



ARCHITECTURE + CLIMATE-FICTION: SEATTLE-FUTURISMS

Nicole Huber¹

¹ Department of Architecture, College of Built Environments, University of Washington, WA, USA

Abstract

Architecture schools in the US and Europe have accepted climate change as a key challenge of this century fundamentally impacting the future of the discipline and its curricula. In action plans and strategic frameworks schools mapped out design methods offering to mitigate climate change by providing techniques of prediction, be they prescriptive, preemptive, preventive, or prototypical. Thereby however, they leave out a reversed perspective: How can we design for a future conceived of as unpredictable? This essay presents architectural education as a space to explore how climate change converts our perspectives on temporality. Featuring the projects of an advanced graduate level design studio, it examines the ways in which interlacing the methods of design thinking and the genres of climate fiction can challenge normative notions of the future to access a spatial plurality, a 'pluriverse,' of nonlinear temporalities.

Keywords

Architecture, Climate Change, Climate-Fiction, Indigenous Futurisms, Pluriverse

Known for its moderate climate, the city of Seattle recently experienced extreme weather conditions. The record-breaking 'heat dome' of 2021, the 'atmospheric river' of unusually heavy rainfall in the spring of 2022 followed by a new heat wave, drought and the worst air quality index worldwide caused by wildfires force its residents "for better or worse", as a Seattle Times reporter writes, "to recognize and confront the impacts of climate change."¹ Whereas a wider public only increasingly acknowledges the climate crises,² architecture schools have accepted it as a key challenge of this century fundamentally impacting the future of the discipline and its curricula. As mapped out in universities' Action Plans, Strategic Frameworks, or new schools, the design methods offered to mitigate climate change provide simulation technologies to extrapolate future data, algorithmic modeling to assess the risks of extreme weather, or prototyping models of post-fossil construction.³ What these design methods all share is that

¹ Nicholas Turner, "Heat Wave Gives Washington Residents a Wake-up Call," *Seattle Times*, July 29, 2022, A 1.

² See: Jennifer Marlon et al., "Yale Climate Opinion Maps 2021," Yale Program on Climate Change Communication, February 23, 2022, <https://climatecommunication.yale.edu/visualizations-data/ycom-us/> (all websites accessed September 10, 2022).

³ Examples are: School of Architecture and Planning, Massachusetts Institute of Technology, MA, "School of Architecture and Planning Creates Climate Action Plan," January 26, 2021, <https://news.mit.edu/2021/school-architecture-and-planning-creates-climate-action-plan-0126>. College of Built Environments (CBE), University of Washington, WA, "Our New Strategic Framework (2021-2026)," <https://be.uw.edu/about/strategic-framework/>. Aalto University Summer School, "Climate, Health and Architecture," Aalto, Finland, <https://www.aalto.fi/en/aalto-university-summer-school/climate-health-and-architecture>. Temple Hoyne Buell Center for the Study of American Architecture, Columbia University, New York, NY, "Course Development Prize in Architecture, Climate Change, and Society," <https://power.buellcenter.columbia.edu/initiatives/course-development-prize-architecture-climate-change-and-society>. Scott McAulay, "Architecture Schools Need to Reform their Teaching to Combat Climate Change," *Architect's Journal*, July 31, 2020, <https://www.architectsjournal.co.uk/news/opinion/architecture-schools-need-to-reform-their-teaching-to->

they engage in techniques of prediction — be they prescriptive, preemptive, preventive, or prototypical. What they leave out is a reversed perspective: How can we design for a future conceived of as unpredictable?

The following article responds to this question by reflecting upon the ways in which a part of the architectural design curriculum, the studio, became a space to explore how climate change converts our perspectives on temporality and, particularly in the realm of design thinking, futurity. As part of college-wide dialogues on *Future Visions: The Anthropocene and the Environmental Crises*, we used what is called a graduate level ‘exploration studio’ to examine the ways in which interlacing the narratives of design thinking and climate fiction or ‘cli-fi’ can challenge normative notions of the future to access a spatial plurality, a ‘pluriverse,’ of nonlinear temporalities envisioned by philosophers, historians, and anthropologists:⁴ as ‘avenir’ of the unforeseeable, following sociologist Bruno Latour, as intersection between human and geological deep time, according to historian Dipesh Chakrabarty, as time shot through with the parallel realities of the possible, the wished-for, the desired, as filmmaker Alexander Kluge suggests, or as co-temporalities of what anthropologist Eduardo Viveiros de Castro calls “perspectival multinaturalism,” a concept which opposes multiculturalism by assuming different coexisting natures.⁵

