

2019

# Stead: visions of outer space in the American West

Saskia Globig

Follow this and additional works at: [https://digitalwindow.vassar.edu/senior\\_capstone](https://digitalwindow.vassar.edu/senior_capstone)

---

## Recommended Citation

Globig, Saskia, "Stead: visions of outer space in the American West" (2019). *Senior Capstone Projects*. 838.  
[https://digitalwindow.vassar.edu/senior\\_capstone/838](https://digitalwindow.vassar.edu/senior_capstone/838)

This Open Access is brought to you for free and open access by Digital Window @ Vassar. It has been accepted for inclusion in Senior Capstone Projects by an authorized administrator of Digital Window @ Vassar. For more information, please contact [library\\_thesis@vassar.edu](mailto:library_thesis@vassar.edu).

Saskia Globig  
*Stead: Visions of Outer Space in the American West*  
April 19, 2019  
American Studies 302-303: Senior Project  
Professor Molly McGlennen, PhD, MFA  
Professor Lisa Brawley, PhD

## **Contents**

Preface . . . 2

The Spiral . . . 3

Towards a New Space Opera: Spaghetti Western Story Ballets and the Functions of Relationality  
. . . 10

True Fictions . . . 17

Been There Already . . . 30

To Till the Moon: The Complex of Wilderness . . . 39

Coda: Three Reviews, Some Steps, and Some Measures . . . 55

In Stead: Reflecting . . . 59

Image Appendix . . . 63

Notes . . . 69

Bibliography . . . 74

The paper you are holding was printed on lands of Lenape, Haudenosaunee, Munsee, Wappinger, and Mohican peoples, turned into New York State and into Vassar College in the City of Poughkeepsie—a name itself Anglicized from a Wappinger word. I will refer to the peoples descended from the original residents of what is now the United States as “Indigenous” and “Native,” terms most current with many Native Studies scholars, to acknowledge worldviews unique to indigeneity but not to specific peoples, leaving individuals to self-identify with nations, clans, tribes, families, or other groups, or as “Indian” or any other term. Remembering the histories and continued Indigenous presence in the Hudson Valley and in diaspora forms the foundation of this project’s aims.

That is here. First, let’s go to Texas.

---

Donald Judd first bought property on Fort D. A. Russell in 1973, starting what would eventually become 340 acres of artist residency and exhibition space outside a museum setting. Known for his hard-edged, clean geometric sculpture, in Marfa, Judd placed cement cubes right into the scrubby landscape and left them to interact with the sun, wind, and plant life. He founded the Chinati Foundation in 1986 for installations in which “the emphasis is on works in which art, buildings, and land are inextricably linked.”<sup>1</sup> Marfa also had previous lives as part of Mexico, and as the setting for numerous spaghetti Westerns.<sup>2</sup> By now, the town has become a destination for hip artists and their milieu, a Brooklyn or Portland of Texas. For tourists stopping in for a

shorter stay, one of the most prominent options for accommodation is the town's tepee hotel.<sup>3</sup> Though we won't be coming back here, Marfa is one place that usefully contains the duality of Western Americana—the past future of a high modernism next to kitsch, the nostalgic distortion and commodification of history. The 1960s to the 1970s, too, will be an especially pivotal moment in this work, considering shifts in technology, American empire, and the art world. It is the place where, as the upper echelons of fine art meet a loaded cultural imagination of the American West, history collides with a moneyed techno-future aesthetic in the stars and leaves questions of who goes there, and how. The tepees, and the white cubes. I wish to draw a connection between sites like Marfa and the performance and scholarship of this project, to put the second in critical conversation with the first—but not always a simple binary. Ambivalence, towards some kind of resolution, will be my uncomfortable perch most of the time ahead: the seat of reckoning.

## **The Spiral**

When we talk about the West, it's not always clear exactly where that is or what it means, probably because it's changed a lot over time. "The West" has been St. Louis; it's been Oklahoma Territory and Monument Valley and the Oregon Trail; it's been Standing Rock; and it's been Hollywood, as well as many places and times in-between. "The West" is whatever that means to you. The West encompasses a lot of different kinds of land, from prairie plains to mountain peaks to spruce forests and arid and semi-arid deserts; regardless, the emphasis on what the West means in our movies and novels and road trips is always the land and how big it

is. I'm concerned here with images of outer space that are less about space and more about land in space, or ways that space has been made into a place. If space is supposed to be emptiness, outer space is far from it. Places in outer space get mapped onto places in the United States, and vice versa, but Americans don't have to keep moving through them in the same ways. Probing how we see and experience lands, plenty of Indigenous contemporary artists are imagining ways out of life under occupation through embodied relationships to space that have never been defined by white America. The West is used to represent the new, the future, but everything "new" about it has to contend with the old and the continuing. And if the new is the future, why do so many Americans stick to their guns on a future in outer space? Maybe the future can look like the past if that place-time is going to do justice to more people. Arjun Appadurai has stressed that "the future is not just a technical or neutral space, but is shot through with affect and with sensation." That is an embodied experience, and Appadurai makes the case for futures to be studied as culturally-specific matrices of "aspiration, anticipation, and imagination."<sup>1</sup> Here I'm looking at a few artistic sites to mine them for these three things, to see how they express their makers' understandings of future-orientation and figure out what brought those elements together.

"I take this puppet, which is myself, and I fling him against the sky." Martha Graham said these words towards the end of her life in a recording of her dance *Frontier* (1935).<sup>2</sup> *Frontier* happens on a stage but is actually all about land and sky: a woman in a long skirt leans against a fence post and sweeps her arm out straight, surveying, marking a homestead. She jumps, over and over, reaching for the big sky that goes with big open land; she'd like to believe there's no one

there but her. Taking and claiming gestures like these of contribute to the basis of the American modern dance canon, of which Graham is usually the face and the first-cited name. But few people remember how much she was influenced by—and probably appropriated from—Hopi and Navajo movement. A hole in the day was made at the Anishinaabe origin moment, a hole in the sky to lower the first person down on a spider's thread, like the poles extending behind the soloist in Isamu Noguchi's set for *Frontier*. If we are all made of star stuff, like Carl Sagan said, then I think of the trajectories of displacement and land-taking, nuclear rocket testing and dancing stolen dances on stolen ground, as white American scientists and artists flinging themselves misguidedly into the sky.

It's almost impossible to talk about the West without talking about the historian Frederick Jackson Turner, who dramatically announced the frontier "closed" in his paper at the World Columbian Exhibition in Chicago in 1892. He defined a masculine American character with a need for an exploratory boundary edge, glorifying untrammelled wilderness and positing America would need continued expansion to hold up its distinct individualism.<sup>3</sup> But it's equally impossible to look at modern dances with "the West" as their subjects without considering Agnes de Mille—and it would seem she did her best to reify Turner's thesis, albeit with a satirical edge. De Mille is best known for the musical *Oklahoma!* and the story ballet *Rodeo*, made for the Ballet Russes de Monte Carlo in 1942 with music by Aaron Copland. In *Rodeo*, the pioneering movement language is maybe even more explicit than Graham's: cowboys and cowgirls raise hands to their brows to survey the landscape, and loop fists around invisible lassoes; they walk with a deliberate bowleggedness and ride invisible horses; the men's jumps are improbably

athletic, the women's circles sweet and swinging.<sup>4</sup> It's also notable that some sections include codified steps of tap dance, originally an African American artform. De Mille was from New York City and attended schools in California. She has become known as the quintessential modern American choreographer because her dances were about the West; she built on and informed images of it as the quintessentially modern American place. Yet the dancers are always so clearly acting, nearly in parody, that De Mille accessed a commentary on a blundering absurdity of the foundational western everyman and -woman as much as their honest exhilaration at the self-narrativizing possibilities on the frontier. I wonder if dancers performing the piece for the Colorado Ballet in Denver have a different relationship to the choreography than those in the American Ballet Theater in New York.

Robert Smithson, in making his massive Land Art sculpture *Spiral Jetty* in Utah, knew it could not “occupy... some mythic Western ‘wide open space’ but rather a space that had already been shaped by a conspicuous historical event” and the political mechanisms of its ongoing commemoration and reconstruction.<sup>5</sup> That event was the final spike in the Transcontinental Railroad. *Spiral Jetty* is submerged in the Great Salt Lake in Utah, a spit of salt and rock off its northeastern shore. Smithson, his hired builders, and his visitors had to pass through the town of Promontory to get to it, along with the Golden Spike National Historic Site where East and West “shook hands” in 1869. Smithson started planning *Spiral Jetty* in the spring of 1969—it was completed the summer of 1970—just in time for the much-celebrated centennial anniversary of this moment of national unification. Much of the American art world's understanding of “kitschiness” in the context of events like this one comes from the critic Clement Greenberg,



who in his 1939 essay “Avant-Garde and Kitsch,” first published in the Trotskyist *Partisan Review*, posited that popular culture and commemorations are the visual tools and associations of fascism.<sup>6</sup> Reenactment performances at Promontory featuring actual descendents of the railroad workers and tycoons made corporeal and erased the Chinese people who labored to construct the railroads, and the Indigenous peoples degraded in its marketing—the reenactment that still occurs every time someone drives West on the interstate highway across stolen Indigenous land, towards the testing grounds and centers of development for America’s newest high-speed travel technology: private space travel. Golden Spike is the name of a private outer space rocket developer posing as competitive in the market of journeys to the Moon.

Art objects are “four-dimensional,” Smithson said: historical events have economic, social, and political contexts leading up to and falling out from their boundaries. Art contains the artist’s process extending infinitely out in either direction before and behind. Each instance of viewing the work is a “cross-section” of its lifespan, which begins in the artist’s mind and ends when the piece has disintegrated completely.<sup>7</sup> A straight-shot trajectory towards the future is a European Enlightenment concept, and it isn’t the only serviceable worldview. Reinhart Koselleck posited that with Enlightenment science and industrial “modernity” came a linearization and acceleration in how historians describe time.<sup>8</sup> The push for the new feeds into and out of the formation of the Liberal individual who “wants his future to come quickly” if “gain” is to be “realized as the better within his lifetime.”<sup>9</sup> This is the temporality which justifies colonization in the name of “progress” amid profit. Western anti-nuclear activist Rebecca Solnit wrote: “I want to be able to see the history of gestures behind even a voyage into the new, and I want more to be able to

remember the lines of convergence that lead to a place like the Nevada Test Site.”<sup>10</sup> *Spiral Jetty* adds to itself with salt and then corrodes; the spiral is a materialization, to poet and theorist Molly McGlennen, of accumulative Indigenous personal and community histories, knowledges; the spiral makes language actual. It asks whether anything is truly “new” or futuristic at all.

George Lipsitz, in his American Studies *Keyword* on space, marks the cultural workings of the frontier as both a space and a time, a promising future lacking constraints for “freedom-seeking” Americans.<sup>11</sup> He describes a “moral geography” of U.S. empire’s spatial logics, much like what Mishuana R. Goeman (Seneca) calls the “settler-colonial grammar of place:”<sup>12</sup> a network that marks some peoples as inhabiting temporally delayed spaces<sup>13</sup> as opposed to up-to-date imperial places. Lands in the American West are marked in the logic of this timeline as places only by the history of achievements of white settlers; spaces to pass through, by the histories of Indigenous peoples. Place theorist Tim Cresswell writes that “to think of an area of the world as a rich and complicated interplay of people and the environment – as a place – is to free us from thinking of it as facts and figures.”<sup>14</sup> Sure, social history rectifies the tyranny of impersonal math. But in learning from Indigenous cosmologies and epistemologies, it’s arguable not only that Native presence on lands lend active impressions, obviously, but that the material of the Earth itself should be valued as both entwined with and independent of human histories.

So this is a history but not strictly a historiographic project, because I don’t always agree with the methods of history. The way most research is conducted, and the way most adults teach and most children learn about the history of the United States, is based on the premise that “we can

assemble all the facts in an ordered way so that they tell us the truth... of what really did happen in the past,” in “one coherent narrative.”<sup>15</sup> That’s almost logistically impossible. It necessitates omissions. But that version of telling is the method I have most ingrained in me, the closest at my disposal. I want to loop the line of history around itself to see what happens when the arms of the spiral face each other. History tends to be of and by the victors, so “to hold alternative histories” in ways that defy official sources and methods “is to hold alternative knowledges” that “form the basis of alternative ways of doing things.”<sup>16</sup> What happens when we compare things that aren’t supposed to be compared? Surprises disrupt; they refuse the foreclosure of possibilities. Spiralling mound art by Indigenous peoples is subjected ludicrously to countless conspiracy theories, not least of which calls them alien productions meant to be seen from outer space. The spiral is central to Graham technique, twisting from the core of the body, through the back, and into the limbs. In a time when American dance was barely escaping the vise of ethereal lightness from classical ballet, Graham was radical in insisting that her dancers find connection to the the floor, the earth, the ground, and draw their power from it through the deepest roots of their bodies. This is what makes Graham’s works so challenging and emotive. It may be no surprise if she developed some of those principles from Indigenous conceptions of connection to land. I have enormous affection, too, for Agnes de Mille. It was through her that I stopped being afraid of exuberance, of public joy. Her dances are *funny*, in a slapstick way that made me appreciate the subtleties of slapstick, the art of clowning. Because *Rodeo* walks that line between satire and replicating genuine socio-political turmoil, dredging up the movement vocabularies of racism and sexism in their frontier setting, I don’t know where to place De Mille in my project. Probably alongside Robert Smithson and Graham herself: with reverence *and* critique.

Ambivalence doesn't feel like it goes far enough, though, if I'm attempting to move beyond an uncritical refraction of Land Art or modern story ballet. Reckoning with the past is an active process, not something I can throw out there and expect positive returns. It isn't transactional, or linear.

