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# Reprise Editor's Introduction: On Temporal Transnationalisms— The Exonational, the Decolonial Cosmogonic, the Unexceptional Human Fossil, and the Non-Earthbound

#### **BRIAN RUSSELL ROBERTS**

During the first decade of the 2000s, deep time was coming for the humanities. And this rough beast of the geological longue durée was slouching toward us from multiple directions.

On one hand, it was coming for us from the environmental sciences. The 2000s was a decade bookended in the year 2000 by the scientists Paul J. Crutzen and Eugene F. Stoermer's initial statement on "The 'Anthropocene" and then, later, around 2010, by the emergence of the field-quaking moniker the environmental humanities. One of the signs of deep time's ultimate arrival in the humanities might be said to have been marked by a 2009 Critical Inquiry article, "The Climate of History: Four Theses," in which the postcolonial historian Dipesh Chakrabarty underscored the conjunction, previously unthinkable for many humanities scholars, between human history and geological history: "Now it is being claimed that humans are a force of nature in the geological sense. A fundamental assumption of Western (and now universal) political thought has come undone in the crisis." He continued: "The geologic now of the Anthropocene has become entangled with the now of human history." Within the version of the humanities that we see at the beginning of the second decade of the twenty-first century, a concern with the deep time of the Anthropocene, and by extension broader geological history, is common.

And yet deep time's arrival within the humanities, from the direction of the environmental humanities's uptake of the Anthropocene narrative, was already a sort of second coming. Indeed, deep time saw one of its most prominent entrances into the humanities via the arena of Transnational American Studies, and specifically through

the work of Wai Chee Dimock. In 2001, during a moment that predated humanities scholars' uptake of Crutzen and Stoermer's elaboration on the Anthropocene in the year 2000, Dimock published an American Literary History article in which she discussed the brief centuries of American literary studies's traditional preoccupation (1620 or 1776-present) in comparison with the millennia of human history with which the United States has been entangled. "I propose a more extended duration for American literary studies," she explained: "I call this deep time." Half a decade later, in 2006, she elaborated on the earlier article in her influential book Through Other Continents: American Literature across Deep Time. Reflecting on and contributing to "the recent outpouring of work aspiring to the 'transnational' and the 'postnational,'" Dimock's study and method proposed to "thread American texts into the topical events of other cultures, while also threading the long durations of those cultures into the short chronology of the United States." And again, she advanced the phrase deep time: "I would like to propose a new term—'deep time'—to capture this phenomenon." The notion of deep time sought to complement Americanists' standard spatial transnationalism (across borders and continents) with a temporal transnationalism across millennia: to think via deep time was a process of "binding continents and millennia into many loops of relations ... . Restored to this, American literature emerges with a much longer history than one might think." Reflecting specifically on Dimock's recourse to vast timescales rather than (or in conjunction with) the vast spatial scales more typical of transnational Americanist and other transnationalist scholars, Mark McGurl in 2012 looked toward Through Other Continents and commented that the book was "among the most prominent but also most unusual works of the transnational turn in literary studies." In the same essay, McGurl also pointed out the geological provenance of Dimock's term, reminding readers that although Dimock confined her deep temporal analyses to a few thousand years, the term deep time had an "original geological meaning," with credit for the term's coinage usually given to the journalist John McPhee, who used the term to describe geological time in his 1981 book, Basin and Range.<sup>7</sup>

Hence, it might be stated that while the humanities today inherits one strand of its preoccupation with deep time from the environmental humanities, which in turn inherited it from Crutzen and colleagues' early 2000s publications on the Anthropocene in scientific journals, another strand of deep time discourse has arrived to us via Transnational American Studies, via Dimock, by way of McPhee's journalistic work to crystallize, for a general reading audience, the scales by which geological time operates. As McPhee had articulated it in 1981, while contemplating the ancient geographies and geologies of the basin and range region in the North American West, "[n]umbers do not seem to work well with regard to deep time. Any number above a couple of thousand years—fifty thousand, fifty million—will with nearly equal effect awe the imagination to the point of paralysis." Consistent with the geological filiation of her keyword, Dimock's work in deep time, though almost wholly focused on transnationalizing the study of US culture within the longue durée of human-oriented

world history, indeed at times cracked open the door and peeked into the much vaster timescales of the geological. In 2001, she observed that "[s]ome historical phenomena need large-scale analysis. They need hundreds, thousands, or even billions of years to be recognized as what they are: phenomena with an extended life, longer than the life span of any biological individual and diachronically interesting for just that reason." <sup>10</sup>

Of course, within the humanities of the early 2020s, the deep temporal thinking that we inherit from Crutzen and colleagues' Anthropocene is thoroughly conflated with the deep temporal thinking we inherit from McPhee via Dimock, and indeed as such the term deep time is proving its mettle. It is accomplishing McPhee's purpose in offering a heuristic by which nonscientists may grapple with timescales beyond a human life and even beyond the human species, whether the heuristic aids Americanists in reaching beyond the brief centuries of US existence and into the realm of humans' multimillennial world history, or aids postcolonial historians to reach beyond the brief millennia of human world history and into the geological longue durée of millions and, as Dimock pointed out, billions of years. Hence, I am not outlining these distinct but ultimately convergent genealogies with the aim of staking some type of transnational Americanist claim to priority vis-à-vis deep time's entrance into the humanities indeed, any temporal priority fades quickly into oblivion within the multimillennial and even geological timescales that the deep temporal heuristic itself brings into focus. Instead, I find it useful to trace these genealogies—and particularly the transnational Americanist genealogy—as a means of reminding transnational Americanists that the transnational has been (even before Shelley Fisher Fishkin described "the transnational turn") a heuristic that is both spatial and temporal. In fact, two decades after Dimock advanced deep time as a temporal correlate for transnational Americanists' spatial preoccupations, might we do well to ask about the degree to which McGurl's observation on the "most unusual" status of Dimock's temporally oriented book still holds true among transnationally oriented Americanists? In other words, to what degree does a preoccupation with spatiality—rather than temporality—continue to function as the calling card for a theory and practice of what constitutes a transnational Americanist approach?

