larsen. *The Tourist Gaze 3.0*. SAGE Publications Ltd, 2011. *DOI.org* (*Crossref*), https://doi.org/10.4135/9781446251904.
- Waite, Nathan N., et al. *A Zion Canyon Reader*. University of Utah Press, 2014. *ProQuest Ebook Central*, http://ebookcentral.proquest.com/lib/claremont/detail.action?docID=3443922.