### **Towards a New Space Opera: Spaghetti Western Story Ballets and the Functions of Relationality**

This project started as the idea to restage Martha Graham's *Appalachian Spring* as a postmodern space opera. I didn't even really know what that category of performance meant when I said first it over two years ago, but I was learning excerpts from the piece and it emerged from my respect for Graham's choreography and exhilaration in the music. I thought it would be a zany intervention that picked up on the connections between Westward expansion and expansion into the Universe. But in pursuing the research on these pages, I realized that simply recostuming Graham's movement and dancing to the same score, meant to evoke something specific about American land, wouldn't achieve the kind of intervention I want—more uncertain, more questioning, more *intervening*. Goeman, in "Disrupting a Settler Colonial Grammar of Place," sums up perfectly why I believe dance is an operative way to do this, with movement as a form of critical investigation: "An examination of embodied spatiality in a settler state is necessary," she states, "if we are to avoid replication of colonial systems of power at-work in the nation state."<sup>1</sup> The whole point of standing in solidarity with the Native peoples erased by *Appalachian Spring*, as much as I can as a white person, is to not repeat the colonizing impulses Graham's movement sanctioned—as much as I can be aware of its, as someone who carries that capability

inherently. Graham's movement can be devastatingly beautiful, and lift up the narratives of people—if archetypes, for her—who did live their lives and face their hardships and joys in the American West. Graham technique has left a powerful residue in my body; its stylistic choices come easily to me, feel like they fit right, and I take a lot of Graham's principles to heart as ways of moving which, to me, seem logical. Many contemporary or postmodern dancers work from a stance oppositional to their classical training, even as they acknowledge the importance of that training as a foundation for the strength of their bodies. They design movement exercises against falling back on what they know: if you feel yourself doing something you've done before, I've been instructed, do something else. Because it's so pervasive in every area of innovation in the US, the language of frontier is inevitably lurking in “new” and sometimes supposedly “better” forms of dance. There is a divide in the dance world between people and companies that exist to preserve and accurately restage the work of the old greats, and people and companies that exist to make new work, to shatter what we thought was possible. But I don't always want to dance beyond Graham; some of what she gave us is still relevant. Instructors often encourage dancers, improvising, to take that frontier and make it personal, internal, to find that boundary with uncharted territory within ourselves. I wonder why synthesis of the old and the new isn't permissible, isn't considered original; it will happen in our bodies anyway, it will come out and it will have done, so why fight it?

In her original plans for *Appalachian Spring* (1944), Graham wanted a Pocahontas story—a classic iteration of a Native female body as land, claimed and assimilated in a moment of climactic ownership through marriage to a white man. An “Indian Girl” character was central, if

ever-shadowed; she is subsumed into the white ladies on stage when America writ large becomes the subject and “Indian” the askance but irrefutable basis. What Graham ended up with was a modern story ballet featuring a married couple, a preacher, and a congregation of female worshippers, reinscribing domestic and Christian familial norms. Of the Indian Girl, Graham said, “she is always with us . . . in the names of our cities, rivers, states... We can never escape the sense of her having been here and of her continual existence as the supreme spectator of all our happenings.”<sup>2</sup> The Native woman haunts this white woman’s work but Graham didn’t want to cede power, so the invisibility is a presence.

Theory abounds on the female body as landscape, but that won’t be my focus here. I want to approach the subject from a different angle of connection. In her book *The People Have Never Stopped Dancing*, white performance studies scholar Jacqueline Shea Murphy records how “Indigenous dancers’ bodies, despite the physical effects of colonization, are a location of ways of being and knowing, held in bodies and everyday movements.” Indigenous and settler modern stage dance developed together through active interaction, appropriation, and negotiation. Many classically trained American dancers live with Graham’s movement in our bodies, and that’s a colonized corporeality. Yet Murphy posites that experimental and critical somatic “movement practices—including contemporary movement practices—are a tool for locating and unearthing these ways of knowing” buried within and escaping canonical high modernism.<sup>3</sup> Indigenous stage dance—Indigenous dance in any venue for that matter—is modern.

Audience-members arrive on a street corner and walk until the performance starts unexpectedly; or they arrive to pick up trash from a shoreline, or to be seated for a meal. This is *SHORE*, a piece by Yupik Alaskan movement artist Emily Johnson. Johnson doesn't believe that *anything* can be dance, but she wants to "broaden the definition" to include performative actions with thoughtful deliberation of their consequences. The fulcrum of Johnson's movement texture is living in uncertainty, reveling in the edge of vulnerability and "relishing self-production" as a radically (self)loving performance mode.<sup>4</sup> The overall story arcs of Johnson's happenings are nonlinear but tie themselves up by the end, connecting the dots of places and people counter to neoliberal conventions. I think that what makes Emily Johnson's work so engaging—and I wish I've been able to attend and participate in one of her works—is that she doesn't fight her influences, and actively makes this part of her practice. The difference is that the learned residue in her work isn't Martha Graham or Merce Cunningham or Trisha Brown but the movements and traditions and stories of her Yupik family and communities in Alaska, as well as the knowledges of the peoples she works with taking her pieces to different locations around the United States. Where the foundations and companies backing the legacies of Graham and other high modern dancers work tirelessly and with huge budgets to maintain that their work is still relevant, Johnson and other Indigenous movement artists do so interwoven into their processes, with the assertion that their pasts are present, that they always have been and will be relevant. When I spoke with Johnson, I asked what her training background was; I wanted to know what was in her body and how it influenced her work. I was struck by how she started the list with childhood sports, before naming her improvisation teachers, and I noticed that impulse in myself to seek some movement commonality with her, for shared understanding but also professional creative

legitimacy. It made me squirm, a little, in embarrassment, and I'm glad she answered with this alternative CV. I remembered when I noticed, a couple days before, that basketball shows up in a lot of my dance movement, that I played it, too, and still love it.

The sticky issue for me now is a question of where my methodology might meet appropriation. I admire Johnson's work; I agree with the philosophies of many Indigenous scholars on how bodies hold stories and pasts. But in taking inspiration from them, it is often difficult for me to see the line between their unique, sometimes tribal, Native epistemologies—which cannot be reapplied or fully inhabited by white people—and the aspects of their methods that can and maybe should influence all American dance artists towards more just, forgiving, enriching practices. Writer and environmental activist Elizabeth Woody (Navajo/Warm Springs/Wasco/Yakama) talks about honoring the connection and shared history between Indigenous peoples and settler-invaders; as fraught as it is, it happened, and Indigenous people have always shared their knowledges and ways of being with white people.<sup>5</sup> Emily Johnson has expressed frustration with a future that excludes the necessity of collaboration with everyone in a postcolonial/colonized community. So Graham's process confronts me with issues of inspiration and attribution, the question of whether and how a white American artist might engage transformative ways of moving that originate in Indigenous cultures not my own. A preliminary answer, I think, is to give credit where it is due, and to not abstract into universals but chew over concepts in embodied experimentation, not imitated or stolen. I'm going to have to explore, through movement and writing, what it looks and feels like to genuinely support, credit, and respect Native artists and views through my own work. Maybe that isn't even the point, or isn't



necessary, even if it is possible. I want to probe the edges of which ideas and ways I might draw from, without repeating Graham's insult of below-the-radar appropriation. If I draw on my own embodied past for movement patterns, I might have to own up to how much Graham that might look like or include.

Take a landmark of incarceration and make it a stage for durational performative protest, like the group Indians of All Tribes from November 1969 to June 1971, on Alcatraz Island: deliberately mobilized narratives dictate what land may be used for, by whom. Enacted, performed, embodied story forms a huge part of how people might take the land back. When Rebecca Belmore (Ojibwe/Lac Seul) nails her red dress to a fence in *Vigil*,<sup>6</sup> she asks us to participate in her history through witness and assistance alongside future-oriented self-liberation. Performance has impact through that mirroring sharing, and Indigenous contemporary dance continues to negotiate relationships between the human and non-human, between times. Vanessa Watts (Anishinaabe/Haudenosaunee) writes of "knowing beingness" as equivalent to "beingness as knowing,"<sup>7</sup> as she pushes Nietzsche, Heidegger, Deleuze and Guattari to their limits: people are more than assemblages of multiplicities, influenced by desire to connect with what's around us; Watts insists that lands have claim to peoples.<sup>8</sup> This cannot be abstracted or fetishized but must remain real. Because most Indigenous spiritual systems are practice-centered, not belief-centered, "Native communities argue that Native people cannot be alienated from their land without committing cultural genocide."<sup>9</sup>

The movement of the body in place is the knowledge, as every one holds memories they may not even cognitively remember. “Stories are material and locatable, and thus Indigenous places serve as sites of material knowledge production,” Watts writes.<sup>10</sup> Carrying story through life in one’s body means “that movement is based on relational interconnectivity.... the poem provides a means to be present to the company of others.”<sup>11</sup> This idea of “relationality” is central to understanding Indigenous research and recording practices, as Aileen Moreton-Robinson outlines. Appadurai similarly names memories, a form of the past always with us, as important “archives” for “dislocated, vulnerable” peoples that form a “critical site for negotiating paths to dignity, recognition, and politically feasible maps for the future.”<sup>12</sup> Dance is being with in narrative, bringing up those archives whether they have discernible story with beginning, middle, and end, or story of affect and effort. The balladeer’s voice reverberates through the body, into touching or proximal bodies, into ephemera, and into the land, reiterating and keeping alive their truths. Moving back can mean moving forward and grounding in land can mean interacting with the stars.

Dance performance provides a tangible immediacy of sharing experience that cannot be expressed through only words. Thinking, feeling, and doing come together, as in K. Tsianina Lomawaima’s framework, to “disarm history” in a way that recognizes nothing is ever finished, static, or past. “Places are constructed by people doing things and in this sense are never ‘finished’ but are constantly being performed;”<sup>13</sup> and Edward Casey believes people are “*of*” places so “there is no knowing or sensing a place except by being in that place.”<sup>14</sup> Trending thought on place intersects it with performance, as David Seamon claims “places are performed

on a daily basis through people living their everyday life;”<sup>15</sup> Nigel Thrift says place “needs to be understood as an embodied relationship with the world. Places and people are mutually constituted. The entire premise of the Mars Desert Research Station is the assumption that enacting an analog experience is a form of knowledge itself, as close to the “real” thing as possible; it’s a stab at “an intimacy that ‘being there’ affords.”<sup>16</sup> Intimacy on the level of the individual body calls to mind equivalencies of the Native feminine as somehow originally natural, so I want to complicate that metaphor by raising the importance of scale, as Goeman does. Colonization depends on the redefinition of places with Indigenous salience from the level of individual bodies, to huge landmasses, to entire worldviews.<sup>17</sup> All bodies are implicated, none off scott free.

### **True Fictions**

The first place I ever really drove far to was Vasquez Rocks, a “natural area park” just outside L.A.—not quite a national park or monument. Enormous sandy-colored protrusions from the ground, levering upward like the tectonic movement was still fresh; verdant little trees clinging to the surfaces in the cracks. This is where a lot of episodes of *Star Trek* were filmed, for the strangeness and the drama of the landscape. But I was struck first by the visitors’ center. It hit me that I have always loved visitors’ centers. Whether I’m about to enter a canyon or the site of the constitutional convention, I sigh in relief in the blast of air conditioning, the promise of a drinking fountain, and most of all, those massive informational panels and glass cases with dioramas and plastic keychains and postcards and sweeping music playing, just a little too

quietly, somewhere overhead. Vasquez had all of that. And I think I've always cared so much because I like to see how the place before me is being spun: how these agents tasked with shaping Americanness—the historians, the archaeologists, the exhibition designers—have chosen to do it, and what kinds of stories they've decided to tell. The history of Vasquez as presented here had essentially two layers: Indian and not. That is usually how indigeneity is presented, as being a before and having an after. I was struck, though, by the full gamut of the record of Shoshone lives in the region, from prehistoric “artifacts” to photos from the 1970s. It seemed some effort had been made to merge the before and after and say it still continues, as much as signs recommended we check out the non-active Shoshone archaeological sites—which turned out to be worn-smooth benches by a wall lodges with worn-smooth pottery fragments lodged. The presence of white people, the visitor's center trumpeted, began with small family mining operations and pretty much continued that way, with hardened people working at a hard land, until the place got recognized as a valuable resource for its hiking and its optics. I was not bitter, reading this, and I'm still not. I always go in skeptical of the inevitable patriotism, but I eat that shit up. And among the rocks themselves, I felt the effort sometimes and surprising ease, other times, of trying hard to reach a summit. I always wanted to know what was over the next ridge, what was down the other side, what it would look like from this or that new angle. Exploration, in a basic, small-scale sense, kept me climbing in the dry air. I wondered if the rocks could feel my clinging and scrabbling on the upshot, bouncing and sliding as momentum forced me down. I was almost more intrigued by the other people there, from all their origin-points; the children piloting the whirring drone that shot high above us; the three women trying to jumpstart their motorcycles. I shielded my eyes from the sun and wondered how many

other people had done that in that place, and what they were looking for. I didn't know what I was looking for, or if it was even something that was possible to *see*.

Frederick Jackson Turner may have been right in saying that white America depends on a frontier to understand itself, but he was wrong in thinking the frontier had closed in 1893; once settler-invaders got to the Pacific, there was nowhere else to go but up. SpaceX fires off rockets from Southern California at the behest of the highest bidder, one of which is NASA. Space Future, a group doggedly devoted to space tourism—and its painful early web design—insists that the Space Age hasn't actually happened yet, and won't until private citizens go to outer space in droves. Their online journal features recommendations for building space habitats and vehicles and sourcing power, with a focus especially on reusable rocket ships.<sup>1</sup> Their language of personal vacation is a direct contrast to the Living Universe Foundation, which appeals to universal humanity,<sup>2</sup> but both kinds of dazzling optimism wash out the shadow of the pioneer in an individualism palatable for their internet niche. Frederic Jameson, in his book *Archaeologies of the Future*, asks whether we can imagine ourselves out of this kind of capitalistic mindset at all. Science fiction took a postmodern turn towards collage and self-referentiality, he claims, because it provides “mock futures” which “transfor[m] our own present into the determinate past of something yet to come.”<sup>3</sup> Our pop-culture visions defamiliarize our world, but not so much that they do not have tidy end-goals, versions of the future that take place somewhere inexorably altered at the end of a linear here-but-not-here.<sup>4</sup>

Ojibwe artist Andrea Carlson has said that “science Fiction films are just Western genre films with silver wagons.”<sup>5</sup> The quickest touchstone for the otherworldly is the visual language of desert; all its associations with “cowboys and Indians” translate easily into the metaphysical threats and battles between what’s familiar and what’s other taking place in science fiction. This framework of land transfer through visual metaphor comes directly from eminent film scholar Vivian Sobchack, who describes films which “alter the world we take for granted into something we mistrust.”<sup>6</sup> Her concept of the “alienation of the familiar” through “subversion of the landscape”<sup>7</sup> branches into two types of films, most basically positive and negative casts on land. In what she calls “optimistic” films, “the strange is conquered” through a “belief in infinite human and technological progress and by a view of the unknown as a beautiful undiscovered country... ultimately discoverable and conquerable.”<sup>8</sup> An unsettling example is the 1964 *Robinson Crusoe on Mars*, filmed in Death Valley. The placement of the single heroic human figure in techno-futuristic costume draws parallels between that lone seafarer who set up a system of slavery on “his” tiny island; explorers, surveyors, and miners in the American West; and the imagined astronauts and real astronauts-in-training we assume will one day walk on the surface of Mars. In his article “Colonizing the Universe: Science Fictions Then, Now, and in the (Imagined) Future,” Greg Grewell identifies how “to many the universe is a ‘place’ habited and inhabitable, by friendly and hostile beings, a place where, sooner or later, humans will dare to travel, point camcorders, and plant flags.”<sup>9</sup> There is an inevitability to this utopian vision. It is the assumption that scientific inquiry will extract utility from the land for eventual action and visualization by non-scientists. Frontierism and the cosmos collide to suggest the scientific

method may be wrested from the hands of imperialistic, capitalistic bodies for use by the everyman-cowboy pulling himself up by his bootstraps.