The transnational. The hemispheric. The borderland. The transatlantic. The circum-Caribbean. The transpacific. The archipelagic. The oceanic. Is it fair to say that these keywords of Americanist transnational analysis are spatial categories? If so, do these spatial categories have equally rich or prominent analogues in the temporal dimension? What are their designations? Or, perhaps the categories with which this paragraph begins are *chronotopic*, equally spatial and temporal in ways that cannot be disentangled from one another? If so, how so? If, seeking to distill an image, we were to boil Americanist transnationalism down to the question of border-crossing, then how often do transnational Americanists address the crossing or troubling of temporal borders as compared to the crossing or troubling of spatial borders? Rita Felski, speaking of literary studies, has suggested that "[t]he flimsiness of our temporal frameworks can be contrasted to the rich resources available for conceptualizing

space."<sup>12</sup> To what degree might this observation also hold true within the arena of Transnational American Studies?

My own sense is that many of the most prominent—and oft-invoked—analytic frames in Transnational American Studies afford priority to spatiality. But this is not to suggest that the temporal dimension is absent from any of the frames that at first glance may appear primarily spatial. We see nods to temporality in a variety of foundational documents—documents which were not written within the arena of Transnational American Studies but which Transnational American Studies has taken as foundational. Time was supposed to be thoroughly entangled in space, for instance, when Paul Gilroy's Black Atlantic advanced "some new chronotopes," including "the image of ships in motion across the spaces between Europe, America, Africa, and the Caribbean."13 Elsewhere, the premises of Gloria Anzaldúa's borderlands hinged on images of the simultaneity of the past, present, future, and eternal: "This land was Mexican once / was Indian always / and is. / And will be again." Antonio Benítez-Rojo's archipelagic discussions relied on the image of an island that repeats through space and time. 15 And in framing salient issues regarding the transpacific, Janet Hoskins and Viet Thanh Nguyen have been concerned with spatial connections but also with shifting century-designations: "the 'American century' ... may be giving way to a 'Pacific century.''<sup>16</sup> Still, to identify such nods toward temporality can often feel like reading for time against the spatialist grain. And much of what we find in terms of time is relatively shallow, stretching decades or centuries rather than millennia, and certainly not (except for the case of Anzaldúa's always) into timescales in which we might begin to parse commensurabilities and incommensurabilities between human time and geological processes or other aeonic temporalities.

This edition of Reprise is focused on recognizing, amplifying, and speculating on some temporal dimensions of Americanist transnationalism, especially along the lines of the deep-temporal; in so doing, it is interested in arriving at or crystallizing a set of more complex transnational temporal correlates vis-à-vis the more spatially oriented categories of transnational Americanist thought. Hence, the four documents republished here offer readers a variety of points of entrance to Americanist temporal transnationalism. They contemplate anatomies of geological criticism, dialogues between Western science's Big Bang theory and Indigenous etiologies for the universe's existence, the symbiosis between biological life and sediment laid down on the scales of geological time, and questions of asteroid mining and human and extraterrestrial evolution. Respectively, I associate these four documents with four categories of transnational temporality: the exonational, the decolonial cosmogonic, the unexceptional human fossil, and the non-Earthbound. First, we read Stanford English professor Mark McGurl's article "The New Cultural Geology," originally published in the journal Twentieth-Century Literature in 2011.<sup>17</sup> Second, we read "Kaona" Connectivity to the Kumulipo." This is the second chapter of the award-winning book Finding Meaning: Kaona and Contemporary Hawaiian Literature, published in 2016 by the University of Hawai'i-Manoa American Studies professor and poet Brandy Nālani McDougall.<sup>18</sup> The third document is a collection of five poems that appeared in 1942 and 1943 in *Trek*, a prisoner-run arts and literature journal published in Topaz, one of ten main internment camps in which the US government unconstitutionally imprisoned some one hundred twenty thousand US citizens and residents of Japanese descent during World War II. These five thematically linked poems were written by one of Topaz's prisoners, the poet, memoirist, and librarian Toyo Suyemoto.<sup>19</sup> *Reprise's* fourth and final reading is titled "Skygypsies," with storyline by the Filipino journalist and science fiction writer Timothy James Dimacali and drawings by John Raymond Bumanglag, a Manila-based illustrator and art director. "Skygypsies," which is a comicbook version of Dimacali's non-illustrated 2007 short story "Sky Gypsies," was published in 2012 in the Philippine magazine *Kwentillion*.<sup>20</sup> Whereas *Kwentillion* published "Skygypsies" in black and white, the *Journal of Transnational American Studies* is pleased to be able to publish it in color, with some minor textual corrections made by Bumanglag in consultation with Dimacali and the *Reprise* editor.<sup>21</sup>

Mark McGurl's article "The New Cultural Geology" originally appeared in a 2011 special issue of Twentieth-Century Literature titled Postmodernism, Then.<sup>22</sup> The special issue sought to frame "the partial if not total eclipse of postmodernism in both contemporary American literature and literary criticism as the condition of possibility for returning to the category of the postmodern."23 Pointing toward evidence of postmodernism's precipitous fall, the issue editors observed that Bruce Burgett and Glenn Hendler's Keywords for American Cultural Studies (2007) did not include an entry for either "postmodernism" or "postmodernity" but did include "terms such as 'globalization' and 'postcolonialism," the latter of which I would note are closely associated with American Studies's transnational turn.<sup>24</sup> As part of this special issue, McGurl took up the question of postmodernism but did not project a likely return to it. Instead, his essay turns to geological time and observes that the geological is what happens then, after postmodernism. He explained, "[w]hat enables the perception of the postmodern-as-past is a new cultural geology, by which I mean a range of theoretical and other initiatives that position culture in a time-frame large enough to crack open the carapace of human self-concern, exposing it to the idea, and maybe even the fact, of its external ontological preconditions, its ground" (380). Among these initiatives, McGurl ranked Crutzen and colleagues' designation of "the 'Anthropocene'" as "[t]he most important" (383), noting Chakrabarty's foreboding observations on the Anthropocene as precipitating the collapse of the long-running humanist distinction between human history and natural history (388). Mentioning other approaches within the new cultural geology, McGurl looked toward philosophical initiatives such as assemblage theory, object-oriented ontology, and speculative realism, which, as he characterized them, have eschewed liberal environmentalism's iconic tree for "the obdurate rock, the dead-cold stone taking center stage as an image of the non-human thing" (384).