The profile of the advanced ‘exploration studio’ sets the stage for this investigation by building upon “technical knowledge and integrative design skills while placing a greater emphasis on experimentation and collaboration as well as design methodology.”⁶ As described in the following, this emphasis allowed us to de- and re-entangle the narratives of design thinking and climate fiction leading us to unexpected forms of collaboration or ‘co-making’ thereby expanding our repertoire of design methodologies by a method of unpredicting. Before getting into the detailed description of our exploration, let me briefly summarize the encounters we experienced leading to

combat-climate-change. Laurie Everett, “Preemptive Design Saving Cities,” *MIT News*, March 6, 2015, <https://news.mit.edu/2015/preemptive-design-saving-cities-urban-risk-lab-miho-mazereeuw-0306>. Kerry Emanuel, Miho Mazereeuw, Paul O’Gorman, “Preparing for a New World of Weather and Climate Extremes,” *MIT Climate Grand Challenges*, <https://climategrandchallenges.mit.edu/flagship-projects/preparing-for-a-new-world-of-weather-and-climate-extremes/>. Dara Entekhabi, Miho Mazereeuw, Danielle Wood, “The Future of Coasts: Changing Flood Risk for Coastal Communities in the Developing World,” *MIT Climate Grand Challenges*, <https://climategrandchallenges.mit.edu/research/changing-flood-risk-for-coastal-communities-in-the-developing-world/>. Natural Building Lab, Technical University Berlin, Germany, “Prototyping the Post-Fossil City,” summer 2019, Natural Building Lab, <https://www.nbl.berlin/projects/prototyping-the-post-fossil-city/>.

⁴ An initiative of the College of Built Environments’ Humanities, Histories, and Futures Group, see: <https://hhf.be.uw.edu/about/>.

⁵ For a definition of the term ‘pluriverse,’ see: Thomas Clément Mercier, “Uses of ‘the Pluriverse’: Cosmos, Interrupted – or the Others of Humanities,” *Ostium* 5, no 2 (2019), <https://ostium.sk/language/sk/uses-of-the-pluriverse-cosmos-interrupted-or-the-others-of-humanities/>. According to Mercier, “the discourse of the pluriverse presents itself as a strategic response to the excess and violence of universalism and Western imperialism. It advocates for a multiversal ethics, a pluriversal cosmopolitics based on interspecies and multinatural kinships, and more aware of the multiplicity of worlds and world-making practices that make up the post-globalization scene.” Latour uses the term ‘multiverse’ interchangeably. See: Latour, *An Inquiry into Modes of Existence: An Anthropology of the Moderns*, transl. Catherine Porter (Cambridge, MA: Harvard University Press, 2013). Latour, “Le futur a-t-il de l’avenir ?,” lecture given at Sciences Po Executive Education Paris, December 12, 2013, video 16:30, <https://www.sciencespo.fr/executive-education/video-bruno-latour>. Chakrabarty, *The Climate of History in a Planetary Age* (Chicago Ill: The University of Chicago Press, 2021). Kluge et al., *Pluriverse*, trans. Rebecca van Dyck, Nathaniel McBride (Leipzig, Germany: Spector Books, 2017). Viveiros de Castro, “On Models and Examples,” *Current Anthropology* 60, suppl. 20 (2019): 296–308. Viveiros de Castro and Deborah Danowski, “Humans and Terrans in the Gaia War,” in *A World of Many Worlds*, eds. Marisol de la Cadena and Mario Blaser (Durham, NC: Duke University Press, 2018), 172–203. On the concept of “perspectival multinaturalism,” see: Viveiros de Castro, “Exchanging Perspectives,” *Common Knowledge (New York, N.Y.)* 25, no. 1–3 (2019): 21–42.