Another, darker, type of science fiction cinema makes the land itself into an actor, and a sinister one. Sobchack writes that films in this category “tell us that the Earth is not a part of us,” that “it does not even recognize us.” She calls “our civilization and its technological apparatus... at best a small town set on the edge of an abyss.”<sup>10</sup> Nature is cast here as a challenge in a dichotomy with “man,” nearly as insurmountable as a distant planet. Sobchack notes that seeing “human beings set uncomfortably against the vastness and agelessness of the desert and the sea, [we] are reminded by the contrast that land and water were here long before us...”<sup>11</sup> The power of space landscapes for potential American colonizers lies in how long they’ve waited for white people, supposedly empty, ancient bodies awaiting interaction with Western scientific standards. There is the impulse to be first, and always the potential of the explorers and settlers being rejected from the land like an organ donation gone wrong. I wonder if this landscape-based science fiction taps into white Americans’ intergenerational guilt and unease over occupying land that never fit right to occupying settlers’ bodies and ways.

There has to be a gentler way to visit, or to return. *Space is the Place* features Sun Ra saying the end of the world is here, has happened, because America is already post-apocalypse for Black and Indigenous people.<sup>12</sup> It can be eye-opening to take projects of U.S. government narrative and public memory as science fictions in themselves. Grewell’s argument turns on the point that all the components of science fiction are embedded in conceptions of American nation already, in

“the imagination that informs [stories of other worlds], that takes from and revises earth history, puts it out there, in a (de)familiarized but cognitively plausible and contextually recognizable ‘future.’”<sup>13</sup> Perry Miller’s “errand into the wilderness”<sup>14</sup> is a repeated rhetorical move built on actual journeys into an artificially untouched landscape. From the primitivizing equation of people with nature, the logics that spin genocides of Indigenous peoples into American “progress” are those that allow continually renewed, supposedly necessary and inevitable speculation on futures in “taming” the wilderness of outer space. One shot in *It Came from Outer Space* (1954) features men working on telephone lines in a desert, “trying to impose limits on an expressionless and terrifying expanse of space.” The landscape itself imposes a fear of unknowability on the viewer with what we know of its heat and mirages: “The desert is deceptive and the wind sings, not to man, but to itself.”<sup>15</sup>

Compare these telephone lines and this inhospitable desert to the images employed and invoked by *Singing Toward The Wind Now / Singing Toward The Sun Now*, by Navajo sculptor and sound designer Raven Chacon. Installed at the Canyon de Chelly National Monument in Chinle, Arizona in 2012, the piece places shining new pieces of infrastructure into the Western desert landscape. Four silver towers function as musical instruments—two are harps and two vibrate using solar power—in what Chacon has called a “council of holy people speak[ing]” to anyone in the canyon. Their geometries reference familiar electrical towers but are also embedded with Navajo weaving and painting patterns.<sup>16</sup> Creating double visions of old and new, earthly and extraterrestrial, they appear dropped onto a landscape figured as empty, natural, inhabitable, with visions of futuristic technology that nonetheless also sing Navajo traditions to each other.



Current cultural expressions continue the metonymic illusion that we can own parts of both earth and lands further out in our Solar System. These images further Manifest Destiny even as they attempt to complicate its remnants for our times—time when travelling to outer space is an actual, physical, measurable, visible possibility, for people no more select than the Jetsons were, supposedly. Space Future names its driving goal as “opening space to the public, because [they] consider that, more than anything else, space is a place to go to.”<sup>17</sup> But that space-travelling techno-future is and will be driven by wealth, a selector which will force us to ask who gets left behind. The answer cannot be who it has always been: the poor, the brown, the Indigenous, the differently-abled. The real question is whether the stakes really are higher now, or will be anytime soon. We’re rapidly approaching—or already live—the future as seen from the 1970s, a future of quotidian space travel. But because that option is still only really open to the super-rich and may remain that way for a long time, embodied returns to the Earth have heightened saliency. How we intend to leave Earth is necessarily grounded in how we are with and on Earth; among competing models and voices, the futures of departure and return are entwined.

Because the pioneer figure is no longer the everyman. It is now possible to buy being an astronaut for the price of a few thousand dollars, with designer streetwear featuring the NASA logo. It seems Americans have funneled their participation in space exploration into increasingly esoteric modes that require little investment or physical taxation to participate, but which provide the select few with feelings of effort and discovery. For NASA’s sixtieth anniversary, the high-end streetwear brand HPC Trading Co. released an official collaboration line of jackets,

pants, and accessories featuring the logotype used between 1975 and 1992. The drop included the launch of a mannequin, wearing a jacket and hat from the collection, into near-space; HPC founder Heron Preston was then filmed retrieving the mannequin and donning the clothes, metaphorically taking on the epic journey of space flight. Other clothing companies have followed suit at more down-to-earth prices, including Old Navy's t-shirts using NASA's current "meatball" logo and sneakers by Vans and Nike. The NASA trend allows people to purchase the appearance of astronaut knowledge and fame, as well as mark participation in an elite group associated with space scientists. It may also, according to an *NSS Magazine* post, provide "the ultimate escapism" for young people seeking the "utopianism" of space, where "blurry earthly issues, of gender, race, and social status" supposedly "diminish."<sup>18</sup> See Heron Preston standing, one leg stepping up, on the massive pile of white salt in the Spring Street Salt Shed on HPC's website [Image Appendix 1]. His pose against the washed-out mounds seems staged to echo American men labelled valiant explorers to extreme landscapes. The salt could be moondust, snow on the North or South Pole, or Western desert sands—all ventures undertaken, until now and perhaps by implication still, in the name of the nation.

This is complicated because Preston is black. The recent uptake of the "yeehaw agenda" finds stars like Solange donning Stetson hats and spangled jackets to reclaim a legacy of black, Native, and Latinx ranchers in an effort to rewrite history beyond the aesthetic appeal. But it's complicated imagery, potentially loaded with toxic masculinity as much as a celebration of beautiful blackness. From a Japanese-American perspective, Mitski skewers the pervasiveness of the cowboy image in misogynistic everyday language.<sup>19</sup> And we cannot forget the Buffalo

Soldiers, the six regiments of U.S. Cavalry composed entirely of black men, stationed in Texas and Kansas, and eventually Montana, beginning in 1866. These enlisted cowboys had the tough and prestigious job of protecting the vanguard of stagecoaches, wagons, and railroad crews, but their objective was also to “contain” Cheyenne, Arapahoe, Cree, Kiowa, and Comanche peoples in the “Indian Wars.” Without leaving New York, Heron Preston takes his place in this lineage and promises his customers the same.

Lisa Messeri’s dissertation from 2004, and later her book, is called *Placing Outer Space: An Earthly Ethnography of Other Worlds*. An anthropologist working in Science, Technology, and Society, Messeri shadowed, assisted, and interviewed planetary scientists from geologists to astrophysicists working on field sites and telescopes and computer labs. She asked how these people situated locations in outer space as tangible places, how they visualized and spoke a knowledge of space as a place to *be* within the givens of techno-science. And she demonstrated these American scientists arriving again and again at a desire, need, and attempt to experience place through embodiment, which Native scholars have long made central to their work. At the Mars Desert Research Station (MDRS) in Hanksville, Utah, Messeri lived with Earth geologists crossing their discipline with areology, the study of Mars, to find out how places are lived as both at the same time. MDRS was established in 1998 by the Mars Society, a nonprofit advocating human settlement of Mars headed by Robert Zubrin. He also led “Case for Mars” conferences and wrote a book with the same title, around which many of the key MDRS areologists rallied. Maybe not incidentally, the station is near “Historic Giles,” a twice-abandoned, Wild West-styled, tourist-attraction ghost town. The groups there test

equipment—in 2004, a drill—projected for use one day by people on Mars, with the goal of demonstrating to NASA that the site could produce effective field research, and so garner federal funding. Part of Messeri’s method considers what she calls double or multiple exposures, undoctored overlays of landforms and technologies in single photographs so Mars and the American West come to the fore as simultaneous specific sites. They could circulate like film stills from sci-fi epics and gain similar traction. Critically engaging the pun of space and (outer) space, Messeri frames this process of understanding as a type of storytelling: “Narratives allow actors to stabilize the messiness and multiplicity of place,”<sup>20</sup> she writes; and the narratives here often slide towards science fiction. MDRS geologists live in “habs” and wear space suits outdoors.

Messeri documents the scientists’ awareness of themselves as operatives in an American frontier narrative, as “making planets into places informs the planetary scientist’s identity as an explorer.”<sup>21</sup> They were especially enthralled by the moment of contact, “conjuring exotic arrival scenes all the time. Imagine yourself...” they would say.<sup>22</sup> Mars scientists even have a club culture like that of gentlemen explorers in 1800s, evidenced by dinner parties held by the Mars Explorers. If there is a tension here between the soaring affect of exploration and the hard science, I argue that they cannot be separated; science is always political.

When California Institute of Technology scientists at the Palomar Observatory in San Diego identified an object orbiting beyond Neptune as a possible dwarf planet, they named it 5000 Quaoar, after the creation figure in Tongva cosmology. The planet’s moon is called Weywot, his

son. The Tongva are some of the first peoples of Southern California, along with Chumash, Tataviam, Kitemuk, and Serrano peoples, and all are actively engaged in negotiations over the land. In a complex rhetorical move of naming, the astronomers honored cosmologies indigenous to the land on which the telescopes rest, meting out the right for Tongva leaders to name the planet's satellite object—though they had to inform the scientists of the preferred spelling of “Quaoar.”<sup>23</sup> Science fiction productions are myths which build futures out the materials of our world, but often towards a largely young, white, male audience. Here, an Indigenous mythology meshes with scientific application for a continuance that asserts its continuing relevance.

A Teddy Roosevelt adventurer figure crops up in the type of people MDRS envisions sending to Mars: those doing geology at the station now are those chosen as astro-heroes in cowboy action-rescues. Being “extremely physically tough” is a desirable characteristic in field geologists, and Messeri links them to astronauts as men all possessing “The Right Stuff.”<sup>24</sup> With the acceleration of the space program in the 1960s, astronauts training in geology could fill the vacuum of the war hero image post-WWII by travelling West;<sup>25</sup> they saw themselves “setting out into the untamed wild” of the land and/as outer space “of their own accord.”<sup>26</sup> Messeri directs readers’ attention to an image of geologist Joe O’Connor at the Hopi Buttes Volcanic Field in the Navajo Nation in 1965 [Image Appendix 2]. He wears a space suit to test its equipment, but topped with a white cowboy hat for expediency in the sun. As much as the researches work to simulate a future with science fiction tropes, the friction of the ranching, “Wild West” past and present show through. If it seems the cowboy-astronaut trope might lose purchase with increasingly corporate ventures, a diffusion perhaps of national fervor, I would point to Elon

Musk's blustering plan to reach Mars. It seems people still want the same face to their exploration, the same reassuring man to save the day.

Mars seems especially potent for this project because it is conceived through tangibilizing and visualizing projects like MDRS as "remote yet able to be settled," making it "the ideal frontier."<sup>27</sup> In 1994, Mars Society founder Robert Zubrin published "The Significance of the Martian Frontier" in *Ad Astra*, the publication of the National Space Society. Taking off directly from Frederick Jackson Turner's "Significance of the Western Frontier," Zubrin stated:

"The creation of a new frontier thus presents itself as America's and humanity's greatest social need... Without a frontier to grow in, not only American society, but the entire global civilization based upon Western enlightenment values of humanism, reason, science and progress will die. I believe that humanity's new frontier can only be on Mars."<sup>28</sup>

Reifying Turner, Zubrin deliberately attempted to reopen the Western frontier via the space frontier. He equated America with the Western world, and moralized scientific values as Liberal social ones assumed to be the standard of linear progressive development. Messeri points out that the logic only works because "this narrative notably lacks natives and slavery, bigotry and disease, oppression and poverty. It is a powerful story because of its simplicity and because it cleanly juxtaposes alien Mars with the familiar frontier."<sup>29</sup> The familiar being, beneath the surface, all those horrors. Mars supposedly presents planetary scientists with a clean way to start over, to continue their profession and escape culpability in interplanetary imperialism, because it has no Indigenous inhabitants. The mistake they make is assuming that then Utah never did, either. It's also important to remember that this all takes place under private enterprise, reinforcing a settler grammar adjacent to the state. The very project of the United States, and of

any nation-state, is “about rearranging geo-cultural ideas of place”<sup>30</sup> in order to hold itself up, to reiterate its logics to those who wholeheartedly believe. Messeri calls the National Aeronautics and Space Administration an organization more interested in ‘can’ than ‘why.’<sup>31</sup> She posits that NASA has actually lost the role of “primary story spinner for the frontier narrative.”<sup>31</sup> groups like the Mars Society are taking over. But isn’t the root purpose private capitalistic enterprise still for the “can” more than the “why?”

The optics of driving out of Los Angeles: a lush and verdant hedge, a haven of wealth vanishing before a desert alien to Easterners in the ways it is so insistently American—that is to say, Western. But for this road trip the desert was green, a “superbloom” after unusual amounts of rain, and I felt like punching the air in a “Ha! Take that!” to all the locations scouts who’d ever decided to call someone’s rural home a dusty barren moonscape. It was somehow affirming to see that things grew here, because it meant somehow that the journey would be less lonely. So we drove, the whirl of the wheels on tarmac, and I laughed again in the catharsis of allowing myself to not succeed by the rules of the city and seek instead the process of not knowing what might come out of the desert. My question was how to go West without replicating what I usually don’t like about *going West*. Before the San Bernardino Mountains, endless driveways to weatherbeaten houses, stretches of telephone wire, and so many electric towers to hold it all up. I thought of Raven Chacon building his own version of the towers, like personages to sing old notes of the desert to each other. I saw why he might want to remake these structures that have so much sway over the land. They dot the ridges and loom when you get close, the ultimate barometer of the trick of Western scale. With the road signs and the fences, they didn’t feel so

much like intruders as descendents of alien craft that had been marching across the landscape for millenia, slowly morphing their shapes and becoming invasively vital to their host. I found it impossible to dislike them.

### **Been There Already**

Everyone subscribing to the American Dream has something to prove, to attain, and many don't stop to think that plenty of people have been in relationship with space forever already. MDRS is an exercise in producing place, and a very specific version of it. If place is taken as meaningful, socially constructed, and space as empty or meaningless—in a settler colonial logic looking for spaces to occupy—then asserting alternative definitions of space is an act of resistance.