Although the essay appeared in a special issue that sought to reflect on the absence and potential return of postmodernism specifically in American literary culture, McGurl's reflections on the new cultural geology do not foreground America, the United States, or the nation-state. Indeed, when juxtaposed with geological ages inhabited by obdurate stones, the US nation-state fades to a vanishing point—shunted to an endnote, both metaphorically and literally, as seen in the essay's third endnote, on Mount Rushmore, "a conspicuously 'historical' and 'national' fabrication of geological authority ... . Of course [the chiseled faces on this monument] ... will crumble to the ground some day, or be slowly worn down to nothing, as the intentions of their maker give way inevitably to the accidents of time" (389 n3). Elsewhere, within the main text of the essay, the nation-state goes nearly unmentioned and is simply one nonprivileged component of "human self-concern" (380), or one of many unnamed "social and economic institutions" (389), whose vanishing point arrives without fanfare when we look into the new cultural geology. The transnational becomes not (as it often surfaces in transnationalism's spatial dimension) an act of physical or intellectual border-crossing from one nation to another. Rather, and to riff on the famous axiom on the past as a foreign country: geological pasts and futures are foreign but are not countries—in these pasts and futures, there are no foreign countries because the notion of a country is precisely that which would be foreign, if we could think transnationally with such pasts and futures. Underscoring its preoccupation with "not-newness," McGurl situates cultural geology as entering "the exomodern," or that which "positions itself strategically outside of rather than after the modern and postmodern" (381). If so, then in the same motion, the new cultural geology enters the exonational. The modern and postmodern pasts are a foreign country, but outside of these svelte temporal increments, the genre of the country is what is foreign.

While readers of Chakrabarty's 2009 essay "The Climate of History"—and now of his 2021 book, The Climate of History in a Planetary Age—may be struck by the sublime challenge of thinking human history in relation to geological time, I would look toward work by the historian Martin J. S. Rudwick to point out that if we are sublimely struck, that sublime striking is contingent on an amnesia regarding the comparatively shallow past.<sup>25</sup> In the conclusion to his book Earth's Deep History: How It Was Discovered and Why It Matters (2014), Rudwick looks toward the relatively recent past to observe that "[i]t was by no trivial accident of wording that at the end of the 19th century [the] new science of geochronology derived its name from the 17th-century science of chronology ... . Both are historical projects." <sup>26</sup> He highlights "the pervasive use of the metaphors of ... nature's documents and archives" to remind us that naturalists' borrowings from historians' toolkit "was essential for the development of habits of reasoning that could turn rocks and fossils, mountains and volcanoes, into the intelligible traces of the Earth's deep history." "These historians" of human time, he continues, "were therefore crucially important for the reconstruction of the Earth's own history by those who were later called geologists."<sup>27</sup> Rudwick further observes that the chronologists' reliance on the book of Genesis, as subsequently taken up by

the geochronologists, evoked a situation in which the "six-day narrative of Creation provided a template for the later development of a narrative of the Earth's own history."<sup>28</sup>

Hence, we are reminded that, for as shockingly as Chakrabarty may frame human-geological entanglements, such entanglements have been present from the beginning (or even multiple beginnings) of human historicization of geology. Could it be that what is more shocking is that there has existed a subset of human academics who have forgotten the intertwined genealogies of human history and geology and who consequently have believed that human time and geological time might exist in ways that make them irrelevant to each other? Brandy Nālani McDougall's Finding Meaning: Kaona and Contemporary Hawaiian Literature helps bring some of this problem into focus, as Indigenous human times circulate among evolutionary, geological, and cosmological times. Finding Meaning brings contemporary Hawaiian literature into dialogue with "mo'olelo," taken as true narrative and true myth, such that the tradition of mo'olelo "encompasses history under the aegis of story. From a Kanaka Maoli perspective, history is a constructed narrative based on actual events but subject to perspective and interpretation. As such, the term mo'olelo blurs distinctions between academic and literary genres, between nonfiction and fiction, myth and history, as well as oral and written binaries" (4). In its concern for temporalities, including temporalities that are self-consciously deep, Finding Meaning's introduction speaks of "deep history" (11) and "long historical context" (12); against "Western logics of linear time and progression," it shuffles the term contemporary with the terms ancestral and traditional (16). Here, cosmogony's deep time (5) becomes a present key and "guide" ... toward a decolonial future" (18), or toward Hawaii's crossing of a temporal rather than spatial border beyond which the US occupation of the archipelago becomes the past.

Further, McDougall begins her introduction with the following sentence: "We have always known that words have immense power" (3). This sentence showcases a phrase, have always, that has become a trope used by many Indigenous writers and writers of color, offering a bivalent sense of deep temporality: have always as underscoring an exocolonial temporality coterminous with the existence of the we on one hand, and have always as mythologizing something like half of infinity, or all of eternity up to the present, with a decolonial faith that the always of the past will find its mirror image as an always of the future, which will perhaps loop or collapse back into what might conventionally be thought of as the present and past. <sup>29</sup> The have always temporal register is not a new one, of course. As previously noted, Anzaldúa in 1987 wrote in this decolonial have always temporal register in discussing Indigenous land claims in relation to the US and Mexican nation-states. Also in 1987, in her famous essay "The Race for Theory," Barbara Christian forcefully contrasted the shallow time of late twentieth-century Euro-American critical theory with the deep time of Black theorizing: "people of color have always theorized." This have always register merits

greater attention than it has received as a mode of transnationalism that is specifically temporal.

As McDougall's second chapter makes clear, Finding Meaning is not only dedicated to reading Hawaiian literature vis-à-vis timescales that are deep according to Dimock's main preoccupation with several thousand years—McDougall's temporal compass, in fact, goes into the geological, and beyond the geological, because it genuinely precedes the geo, delving into a shuffling between the Western cosmological and the Kanaka cosmogonic, with both Western and Kanaka temporalities emerging as perhaps equally cosmological and cosmogonic. McDougall opens Chapter Two with a poem that splices Kanaka cosmogony with Western cosmology's famous Big Bang. Written by McDougall herself, this is a poem whose title, "Po," is also the name of "the creative force from which the entire universe sprang, according to the Kumulipo," which is the major Hawaiian cosmological and genealogical chant (53). McDougall's poem looks back in time—past ocean resorts and plantations, past the Earth's genesis in magma, past the birth of stars, past time and space, past light and heat—to the beginning, when Po facilitated the Big Bang or something resembling it by "[p]ressing the entirety of a universe into a shell / the size of an atomic nucleus, waiting" (II. 14–15). The chapter that follows this poem looks at four contemporary Kanaka authors' engagements with the Kumulipo to highlight ways in which "the Hawaiian cosmogonic perspective," which traces "our beginnings to the beginning of the universe" (83), reminds "that our ancestors [more than eight hundred generations of them] supersede our relatively recent colonial occupation by the United States" (66).<sup>31</sup> In the service of a decolonial future, McDougall's work collapses human and geological times, and it presses—as if into a shell—cosmological and cosmogonic times.