⁶ For the description of this graduate level studio, see: College of Built Environments, *Architecture*, “Arch 505 Architectural Exploration Studio [...] The first of two advanced architectural design studios offers a variety of studio experiences on specialized topics. The studio builds upon technical knowledge and integrative design skills while placing a greater emphasis on experimentation and collaboration as well as design methodology.” University of Washington, <https://www.washington.edu/students/crscat/archit.html>.

the design genre we called *Seattle Futurisms*: The poeticizing of futurity, its de-signing by intertwining the dualities of theory and practice leading to a co-signing, an unexpected form of cooperation.⁷

To design for unpredictable futurities, we would have loved to “learn” from climate fiction, as urbanist Mark Kammerbauer recommends.⁸ But we could not. Rather, we had to start by deconstructing the genre. Thereby, we responded to the talk on *Future Visions – Dislocations* by architectural historian and theorist Mark Jarzombek in which he calls for replacing climate fiction’s “erotics of the future,” its “cinematically enhanced rush to imagine our planetary demise,” by a “poetics of the future,” a “speculative space of ambiguity.”⁹ As will be outlined in the section on *Poetisizing Futurity*, Jarzombek did not prompt us to leave the realms of cli-fi but rather to turn the genre’s ‘erotics’ into a ‘poetics’ by redirecting its narrative routes into the speculative spaces of Alternative or Co-Futurisms such as Afro-, Indigenous-, Latinx-, Queer-, or Decolonial Futurisms. This direction extended our language or – as anthropologist Eduardo Kohn suggests – allowed us to move “beyond” it to include the bio-semiotics of more-than-human environments.¹⁰ By adopting the semiotics of Kohn’s “sylvan, wild, or savage” thinking, we expanded what poetry scholar Brian M. Reed calls the “unpredictability” of poesis, of ‘making,’ into that of zoopoiesis, of “co-making,” to cite Aaron Moe, or of sympoiesis, of “making with,” as Donna Haraway suggests, — be it animals, plants, or microbes, ancestors, gods, stars, or spirits, technologies, apparatuses, or AI.¹¹

This practice of (sym)poetisizing futurity’ changed our understanding of design turning it from a formal, spatial, or systematic practice into a one of de-signing design which not only intertwines the dualities of theory and practice, thinking and doing, — as Elizabeth Grierson, Harriet Edquist, and Hélène Frichot argue, — but also those of presence and absence, of life and death, of known and unknown. As will be shown in the section on *De-Signing Futurity*, the process of ‘making with’ or ‘co-making’ turns designing into co-signing, poesis into bricolage which Viveiros de Castro calls a “worldview” or type of “worldmaking” seeking to “unpredict the world.” This worldview is however just one in a “pluriverse” of many — also more-than-human — worlds requiring the ability to mediate between them.¹² Whereas he ascribes this ability to shamans, literary scholar Marília Librandi-Rocha also assigns it to artists, poets, or writers of fiction and thereby, as we suggest, to designers. From this perspective, co-signing turns design into fiction in which the peoples of *Co-Futurisms* are joined by peoples called ‘site’ or ‘environment’ — be it Seattle or other places — thereby becoming active, possibly haunting, agents which expand the genres of *Afro-*, *Indigenous-*, *Latinx-*, etc. *Futurisms* by an open-ended design genre called *Seattle Futurisms*.

⁷ The participants of the interdisciplinary studio »Architecture and Climate Fiction: Seattle Futurisms« were Steven Barcikowski, Alexis Bouchard, Max Clair, Colten Danks, Alondra Garcia, Elijah Hansen-Lints, Facundo Jaime, Ryan Mackey, Hannah McCreary, Veronica Restrepo, Leila Jackson (MLA, UDP), Emily Saeger (MLA), Darryl Vallejos (MLA), co-developed and co-taught by Gabe Hogness and the author, and accompanied by our discussion partners Vikram Prakash, Magdalena Hogness, Michael Gilbride, Amelia Jarvinen, and, as always, Ralph Stern.

⁸ Kammerbauer, “Was die Architektur von Climate Fiction lernen kann,” *Bauwelt* 98, no. 4 (2022): 11, transl. by the author.

⁹ Jarzombek, “Future Visions — Dislocations,” lecture given at CBE, January 6, 2022, video, 1:27:20, <https://hfhf.be.uw.edu/about/>. For further conversations about concepts of architectural futurity: “Oracular Visions and the Fungal Futures with Mark Jarzombek,” interview by Vikram Prakash. *Architecture Talk* 119, podcast audio, 55:50, January 14, 2022, <https://www.youtube.com/watch?v=Es-4dvEcfWI>. Jarzombek, “The Epic of Gilgamesh and the Political Symbolism of the Periphery,” *Perspecta* 52, (December 2019): 136-145.

¹⁰ Kohn, “Beyond Language,” interview by Philippe Chiambaretta, *PCA-Stream*, November 4, 2017, <https://www.pca-stream.com/en/articles/eduardo-kohn-beyond-language-100>.