Unravelling linear time, and spaces are places that always have been. Messeri's model is capacious. "Place is more than a given category," she writes, "it is also a tool of knowing, a way of making sense"<sup>2</sup>—which indigenous scholars already wrote. A lot of Western place theory articulates what Native scholars have long worked from as central to their disciplines. American lands can reclaim the value of human and non-human spaces/places for a history that is ongoing and pressing. Getting there might require taking a few steps back to ask what makes place, as opposed to space, in the threads of multiple traditions. Why this matters, I'm arguing, is what those understandings make people *do*.

Assuming space and place make a dichotomy, as Western thought generally has assumed, the following question may be what each has which the other does not. Tim Cresswell, in his authoritative *Place: An Introduction*, notes that "when we speak of space we tend to think of outer-space or the spaces of geometry. Spaces have areas and volumes. Places have space



between them.”<sup>3</sup> Outer space, a near-vacuum; places on Earth, enclosures or specific locations on land. Land seems to be the basis, but even this resonance with Native American epistemologies gets twisted and lost in the history of how Western philosophers and laypeople have, specifically, *seen* land in the process of experiencing it. Cresswell reminds readers that “place, at a basic level, is space invested with meaning in the context of power” because social dynamics form in the bounds of power dynamics.<sup>4</sup> The apparatus making that oppression possible stems from seeing land as *landscape*, a surface maintained as a material space as opposed to a material place holding the relations of people’s lives. Landscape as a way of seeing emerges from Renaissance geometric point perspective. As Linda Tuhiwai Smith describes Henri Lefebvre’s work, in her book on decolonizing research methodologies, the power of this visual tool results in a concept of space “appropriated by mathematics,” in which measurement and empiricism gain “ideological position of dominance over what space means.”<sup>5</sup> In practice, this was and is a way for bourgeois art collectors<sup>6</sup> by the 19th Century to feel “in control of the vast territory being surveyed” from an elevated vantage by “conveying a sense of presence and confidence,”<sup>7</sup> as Elizabeth Hutchinson posits in her *Keyword* on visuality. “We do not live in landscapes – we look at them,”<sup>8</sup> Cresswell writes. This sense of wrangling the vision of land puts those engaged on the outside, whereas “places are very much things to be inside of.”<sup>9</sup>

Michael Heizer’s father was an archaeologist. The Cold War “Big Science” methods he used to analyze spiritual sites in Mexico—high-tech versions of those classic colonial tools mapping and tallying, surveying and fencing—Robert J. Kett argues the artist abstracted and perpetuated these “seek[ing] to recreate ancient relations of site and space” using “intensive technological

interventions.”<sup>10</sup> The Land Art movement was artificially self-referential, a “radical rupture from modern modes of art and knowledge making,” only inasmuch as it could “effac[e] the complexities” of its sites and their “contemporary social worlds,”<sup>11</sup> Kett posits. In *City*, a 28-acre complex just over the hills from the Nevada Test Site, Heizer has mapped a massive Mayan temple onto Shoshone land, in an attempt to create a Pan-American aesthetic in the modernist language of geometric forms. The “great gory mess of how we will occupy this country,” Solnit wrote in 1994, deals in issues “not [of] cowboys and Indians, but land, war technology, apocalypse... civil disobedience, bureaucratic obscurity, and Indians.”<sup>12</sup> It still does. This is not to vilify the scientific method, but to foreground how Heizer irresponsibly applied it as an artist. He did not consider its power as a destructive tool. This is the rumbling of history in the land beneath those futuristic forms.

The initial basis of fieldwork at MDRS is similarly external and visual, as the analogous places are chosen using information coming from Mars as numerical data and images. Yet Mars and other planets “are real only in so far as their visualizations are believable” because people can’t yet walk on the surface.<sup>13</sup> Messeri acknowledges the falsity and paradox of the “view from nowhere”—or everywhere—in producing supposedly objective scientific truth which must, to be credible, have provenance.<sup>14</sup> In working from a spatial or place orientation, there is necessarily an Other or Elsewhere. She cites Kant as culpable for the founding Western scientific ideal that general knowledge must be attained before localized or experiential knowledge has value or legitimacy.

The process of mapping gives shape to power relations by overriding or erasing existing knowledges in-place. Because Native peoples so often see histories and spiritualities as tied into places, the settler state abstracts Native peoples from places to they can be managed and manageable, measured by and on reservations and quantified as a monolithic race.<sup>15</sup> This is echoed darkly in how Messeri's subjects sought to turn planets from objects to places specifically "amenable to habitation,"<sup>16</sup> applying "terrestrial mapmaking methods to an extraterrestrial surface."<sup>17</sup> She argues that planets remain elusive and fascinating to scientists and laypeople alike because popular conceptions shape them from a mixture of realism—the assumption that everything is out there and discoverable—and constructivism, the premise that objects are social, "inventions... molded from a historical and local context."<sup>18</sup> When she asks how the premise of establishing a Mars outpost can be "unproblematic" for its inhabitants and advocates,<sup>19</sup> Messeri may mean in scope or futurity but I also mean it in the other sense. Looking to Mars, MDRS planetary scientists engage in what Messeri calls "an effort to de-exoticize... previously unknown objects"<sup>20</sup> by bringing them into scientific languages and visualities analogous those used in the Utah desert. This simultaneous alienation and closeness of Mars, like the science fiction theory articulated by Vivian Sobchack, is uniquely possible through the distance of landscape or map visualization coupled with Earth geology. The ends of this scientific endeavor are not necessarily destructive. They feed the machine of progress and the imperial visual language of habitation and appropriation. The distance it creates between the researchers and Earth follows the same logic that leads to manipulation of earth for the ends of the military-space-program.

I'm aware that this might come across as techno-phobic, fearful of Big Science as some kind of hazy, singular institution. I want to make it clear that I *believe* in science. I mean that in the most literal way, in that I usually trust the information scientific studies publish and I incorporate it into how I understand the world; and I mean it to say that I get completely swept up in the excitement of scientific "discovery" as it is shared in the popular press. This project exists at all, in part, because it lets me read about astronomy, geology, physics, and other fields. But since I'm not actually a scientist, I've become more interested in how scientific disciplines are deployed by different hands. I've learned to see that inquiries and technologies are never neutral; this allows me to live by the premise that theories of climate change hold truth as much as the linkage of America's space program and military-industrial complex is a truism. So maybe one way through this follows Donna Haraway, in her vision of subaltern subjects as cyborgs: balancing respect and awe for techno-science with skepticism and irreverence towards its pitfalls, that multiplicity holds possibilities for reclamation and enactment of alternatives.<sup>21</sup> Maybe the way things are holds the keys—or the weapons—for making them better. Messeri cites Debora Battaglia to argue that our shifting conceptions of social space necessarily "embrace the alien not as other but entangled with self" because the "multiplicity of place mirrors the multiplicity of the body."<sup>22</sup> People are inscribed with the history they've enacted through where they are, which in turn inscribes; accepting all of that may proliferate alternative, radical possibilities.

"The ideas 'space' and 'place' require each other for definition. From the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa." This is part of Yi-Fu Tuan's 1977 theory of placemaking,<sup>23</sup> and it's the inclusion of both "freedom" and

“threat” in an idea of space that makes the openness of the American West historically and continually enthralling. The Westward movement of the MDRS researchers is “further complicated by the fact that the ‘there’ they travel to on Earth is not the ‘there’ they are actually seeking to understand.”<sup>24</sup> When they bring the broad landscapes of Utah down to an observational level, they map future-oriented places onto a historicized space; it’s an attempt to revalue space based on empiricism which requires a hefty dose of imagination and extrapolation. The land itself holds the information they seek, and so has always been a place regardless of human activity. “Settler grammar” requires people landing on land; in disregarding peoples already there, insisting that the land’s information becomes most relevant only through techno-scientific inquiry about a place distant from it, a project like MDRS marks Indigenous peoples—and the other beings in relation with them—as irrelevant to the future of place-making. The imperial timeline does spiral back on itself.

Near the apex of Pisgah Crater in California, my friend and I squatted close to the ground and picked up tiny shards of the volcanic rock. We turned them in our hands to watch the facets reflect iridescent blue in the sunlight. I had an impulse to pocket the pebbles as reminders of that moment, and I did, thinking of a geologist in Messeri’s account who says she would like to buy land in Utah near MDRS because “she’d just like to have it.”<sup>25</sup> I had the same drive towards individual ownership of a part of the West, and I’m slightly ashamed that I obeyed it. My friend almost stopped me, asking something like, “Don’t you think it would be sad to be separated from the rest of the mountain?” I admired her consideration of the crater and the rocks as beings, with a form of sentience we couldn’t entirely understand. But I answered, “Maybe it would like to go

on a journey.” When I possess a bit of a place and move it, does it maintain its essence of that place? How much does it alter the new space (or place) it’s in? My impulse to collect was a distillation of the question of how to understand and honor the potential of places—to own, or hold in experience?

“The embodied experience of being on the Moon and the rock samples this afforded brought about a new era of knowing the Moon.”<sup>26</sup> My need to take from Pisgah Crater maybe stemmed from an assumption that keeping the material of the place with me could prolong my movement-based, physical knowledge of the place. I sought that form of immediacy through travel because I did not live in a tradition of land-based knowledge there. An unnamed Inuit interviewee says, in Messeri’s introduction, “We didn’t know this was the first time you white people had been to the Moon. Our shamans have been going for years. They go all the time.”<sup>27</sup> Maybe the biggest issue here is redefining what embodiment really means or feels like, reshaping it from an intellectualized mental formulation to revalue knowledges that are not transferable or articulable but still reachable through a form of displacement. So *seeing is believing*—what of touch? The project of Messeri’s planetary scientists is to “evoke a sense of ‘being there’ when actually *being* in the places they imagine is an impossibility”<sup>28</sup>—though some say not—and I’m interested in the functions of that evocation—how much I as a science-learner lean on it for the production of truth, rather than assuming there are things I will simply never fully *know*. Watts’s ontology arises again, the being as the knowing, and the reverse. Goeman advocates for using actual lived experience to break the dichotomy of conceivable and

perceivable spaces, disempowering the grammar by highlighting how it is fundamentally an imaginary that can be ignored or changed.<sup>29</sup>

Structuration theory probes the interactions between big institutions and individuals' everyday agency in shaping spaces into places;<sup>30</sup> I can only conclude, maybe unhelpfully, that actions on all scales support and influence each other to actively construct spaces into places with pervasive norms. Eva Cherniavsky, writing on conceptions of the body, describes people enacting themselves through everyday performance according to and forming a "grammar" of embodiment, itself, guaranteeing "there are no bodies *without* culture [emphasis hers]."<sup>31</sup> Cherniavsky classifies Liberal citizenship as a fundamentally disembodied concept with requires an opposite in identifiable, corporealized Others who are "overembodied."<sup>32</sup> I do not wish to lump Native identifications into one identity or "race," but to point to the invisible power of denying embodiment: it is denying the culture of white supremacy. When the white men at the head of space ventures get to disappear into the grammar's framework, they deploy technologies on spaces rather than places, thereby getting to say no subjects of the land—by definition of no embodied citizens of the nation—were harmed.

Both technological surveys and Indigenous spirituality, apparently, "re-imagine" space "filled with places suitable for embodied experience."<sup>33</sup> Messeri claims that "just as shamans have a different way of understanding what it means to go to a place, planetary scientists similarly recast notions of embodiment." Acclaimed author Simon Ortiz (Acoma Pueblo) probes this from a Native family's perspective on one of the *Apollo* moon landings, in his short story "Men on the

Moon.” An elderly man, Faustin, watches one of the shuttle take off on TV, with his daughter and grandson Amarosho. When Faustin asks if they brought any “knowledge” back from the first mission, Amarosho replies with dry irony: “They brought back some rocks.”<sup>34</sup> Later that night, Faustin has an allegorical dream in which Flintwing Boy protects Tsushki the coyote, using ceremony and arrows, from a machine barreling across their lands. A feeling of danger and violation in the dream tie that land together with the moon, drawing it all with Faustin’s sphere of personal history. Messeri notes that visions of the Moon are always historical products,<sup>35</sup> but she falls into a progress-based teleological narrative by linking shifts in perception to *new discoveries* within exploratory scientific missions. In the story, when footage from the moon reaches the family’s TV, Faustin compares the image of an astronaut collecting rock samples to his memory of a work crew drilling for water nearby his house.<sup>36</sup> Their failure, and the sadness of the dry land left, uncannily echoes the excursion into the moon dust; Ortiz makes a statement on the relative smallness of the moon landing and even its futility. Amorosho explains that the mission may be “useful in finding out where everything began a long time ago and how everything was made in the beginning.” “Hasn’t anyone ever told them?” Faustin asks.<sup>37</sup> Ortiz develops his use of traditional mythology in Faustin’s dream to reinforce his peoples’ long relationship with the cosmos and give it a fighting chance up against Euro-American methods of empirical science.

What I really wonder is if a planet like Jupiter, a gas giant, can be a place. Messeri seems to think not, claiming that “without a landscape, Jupiter lacks a narrative.”<sup>38</sup> I’ve been arguing for



the stories of land, but just because humans can't stand on Jupiter's surface doesn't mean it doesn't have a story of its own.

Space is a place, or series of places, or even *the* place to be, as Sun Ra sings. What Grewell seems not to consider, in his study of science fictions aiming to “map, catalog, and describe the resources and being of other lands in order to open them up for trade, administration, or occupation,”<sup>39</sup> are the myriad expressions of subtle subversion from creators whose peoples are historically paralleled to the “space monsters and aliens.” When formulated through the frameworks above, “places” are articulations of force, of settler boundaries and mapping; asserting that Indigenous lands are “still space” is a form of resistance.<sup>40</sup> Yet Allan Pred has posited, from within a settled frame of everyday action, that places are not fixed or measurable; they are never “finished” and always “becoming.”<sup>41</sup> I want to reconcile such an idea with what Andrea Carlson says on Indigenous Futurisms: “As an artist I don't want to make work from within a known vessel, I don't want to fantasize about colonizing Mars, I don't want to project myself into Star Wars, and I don't want to go to the moon and travel the Milky Way until I am good and ready.”<sup>42</sup>

### **To Till the Moon: The Complex of Wilderness**

Land is the crux of American expansion from East to West: it's what's moved, taken, tilled, made to conform. A future in space isn't an empty vacuum; a colonial mindset exported upwards requires land to stand on, if space is to be the next big thing for a narrative of futurity shaped by

government and corporate interests. And it is: space will not relinquish us from its hold on our aspirations and imaginations. Mythologizing land in the American West, whether past- or future-oriented, often avoids the hard-reality question of how *useful* that land can be made. The most heralded recent historian of the West, Patricia Nelson Limerick, asks her readers to consider the imprints of human industries destabilizing or maybe repeatedly reopening the supposedly “closed” frontier. With extraction and agriculture, given its arid and semi-arid conditions, developers have attempted to “normalize” Western land from the nineteenth century well into the twentieth and twenty-first.<sup>1</sup> The going assumption is, land that could be changed should be, as long as it holds potential from a capitalistic mindset. Land that couldn’t be changed—whether because of its immensity or harsh conditions, or, sometimes, its beauty—would become into a national park or monument. National parks are areas that cannot be mined or farmed. As such, they often historicize and enshrine peoples who supposedly cannot be brought into that future of resource exploitation: take the well-worn educational archaeological sites at the Vasquez Rocks, displaying Shoshone pottery as a past event. These sites are held aloft and aside like desolate planets that similarly cannot—yet—be mined or farmed. Smithson engaged the discourse around large-scale extraction and building that was part of the Land Art Movement. “Historical depth formations were materially continuous,” Smithson believed; he claimed that history leaves “a material residue” that never vacates.<sup>2</sup> So *Spiral Jetty* encompasses the railroad and the salt flats even as it remains the enduring land of decidedly “unvanishing” Indigenous peoples.<sup>3</sup> Smithson tried to talk about the appeal of the untouchable in his work and writings; he loved industrial waste, once choosing a site in Amarillo in the Texas Panhandle for what he called its “moon-barren desert lake.”<sup>4</sup> But he set up the experience of

*Spiral Jetty* as an effortful journey: he replicated the movement of gains-driven settlers from the East, even if the gains here might be cultural capital.