In the context of the vertiginous vastness of McGurl's cultural geology and McDougall's cosmological-cosmogonic times, to speak or write the day, month, and year of a specific date feels strange, reminiscent Gilles Deleuze and Félix Guattari's commentary on the vestigial "proper name" as a means of designating an "individual open[ed] up to the multiplicities pervading him or her."32 In the face of the severe depersonalization attendant to the multiplied individual, Deleuze and Guattari ask at the beginning of A Thousand Plateaus: "Why have we kept our own names? Out of habit, purely out of habit."33 Then out of habit, and in the face of deep time's denaturalization of the individual day as one of time's conventional building blocks, I recall a specific date: on February 19, 1942, President Franklin D. Roosevelt signed Executive Order 9066, which authorized the unconstitutional imprisonment of some one hundred twenty thousand US residents of Japanese descent, about two-thirds of whom were US citizens. Consistent with Roosevelt's order, Toyo Suyemoto, who was born a US citizen in California in 1916 and who had graduated from UC Berkeley with majors in English and Latin, was imprisoned in April 1942 at the Tanforan temporary internment camp and then in Topaz, which was a more permanent internment camp in central Utah. Imprisoned until the camp's closing in October 1945, Suyemoto taught high school English and Latin classes, as well as adult English classes, before becoming a camp librarian at the Topaz Public Library.<sup>34</sup> By the time of her imprisonment, Suyemoto had already emerged as part of a group of California-based Nisei writers and had been recognized for her poetic achievements in both the United States and Japan.<sup>35</sup> And in late 1942, shortly after her arrival at Topaz, she published a poem in the camp's arts and literature journal, *Trek*, with the invitation extended by editor Miné Okubo, who went on to write and illustrate the influential internment memoir *Citizen* 13660.<sup>36</sup> "Gain" was the first of five total poems that Suyemoto published in *Trek*.<sup>37</sup>

This cycle of five poems depicts biology in relation to geology, evoking worlds of human meaning in which seasonal timescales of plant life often conflict with geological timescales associated with hard and barren earth, shallow dust, and stony graves. Within the coherence of the cycle, plant life is plant life itself while also accruing meaning as a metaphor for Suyemoto's hopes and fears as an unconstitutionally imprisoned citizen of the US government—she herself elsewhere called the imprisonment an "uprooting." Meanwhile, the geological within the cycle is Topaz's desert geology itself even as it accrues meaning as the unfeeling character of the US government in relation to US citizens and residents of Japanese descent. In "Gain," a seed of hope and life is introduced to "the barren earth," trammeled up in its sprouting not only because of the barrenness but because this is an "untimely planting" (l. 1, l. 7). In the second poem, "In Topaz," the barren earth reappears now as "hard earth," though the poem expresses hope for a time when "grass comes to life / Outwitting barren ground" (l. 1, ll. 7–8). Subsequently, the poem "Transplanting" (a title that mirrors the word relocation, a euphemism associated with the Japanese American imprisonment) suggests that, transplanted to the soil of Topaz, the prisoner "withers in the ground," finding only "shallow dust" to hold onto; however, it looks toward release and a subsequent transplanting into "[s]ome other soil" (l. 4, 1, 7). The fourth poem in the cycle, "Promise," looks at a new shoot coaxed by the sun from its seed casing, "its dark shell"—a triumph no doubt, but doubt immediately presents itself as the poet questions whether the shoot will be able to grow in the barren soil (I. 4). Such concerns are consistent with Suyemoto's commentary elsewhere on the "Japanese idea of furusato (one's native place), the sense of belonging to a place where I had been born."<sup>39</sup> The cycle's final poem, "Retrospect," is something of a departure from the previous four poems, in that it does not focus on conflict between biological plants and geological sediment. Now it is a human–geology conflict, and the obdurate stone working in collaboration with time appears to have the final triumph: "And time—still fleet—delays / While pulse and bone / Take count before the days / Lock me in stone" (II. 13-16).

Certainly, in the image of the poet locked in stone, geology seems to triumph against biology, and in so doing geology seems to decimate the very meaning of existence as it is conveyed by her mother at the beginning of Suyemoto's memoir, I Call to Remembrance. While working in the yard, Suyemoto's mother comes to her holding a plant she is in the process of transplanting. Suyemoto recalls, "I saw an open

blossom, small buds, and delicate leaves, supported by matted roots in the ball of dirt. She bent her head over what she held, then looking up at me, she exclaimed, 'See, here is all of life."<sup>40</sup> In Suvemoto's poetry, as barren sediment makes precarious all of life, and as the poet herself is finally projected to be locked in stone, obdurate geology (whether symbolizing the US government or ultimate death or existing as geology itself) triumphs. But her memoir walks back what her poetry asserts: "The earth was not as barren as my poem ["Gain"] stated. ... Even the lifeless ground yielded hidden treasures to the seekers: an occasional arrowhead, stones, and small shells buried in the silt of the dried up lake bed. Later, when I was teaching Basic English to adults, one of my students, an Issei man, shyly gave me a brooch made from such shells in the form of a tiny basket holding a bouquet of flowers."41 As Suyemoto knew, and as was explained in an article by her fellow prisoner Jim Yamada in the second issue of Trek, Topaz was located on the bed of an ice-age lake that had dried up some ten thousand years ago.<sup>42</sup> The shells of once-living mollusks which had died at least one hundred centuries ago had been preserved by the Sevier Desert's alkaline soil and become part of the geological record, and now this geologized life offered a sense of meaning to living beings who were cognizant of their own march toward becoming part of the geological record, being locked—and perhaps thus preserved—in stone. This question of the preservation rather than decimation of life via geology was taken up in the very issue of Trek in which Suyemoto's phrase "locked in stone" appeared. This issue devoted a three-page article to discussing trilobites, a class of marine arthropods that arose during the Cambrian some half-billion years ago. 43 The article explained that fossilized trilobites could be found near Topaz and remarked that "[t]hese fossilized corpses of once living animals constitute a sort of marginal notation made by Nature" regarding the history of the Earth. 44 The article concluded by observing that hunting trilobite fossils (analogous to finding ice-age mollusk shells) could contribute to "an extremely rich and rewarding field of study and activity which may help relieve the relative drabness of [the prisoners'] lives and surroundings."45 Thus, held in suspension with a more traditional notion of biology pitted in a losing battle with geology, we see also in Suyemoto's poetry and its contexts a counter image: fossilized or geologized life as emissary across spans ranging from one hundred centuries to four million centuries, with human geologization (whether via stone tools or being bodily locked in stone) as unexceptional within this many hundred-million and even multibillion-year collaboration between biology and geology. Though some might loosely define the Anthropocene as beginning "at the moment when human effects on the environment became so great that they registered in the geological record,"46 Suyemoto's poetry and its accompanying geological discussions at Topaz remind us that humans are unexceptional in leaving fossils (a term which I use here to reference the general notion of a trace) within the geological record. The transbiological is also the transnational, as death's stone and nationalism's barren ground potentially lose their sting.