¹¹ Kohn, “Anthropology as Cosmic Diplomacy: Toward an Ecological Ethics for Times of Environmental Fragmentation,” in *Living Earth Community: Multiple Ways of Being and Knowing*, ed. Sam Mickey et al. (Cambridge, UK: Open Book Publishers, 2020), 59. Kohn, *How Forests Think: Toward an Anthropology Beyond the Human* (Berkeley: University of California Press, 2013), 8. Reed, “Poetics, Western,” in *The Princeton Encyclopedia of Poetry and Poetics*, 4th ed., eds. Roland Greene et al., (Princeton: Princeton University Press, 2012), 1064. Moe, “Toward Zoopoetics: Rethinking Whitman’s ‘Original Energy,’” *Walt Whitman Quarterly Review* 31, no. 1 (2013): 2. According to Moe, “zoopoetics [...] recognizes that nonhuman animals (zoion) are makers (poiesis), and they have agency in that making. The etymology also suggests that when a poet undergoes the making process of poesis in harmony with the gestures and vocalizations of nonhuman animals, a multispecies event occurs. It is a co-making. A joint venture. The two-fold foci of zoopoetics that nonhuman animals are makers and that this making has shaped the form of human poems-illuminates how animals animate even the ›non-iconic‹ alphabetic systems of language and therefore bring the sensuous world to the surface of the written page.” Haraway, “Sympoiesis: Symbiogenesis and the Lively Arts of Staying with the Trouble,” in *Staying with the Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016), 58.

¹² Viveiros de Castro, “On Models,” 296, 300, 305.

This form of co-signing futurity also informed the studio's pedagogy. Expanding the repertoire of provided, top-down tools of design thinking such as 'parti,' 'conceptuality,' and 'performativity,' it focused on fictionality thereby shifting the focus from individual projects to what Hannah McCreary calls a "network of voices," from speaking to sensing, listening, and living, from concepts to conversations, from products to processes, as Gabe Hogness emphasizes, and from presentations to exhibitions. Assembling walks, talks, and snacks, the exhibition featured groups formed not by categories but by relationalities and affinities: by the interweaving of content and form, of the themes of 'identity,' 'time,' and 'landscape,' of 'body,' 'trauma,' and 'transformation' and the poiesis of sensing, listening, and living, of what could be called 'senso-poetics,' 'echo-poetics,' and 'tempo-poetics.'

Poetisizing Futurity

In his article "What Architecture Can Learn from Climate Fiction," Mark Kammerbauer lauds the genre for offering "future visions" about our "architectural relation to the environment and to our fellow human beings" providing both warnings about the impact of resource commodification and suggestions of a "world finding answers to climate change."¹³ Mark Jarzombek however questions the genre's positive role. In his talk *Future Visions – Dislocations*, he criticizes climate fiction for being itself a product of commodification, of Hollywood's culture industry, converting the future into a "competitive erotics of the end of the world porn." In order to "talk about the future [...] without getting sucked into the cinematically enhanced rush to imagine our planetary demise," Jarzombek suggests replacing cli-fi's "erotics of the future" by a "poetics of the future," a poetics focusing not on aesthetics but on hermeneutics thereby forcing us "to have conversations." In this interest, he maps out a twin-track methodology of "dislocations" evading the spaces of reality and phantasy to enter those of "uncertainty." The first way, according to Jarzombek, "prompted by our status as global, is to bring ourselves into the shadowy speculative space of our entanglement and complexity with things that we are unfamiliar with." The second one is "to enter another form of speculative space which is also unfamiliar. The speculative space of [verbal] ambiguity."¹⁴

Therefore, we wondered: Is the genre of cli-fi unfit to offer future visions of design? Or are there ways in which it can be turned into a methodology of ›dislocation‹ allowing us to poeticize futurity?