In 1936 Archibald MacLeish published *Land of the Free*, a lyric poem illustrated with large pictures by photographers hired by the Works Progress Administration. The poem moves from extolling American nature as the nation's driving spirit, to acknowledging creeping dread and finally anger that speculative farming had left "the land" an unprofitable husk, reopening California as a frontier out of the Dust Bowl. "Now that the land's behind us," MacLeish writes, "we get wondering / We wonder if the liberty was land and the / Land's gone: the liberty's back of us...."<sup>5</sup> As Vivian Sobchack intones on science fiction cinema, "When the land which has nurtured us threatens us, we are truly lost in space."<sup>6</sup> The Dust Bowl was so terrifying to farmers and devastating to farmers because it was the golden promise of American farming success, itself, pulled out from under the Midwest and Great Plains. Appadurai insists that "we need to reopen the many meanings of 'speculation'" to come to terms with how the "ethics of possibility"—visions of hope for just futures, grounded in locality—"come into contact with the ethics of probability"—the logical disastrous outcomes of continued neoliberalism, and the people in markets profiting from those disasters.<sup>7</sup> If space travellers successfully terraformed the Moon to support agriculture, or successfully set up mining operations on the surface, would it still be the Moon of our imaginings? Its mystique would certainly change. The contradiction lies in how distant bodies function in an imperial imaginary: the distance and the inhospitality, the uninhabitability, are what make other planets so intriguing, but they are what space exploration ultimately seeks to end.

It will be useful to remember that actual exploitation of land and resources in the American West has resulted from the same combinations of military and capitalist power that backed space exploration; that they continue to do so; and that these ramifications for land have ramifications for actual people. SpaceX launches from Vandenberg Air Force Base in Southern California, where its operations are managed by ManTech, an engineering contractor also dealing with U.S. military, intelligence, and NASA. Limerick has written of the West's "long history as the nation's dumping ground," both for "troubling populations" and "toxic and radioactive substances."<sup>8</sup> It functions rhetorically and actually as an out-valve for social and governmental disposal. Mining, ranching, industrial farming, oil drilling, and other extractive industries have long been vital to Western economies, but what goes into the land, air, and water has effects as long-ranging as what's taken out. Matrices and relations of power are visible in the fact that "the majority of energy resources in this country are on Indian land," Andrea Smith points out in *Conquest*. Environmental and bodily harm are intertwined in coal, oil, and mineral extraction, making it so that "the U.S. could not stop oppressing Indian people without fundamentally challenging its hegemonic position or multinational capitalist operations."<sup>9</sup> The riches not just of the few, but of the set-up of the nation's dominance, depend on historic devaluation of Native peoples for the value of their homelands. The Nevada Test Site or Nevada National Security Site, just outside Las Vegas, is a 1,350-square-mile swathe of Shoshone land designated within the Nellis Air Force flying range in 1951 for the testing of nuclear bombs. The area was closed to the public in 1941. When Rebecca Solnit documents resistance to the site in *Savage Dreams*, she upends the futurity of rocket-propelled military preparation, noting the local Shoshone peoples'

continued ways steeped in radiation: the biggest nuclear war is actually “something that has been going on all along,” not “a terrible thing that might happen someday.”<sup>10</sup> American Peace Test warnings informed civil disobedience protesters like Solnit that beta and gamma rays were unavoidable, while alpha particles travel in dust on the wind and can cause breakdowns in the body if ingested.<sup>11</sup> Yet Western Shoshone residents continue to traverse the land to visit spiritual sites, as well as hunt animals and plants exposed to radioactive particles. Half-lives are long; the generational embodied impacts of cancer and radiation poisoning, simply from continuing Indigenous lifeways, are devastating. And nearby, Yucca Mountain has been approved, since Solnit’s writing, as the main nuclear waste dump for the U.S., endangering its unstable ground water saturation-level.

Cold War development of nuclear technologies and long-range missiles went hand-in-hand with the Space Race. The fact that the Nevada Test Site and Yucca Mountain remain largely unpublicized today, a “blank on many maps” and “a forgotten landscape”<sup>12</sup> despite Shoshone claims, perhaps simply reiterates most Americans’ amnesia towards the connection between government military operations, space travel ventures and, with the concurrent mining in the area, private enterprise. The Mars Society declares that one reason for colonizing the planet is “another chance to shed old baggage and begin the world anew.”<sup>13</sup> But the baggage is inherent in the technological project of space colonization; in the very mechanism and act of leaving, there cannot be anew or a new.

The United States Geological Survey attempted to put astronauts *inside of* places on the Moon by providing geological field methods as part of Air Force training, making what's on the ground relevant to people so often in the air. But as the Apollo program was underway in the late 60s and early 70s, the USGS mobilized military force to “craft their own ideal lunar landscape” with strategic explosives outside Flagstaff, Arizona.<sup>14</sup> “A Study of Lunar Research Flights,” or “Project A119,” floated the possibility of detonating a nuclear bomb on the Moon, itself, after the U.S. lost to the Soviet Union, in 1959, in the race to send the first craft there. More recently Lockheed Martin, a leading missiles defense and security company, manufactured the hab for MDRS; in the Mars Society's projected future on the Red Planet, the corporation would most likely be contracted. And the Mojave Air and Space Port continues to house private corporations developing means to get to the place that is outer space. These places on Earth and specifically in the American West are especially glaring expressions of the union of corporate and military power, their hand-in-hand development in the business of rocketing off Earth. Tim Cresswell reminds readers that “cruise missiles are programmed with locations and spatial referents. If they could be programmed with ‘place’ instead, with all the understanding that implies, they might decide to ditch in the desert.”<sup>15</sup> He points to how abstraction sanctions destruction. It depends on an “inscription of difference between viewer and viewed that masks or naturalizes the viewer's power,” as Hutchinson draws on Lacan. But Cresswell's implication that the desert is a space, and not a place with social layers worth recognizing or preserving, reflects that desert peoples have been equated with this emptiness or lack of worth in the Euro-American framing of landscape. They are made equivalent to the dust, the rocks. Because of this I find it impossible to believe Messeri's assertion that planetary researchers' imagined communities are *not* organized

around some conception of the American nation-state, to follow Benedict Anderson. Given the structures of visibility and actual planetary exploration holding up their work in the sciences, are those formations escapable?

And none of this is to say that I don't love the idea of outer space. I would go to the Moon if I had the chance—and the training, or the money. The fact is that most of what's steering scientific work worldwide are Enlightenment-based methodologies in a Liberal framework; that's a pervasive, sound form of inquiry that can produce serviceable, fascinating, and even beautiful forms of knowledge. I take issue when those methods are misused, guided by greedy hands that disregard others. In some ways, the West has been won: the United States is “postcolonial” in the sense that the catalyst of ongoing colonization cannot be undone; all is steeped in capitalism; technology has been developed with Western epistemologies, and not Native ones, in mind. I know that this project can't change that single-handedly. And I continue to love space; to fetishize it, to dream of it. I'm looking for the ways that can coexist alongside this intervention here, and the elevation of other artists'.

Beatriz Cortez's intervention is her first solo show, *Trinidad / Joy Station* at Craft Contemporary in Los Angeles. The title of the exhibition unites influences from Drop City, a utopian communal-living experiment in Trinidad, Colorado, with evidence of everyday collectivity in Joya de Cerén, a Mayan urban complex in Cortez's home nation of El Salvador. Drop City was founded in 1956 and is considered the first “hippie artist commune” of the 1960s. It was known for its multicolored geodesic dome architecture, which Cortez draws on to construct multifaceted

vessels out of salvaged car hoods. Her freestanding rooms and vessels denote hypothetical future space travel and habitation. “Cortez aims to recycle destructive elements of Western capitalist society,” the press release for the show explains, “to build alternative spaces of coexistence and communalism.”<sup>16</sup> The scrap-metal domes hold real plants that form the backbone of Incan, Mayan, and Aztec life, allowing Cortez to activate old futuristic symbols for Indigenous survivance and nourishment. When Joya de Cerén was covered by a volcanic eruption in the year 600, containers of seeds and entire cultivated fields of maize were preserved until they were uncovered by archaeologists in 1979. One of Cortez’s structures, resembling a seed ark with portholes full of grains, is called *Jumbo*, after the container for the first atomic bomb detonated in New Mexico; Cortez has articulated ties between this technology and NASA’s efforts to grow food in space, and she tackles earthly destruction on military and environmental fronts to envision a reseeded through re-Indigenizing subversion. Cortez’s sculptures seem grounded, however, with little intention of flight, and it may be because they’ve already landed from an alternative world: promotional images for the exhibition feature Cortez’s work in the scrub just outside Los Angeles, with power lines and other infrastructure clearly visible [Image Appendix 3]. Thus the pieces meld Cortez’s peoples’ past, a distinctly Californian present, and a realistic but hopeful future. The additional inclusion of mylar blankets as a sculpting material foregrounds Cortez’s immigration—and that of many young people recently—from Central America into California as part of this story, and part of the destabilization of American borders in the face of Indigenous land relationships.



Smithson reportedly saw the Golden Spike commemoration events as crimes of historical memory, and grounded his work against such discursive functions. Smithson and Michael Heizer were locked in a bitter rivalry throughout both their careers over the definition of authentic land art, each claiming they were it.<sup>17</sup> Though both grabbed land for clout in the East Coast art world like creative cowboys, mythologizing their individual physical efforts, they approached lands' inherent meanings and memories differently. Heizer's strategy was complicated and exposed when he created a series of mounds that imitate traditional practices of original peoples, *Effigy Tumuli* in Buffalo Rock State Park on the Illinois River. The piece consists of five earthworks in the shape of river animals: a catfish, a frog, a turtle, a snake, and a water-strider bug, each hundreds of feet long. Mound-building peoples constructed urban centers and religious sites across the Northeastern United States as long ago as 2,000 B.C.E. Surveying the site from the air, the artist remembered: "My thoughts were similar to those I have when I look at photographs of the earth taken from the moon. In that single image, our predicament and our challenge, as imperiled inhabitants of this planet, seem spoken with a power beyond words."<sup>18</sup> His take on history seems a bit of a double-edged sword in historicizing Indigenous peoples, though: in explaining why he based his plans on a Native American concept and pictorial language around animals, Heizer asserted that "there was no way [he] could come into that region and do what modern man had done since they ran the Indians out, which was build more cities, more modern things, more abstract-looking things. So there had to be imagery; it had to be within those terms."<sup>19</sup> He felt he had an "obligation... to maintain that ancient dialogue" and "make a statement *for* the native American [emphasis mine]. I thought I was eternal," he has said. "I still do."<sup>20</sup> Land Artists were pioneers, as their own commemoration in books and films will tell us;

explorers, men who discovered the land they used and the concepts they developed; brave, rugged individuals eschewing New York's Eastern center of art commodification and striking out in a new direction.<sup>21</sup> That direction was West, and was not very new.

The convenient thing about Beatriz Cortez's art is that it's art. Her habs don't have to withstand passage through the Earth's atmosphere; they don't have to protect human bodies from exposure. When scientific development and Indigenous technologies collide outside the gallery, the result is often less joyful. In 2005, Winona LaDuke documented the San Carlos Apache peoples' fight to prevent the University of Arizona from building a large binocular telescope on the summit of Mount Graham, in the Sonoran Desert. The mountain, *Dzil nchaa si an*, is the home of important spirits and the site of numerous Apache religious practices, and its ecosystems—unique in the United States—provide the ingredients for ceremonies performed on lower ground. Named, ironically, the Columbus Project, the telescope was projected to destroy 25 percent of the original fir forest<sup>22</sup> on the mountain in the name of highly detailed observations of cosmological objects. It appears that this capability aims to impress NASA and the US Air Force; they contract university telescopes to develop surveying projects like the University of Minnesota's infrared map of the sky, which will use data from Mt. Graham to track missile defense systems.<sup>23</sup> Since Apache tribal member Wendsler Nosie was notably arrested for “trespassing” on the mountain when the land was first requisitioned in 1998, the telescope has been built, the insult and actual harm to Apache cosmology, done. LaDuke pinpoints the struggle between differing views of the universe. In a statement to the Apache tribe, astronomer Gunther Hasinger stated that science “is a different type of religion” and that “every improvement we have has to do with science.”

Brushing aside ties to military money and invalidating Apache beliefs grounded on *Dzil nchaa si an*, Hasinger summed up a fundamental refusal to shift mindsets by saying simply, “We look differently at the stars.”<sup>24</sup>

A sepia grisaille oil painting from 1991, by Mark Tansey, depicts a group of stereotyped Plains “Indians” looking down on *Spiral Jetty* from a rocky outcropping [Image Appendix 4]. It’s called *Purity Test*, and so calls into question the interpretation of the sculpture as “pure abstraction” or as a symbol of indigeneity that lags behind the modern, yet is in itself “pure.” As contemporary surreality, Tansey has said that his work “investigates how different realities interact and abrade.”<sup>25</sup> As much as the painting is *about* Americans’ expectations of Native Americans based on stereotypes, *Spiral Jetty* is a symbol of its own surround, and so there’s a question of authenticity placed on both actors in this painting. How much did Smithson’s intentions matter compared to his methods? Like my feelings on Martha Graham, I sit with ambivalence towards Smithson and other land artists. I’m impressed with them and agree with some of their principles and impulses, but some of them I don’t. So reckoning with the shortcomings of the artists I admire—including Johnson, including Smithson—requires deciding whether what I see as worthwhile in their work outweighs the moments they’ve been ineffective or stepped into areas I believe they shouldn’t have. At the risk of oversimplifying, Michael Heizer doesn’t make it according to those criteria, for me; though I think his work is beautiful and impressive in its scale and simplicity, his own words undermine it with slimy principles. He even sold out under his own ideals, constructing *Levitating Mass* for LACMA in a contained museum setting he helped found the Land Art movement to avoid—and even if *City* was a

re-commitment to those ideals, his flagrant imitation of Mayan architecture and his race to claim the pioneering “first” of the largest sculpture in the country disappoints me. I still enjoy his work, just as I enjoy De Mille’s. So I have to admit I *like* things that complicate the artistic landscape without being the most productive for the American imagination, for being disruptive but not in the way I’d prefer. Graham was disruptive for her liberal and probably largely white audiences, because they’d never considered what her Native influences have drawn on forever.