While Suyemoto was contemplating biological–geological divides and conjunctions in Topaz, the country of her parents' citizenship and the country of her own

citizenship were at war in the Philippines, an archipelago whose Indigenous populations had experienced the colonial rule of the Spanish empire (beginning in the sixteenth century through 1898), the US empire (1898 through 1941/1942), and now the Empire of Japan (1941/1942 through Japan's September 1945 surrender to the United States). When the United States originally took possession of the Philippines in 1898, it sent the white US geologist George Ferdinand Becker as a special agent to evaluate the archipelago's mineral resources. As is recounted in Megan Black's The Global Interior: Mineral Frontiers and American Power (2018), Becker offered telling commentary regarding a rationale for US colonialism in the Philippines: "The opposition which the natives have made to our occupation of the islands,' Becker explained, 'has aroused the doggedness of our Teutonic race; and the task of developing the immense resources of the archipelago appeals most congenially to a nation descended from pioneers."<sup>47</sup> As Black summarizes, Becker went on to write an article for Scribner's in which he stated that the "[m]ost impressive of the Philippines' minerals was lignite coal, strewn across the archipelago in Luzon, Mindanao, and Cebu's Mount Uling," projecting that these coal sources would "be highly suitable for U.S. coaling stations in keeping with the strategy for maintaining U.S. military presence in the Pacific."48

Showcasing Timothy James Dimacali's storyline and John Raymond Bumanglag's art, the graphic short story "Skygypsies" may be said to imagine an afterlife of Becker's Philippines, in which mining, Indigenous land claims, and US colonialism interact. Shortly after World War II, the Philippines crossed a temporal border when the United States relinquished its imperial claims and recognized the Philippines as an independent nation-state on July 4, 1946. As a piece of ethnofuturist or science/speculative fiction, "Skygypsies" is set approximately two centuries later, likely in the 2140s, three generations after the United Nations opened up near-Mars asteroid mining to all nations (and following the Mars Union's apparent political and economic monopolization of mining rights on Mars). 49 To produce the "CHEAP LABOUR" necessary to compete with the Martian Union in terms of space mining (495), someone (perhaps it is the United Nations, perhaps it is the United States, perhaps someone else) mines and alters the genes of "THE BADJAO OF THE PHILIPPINES' SOUTHERN SEAS" (496), also sometimes known on Earth as "SEA GYPSIES." 50 As is made clear from Bumanglag's depiction of their anguished faces and contorted bodies, the Badjao have not submitted willingly to this genetic mining and manipulation (496-98). And yet the "OUTSIDERS" transform them from sea gypsies into the sky gypsies of the story's title, apparently coercing them in their space-mining activities for generations by controlling the technology through which the Badjao are able to survive in space (512). In the story, we glimpse what may be the first crumbling of outsider control, as an asteroid-mining father-son team of Badjao identify a previously unknown form of life; the story doesn't tell us, but perhaps it is the first non-Earth biology humankind has ever encountered. They collect the lifeform (apparently a tarlike substance that metabolizes stone and releases oxygen as a byproduct) and begin the long journey back to their space-based Badjao

settlement: "PERHAPS THEY COULD HARVEST IT SOMEHOW, USE IT SO THAT [THEIR] PEOPLE NO LONGER NEEDED TO RELY ON OUTSIDER TECHNOLOGY FOR THE AIR THEY BREATHED" (517).

"Skygypsies" concludes with a sense of assurance that it has been Tuhan (God) who directed the father-son Badjao team toward this new lifeform, and perhaps it has been—and perhaps the Badjao will enter into the type of mutually beneficial relationship with this lifeform that has been valorized by Anna Tsing, as seen in lichen's constitution by symbiosis between a fungus and algae or cyanobacteria. And yet just as the Badjao's delivery from outsider control is not assured at the end of the story, neither is the Badjao's ethical interaction with this new lifeform, this new "DISCOVERY" (517). Certainly, many European explorers who imagined themselves to be discovering something or someone new and exploitable also imagined that it was God who had guided them toward this occasion for exploitation. In identifying this analogy between "discovery" in space and "discovery" on Earth, we should recall that quite often within science or speculative fiction, the interrelations among exotic times, spaces, and technologies may be readily viewed as metaphors for what Bruno Latour might call Earthbound presents or pasts. 52

But Dimacali and Bumanglag's graphic short story, I would suggest, is an instance in which an SF narrative, with its backstory of multilayered and multicenturied colonialism in the Philippines bleeding into space, may become a template for thinking about non-Earthbound dynamics of the present and near future. Today, some humans (with roots in Earth's geology, biology, and cosmogonies) are seeking to graft humankind onto non-Earthbound geologies while actively seeking non-Earthbound biologies and potentially, I note by way of speculation, intersecting with concomitant non-Earthbound evolutionary histories and even cosmogonies. The grafting of humankind onto multiple worlds' geologies is already taking place or at the near-term planning stages, as NASA has for nearly two decades operated "robotic geologists" on Mars and multiple spacefaring nation-states are making plans for mining on Mars, asteroids, and the moon.<sup>53</sup> Meanwhile, even as humans remain ignorant regarding the question of whether Mars presently harbors its own Marsevolved microbial life, or whether Mars's geology harbors a record of past Marsevolved life, nearly eighty percent of presumably planet-conscious US-based drivers of electric vehicles are operating cars produced by a company whose owner has regularly advocated for detonating massive numbers of nuclear weapons on Mars with the ambition of terraforming it, disregarding a non-Earth planet's geology and possible biology to purposefully engineer the solar system's second Anthropocene.<sup>54</sup> Without a comprehension of the Anthropocene's ramifications on Earth, some humans are seeking the Anthropocene's second coming, but now grafted onto geological times that are not simply alien to the present but alien to Earth. The idea of terraforming Mars with nuclear weapons may seem absurd, or it may seem to point toward an irrelevantly distant temporal and spatial horizon—hence, most planet-conscious humans find it unworthy of criticism or even comment. But this indifference makes it all the more clear that everyday human ethics of today regarding the notion of the planet and its geological times remain remarkably and even naively Earth-bound in comparison to several nation-states' current and near-term aspirational technologies, as they are bringing humans as a species into interface with other geological entities in the solar system, or into interface with the multifarious temporalities of the planet as a non-Earthbound genre.<sup>55</sup>