At first sight, the literary version of climate fiction seems to belong to the 'speculative spaces' Jarzombek envisions. Coined by the journalist Dan Bloom, the term describes a sub-genre of speculative fiction addressing responses to human-induced climate change.¹⁵ According to literary scholar Gregers Andersen, the genre is an "exciting medium" to reflect upon the "uncertainty" about the effects of "anthropogenic global warming" on "the Western mind" and on "human beings' modes of existence."¹⁶ As laid out in his *Climate Fiction and Cultural Analysis*, the genre can serve to chart a cartography measuring the impact of climate change on humans' "imagination forms" as well as their affective and cognitive "relations to the world."¹⁷ Andersen however acknowledges that his cartography only depicts "Western climate fiction," work produced in North America, Australia and Europe, leaving out the narratives from the areas most affected by global warming: those of the "Global South."¹⁸

This absence turns out to be one of the genre's key presences. As Nicole Seymour and Briggetta Pierrot argue, the genre raises an "important point about visibility and global ecologies: Western literature, and cli-fi in particular, tends to focus on places that have economic wealth and power, making them litmus tests for environmental catastrophe."¹⁹ In addition, they criticize the genre for its normativity regarding race and gender, for being "white- and male dominated."²⁰ In order to focus on the topic of "climate injustice" and the active agency of the communities excluded in cli-fi, they suggest including other branches of speculative fiction called *Alternative Futurisms*, such as *Afro-*, *Chicanx-*, or *Indigenous Futurisms*. According to Pierrot, these genres "revolve around this idea of reclaiming the past (specifically the collective trauma caused by colonialism), as well as creating a literary presence in the present by imagining these limitless futures" featuring protagonists of the excluded

¹³ Kammerbauer, "Was die Architektur," 11.

¹⁴ Jarzombek, "Future Visions."

¹⁵ Claude Forthomme, "A Chat with the Man Who Dreamt Up Cli Fi," *Impakter*, July 30, 2014, <https://impakter.com/climate-fiction-a-chat-with-the-man-who-coined-the-term-cli-fi/>

¹⁶ Andersen, "Introduction: The Birth of a New Type of Fiction," in *Climate Fiction and Cultural Analysis: A New Perspective on Life in the Anthropocene* (Milton Park, Abingdon, Oxon: Routledge, 2020), 10.

¹⁷ Ibid, 3. Emphasis in the original.

¹⁸ Ibid, 5.

¹⁹ Seymour and Pierrot, "Contemporary Cli-Fi and Indigenous Futurisms," *Departures in Critical Qualitative Research* 9, no. 4 (2020): 101.

²⁰ Ibid, 93.

groups.²¹ In the spectrum of *Futurisms* they particularly focus on *Indigenous Futurisms*, which, coined by Anishinaabe scholar Grace Dillon, highlights “acts of survivance, not merely survival — [as] establishing vibrant Indigenous presence as a condition of the (post)colonial, not a counterargument to it.”²²

Like the genre’s other branches, *Indigenous Futurisms* are, as Dillon explains, “a literary and artistic movement that expresses Native perspectives of the past, present, and future. These genres encompass the myriad communities too often overlooked within speculative and science fiction.” To overcome the genres’ limiting singularity, Dillon recommends adopting a “cofuturism approach” which combines the perspectives of multiply marginalized communities into what she calls “intersectional storytelling.” This approach not only introduces us to “new worlds but new perspectives” which turn climate fiction into “climate justice stories” raising awareness about the importance of understanding “how people of different backgrounds and experiences think about that future” thereby leading “the way to a more sustainable, more just future.”²³

This form of ‘intersectional storytelling’ also includes the ‘thinking’ of more-than-human peoples, of animals, plants, and microbes, of ancestors, gods, stars, and spirits. In his seminal “anthropology beyond the human” *How Forests Think*, Eduardo Kohn calls this form of thinking “sylvan,” a “kind of thought that does not just belong to us humans. It is something we share with all of life.”²⁴ Translating this more-than-human thinking into climate fiction would require moving ‘beyond language,’ beyond the symbolic signs of words to include the iconic ones of “images — be they oneiric, aural, anecdotal, mythic, [...] photographic,” or cinematic, — and the indexical ones of contexts, to make visible, to re-present that which “lies beyond” the human, be it forests, gardens, fallows, plantations, cities, or landfills.²⁵

His notion of semiosis, of sign processes, also affects our notions of futurity. According to Kohn, semiosis “are organized around the fact that signs represent a future possible state of affairs,” they “re-present what is not present” and thereby the ambiguities between presence and absence, of life and death, human and non-human.²⁶ All semiosis, he states, “as it grows and lives, creates future. This future is virtual, general, not necessarily existent, and yet real. All selves partake of this ‘living future’.”²⁷