Far to the North, *Gauge* sits as a counterpoint, a two-year collaboration between Danny Osbourne, Patrick Thompson, Alexa Hatanaka, Sarah McNair-Landry, Eric McNair-Landry, Erik Boomer, and Raven Chacon—abstract murals on glacier faces on Baffin Island in Nunavut, Canada using animal and vegetable dyes sprayed through fire extinguishers and other nontraditional tools.<sup>26</sup> The ice shifts over time with the tides; the paintings are broken and submerged; unlike the materials from Polar imperial expeditions, no permanent designs to alter the landscape. The land—or water—in *Gauge* is both surface and medium, an artist or actor as living material with which the artists collaborate; activations mesh and contrast with the ice’s processes to create circuits of creation, destruction, renewal, and then sonic/photographic capture.

Standing on a scree of volcanic rocks near the top of Pisgah Crater, I felt the solid age of the place but also the looseness of the gravel. I was in San Bernardino County, between the towns of Barstow and Needles, but also in a place where none of those names mattered and the sky was so close I felt it press. I could have been there out of the interest and conviction that the place was

*alien*, the black sand and bleached vegetation, but I found it was weirder and more moving—and I unfortunately don't have much better words than that—to anchor down in knowing that this was Earth, and this was America, but a version of it many people would never see. I felt no pride of discovery or special knowledge; the tourist attraction of Pisgah was worn out, almost nonexistent. People had mostly decided to leave this place alone after a while, it seemed, after mining it and exhausting it, and now the crater sighed. The last time it erupted was 100 thousand years ago. The wind was 100 thousand strong hands, pushing and searching, trying maybe to whisk me off and away. I had a wild urge to run, in leaps and bounds, until I slipped and the mountain cut me, blood dripping from a slit up the side of my calf. There was only so much this place would allow me to do, and I didn't know what comfort meant to it.

The stated mission of the Living Universe Foundation, or LUF, is to “colonise space” to “ensure the eternal prosperity of life.” It presumes a post- or trans-human evolution beyond our current biology so that “humanity, in whatever form it transcends to, will be the torchbearers, bringing the green spark of life to the Galaxy.”<sup>27</sup> There is a small leap, rhetorically, between mining in Nevada and mining the Asteroid Belt. And people leave debris in the space all the time, metal bits of satellites and other craft soundlessly disintegrating. Industrial rehabilitation lies somewhere alongside as an unsettling alternative. Citing David W. Noble, Lipsitz spells out in his *Keyword* that “belief in a redemptive national landscape performed important cultural work in constituting the United States as an imagined community grounded in white masculine property and power.”<sup>28</sup> As much as the earth can be pummeled, we expect it to bounce back as the inexhaustible *source* of American values, themselves. But at some point environmental

toxicity tips the balance, and the lions of Western masculinity feel obligated to give back. Michael Heizer's *Effigy Tumuli* required coordination between the Abandoned Mines Reclamation Council and the Ottawa Silica Company in Illinois, but Heizer scoffed at implications that his piece was "reclamation art." He considered it fundamentally anti-war, the opposite, he said, of smashing metal tanks into the ground.<sup>29</sup> The soil and water in Buffalo Rock were destroyed by years of dumping acidic shale and pyrite as part of mining coal. The reclamation process resembled a reverse time-lapse of farming: the building team added lime to the soil to balance its pH, tilling it with a tractor, and then planted grasses from the region, in effect remaking the prairie that had been gutted by mining. Somewhere in this there's an impulse to unsee, to undestroy, to remake the "virgin lands" so important to America's self-image—maybe to avoid the weight of hundreds of years of guilt over exploitation, to stymie the impression that one day resources truly will be exhausted if not reconsidered. Contradicting, maybe, the desire to depart Earth, this outlook depends on a capitalistic impossibility of exhausting the land's resources. It "comes out of the American obsession with virgin wilderness, which is itself a deeply problematic idea, and it speculates about the possibility of the utterly new, of an experience without predecessors..." which is actually continual rhetorical production of old land, as Solnit observes on the area around the Nevada Test Site. Still, repeating over and over with waves of people fashioning themselves pioneers, Solnit observes that "there's a strangely popular subject of speculation for hikers and explorers: whether they were the first people ever to tread on a piece of land." In reality, "there are few places in North America that were not first walked upon by the indigenous inhabitants of the continent... And the actual act of climbing a mountain depends for its meaning on the romantic cult of mountains... you have

inherited it ... New or old, it seems you should know where you came from to understand where you are” because “we all carry the burden of history and desire...”<sup>30</sup> The glorification of a technological future, of self-sufficiency driven by a white-male scientific elite, depends on an environmental racism tied to that environmental exhaustion, to the worst climate change apocalypses. “Land is not exclusive property but the embodiment of our ancestors,” as Elizabeth Woody describes her peoples’ beliefs,<sup>31</sup> so bodily connection to land endures even when it is toxic from industry.

I came to a low point at Pisgah, at the end. I let myself revert and climbed straight up the side of a black sand dune. I have a vivid image, still, of my hand, fat with dehydration, slapping down on the shifting surface towards the summit, with a turquoise ring on my middle finger from an out-of-place tribe. I felt that the crater had been happy to sit with me until then, when it abruptly didn’t want me there, a split-second realization, and it was time to go. Reaching the top of the dune meant nothing. In the driver’s seat I felt bleached and parched and buffeted, at a loss. In my research, the land had received by body; I had listened to the shifts beneath me as the big rocks broke into smaller rocks, which powderized into an obsidian sand, and the pale coral flowers inched towards the dusty sun. I had lost control, in fast and slow ways, and the place had held me. But now I was back in my personal space capsule. Cars are like that—pods that allow their terranauts to scream them across a wide land from another planet. The freedom of the automobile, in the West, is much like the lonely freedom of the astronaut in the moon transport. “I’ll fling myself at ordinary monsters,” writes Lauren Berlant, veteran theorist of nation-building affective or emotional norms, “if in the crevasse of the mistake I get next to a

freedom.”<sup>32</sup> I was in the crevasse, and at the peak. I was protected from the wind now, and from the dust of the land, and with all those plastic and chrome surfaces instead, I missed it.

I wouldn't have understood Pisgah Crater in the same way if I hadn't gatecrashed the Mojave Air and Space Port. Also known as the Civilian Air and Space Test Center, the airport's mission is to “foster and maintain our recognized aerospace presence with a principle focus as the world's premier civilian aerospace test center while seeking compatibly diverse business and industry”—this in all-caps at the bottom of the most recent board meeting minutes posted in a vitrine on the side of a building. What it looked like in practice was a lot of gravel driveways and a lot of chain-link fences, sectioning off vast sheds for the private companies that make everything you need to build a spaceship. Virgin Galactic, Stratolaunch, Scaled Composites. The town of Mojave, like Vasquez and most of the area, was also a hub for mining beginning in the 1930s. In its commemorative materials, the Air and Space Port likes to draw a connection between this early extractive technology and its claim to the first-ever manned private space launch: June 21, 2004, in a craft owned by the Xprize Foundation and built by Scaled Composites. On the plaque in front of a scale model of the craft, part of what the port called its “Heritage Walk,” was an inscription from Wernher von Braun, rocket engineer and author of the nonfiction works *Conquest of the Moon* (1953), *Space Frontier* (1968), and *The Mars Project* (1952), among others. It read: “Do not tell me that man doesn't belong out there. Man belongs wherever he wants to go—and he'll do plenty well when he gets there.” Needless to say, slinking around the premises and snooping in on this contained, unfamiliar culture of the nuts and bolts of exploration, I was incensed—and enjoying it immensely. I wanted to know more, I wanted there



to be someone to talk to, but I avoided the on-site diner even though that's where most of the human activity was, for the risk of a *Star Wars* "cantina" moment. The dominant features of the landscape were the rotary rocket and the NASA plane. The cone-shaped space vessel was the first rocket to fly out of Mojave, in 1999; the NASA plane appeared to be decorative, marking the private companies' ongoing contracts with the national body—one of the Test Center's tenants, Masten Space Systems, was selected by NASA this year to help construct equipment for a renewed Moon program. The two show-vehicles were in fact connected by an axial path, two shining white chunks of metal sticking up from the expanse of dust, with the rugged hills beyond, and it was clear we were meant to photograph them [Image Appendix 5]. Radio towers and air vents dotted the horizon; the future as seen from the past was now. It was almost too perfect, so evocative that I was aware the whole time of the set-up of it all, the level of control. It was a similar feeling to the one I get in visitors' centers: an inkling that what you see is not all there is to find, that the history and powers beneath the surface are so much bigger. We never had a reason to get arrested for trespassing, but I kind of wanted one.

### **Coda: Three Reviews, Some Steps, and Some Measures**

"I imagine the collapse of chronologies," Beatriz Cortez says, "and try to experience time as simultaneities and circular motion as a way to resist colonialism."<sup>1</sup> Some of the sculptures invite viewers to activate them, as participants in this future, by crawling inside. Curiosity and joy in the experience is one of Cortez's primary aims: she sees "shared joy as a way to resist capitalism," a productive force.<sup>2</sup> In Cortez's vision, materialized as the pieces in the show stand

together in this imaginary space station or earth station, space travel will be necessary Americans to survive destruction on Earth—and maybe it already has been—but its technology won't come from anything Indigenous North Americans haven't known all along. Her future includes reactivating those knowledges by sharing them with all Americans, implying that new forms will be syntheses and repurposes dealing in the real material legacies of a “post”-colonial coalition.

Maybe the Center for Land Use Interpretation provides another a way to respect and recontextualize changed landscapes. It's “dedicated to the increase and diffusion of knowledge about how the nation's lands are apportioned, utilized, and perceived.” Its online archive of projects and images marks the esoteric fringes of American landscape. One of its branches, the American Land Museum, describes its collection:

“Being actual places, these exhibits are connected to the continuous ground, and cannot be dislocated and transported into a conventional museum. So they remain where they are, and the museum is established around them, like a picture frame around a picture. Similar in some ways to the National Park system, the American Land Museum is a continental collection of places.”<sup>3</sup>

The language used is strikingly similar to that of Land Artists. It may seem radical, but the website claimed the project started in 1776 and will just keep going. Miller and Turner wrote that America didn't have cathedrals, so it held up its forests and canyons—a similar logic here. This enshrines *land junk* like space junk and space junk *as* land junk, collapsing historic moments and redefining what an “artifact” can be. In a photograph captioned “Lightning Test Area, with Rocket Nose Cone” in a *Cabinet* article<sup>4</sup> on Wendover, Utah, a stand of thick lightning rods supported by wires backgrounds a field of cracked cement against a fence and a partly-cloudy blue sky; dry shrubbery grows up at the edges and in the cracks; and in the middle, a pristine,

white rounded cone rests on a disk [Image Appendix 6]. How did it get there? Is it a relic of nuclear warhead testing on Indigenous reservations? The CLUI messes with what a museum really is; it un-rarifies the gallery setting and the National monument by saying that many productions, *in situ* or in their real contexts, matter. By creating artifacts of the future out of the past, CLUI contends at least that Native American arts are not the only “artifacts” in the West.

*Delivery from Earth* (2014), a short film with an entirely Native cast—and a non-Native director, Michael Becker—opens with disorienting shots of a dry landscape. The camera plays with scale, so we can’t tell if we’re high above Mars or looking in closely at a desert floor. The film is *about* a lot of science fiction tropes: the location identification beeping across the screen is “The Navajo Nation” before any mention of the State of New Mexico, and the setting asks how Navajo individuals could activate an outpost on Mars—whether as a small boy’s imaginative fort in the desert, or the real thing. Throughout, Indigenous peoples are reified as defiantly unvanishing and unhistoricized, current, via their use of futuristic technologies in everyday life. Navajo language permeates; the linchpin in the plot occurs when the “Astronaut Mother” (Tailinh Agoyo) the first woman to give birth on Mars—to the first doubly Native Martian—delivers a televised address with Navajo words from her mentor, the boy’s grandfather (Phil Bluehouse).<sup>5</sup> A supposedly occupied, colonized people turn on its head the concept of claiming land by settlement and reproduction, linking direct and tribal family across planets.

These are just a few facets of the commentary on speculative projects which say space *is* the future, which usually erase Indigenous peoples’ long-standing relationships with the cosmos. Yet

the conclusion here is not that space is *not* the future. Native writers, actors, and dancers explore it on their own terms, finding real emotional, spiritual, and material connection to outer space through their various communities and personal positions towards traditions' continuance. Non-Native artists have roles to play in decolonial work, too, from different vantages with different goals, with respect to Indigenous worldviews we cannot inhabit. Canonical modern choreographer José Limón was an Indigenous Mexican dancer who represented the United States in State Department tours during the Cold War, on the heels of Termination and urban relocation policies engineered against Native peoples in the 1950's. From within his complex position between "authenticity" and palatability, Limón issued this aphorism: "You will, mightily, for something to happen," he said, "and you take steps and measures."<sup>6</sup> The comment could be about his personal rise to fame within the art world and within the burgeoning neoliberal framework of state power-play using culture; but it could also be a statement of Indigenous survivance and an exhortation to all Americans to embody and enact the futures they want to experience fulfilled as reality. Emily Johnson has said that her work stems from actualizations of "joyous futures," alternatives culled from her communities both in words and experimentations in somatic sensations. Cultivating the conditions for joy, by taking up space or being in place in the face of colonial forces, is a preliminary resistance. So this has been a step towards and a measure against. Do what "they" don't want you to do, where you're not supposed to be. Generate surprise.