By means of Wai Chee Dimock's work from 2001 to 2006, with its ambition to "bind ... continents and millennia into many loops of relations," some of Transnational American Studies's founding documents called for a recognition of temporality and spatiality as coeval and entangled factors. 56 Since the mid-2000s, American studies and allied arenas have seen a splintering of both the continent and the millennium as the building blocks of time and space, particularly along the lines of Indigeneity as well as the archipelagic and oceanic—as Mark Rifkin has aimed "to pluralize temporality," as the tide's temporal interactions with the spatial coast have given rise to Elizabeth M. DeLoughrey's discussions of Brathwaitean tidalectics, and as in my own work I have looked toward the chronotopic intertidal foreshore as a means of thinking through a fractal temporality conjoined with the island's fractal spatiality.<sup>57</sup> I would be remiss if I did not mention that in my work on the archipelagic borderwaters as "equally ... a critical geography and a mode of thinking through critical temporalities,"58 I have thought in dialogue with and benefited from spatial and temporal discussions advanced by each of the thinkers republished here. And yet of course each of these thinkers makes their own extraordinary contribution to our suite of transnational temporal frames, disrupting standard human-scaled temporal units such as the day, the year, the decade, the century, or the millennium. Here I have described these contributions as the exonational, the decolonial cosmogonic, the unexceptional human fossil, and the non-Earthbound.

#### **Notes**

- Paul J. Crutzen and Eugene F. Stoermer, "The 'Anthropocene," IGBP Newsletter 41 (2000): 17–18. On 2010 and the term environmental humanities, see Robert S. Emmett and David E. Nye, The Environmental Humanities: A Critical Introduction (Cambridge, MA: The MIT Press, 2017), 4–5.
- Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35 (Winter 2009): 207, 212.
- Wai Chee Dimock, "Deep Time: American Literature and World History," American Literary History 13, no. 4 (Winter 2001): 759.
- Wai Chee Dimock, Through Other Continents: American Literature across Deep Time (Princeton, NJ: Princeton University Press, 2006), 3. In representing this quotation, I have changed the original "America" to "American."

- <sup>5</sup> Dimock, Through Other Continents, 3, 4.
- <sup>6</sup> Mark McGurl, "The Posthuman Comedy," Critical Inquiry 38 (Spring 2012): 533.
- <sup>7</sup> McGurl, "The Posthuman Comedy," 538 and 538n9.
- Aside from Crutzen and Stoermer, "The 'Anthropocene," see also Paul J. Crutzen, "Geology of Mankind," *Nature* 415 (3 Jan. 2002): 23; and Will Steffen, Paul J. Crutzen, and John R. McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?" *AMBIO*: A Journal of the Human Environment 36, no. 8 (Dec. 2007): 614–21.
- John McPhee, *Basin and Range* (New York: Noonday Press, 1981; reprint, New York: Farrar, Straus and Giroux, 1982), 21.
- Dimock, "Deep Time," 758.
- Shelley Fisher Fishkin, "Crossroads of Cultures: The Transnational Turn in American Studies—Presidential Address to the American Studies Association, November 12, 2004," *American Quarterly* 57, no. 1 (Mar. 2005): 17–57.
- Rita Felski, The Limits of Critique (Chicago, IL: University of Chicago Press, 2015), 154.
- Paul Gilroy, The Black Atlantic: Modernity and Double Consciousness (Cambridge, MA: Harvard University Press, 1993), 4. My italics.
- Gloria Anzaldúa, Borderlands/La Frontera: The New Mestiza (San Francisco, CA: Aunt Lute Books, 1987), 91.
- Antonio Benítez-Rojo, The Repeating Island: The Caribbean and the Postmodern Perspective, trans. James Maraniss, 2nd ed. (Durham, NC: Duke University Press, 1996), 4.
- Janet Hoskins and Viet Thanh Nguyen, "Introduction—Transpacific Studies: Critical Perspectives on an Emerging Field," in *Transpacific Studies: Framing an Emerging Field* (Honolulu: University of Hawai'i Press, 2014), 8.
- Mark McGurl, "The New Cultural Geology," Twentieth-Century Literature 57, nos. 3/4 (2011): 380–90. Subsequent references to this work are cited parenthetically.
- Brandy Nālani McDougall, Finding Meaning: Kaona and Contemporary Hawaiian Literature (Tucson: University of Arizona Press, 2016), 52–85, 173–76. Subsequent references to Finding Meaning are cited parenthetically.
- Toyo Suyemoto, "Gain," *Trek* Dec. 1942: 6; Toyo Suyemoto, "In Topaz," *Trek* (Feb. 1943): 20; Toyo Suyemoto, "Transplanting," *Trek* (June 1943): 8; Toyo Suyemoto, "Promise," *Trek* (June 1943): 37. *Trek* was published by the War Relocation Authority's Project Reports Division of the Central Utah Relocation Center. Full issues of this US government publication are made available through Utah

- State University's Topaz Japanese American Relocation Center Digital Collection: https://digital.lib.usu.edu/digital/collection/p16944coll135.
- Timothy James Dimacali and John Raymond Bumanglag, "Skygypsies," Kwentillion, 26 May 2012, 94–120. The original short story on which "Skygypsies" is based was published as Timothy James M. Dimacali, "Sky Gypsies," in *Philippine Speculative Fiction III*, ed. Dean Francis Alfar and Nikki Alfar (Pasig City, Philippines: Kestrel, 2007), 147–53. Subsequent references to "Skygypsies" are cited parenthetically. Because the *Journal of Transnational American Studies* is republishing "Skygypsies" based on an original PDF (rather than a copy drawn from its 2012 publication in *Kwentillion*), references to page numbers refer to pagination as it appears in *Journal of Transnational American Studies*.
- In republishing "The New Cultural Geology," "Kaona Connectivity to the Kumulipo," Suyemoto's five *Trek* poems, and "Skygypsies," we gratefully acknowledge copyright permission granted by the copyright holders: respectively, Duke University Press, the Arizona Board of Regents, James R. Bailey (executor of Suyemoto's estate), and Dimacali and Bumanglag. We are also grateful for the support of the living authors: McGurl, McDougall, and Dimacali/Bumanglag.
- Postmodernism, Then, special issue of Twentieth-Century Literature, ed. Jason Gladstone and Daniel Worden, Twentieth-Century Literature 57, nos. 3/4 (2011).
- <sup>23</sup> Jason Gladstone and Daniel Worden, "Introduction: Postmodernism, Then," *Twentieth-Century Literature* 57, nos. 3/4 (2011): 291.
- Gladstone and Worden, "Introduction," 293; Keywords for American Cultural Studies, ed. Bruce Burgett and Glenn Hendler (New York: New York University Press, 2007).
- Dipesh Chakrabarty, The Climate of History in a Planetary Age (Chicago, IL: University of Chicago Press, 2021).
- Martin J. S. Rudwick, Earth's Deep History: How It Was Discovered and Why It Matters (Chicago, IL: University of Chicago Press, 2014), 303.
- 27 Rudwick, Earth's Deep History, 303.
- <sup>28</sup> Rudwick, Earth's Deep History, 304.
- On this collapse of present, future, and past, see Leanne Betasamosake Simpson, As We Have Always Done: Indigenous Freedom through Radical Resistance (Minneapolis: University of Minnesota Press, 2017), 2, 6.
- Barbara Christian, "The Race for Theory," *Cultural Critique* 6 (Spring 1987): 52. My italics. Beyond these few examples, it is fair to say that we have always seen the *have always* register.