Having embraced Jarzombek’s ‘poetics of the future,’ with his notion of “ambiguous futures that are poetics,” and having folded it into Kohn’s notion of ‘living futures,’ the studio developed forms of climate fiction by listening to the voices to more-than-human poets, to animals, earth, mud, and waste. Thereby, we did not mean to add to a “(re)colonisation of indigeneity,”²⁸ but to expand the ambiguity of Kohn’s sylvan semiosis into the realm of Western poetics, into what poetry scholar Brian M. Reed describes as a genre defined by the “ambiguity” of signifying both criticism and composition whereby the latter was particularly important to us as “something altogether more changeable, porous, and unpredictable” to be discovered and applied “during the writing process.”²⁹ By including the voices of sylvan thought, the studio expanded the ‘unpredictability’ of poesis, of ‘making,’ into that of zoopoiesis, of “co-making,” to cite Aaron Moe, or sympoiesis, of “making with,” as Donna Haraway suggests, — be it animals, plants, or microbes, ancestors, gods, stars, or spirits, technologies, apparatuses, or AI — into the ‘living futures’ of possibility, potentiality, and performativity.³⁰

(Sym)Poeticizing futurity, rerouting the narratives of cli-fi into the speculative spaces of *Alternative* or *Co-Futurisms* not only affected our vision of the future we design for but also the future of design as discipline by complementing its methods of prediction, be it prescribing, preempting, or prototyping, by one of improvising, by — as we will see — a method of unpredicting.

²¹ Ibid, 94.

²² Dillon quoted in ibid, 96. Dillon, “Introduction: Indigenous Futurisms, Bimaashi Biidaas Mose, Flying and Walking towards You,” *Extrapolation* 57, no. 1–2 (2016): 4.

²³ Dillon, “Why Intersectionality in Fiction Matters,” *Grist. Climate. Justice. Solutions*, September 28, 2021, <https://grist.org/fix/intersectionality-in-climate-fiction/>. Also see: Dillon, “Maampii Dibendaagoziyaang, ‘Here is Where We Belong:’ Decolonizing Anthropocenes in Indigenous Futurisms,” lecture given at CBE, May 4, 2022, video, 1:44:03, <https://hhf.be.uw.edu/about/>.

²⁴ Kohn, “Beyond Language.”

²⁵ Kohn, *How Forests Think*, 222. Kohn traces “the ways in which iconic, indexical, and symbolic processes are nested within each other.” Ibid, 50. Kohn, “Further Thoughts on Sylvan Thinking,” *Hau: Journal of Ethnographic Theory* 4, no. 2 (2014): 280f.

²⁶ Kohn, *How Forests Think*, 23.

²⁷ Ibid, 207.

²⁸ David Chandler and Julian Reid, “Becoming Indigenous: The ‘Speculative Turn’ in Anthropology and the (Re)Colonisation of Indigeneity,” *Postcolonial Studies* 23, no. 4 (2020): 485–504.

²⁹ Reed, “Poetics, Western,” 1064.

³⁰ Moe, “Toward Zoopoetics,” 2. Haraway, “Sympoiesis,” 58.

De-signing Futurity

How Forests Think deeply affected our design thinking. According to Kohn, forests think “in images” connecting “life [...] to death, continuity to finitude, future to past, absence to presence, supernatural to natural” thereby contributing to what Elizabeth Grierson, Harriet Edquist, and Hélène Frichot called *De-Signing Design*, the interweaving of theory and practice, thinking and signing to form experimental tactics of “thinking-doing.”³¹ Kohn’s ‘sylvan’ thinking changed our understanding of design by turning it from a formal, spatial, or systematic practice into a performative one, a fiction or play in which the peoples of *Alternative* or *Co-Futurisms* are joined by peoples called ‘site’ — here Seattle and the heavily engineered geographies of its wetlands and wastelands, its liquefaction- and flood-zones — thereby becoming active agents of an ‘intersectional storytelling’ about climate injustice. In our ‘cofuturism approach,’ the peoples called ‘sites’ expanded the genres of *Afro-*, *Indigenous-*, *Latinx-*, etc. *Futurisms* by a design genre called *SEATTLE FUTURISMS*.