## **In Stead: Reflecting**

The entire process of conceiving, developing, and staging a performance based on all this research was a process of mediating my expectations with unexpected moments. I was struck by something one of my advisors, Lisa Brawley, said in a meeting: When choreographers try to make new work, or dancers improvise, breaking away from existing dance forms, she wondered, is that not a kind of frontier? One inside the dancers bodies? This profoundly altered my perspective on contemporary dance and somatic practices, and drove my strategies in working with the eleven dancers who participated. The group included people with years of classical training alongside some with less-codified backgrounds or who came later to the game. In my insistence on recognizing the influences held in and by our bodies, the emphasis leaned towards working with and through technique, using what we knew to experience the qualities, shapes, and concepts I pulled forward. I wish I had begun earlier, though, to break down each dancer's relationship to technique, and to explore the weighted personal and larger histories with those rubrics. I began with improvisation but moved quickly to phrase-work in rehearsals—with material I invented as well as generating movements with the people in the room—so the process centered choreography and my decisions a bit more than I would have liked. Making phrases and repeatable parts with the dancers, I often relied on single-word prompts to leave open the affective and somatic possibilities for each person. We explored comfort and risk; flagging, moving through, and inviting.

These experimentations in the studio changed shape when they were transferred outside in a series of walks, when we sought a route around Vassar's campus with what seemed like a fitting

narrative. Many moments in the piece were added on a whim while wandering outside, such as climbing over the yellow gate, scaling the roof, and rolling down the hill. I had my eye on the trees at the edge of the golf course for a while; that was the only pre-planned response to the land. Even manipulating the pile of salt happened somewhat organically, as it suddenly made sense to ask for the audience's assistance in the task of building it taller. This experience made me realize that there is a difference, actually, between site-specific performance and place-based performance. I knew this intellectually and academically throughout the research process but only truly felt it on the day of the happening; I felt the shifts in register as we all moved between different types of use, staging, and activation on or with the locations we chose.

Spontaneous choices—which didn't even feel like choices, really—animated the piece beyond my imagings. When everyone started applauding after crossing the bridge; when two of my friends led the line in rippling movements; when the dancers stepped forward to help participants over the gate: moments like these felt like the ultimate purpose of the work, to me. It was magical to feel the consensus reached without words. And I want to note the bravery it takes to step forward and do something without rehearsal, watched by an audience. The outpourings of joy and effort from audience-members joining in our first improvisation indoors, and pushing the pile of sand, were especially gratifying for this reason.

I grappled with the decision to use a line formation as a transitory container. I saw it as one way to add layers of information and texture to the work, rather than simply walking from one place to another; I saw the words and movements shared as ways to make the “in-between” spaces into

places. I knew that people would have their own conversations, maybe connecting anew to each other and to the places. But I was also conscious of the regimentation of a line and the histories of marches. With climbing the roof and scaling the stairs in the race, the line formed one thread enacting and probing how people can be organized in a “grammar” of normalizing roles—its counter, I hope, was moments that broke that down. It was encouraging to see the back of the line fall apart into small groups. The event necessarily occurred in conversation with art “happenings” of the 1960s and 70s; the journey logs of Land Artists visiting discrete sites and the landscapes along the way; and more recent ambulatory theater and activity-based works like Emily Johnson’s. I knew every audience-member would bring a slightly different lexicon of references like these to the performance. Speaking to people afterwards, I was struck by their impressions and interpretations of symbolic moments—often in ways I did not intend or anticipate. I recall now how some sections of the piece felt more evocative than direct, and I would be interested to hear more impressions of what was conveyed, when.

The dynamic of audience participation formed the fulcrum of the work’s premise, and was also its most uncertain factor. It was difficult for me to strike a balance between instructing, inviting, and checking in. But activating the piece with the audience was an exercise for me in letting go, allowing the material to morph however it would, and I believe this is the ultimate release from the confines of proscenium stage dance. Leaning into the risk of uncertain outcomes, and feeling the audience trust me to lead them into what might happen, was the location of the community-building which I feel genuinely developed on the excursion. I was overjoyed to bring people of all ages into the happening; with the energy and asides from my professor’s daughter,

and the solid presence of my own father, one friend said we looked like a village. Providing structure felt necessary to encourage this meeting, and I challenged myself to do so with minimal words. As a result, I wish the flow of events had been clearer. I wish the people in yellow had been more dispersed into and interacting with everyone else: in the lines of walking, and when we clumped close together. I didn't anticipate this happening until it did, and I think I could have communicated that better to the dancers and requested that they mingle. We made lots of decisions as the performance progressed and I think that would have been a reasonable one.

Yet I did not want to draw audience-members into situations of unproductive discomfort. The performance was designed to function with or without an audience at all, so the connection between those of us in yellow was something we could cultivate and share to whatever degree others wanted to receive it. I felt these porous and uncertain boundaries of our group, within the context of formal dance concert indoors, at the very end, when we sang. I had wanted to sing to the audience, and had assumed all the dancers would stand with me to sing; pulling them to their feet, and all facing each other, instead, gave me both more and less control than I anticipated. But I fell into that and made small connections with audience-members in the process. The ending was a revelation because it combined the sensations of witnessing and being witnessed. It left me feeling slightly unsatisfied, uncertain, mixed up, and that was not unpleasant; that's the point.



## IMAGE APPENDIX

1. Heron Preston. Spring Street Salt Shed. Promotional photograph for HPC Trading Co. “Uniform” line. September 9, 2016.



2. Geologist Joe O'Connor tests a space flight suit at the Hopi Buttes Volcanic Field in the Navajo Nation. 1965.

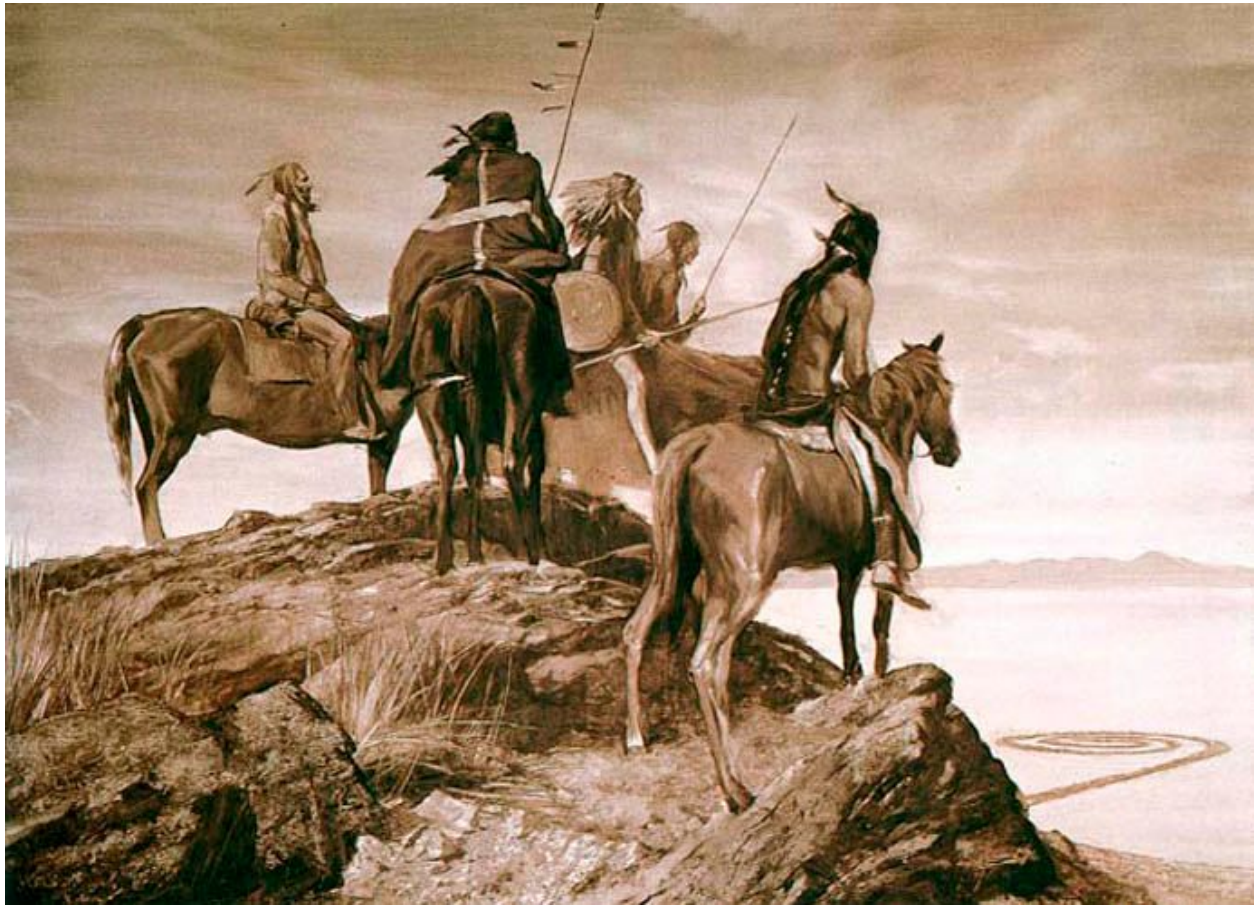


3. Beatriz Cortez. Promotional photograph for *Trinidad / Joy Station*. 2019.





4. *Purity Test*. Mark Tansey. Oil on canvas. 1991.



5. Rotary Rocket and NASA plane. Mojave Air and Space Port. March 2019.



6. "Lightning Test Area, with Rocket Nose Cone." The Center for Land Use Interpretation. 2003.





## Notes

### Preface

1. The Judd Foundation, "Visit Marfa: The Chinati Foundation," <https://juddfoundation.org/visit/marfa/>.
2. Samantha Sanders, "Why Donald Judd Brought Art to Marfa, Texas," *Artists Network*, <https://www.artistsnetwork.com/magazine/donald-judd/>.
3. <https://elcosmico.com/room/tepees/>.

### The Spiral

1. Arjun Appadurai, *The Future as Cultural Fact: Essays on the Global Condition* (New York: Verso, 2013), 286-287.
2. <https://www.youtube.com/watch?v=wX--wIO82FY>
3. Frederick Jackson Turner, "The Significance of the Frontier in American History," 1893, <http://nationalhumanitiescenter.org/pds/gilded/empire/text1/turner.pdf>.
4. <https://www.youtube.com/watch?v=X9uzwiKNhCk>
5. Jennifer L. Roberts, *Mirror-Travels: Robert Smithson and History* (New Haven: Yale University Press, 2004), 118.
6. Clement Greenberg, "Avant-Garde and Kitsch" in *Clement Greenberg: The Collected Essays and Criticism, Volume I: Perceptions and Judgements, 1939-1944*, ed. John O'Brian (Chicago: University of Chicago Press, 1986), 5-22.
7. Roberts, *Mirror-Travels*, 122.
8. Reinhart Koselleck, "Modernity and the Planes of Historicity" in *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004 [1985]), 22-23.
9. *Ibid.*, 22.
10. Rebecca Solnit, Part I, "Dust, or Erasing the Future: The Nevada Test Site," in *Savage Dreams: A Journey into the Landscape Wars of the American West* (Berkeley: University of California Press, 1999), 24-25.
11. George Lipsitz, "Space" in *Keywords for American Cultural Studies*, ed. Bruce Burgett and Glenn Hendler (New York: NYU Press, 2014), 228.
12. Mishuana R. Goeman, "Disrupting a Settler-Colonial Grammar of Place: The Visual Memoir of Hulleah Tsinnahjinnie" in *Theorizing Native Studies*, ed. Audra Simpson and Andrea Smith (Durham, North Carolina: Duke University Press, 2014), 236.
13. Lipsitz, "Space," 228.
14. Tim Cresswell, *Place: An Introduction*, second edition (West Sussex, United Kingdom: Wiley, 2015), 18.
15. Linda Tuhiwai Smith, *Decolonizing Methodologies*, first edition (London: Zed Books, 1999), 31.
16. *Ibid.*, 34.

### Towards a New Space Opera: Spaghetti Western Story Ballets and the Functions of Relationality

1. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 238.
2. Jacqueline Shea Murphy, *The People Have Never Stopped Dancing: Native American Modern Dance Histories* (Minneapolis: University of Minnesota Press, 2007), 157.
3. Murphy, *The People Have Never Stopped Dancing*, "Introduction," 9-10.

4. Emily Johnson, Karen Recollet, and Mique'l Dangeli, "Kinstillatory Mappings in Light and Dark Matter," <http://www.catalystdance.com/kinstillatory-mappings-in-light-and-dark-matter>.
5. Elizabeth Woody, "Voice of the Land: Giving the Good Word," in *Speaking for the Generations: Native Writers on Writing*, ed. Simon Ortiz, (Tucson: University of Arizona Press, 1997), 150.
6. <http://www.rebeccabelmore.com/video/Vigil.html>.
7. Vanessa Amanda Watts, "Re-Meaning the Sacred: Colonial Damage and Indigenous Cosmologies" (PhD. dissertation, Queen's University, Ontario, 2016), 6.
8. Ibid., 4-5.
9. Andrea Smith, "Spiritual Appropriation as Sexual Violence," in *Conquest: Sexual Violence and American Indian Genocide* (Durham, North Carolina: Duke University Press, 2015), 122.
10. Vanessa Amanda Watts, "Re-Meaning the Sacred: Colonial Damage and Indigenous Cosmologies," PhD. dissertation (Queen's University, Ontario, 2016), 6.
11. Molly McGlennen, *Creative Alliances: The Transnational Designs of Indigenous Women's Poetry* (Norman: University of Oklahoma Press, 2014), 166.
12. Appadurai, *The Future as Cultural Fact*, 288.
13. Cresswell, *Place: An Introduction*, 69.
14. Lisa Rebecca Messeri, "Placing Outer Space: An Earthly Ethnography of Other Worlds," (PhD. dissertation, Massachusetts Institute of Technology, 2004), 25.
15. Cresswell, *Place: An Introduction*, 64.
16. Ibid., 24.
17. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 237.

#### True Fictions

1. <http://www.spacefuture.com/about.shtml>.
2. <http://www.luf.org/index.php>.
3. Fredric Jameson, "Progress vs. Utopia, or; Can We Imagine the Future?" in *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (New York: Verso, 2007), 288.
4. Ibid., 286, 288.
5. Andrea Carlson, "A Mothership Connection: Past Futures of Resurrection and Absence," *MPLS Art*, February 21, 2018, <https://www.mplsart.com/written/2018/02/a-mothership-connection-past-futures-of-resurrection-and-absence/?fbclid=IwAR1N2ZedHhXP8aRJEBMw-U9VZDXJ2yIbBz6PT2pksR8KRAAEw9VxiHnKE18>.
6. Vivian Sobchack, *Screening Space: The American Science Fiction Film* (New York: Ungar, 1987), 109.
7. Ibid., 110.
8. Ibid.
9. Greg Grewell, "Colonizing the Universe: Science Fictions Then, Now, and in the (Imagined) Future," *Rocky Mountain Review of Language and Literature* 55 no. 2 (2001), 26.
10. Sobchack, *Screening Space*, 113.
11. Ibid., 114.
12. <https://www.youtube.com/watch?v=0Gtxhm2N9xc>.
13. Grewell, "Colonizing the Universe," 27.