- On the Kumulipo's more than eight hundred generations, see McDougall, Finding Meaning, 54.
- Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 37.
- <sup>33</sup> Deleuze and Guattari, A Thousand Plateaus, 3.
- On Suyemoto's biography, see Susan B. Richardson, introduction to I Call to Remembrance: Toyo Suyemoto's Years of Internment, by Toyo Suyemoto, ed. Susan B. Richardson (New Brunswick, NJ: Rutgers University Press, 2007), xvii–xxi.
- 35 Richardson, "Introduction," xxii–xxiii.
- Suyemoto, *I Call* to Remembrance, 135–36. Miné Okubo, Citizen 13660 (New York: Columbia University Press, 1946; Seattle: University of Washington Press, 1983).
- It is worth noting that aside from her five poems over the course of the three issues of *Trek*, Suyemoto also published three poems in *Trek*'s one-issue successor, *All Aboard* (Spring 1944): 17, 45, and 53. Here, however, I am interested specifically in the *Trek* cycle.
- <sup>38</sup> Suyemoto, I Call to Remembrance, 23.
- <sup>39</sup> Suyemoto, I Call to Remembrance, 68.
- <sup>40</sup> Suyemoto, I Call to Remembrance, 9–10.
- Suyemoto, I Call to Remembrance, 138.
- Jim Yamada, "Lake Bonneville," Trek (Feb. 1943): 35–37.
- Frank Beckwith Sr., "Trilobite Fossils of Antelope Springs," *Trek* (June 1943): 14–16. Beckwith was a newspaper editor, amateur geologist, and prominent citizen in the nearby town of Delta, Utah. The editors of *Trek* published an article by Beckwith in each of the journal's three issues.
- 44 Beckwith, "Trilobite Fossils of Antelope Springs," 14.
- Beckwith, "Trilobite Fossils of Antelope Springs," 16. On how some prisoners incorporated trilobite fossils into the meaning of their unconstitutional imprisonment, see Brian Russell Roberts, Borderwaters: Amid the Archipelagic States of America (Durham, NC: Duke University Press, 2021), 180–96.
- <sup>46</sup> Emmett and Nye, The Environmental Humanities, 16.
- <sup>47</sup> Megan Black, The Global Interior: Mineral Frontiers and American Power (Cambridge, MA: Harvard University Press, 2018), 39.
- <sup>48</sup> Black, Global Interior, 42.

- <sup>49</sup> I base my chronological estimates on the story's assertion it is set three generations after 2084, assuming about twenty years for each generation. Thanks to Dimacali for suggesting the term *ethnofuturist*; Timothy James Dimacali to Brian Russell Roberts, email October 26, 2021.
- Bruno Bottignolo, Celebrations with the Sun: An Overview of Religious Phenomena among the Badjaos (Manila, Philippines: Ateneo de Manila University Press, 1995), 9.
- Anna Tsing, "Unruly Edges: Mushrooms as Companion Species," Environmental Humanities 1 (2012): 142.
- Bruno Latour, Facing Gaia: Eight Lectures on the New Climatic Regime, trans. Catherine Porter (Medford, MA: Polity, 2017), 38.
- "Mars Exploration Rovers," NASA Science Mars Exploration Program, https://mars.nasa.gov/mars-exploration/missions/mars-explorationrovers/#:~:text=In%20January%202004%2C%20two%20robotic,geology%20and%20making%2 oatmospheric%20observations; "Mars Perseverance Rover Gathers Rock Samples," NASA, https://www.nasa.gov/image-feature/mars-perseverance-rover-September 3, 2021, gathers-rock-sample; Cecilia Jamasmie, "Experts Warn of Brewing Space Mining War China and Russia," Mining.com, February US, 2, 2021, https://www.mining.com/experts-warn-of-brewing-space-mining-war-among-us-chinaand-russia/.
- Caroline Delbert, "Elon Musk Needs 10,000+ Missiles to Nuke Mars. 'No Problem,' He Says," Popular Mechanics, May 19, 2020, https://www.popularmechanics.com/science/a32588385/elon-musk-terraform-marsnuclear-missiles/; and Fred Lambert, "Tesla Owns 79% of the Electric Car Market in the US, and That Needs to Change," electrek, February 16, 2021, https://electrek.co/2021/02/16/tesla-owns-electric-car-market-us/.
- In Chakrabarty's distinction between "[t]he global [as] humanocentric" while "the planet decenters the human," the planet remains singular as the habitation of humans; Chakrabarty, The Climate of History, 19. But what I am proposing as the generic planet is capacious enough to consider geological worlds on which humans do not live.
- Dimock, Through Other Continents, 3.
- Mark Rifkin, Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination (Durham, NC: Duke University Press, 2017), ix; Elizabeth M. DeLoughrey, Routes and Roots: Navigating Caribbean and Pacific Island Literature (Honolulu: University of Hawaiʻi Press, 2007), 1–48; Roberts, Borderwaters, 159–201. Also on temporality and oceans and islands, see Elizabeth M. DeLoughrey, Allegories of the Anthropocene (Durham, NC: Duke University Press, 2019).

<sup>58</sup> Roberts, Borderwaters, 162.