The studio’s ‘co-making’ challenged the notion of single authorship prevalent in architectural education and practice, turning the process of de-signing into one of co-signing. Thereby, it created what poet Ben Lerner calls a “heteroglot space,” a “space where you can make all of the different languages in a language collide.”³² Fusing “critical and creative work,” this space is akin to fictocriticism which, according to literary scholar Anna Gibbs, challenges a narrative’s “univocal form” fostering its “multivocality” and “dialogism.”³³

According to Gibbs, fictocriticism is a collaborative practice “for which there is no blueprint, and which must be constantly invented anew in the face of the singular problems that arise in the course of engagement with what is researched.” As Gibbs argues, this “way of writing” can serve as a practice of decolonization by deconstructing the metaphor of the house as patriarchal principle dominating the disciplines of economy and ecology, literature and, obviously, architecture.³⁴ As a ‘way’ of designing, fictocriticism contributes to re-envisioning architecture. She describes her practice as “a writing in fragments roughly juxtaposed with each other, escaping from the overarching protective shelter of story, and the arc of narrative as a line pointing (and taking us) somewhere, like ‘home’.”³⁵ Thereby, fictocriticism turns the narrative product into a process, its construction into a cut up, its arc into an assemblage, its arché — as we will see — into anarchy.

The practice of assembling complements prescriptive, preemptive, and prototypical design methods by offering a provisional one, a practice of improvisation or, as anthropologist Viveiros de Castro suggests, of bricolage.³⁶ This practice is one of “two ideal types of worldmaking”: that of the “engineer” and that of “the bricoleur,” that of blueprints and that of “unpredicting the world.”³⁷ These types of ‘worldmaking’ are part of a “new worldview” according to which ‘world’ signifies a “pluriverse” of many worlds” and ‘view’ a perspective which is not a representation but “a point of view [...] located in the body.”³⁸ With his concept of a ‘pluriverse,’ Viveiros de Castro opposes the concept of multiculturalism to that of multinaturalism arguing that different people are not distinguished by their cultures but their bodies and thereby by their perspectives.³⁹

³¹ Kohn, *How Forests Think*, 222, 195. Elizabeth Grierson, Harriet Edquist, and Hélène Frichot, “Introduction,” in *De-Signing Design: Cartographies of Theory and Practice*, eds. Ibid (Lanham, MD: Lexington Books, 2015), xviii f.

³² Lerner, “No Art | Poetry, Fiction, Criticism, Fiction, Poetry,” interview, Foyles, UK, November 1, 2016, video, 7:48, <https://www.youtube.com/watch?v=8PGkC6e855Q>.

³³ Ibid. Gibbs, “Fictocriticism, Affect, Mimesis: Engendering Differences,” *Text: Journal of Writing and Writing Courses* 9, no. 1 (April 2005), <http://www.textjournal.com.au/april05/gibbs.htm>.

³⁴ Ibid.

³⁵ Gibbs, “From Site to Situation: Cutting up as Fictocritical Composition,” in *Writing Architectures*, 32.

³⁶ Viveiros de Castro, “On Models,” 300. On the relations between fictocriticism, assemblage, and bricolage see: Anna Dezeuze, “Assemblage, Bricolage, and the Practice of Everyday Life,” *Art Journal* 67, no. 1 (2008): 31–37. Gibbs, “Writing as Method: Attunement, Resonance, and Rhythm,” in *Affective Methodologies: Developing Cultural Research Strategies for the Study of Affect*, eds. Britta Timm Knudsen and Carsten Stage, (London: Palgrave Macmillan UK, 2015), 222–236.

³⁷ Viveiros de Castro, “On Models,” 300, 306. Viveiros de Castro refers to Roy Wagner, *The Invention of Culture* (Chicago: The University of Chicago Press, 2016), 2nd ed., 88: “And so we can speak of this form of action as a continual adventure in ‘unpredicting’ the world.”

³⁸ Viveiros de Castro, *ibid*, 296, 305. Viveiros de Castro, “Cosmological Deixis and Amerindian Perspectivism,” *The Journal of the Royal Anthropological Institute* 4, no. 3 (1998): 478. The author refers to Gilles Deleuze, *Le pli: Leibniz et le baroque* (Paris: Minuit, 1988), 16. Viveiros de Castro, “On Models,” 300.

³⁹ See Viveiros de Castro and Danowski, “Humans and Terrans.” Viveiros de Castro, *Cannibal Metaphysics* (Minneapolis: University of Minnesota Press, 2014), 74 ff.

