



# An Introduction to Settler Science and the Ethics of Contact

*David Delgado Shorter and Kim TallBear*

In this special issue of the *AICRJ*, “Settler Science, Alien Contact, and Searches for Intelligence,” we are excited to bundle a range of perspectives that can help us collectively think and feel more deeply about extraterrestrials (ETs), space exploration, and the often-uncomfortable connections between colonizations past and future. We intended initially to present theoretical, ethical, and methodological criticisms of two central tropes running throughout the physical sciences: “discovery” and “contact.” But as things turned out, we had so much more to say. The essays that follow look to some of the formative moments of our imperialist and colonial histories. They explore various modes of representing scholarship and tease both theory and norms for academic prose. In many ways, we collectively aimed to go where few settler academics have gone before. Yet as coeditors, we also understand these essays as representing an important and unique genre within Indigenous studies. While others have explored science fiction and the role of fantasy in Native studies, this special issue sets its course toward four primary coordinates: the history of science, ufology, government and private space exploration, and colonialism.

Readers who have some familiarity with both science fiction and Indigenous studies surely see how the summer 2021 footage of Jeff Bezos wearing a cowboy hat was both laughable and incredibly predictable. To penetrate space (if even just the

---

A professor of World Arts and Cultures/Dance at the University of California, Los Angeles, DAVID DELGADO SHORTER is the author of *We Will Dance Our Truth: Yoeme History in Yaqui Performances*. He studies the borderlands of science, including the study of the paranormal and concepts of healing across cultures. Dr. Shorter is the director of the Wiki for Indigenous Languages and The Archive of Healing. KIM TALLBEAR is professor and Canada research chair in Indigenous Peoples, Technoscience, and Society, Faculty of Native Studies, University of Alberta. Dr. TallBear studies colonial disruptions to Indigenous sexual relations. A regular panelist on the Media Indigena podcast and a citizen of the Sisseton-Wahpeton Oyate, she is the author of *Native American DNA: Tribal Belonging and the False Promise of Genetic Science*.

edge) in a huge, phallic, and extraordinarily expensive mission while Earth is vacillating between flooding and overheating, is a prime example of colonizer hubris. As Bezos and Elon Musk devote billions to escaping our planet, social media has been lighting up with riffs on capitalist-pigs-in-space during a period in which, week after week, new UFO disclosures were coming from government officials, pilots, and retired Air Force personnel. If, as has been proffered for decades, the existence of aliens was being covered up to prevent mass hysteria, it was all for naught: the true collective reaction seems closer to mass fatigue. How many once-in-a-lifetime events can our proximate generations take?

If one overarching theme resounds from the essays in this issue, it may be that we who write from the vantage point of Indigenous studies are not so afraid of the unknown extraterrestrials, the vastness of space, or the farthest depths of the galaxy and beyond. Instead, we fear that various space exploration initiatives are reembodying the attitudes and practices of terrestrial explorers in the past. Although we do not want to generalize the multiple agencies and companies that are telescopically reaching into space, our essays offer reason to suspect that corporations will utilize unethical methods based in racist and anthropomorphic theories for the purposes of resource extraction in space.<sup>1</sup>

The essays that follow cover a wide array of topics, yet all were born from the conjunction between four scholars and a particular organization's search for extraterrestrial intelligence. In 2018 the coeditors of this special issue, David Shorter (settler) and Kim TallBear (enrolled Sisseton-Wahpeton Oyate), were invited to join a small working group of Indigenous studies scholars to contribute a working paper to the Berkeley Search for Extra-Terrestrial Intelligence Research Center. The passive voice in this brief history is intentional; we either do not know or do not want to assign any agency to what transpired. The Berkeley contingent had decided to convene a two-day listening session to learn how they might better engage various scholarly fields and academic disciplines. We must emphasize that we were engaging not SETI, an amorphous collection of astrophysicists and aeronautical engineers, but a subsection of the group responsible for "Breakthrough Listen." With a hundred million dollars in funding and focusing squarely on the push to send and receive signals from ETs, Breakthrough Listen represents the most well-funded and geographically expansive search for extraterrestrial communication in history, and drawing from telescopes in both hemispheres to scan the entire 1 to 10 GHz range. They infrequently host meetings intended to listen to earthlings from other scientific disciplines.

Together with Dr. Sonya Atalay (Anishinaabe) from the University of Massachusetts Amherst and Dr. William Lempert (settler) from Bowdoin College, the four of us had been invited by an advanced graduate student in MIT's History, Anthropology, and Science, Technology, and Society program who was researching how the Search for Extraterrestrial Intelligence (SETI) defines "intelligence" and develops research methods. Under the rubric of a Native studies working group that would represent a collection of Indigenous studies perspectives—we were one of five working groups invited to share our disciplinary perspectives on Breakthrough Listen's work—the four of us began engaging each other on a shared conundrum.