#### **Selected Bibliography**

- Anzaldúa, Gloria. Borderlands/La Frontera: The New Mestiza. San Francisco, CA: Aunt Lute Books, 1987.
- Beckwith Sr., Frank. "Trilobite Fossils of Antelope Springs." Trek (June 1943): 14–16.
- Benítez-Rojo, Antonio. The Repeating Island: The Caribbean and the Postmodern Perspective, translated by James Maraniss, 2nd ed. Durham, NC: Duke University Press, 1996.
- Black, Megan. The Global Interior: Mineral Frontiers and American Power. Cambridge, MA: Harvard University Press, 2018.
- Bottignolo, Bruno. Celebrations with the Sun: An Overview of Religious Phenomena among the Badjaos. Manila, Philippines: Ateneo de Manila University Press, 1995.
- Burgett, Bruce, and Glenn Hendler. Keywords for American Cultural Studies. New York: New York University Press, 2007.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." Critical Inquiry 35, no. 2 (2009): 197–222. https://doi.org/10.1086/596640
- ——. The Climate of History in a Planetary Age. Chicago, IL: University of Chicago Press, 2021.
- Christian, Barbara. "The Race for Theory." Cultural Critique 6 (Spring 1987): 51–63. https://doi.org/10.2307/1354255
- Crutzen, Paul J. "Geology of Mankind." *Nature* 415, issue 6867 (3 Jan. 2002): 23. https://doi.org/10.1038/415023a
- Crutzen, Paul J., and Eugene F. Stoermer. "The 'Anthropocene." IGBP Newsletter 41 (2000): 17–18. https://doi.org/10.17159/sajs.2019/6428
- Deleuze, Gilles, and Félix Guattari. A Thousand Plateaus: Capitalism and Schizophrenia. Translated by Brian Massumi. Minneapolis: University of Minnesota Press, 1987.
- DeLoughrey, Elizabeth M. Allegories of the Anthropocene. Durham, NC: Duke University Press, 2019. https://doi.org/10.2307/j.ctv125jk4v
- ——. Routes and Roots: Navigating Caribbean and Pacific Island Literatures. Honolulu: University of Hawai'i Press, 2007.
- Dimacali, Timothy James M. "Sky Gypsies." In *Philippine Speculative Fiction III*, edited by Dean Francis Alfar and Nikki Alfar, 147–53. Pasig City, Philippines: Kestrel, 2007.
- Dimacali, Timothy James, and John Raymond Bumanglag. "Skygypsies." Kwentillion, May 26, 2012, 94–120.

- Dimock, Wai Chee. "Deep Time: American Literature and World History." American Literary History 13, no. 4 (2001): 755–75. https://www.jstor.org/stable/3054595
- ——. Through Other Continents: American Literature across Deep Time. Princeton, NJ: Princeton University Press, 2006.
- Emmett, Robert S., and David E. Nye. *The Environmental Humanities: A Critical Introduction*. Cambridge, MA: The MIT Press, 2017.
- Felski, Rita. The Limits of Critique. Chicago, IL: University of Chicago Press, 2015.
- Fishkin, Shelley Fisher. "Crossroads of Cultures: The Transnational Turn in American Studies—Presidential Address to the American Studies Association, November 12, 2004." American Quarterly 57, no. 1 (2005): 17–57. http://www.jstor.org/stable/40068248
- Gladstone, Jason, and Daniel Worden. "Introduction: Postmodernism, Then." Twentieth-Century Literature 57, nos. 3/4 (2011): 291–308. https://doi.org/10.1215/0041462X-2011-4007
- Gilroy, Paul. The Black Atlantic: Modernity and Double Consciousness. Cambridge, MA: Harvard University Press, 1993.
- Hoskins, Janet, and Viet Thanh Nguyen. "Introduction—Transpacific Studies: Critical Perspectives on an Emerging Field." In *Transpacific Studies: Framing an Emerging Field*, edited by Janet Hoskins and Viet Thanh Nguyen, 1–38. Honolulu: University of Hawai'i Press, 2014. https://www.jstor.org/stable/j.ctvsrfxo
- Latour, Bruno. Facing Gaia: Eight Lectures on the New Climatic Regime. Translated by Catherine Porter. Medford, MA: Polity, 2017.
- McDougall, Brandy Nālani. Finding Meaning: Kaona and Contemporary Hawaiian Literature. Tucson: University of Arizona Press, 2016.
- McGurl, Mark. "The New Cultural Geology." *Twentieth-Century Literature* 57, nos. 3/4 (2011): 380–90. https://www.jstor.org/stable/41698758
- ——. "The Posthuman Comedy." Critical Inquiry 38, no. 3 (2012): 533–53.
- McPhee, John. Basin and Range. 1981. Reprint, New York: Farrar, Straus and Giroux, 1982.
- Okubo, Miné. Citizen 13660. 1946. Reprint, Seattle: University of Washington Press, 1983.
- Richardson, Susan B. Introduction to I Call to Remembrance: Toyo Suyemoto's Years of Internment, by Toyo Suyemoto, edited by Susan B. Richardson, xvii–xlvi. New Brunswick, NJ: Rutgers University Press, 2007.https://doi.org/10.36019/9780813541549
- Rifkin, Mark. Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination. Durham, NC: Duke University Press, 2017.

- Roberts, Brian Russell. Borderwaters: Amid the Archipelagic States of America. Durham, NC: Duke University Press, 2021. https://doi.org/10.1215/9781478013204
- Rudwick, Martin J. S. Earth's Deep History: How It Was Discovered and Why It Matters. Chicago, IL: University of Chicago Press, 2014.
- Simpson, Leanne Betasamosake. As We Have Always Done: Indigenous Freedom through Radical Resistance. Minneapolis: University of Minnesota Press, 2017.
- Steffen, Will, Paul J. Crutzen, and John R. McNeill. "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?" AMBIO: A Journal of the Human Environment 36, no. 8 (1 Dec. 2007): 614–21. https://doi.org/10.1579/0044-7447(2007)36[614:TAAHNO]2.0.CO;2

Suyemoto, Toyo. "Gain." Trek (Dec. 1942): 6.

- —. I Call to Remembrance: Toyo Suyemoto's Years of Internment, edited by Susan B. Richardson. New Brunswick, NJ: Rutgers University Press, 2007.
  —. "In Topaz." Trek (Feb. 1943): 20.
  —. "Promise." Trek (June 1943): 13.
  —. "Retrospect." Trek (June 1943): 37.
  —. "Transplanting." Trek (June 1943): 8.
- Tsing, Anna. "Unruly Edges: Mushrooms as Companion Species." Environmental Humanities 1, no. 1 (2012): 141–54. https://doi.org/10.1215/22011919-3610012

Yamada, Jim. "Lake Bonneville." Trek (Feb. 1943): 35–37.