14. Perry Miller, *Errand Into the Wilderness* (Cambridge: Harvard University Press, 1956).
15. Sobchack, *Screening Space*, 114.
16. <http://spiderwebsinthesky.com/portfolio/items/singing-toward-the-wind-now-singing-toward-the-sun-now/>.
17. <http://www.spacefuture.com/about.shtml>.
18. Peter Dahlgren, "NASA's influence on streetwear," *NSS Magazine*, May 2018, <https://www.nssmag.com/en/fashion/14670/nasa-s-influence-on-street-wear/image:133000>.
19. Michelle Kim, "How Solange and Mitski Reconsider Who Can Be the Cowboy," *Pitchfork: The Pitch*, March 21, 2019, <https://pitchfork.com/thepitch/how-solange-and-mitski-reconsider-who-can-be-the-cowboy/>.
20. Messeri, "Placing Outer Space," 201.
21. Ibid., 32.
22. Ibid., 11.
23. Elizabeth Howell, "Quaoar: Planetoid Beyond Pluto," <https://www.space.com/25817-quaoar.html>.
24. Messeri, "Placing Outer Space," 231.
25. Ibid., 229, footnote 10.
26. Ibid., 228.
27. Ibid., 231.
28. Ibid., 230-231.
29. Ibid., 231.
30. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 256-257.
31. Messeri, "Placing Outer Space," 230.

#### Been There Already

1. Messeri, "Placing Outer Space," 230.
2. Ibid., 12.
3. Cresswell, *Place*, 15.
4. Ibid., 19.
5. Andrea Smith, "Spiritual Appropriation as Sexual Violence," in *Conquest: Sexual Violence and American Indian Genocide* (Durham, North Carolina: Duke University Press, 2015), 50.
6. Messeri, "Placing Outer Space," 207-208.
7. Elizabeth Hutchinson, "Visual" in *Keywords for American Cultural Studies* (New York: NYU Press), online, <https://keywords.nyupress.org/american-cultural-studies/essay/visual/>.
8. Cresswell, *Place: An Introduction*, 18.
9. Ibid., 17.
10. Robert J. Kett, "Monumentality as Method: Archaeology and Land Art in the Cold War," *Representations* 130 (Spring 2015): 121, DOI: 10.1525/rep.2015.130.5.119.
11. Ibid.
12. Solnit, "Dust, or Erasing the Future," 30.
13. Messeri, "Placing Outer Space," 22.
14. Ibid., 30.
15. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 242.
16. Messeri, "Placing Outer Space," 23.

17. Ibid., 14.
18. Ibid., 21-23.
19. Ibid., 212.
20. Ibid., 30.
21. Donna Haraway, "A Cyborg Manifesto: Science, technology, and socialist-feminism in the late twentieth century" in *The Cybercultures Reader* (London, U.K.: Routledge, 1985).
22. Messeri, "Placing Outer Space," 29.
23. Creswell, *Place*, 6.
24. Messeri, "Placing Outer Space," 240.
25. Ibid., 234.
26. Ibid., 12.
27. Ibid., 15.
28. Ibid., 11-12.
29. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 257.
30. Creswell, *Place: An Introduction*, 66.
31. Based on Judith Butler. Eva Cherniavsky, "Body" in *Keywords for American Cultural Studies*, <https://keywords.nyupress.org/american-cultural-studies/essay/body/>.
32. Ibid.
33. Messeri, "Placing Outer Space," 15.
34. Simon Ortiz, "Men on the Moon" in *Walking the Clouds: An Anthology of Indigenous Science Fiction*, edited by Grace L. Dillon (Tucson: University of Arizona Press, 2012), 89.
35. Messeri, "Placing Outer Space," 13.
36. Ibid., 94.
37. Ibid., 96.
38. Messeri, "Placing Outer Space," 206.
39. Grewell, "Colonizing the Universe," 34.
40. Goeman, "Disrupting a Settler-Colonial Grammar of Place," 237.
41. Creswell, *Place*, 65.
42. Andrea Carlson, "A Mothership Connection: Past Futures of Resurrection and Absence," *MPLSart*, February 21, 2018, <https://www.mplsart.com/written/2018/02/a-mothership-connection-past-futures-of-resurrection-and-absence/?fbclid=IwAR1N2ZedHhXP8aRJEBMw-U9VZDXJ2yIbBz6PT2pksR8KRAAEw9VxiHnkE18>.

#### To Till the Moon: The Complex of Wilderness

1. Patricia Nelson Limerick, *Something in the Soil: Legacies and Reckonings in the New West* (New York: W. W. Norton & Company, 2000), 19.
2. Roberts, *Mirror-Travels*, 118.
3. Limerick, *Something in the Soil*, 23.
4. Ron Graziani, *Robert Smithson and the American Landscape* (New York: Cambridge University Press, 2004), 140.
5. Archibald MacLeish, *Land of the Free* (San Diego: Harcourt, Brace, and Co., 1938), 29.
6. Sobchack, *Screening Space*, 113.
7. Appadurai, *The Future as Cultural Fact*, 298.
8. Limerick, *Something in the Soil*, 25.

9. Andrea Smith, "Spiritual Appropriation as Sexual Violence," 121.
10. Solnit, "Dust, or Erasing the Future," 5.
11. Ibid., 16.
12. Ibid., 7.
13. The Mars Society, "Founding Declaration," <http://www.marssociety.org/home/about/founding-declaration/>.
14. Messeri, "Placing Outer Space," 227.
15. Cresswell, *Place*, 8.
16. Craft & Folk Art Museum, *Beatriz Cortez: Trinidad / Joy Station*, press release (December 2018), [http://www.cafam.org/media/73087/beatrizcortez\\_pressrelease.pdf](http://www.cafam.org/media/73087/beatrizcortez_pressrelease.pdf).
17. Dana Goodyear, "A Monument to Outlast Humanity: In the Nevada desert, the pioneering artist Michael Heizer completes his colossal life's work," *The New Yorker*, August 29, 2016., <https://www.newyorker.com/magazine/2016/08/29/michael-heizers-city>.
18. Douglas C. McGill, *Michael Heizer: Effigy Tumuli—The Reemergence of Ancient Mound Building* (New York: Abrams, 1990), 25.
19. McGill, *Michael Heizer: Effigy Tumuli*, 24.
20. McGill, *Michael Heizer: Effigy Tumuli*, 25.
21. *Troublemakers: The Story of Land Art*, <https://www.youtube.com/watch?v=yD5IurD7CJI>.
22. Winona LaDuke, *Recovering the Sacred: The Power of Naming and Claiming* (Cambridge, Massachusetts: South End Press, 2005), 21.
23. Ibid., 30.
24. Ibid., 31.
25. *C4 Contemporary Art*, "Profile: Mark Tansey," <http://c4gallery.com/artist/database/mark-tansey/mark-tansey.html>.
26. <http://spiderwebsinthesky.com/portfolio/items/gauge/>.
27. The Living Universe Foundation, "Galactica," <http://www.luf.org/galactia.php>.
28. Lipsitz, "Space," 228.
29. McGill, *Michael Heizer: Effigy Tumuli*.
30. Solnit, "Dust, or Erasing the Future," 24-25.
31. Woody, "Voice of the Land," 165.
32. Lauren Berlant in Hua Hsu, "Affect Theory and the New Age of Anxiety," *The New Yorker*, March 18, 2019, <https://www.newyorker.com/magazine/2019/03/25/affect-theory-and-the-new-age-of-anxiety>.

#### Coda: Three Reviews, Some Steps, and Some Measures

1. Craft & Folk Art Museum, *Beatriz Cortez*, 2.
2. Ibid.
3. The Center for Land Use Interpretation, "American Land Museum," <http://www.clui.org/section/american-land-museum>.
4. "The American Land Museum at Wendover, Utah: The Center for Land Use Interpretation," *Cabinet* 10, "Property" (Spring 2003), <http://www.cabinetmagazine.org/issues/10/landmuseum.php>.
5. <https://medium.com/space-anthropology/native-sci-fi-films-and-film-trailers-ce6d3c4d8309>.
6. Limón quoted in Murphy, *The People Have Never Stopped Dancing*, 183.

## Bibliography

- Appadurai, Arjun. *The Future as Cultural Fact: Essays on the Global Condition*. New York: Verso, 2013.
- Bould, Mark. "Monsters vs. Empire: Trump's Space Force is a bad reboot of the old imperial fantasy of control from above." *The Boston Review*. October 31, 2018.  
<http://bostonreview.net/literature-culture/mark-bould-monsters-vs-empire>.
- Carlson, Andrea. "A Mothership Connection: Past Futures of Resurrection and Absence." *MPLSart*. February 21, 2018.  
<https://www.mplsart.com/written/2018/02/a-mothership-connection-past-futures-of-resurrection-and-absence/?fbclid=IwAR1N2ZedHhXP8aRJEbMw-U9VZDXJ2yIbBz6PT2pksR8KRAAEw9VxiHnKE18>.
- Cherniavsky, Eva. "Body." In *Keywords for American Cultural Studies*. Online. No date.  
<https://keywords.nyupress.org/american-cultural-studies/essay/body/>.
- Craft & Folk Art Museum. *Beatriz Cortez: Trinidad / Joy Station*. Press release. December 2018.  
[http://www.cafam.org/media/73087/beatrizcortez\\_pressrelease.pdf](http://www.cafam.org/media/73087/beatrizcortez_pressrelease.pdf)
- Cresswell, Tim. *Place: An Introduction*, Second Edition. West Sussex, United Kingdom: Wiley, 2015.
- Driskill, Qwo-Li. "Theater as Suture: Grassroots Performance, Decolonization and Healing." In *Aboriginal Oral Traditions: Theory, Practice, Ethics*, edited by Renate Eigenbrod and Renée Hulan. Nova Scotia: Fernwood, 2008.
- Goeman, Mishuana R. "Disrupting a Settler-Colonial Grammar of Place: The Visual Memoir of Hulleah Tsinhnahjinnie." In *Theorizing Native Studies*. Edited by Audra Simpson and Andrea Smith. Durham, North Carolina: Duke University Press, 2014.
- Goodyear, Dana. "A Monument to Outlast Humanity: In the Nevada desert, the pioneering artist Michael Heizer completes his colossal life's work." *The New Yorker*. August 29, 2016.  
<https://www.newyorker.com/magazine/2016/08/29/michael-heizers-city>.
- Graziani, Ron. *Robert Smithson and the American Landscape*. New York: Cambridge University Press, 2004.
- Grewell, Greg. "Colonizing the Universe: Science Fictions Then, Now, and in the (Imagined)

- Future.” *Rocky Mountain Review of Language and Literature* 55 no. 2 (2001): 25-47.
- Haraway, Donna. “A Cyborg Manifesto: Science, technology, and socialist-feminism in the late twentieth century” Pp. 455-475. In *The Cybercultures Reader*. London, U.K.: Routledge, 1985.
- Hutchinson, Elizabeth. “Visual” in *Keywords for American Cultural Studies*. New York: NYU Press. Online. No date.  
<https://keywords.nyupress.org/american-cultural-studies/essay/visual/>.
- Kett, Robert J. “Monumentality as Method: Archaeology and Land Art in the Cold War.” *Representations* 130 (Spring 2015): 119-151. DOI: 10.1525/rep.2015.130.5.119.
- Kim, Michelle “How Solange and Mitski Reconsider Who Can Be the Cowboy.” *Pitchfork: The Pitch*. March 21, 2019. Online.  
<https://pitchfork.com/thepitch/how-solange-and-mitski-reconsider-who-can-be-the-cowboy/>
- LaDuke, Winona. *Recovering the Sacred: The Power of Naming and Claiming*. Cambridge, Massachusetts: South End Press, 2005.
- Limerick, Patricia Nelson. *Something in the Soil: Legacies and Reckonings in the New West*. New York: W. W. Norton & Company, 2000.
- Lipsitz, George. “Space.” In *Keywords for American Cultural Studies*. 227-231. Edited by Bruce Burgett and Glenn Hendler. New York: NYU Press, 2014.
- Lomawaima, K. Tsianina. “Mind, heart, hands.” In *Sources and Methodologies in Indigenous Studies*, edited by Chris Anderson and Jean M. O’Brien. New York: Routledge, 2017.
- MacLeish, Archibald. *Land of the Free*. San Diego: Harcourt, Brace, and Co., 1938.
- McGlennen, Molly. *Creative Alliances: The Transnational Designs of Indigenous Women’s Poetry*. Norman: University of Oklahoma Press, 2014.
- McGill, Douglas C. *Michael Heizer: Effigy Tumuli—The Reemergence of Ancient Mound Building*. New York: Abrams, 1990.
- Meland, Carter. *Stories for a Lost Child*. East Lansing: Michigan State University Press, 2017.

- Messeri, Lisa Rebecca. "Placing Outer Space: An Earthly Ethnography of Other Worlds." PhD. dissertation, Massachusetts Institute of Technology, 2004.
- Moreton-Robinson, Aileen. "Relationality." In *Sources and Methodologies in Indigenous Studies*, edited by Chris Anderson and Jean M. O'Brien. New York: Routledge, 2017.
- Murphy, Jacqueline Shea. *The People Have Never Stopped Dancing: Native American Modern Dance Histories*. Minneapolis: University of Minnesota Press, 2007.
- Ortiz, Simon. "Men on the Moon." In *Walking the Clouds: An Anthology of Indigenous Science Fiction*, edited by Grace L. Dillon. Tucson: University of Arizona Press, 2012.
- Roberts, Jennifer L. *Mirror-Travels: Robert Smithson and History*. New Haven: Yale University Press, 2004.
- Smith, Andrea. "Spiritual Appropriation as Sexual Violence." Pp. 119-135. In *Conquest: Sexual Violence and American Indian Genocide*. Durham, North Carolina: Duke University Press, 2015.
- Smith, Linda Tuhiwai. *Decolonizing Methodologies: Research and Indigenous Peoples*. New York: Zed Books, 1999.
- Sobchack, Vivian. *Screening Space: The American Science Fiction Film*. New York: Ungar, 1987.
- Solnit, Rebecca. Part I, "Dust, or Erasing the Future: The Nevada Test Site." In *Savage Dreams: A Journey into the Landscape Wars of the American West*. Berkeley: University of California Press, 1999.
- TallBear, Kim. "Standing with and speaking as faith." In *Sources and Methodologies in Indigenous Studies*, edited by Chris Anderson and Jean M. O'Brien. New York: Routledge, 2017.
- Watts, Vanessa Amanda. "Re-Meaning the Sacred: Colonial Damage and Indigenous Cosmologies." PhD. dissertation, Queen's University, Ontario, 2016.
- Woody, Elizabeth. "Voice of the Land: Giving the Good Word." In *Speaking for the Generations*:

*Native Writers on Writing*, edited by Simon Ortiz. Tucson: University of Arizona Press, 1997.