How could we possibly offer substantial and reasoned contributions to a field and mission that seemingly have had little regard for the humanities, social sciences, arts, and, in particular, Indigenous studies critiques of “settler science”? Furthermore, in the time allotted to develop a working group statement we would be unable to engage the history, publications, representation, or practices of SETI and its loose collection of affiliated scientists.

Nonetheless, we first co-wrote a thirteen-page rough draft that offered resources and rationales for our recommendations. When the draft was submitted for preliminary approval, the response was that we should aim for no more than three pages instead. Our working group then decided to focus solely on the Breakthrough Listen Initiative<sup>2</sup> and, almost intuitively, we homed in on the description provided on the website of Berkeley’s Astronomy Department:

The Breakthrough Listen Initiative, sponsored by the Breakthrough Prize Foundation, is the most powerful, comprehensive and intensive scientific search ever undertaken for signs of intelligent life beyond Earth. The project is using the Green Bank radio telescope in West Virginia, the Parkes Telescope in Australia and the MeerKat Array in South Africa to search for radio transmissions from advanced civilizations. In addition, the Automated Planet Finder at Lick Observatory is being used to search for optical laser transmissions from other technological civilizations.<sup>3</sup>

This self-description provides key insights, not only into the role of telescopes and how the tentacles of SETI reach across multiple Indigenous lands, but also names the terms bearing the hermeneutic clues by which we may make sense of the SETI researchers’ intentions: “science,” “intelligence,” “advanced civilizations,” and “technology.”

These are weighty, contested, and painful terms in Indigenous studies. As we narrate below, our concerns with something as basic as terminology were met with indifference. After weeks and weeks of drafting responses and collaboratively editing our expansive contributions to a succinct three pages (with some additional commentaries from three of us), our recommendations were largely unheard and disregarded. The four of us learned, once again, the truth of Karen Kosasa’s claim (interpreting Haunani-Kay Trask’s indictment) that “settlers cannot be trusted to detect and identify colonial injustice.”<sup>4</sup> Our moderate hope, however, is that more settlers will be courageously curious about Indigenous anticolonial analyses and lean into their/our relational ethics to be truer allies.

Our Indigenous studies working group was tasked with making a collective statement, in writing and via Skype, to the adjoined group at UC Berkeley in response to a single question: “What would you most want SETI scientists to know about potentially making contact?” We each wrote our own response, and then we collectively edited them into one statement. We took turns speaking about our working group statement during a conference video call with some SETI scientists and the Breakthrough Listen team. Although Dr. Atalay was unable to contribute to this special issue, one of her areas of expertise, research ethics, was a key theme of our written and oral statements. Because we feel that our working group statement concisely demarcates a

line that we in Native studies are drawing in the sand (or drawing in space, as the case might be), we are including the working group statement in its entirety following this introduction.

The four of us collectively felt that the group in attendance did not fully understand the value of our contributions, which they had solicited in the first place. We received emails from some people in attendance who wanted to apologize for how we were collectively treated. One senior female scholar wrote that she was surprised we had even remained in the meeting after seeing the reactions we received from our audience; several people rolled their eyes or carried on separate conversations while we were talking, and the majority simply stared at their phones. Shorter at one point had to ask some men, in a pointed manner, to stop speaking over Dr. Atalay. Afterward, the four of us were perplexed: Why ask us for our perspectives and then respond with something between apathy and disregard? Was it simply to check the consultation box? TallBear expressed in a follow-up conversation with our working group that she had seen this sort of eye-rolling behavior many times before. The four of us felt that, for a group allegedly focused on communication, listening ethically might not be one of their strong suits. Another incident justifies this impression.

One of our working group members happened to be in Berkeley. While three of us presented via Skype, Willi Lempert was in the room watching the scene play out in person. About 80 percent of the way through our group presentation, the Skype technology glitched. (Pause for a moment to consider the metadiscursive irony of a group of people using technology to communicate about the ethics of communication using technology—during which conversation the technology does not work as expected.) The three of us on Skype lost incoming sound and video. We thought we were totally disconnected from the room in Berkeley. But in Berkeley they could still see and hear us, despite their monitors showing that communication was lost. They quickly realized that we on Skype could neither hear them nor see them, and that we thought we were no longer being viewed (nor recorded). Thus, the people in Berkeley began to see and hear what we thought was then a private conversation on our end. Lempert, being present and concerned about the ethics of overhearing what we three clearly perceived to be private, asked that the feed be cut, or at the very least that it be muted. The response of the others in the room was shocking: leave it on. After all, as they expressed, since we were conversing about the conference and same subject matter, it was relevant to the collective topics at hand.

The coeditors may disagree on why strangely coincidental things happen in the world, but we do agree that this moment provided crystal clear insight into the different ethical standpoints that different humans can inhabit. Here was a group of people working under the title of “Breakthrough Listen” who are on an “intensive scientific search” using the “most powerful” communication devices around the globe. When presented with the option to act ethically with incredibly basic personal computer audio/video relay (Skype) technology in 2018, they made the decision that they should listen in, project onto a screen, and record what other terrestrials had thought was a private conversation. After all—and you will hear this argument continually from SETI defenders—what harm could come from “only listening?”

Listening, watching, surveying, penetrating, extracting, studying, owning: a series of triggering actions that have been continuous throughout Indigenous histories with others, specifically colonizers. These issues came up for us and we began to think together about how to collect these perspectives, theories, and feelings into a volume. First, we tested our professional organization's interest in these topics in a panel at the 2019 Native American and Indigenous Studies Association annual meeting. The panel was standing-room only, with a TV station recording. Based on the discussions that followed, we reached out to the editorial team at *American Indian Culture and Research Journal*, who invited us to guest edit a special issue. The essays that follow are not limited to a single topic, such as the history or criticisms of SETI or Breakthrough Listen. In fact, we would find such criticisms hard to justify, since both SETI and Breakthrough Listen have very diverse positions expressed across public talks, publications, working papers, websites, and voices from a loosely defined membership. Instead, this collection brings together a handful of the ways Indigenous studies might reflect on settler science, alien contact, and searches for intelligence.

In the essays that follow, the authors explore the ethics of contact in a manner that aims to expand the terms central to the Search for Extraterrestrial Intelligence. David Delgado Shorter aims to expand notions of intelligence, communication, and contact. He draws from his decades of teaching an "Aliens, Psychics, and Ghosts" course, his father's work on top-secret projects in the deserts of New Mexico, and his research into what counts as knowledge, or what he likes to call "the borderlands of science." Maintaining much of the colloquialisms of his NAISA 2019 presentation, he ponders how humans might think beyond the human when doing so seems so difficult with intelligent life on this planet.

As one of the working group members, William Lempert brings a novel perspective to our engagement with SETI. Though interpretation of SETI behavior remains elusive for our disciplinary contact zone, Lempert comes the closest in this special issue to making sense of why "listening" becomes the banner flown by many SETI scientists, enabling them to say that they cannot be held accountable for colonial analogies since they are only listening. Connecting such logics to both Star Trek's prime directive and the justification for Captain Cook's expeditions, he tugs the rug out from under the feet of those who justify space exploration, or perhaps even "space surveillance." Lempert's essay goes quite the distance in showing how the road to empire is paved with good intentions, or at least with the ruse of innocent scientific discovery. The essay turns linear time on its head through an insightful use of Dipesh Chakrabarty's time knots, a concept derived from a Bengali expression that says that lived experiences across time are pluralities existing together, much as a whirling knot in a tree.<sup>5</sup>

Rebecca Charbonneau weaves together two histories: that of SETI's colonial metaphors of discovery, and that of the unsettling of places for the placement of telecommunications and observation technologies. Her essay pulls at the threads of disciplinary boundaries, asking why social science and the humanities have been forced to the periphery. One of the answers she offers lies in historiography, how history is written through metaphor, tropes, and linear progressivist, civilizational thinking. According to Charbonneau, SETI has resisted inviting non-STEM scholars to the

table because of a disciplinary egocentrism, a theme Shorter also connects to Enrique Dussel's work.<sup>6</sup>

In "Unsettling (S)pace," David Uahikeaikalei'ohu Maile documents his participation in a frontline defense with other Kanaka Maoli who challenged the Thirty Meter Telescope (TMT) and the development of the North American-led astronomy industry at Maunakea in Hawai'i. Maile engages the anthropology of science, paying close attention to Canada's "second-to-none" financial and scientific investment in the TMT. Describing observations of Canadian astronomers and taking lessons from Indigenous "land-back" movements in Canada to help articulate Indigenous land claims at Maunakea, Maile highlights a method that he calls "writing the land back."

Suzanne Kite joins other authors in this issue in interrogating settler mythology about extraterrestrials, narratives co-constituted with historical and ongoing colonialism, including the kind of deadly resource extraction from stolen Indigenous lands that enabled nuclear weapons and war. Kite examines manifest destiny in the United States as actually part of a settler imaginary of divine and inevitable movement toward apocalypse. Kite also joins several other authors in proposing an alternative to the settler's imagined (apocalyptic) future. As an alternative understanding of our ethical relations to nonhumans, including our relationships with extraterrestrials, she proposes an alternative ethical framework predicated on Indigenous ontology, specifically Lakota star knowledge and star and spirit relationality.

Fantasia Painter rightfully notes that Native studies has not yet directly focused on extraterrestrials. Her essay (and this issue of *AICRJ*) set a course for new horizons. Painter revisits the provocative question of who was mutilating all those cattle from the 1960s to the 1980s across the American Southwest and the western Plains. For those unaware of this bizarre series of incidents, ranchers across the Southwest were finding cows dead for no apparent reason, often in conjunction with UFO sightings. Rumors spread of how the cows' organs were medically removed, or that their cadavers evidenced a surgical approach. It was as if someone was dissecting these creatures and perhaps occasionally removing select organs for experimentation. But who could have swept in during the night, done such detailed taxidermy, and left without a trace? Those of us who remember these stories were sure that aliens were the prime suspects. But Painter raises a key question: if the mutilated cows were often found on Indian land, then the aliens were not simply making contact but doing so on stolen land, under the jurisdiction of the federal government, thereby expanding if not exploding the binary of settler/Indigenous. She toys with the questions surrounding how contact challenges our notion of a double colonization for Indigenous people. The questions she asks push us to the edge of both science and fiction, and appropriately, leaves us with more questions to consider.

In a creative nonfiction essay, Kim TallBear embarks on a new horizon with "Iz," a character that embodies the field of Indigenous studies. TallBear first introduced the character of Iz in a 2016 essay, at which time Iz was her "complicated" lover who needed to make some changes if TallBear were to stay with her. In this installment, TallBear herself takes on the voice of Iz and challenges SETI's ethical practices in listening to Indigenous studies—from whom it sought input, ironically, regarding its ethics for

listening to the stars and possible extraterrestrial signals. Similar to the story told in the 2016 essay, Iz has a nonmonogamous relationship with a masculinist science—then, environmental science, and now, SETI science—that keeps going wrong.<sup>7</sup>

We collectively wish to express our gratitude to the editorial team of the *American Indian Culture and Research Journal*, particularly Pamela Grieman, who first envisioned this volume after a related panel at the Native American and Indigenous Studies Association annual meeting in New Zealand. The volume came together through the careful administration of this journal's Editor in Chief Randall Akee. While we are accustomed to reader reports, we have rarely encountered such informed and engaged, anonymous, peer-review evaluations. Our essays are better due to their diligence and serious wrestling with the range of issues we are covering in this special issue.

We thank Joanne Barker for her incredible donation of the cover art, and Sonya Atalay remains a core co-thinker with us on the issues of ethical research practices. This work is for all our relations, on this planet and otherwise.

## NOTES

1. United States Congress, "US Commercial Space Launch Competitiveness Act," Public Law 90 (2015). See also Jessica A. Dallas, S. Raval, J. P. Alvarez Gaitan, S. Saydam, and A. G. Dempster, "Mining beyond Earth for Sustainable Development: Will Humanity Benefit from Resource Extraction in Outer Space?" *Acta Astronautica* 167 (2020): 181–8, <https://doi.org/10.1016/j.actaastro.2019.11.006>. We base our claims about resource extraction on the history of colonialism and European exploration combined with the lack of any legal pretense otherwise. While the Outer Space Treaty was created in 1967, adjoined by the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies in 1979, we join others in noting that no spacefaring nation has ratified the agreements. Moreover, the Spurring Private Aerospace Competitiveness and Entrepreneurship (SPACE) Act of 2015 explicitly permits US citizens "to engage in the commercial exploration of 'space resources.'"

2. University of California Berkeley Department of Astronomy, "Breakthrough Listen Initiative," <https://astro.berkeley.edu/research-facilities/projects/breakthrough-listen/>.

3. Ibid.

4. Karen K. Kosasa, "Sites of Erasure: The Representation of Settler Culture in Hawai'i," in *Asian Settler Colonialism*, ed. Jonathan Y. Okamura and Candace Fujikane (Honolulu: University of Hawaii Press, 2008), 195–208, 206, <https://doi.org/10.1515/9780824861513-015>.

5. Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton University Press, 2008).

6. Enrique Dussel, *The Invention of the Americas: Eclipse of the Other and the Myth of Modernity* (London, UK: Continuum, 1995).

7. Kim Tallbear, "Dear Indigenous Studies, It's Not Me, It's You. Why I Left and What Needs to Change," in *Critical Indigenous Studies: Engagements in First World Locations*, ed. Aileen Moreton-Robinson (Tucson: University of Arizona Press, 2016), 69–82.