The practice of bricolage contributes to what he calls “perspectival multinaturalism” by “subvert[ing] conventional understandings of the world” by complementing the “models” of scientific generalizations with empirical principles of “examples,” of “some are/some are not.”⁴⁰ “Someness,” he argues, “is a form of unpredicted the world,” a style of thinking he calls “ontological anarchy” as the “reminder to always leave some door open, at least one door open—the one that punctures the One.”⁴¹ Viveiros de Castro does not “vilify” engineering and thereby prescriptive, preemptive, and prototypical design methods but recognizes the ‘pluriverse’ of more-than-human worlds and types of worldmaking emphasizing the need to be able to commute and mediate between heterogeneous perspectives, an ability he ascribes to shamans.⁴²

This ability is, as literary scholar Marília Librandi-Rocha argues, shared by artists, writers, and poets. In her transposition of Viveiros de Castro’s “ontological perspectivism” into the field of literary theory, she contends that his view is closely related to the “world of fiction,” a world she defines as the “possibility and practice of experiencing other imaginaries.”⁴³ Here, artists serve as translators, as interlocutors, as what she calls “cosmic diplomats” of worlds we conceive of as ‘other.’ According to Librandi-Rocha, artists are able of “metamorphosis” allowing them to “embody” different points of view. Their “mimetic impulse [...] corresponds to a process of transformation or of metamorphosis according to an appeal and an impulse for the unknown.”⁴⁴ Following this perspective, *co-signing futurity* expanded the realms of design thinking such as ‘parti,’ ‘conceptuality,’ and ‘performativity’ by focusing on fictionality, by embracing the unknown, the unpredictable, and the open-ended con-figuring or, as Haraway calls it, “string-figuring” of negotiations and relations.⁴⁵

Co-Signing Futurity

This form of *co-signing futurity* also informed the studio’s pedagogy. The practice of ‘co-making,’ of co-signing did not create a collective design strategy but a ‘pluriverse’ of coexisting worlds thereby fostering what could be called inter-planetary, inter-perspectival travel. Adding designers to Librandi-Rocha’s list of ‘diplomats,’ the studio shifted the focus from individual projects to what Hannah McCreary calls a “network of voices,” to letting voices “matter,” to cite Colten Danks. The concept and artifact of a ‘network’ also plays an important role for Librandi-Rocha’s pluriversal world of fiction. Consisting of threads and voids, it ties together what she terms a “multiplicity of holes,” of “black holes” or “voids” of unknown perspectives. Its threads allow for inter-perspectival or “interspecies” travel between the viewpoint of animals, plants, or microbes, ancestors, gods, stars, or spirits, technologies, apparatuses, or AI.⁴⁶

The studio’s networking turned the final presentation into an exhibition featuring groups which were not formed by categories but by relationalities and affinities. As traced in the exhibition layout, the studio’s threads interwove content and form, the wefts of the themes of ‘identity,’ ‘time,’ and ‘landscape,’ of ‘body,’ ‘trauma,’ and ‘transformation’ and the color-coded warps of the techniques of ‘*senso-poetics*,’ ‘*echo-poetics*,’ and ‘*tempo-poetics*.’ The ‘holes’ displayed ‘points of view’ translating Kohn’s thinking ‘in images’ into a designing ‘in images’ which did not privilege the eye but spoke to oneiric, aural, anecdotal, mythic, or cinematic forms of vision, to address the invisible and opaque, the repressed and silenced. The forms of envisioning initiated different forms of poetics, which — following the color-coded affiliations informing the groups — could be called a poetics of sensing, of listening, and of living: a ‘*senso-poetics*,’ an ‘*echo-poetics*,’ and a ‘*tempo-poetics*.’

As marked in color coded ‘artist cards,’ the ‘green’ group was affiliated by designing ‘by sensing,’ by conceiving of the skin as an “envelope,” as a “clothing,”⁴⁷ which, following Viveiros de Castro and Librandi-Rocha, can serve as an ‘instrument’ for interspecies travel. Like “diving equipment” or “space suits,” the skin can serve as an “instrument of communication” with the unknown. Here, the unknown is the skin of the earth itself, an

⁴⁰ Viveiros de Castro, “On Models,” 300.

⁴¹ Ibid, 306. On replacing the arché (of architecture) by anarchy, see the chapter on “Ontological Anarchism” in Saul Newman, “Postanarchism,” in *The Palgrave Handbook of Anarchism*, eds. Carl Levy and Matthew S. Adams (Cham, Switzerland: Palgrave Macmillan, 2019), 301f.

⁴² Viveiros de Castro, “On Models,” 300. Viveiros de Castro describes shamans as “‘commuters’ or conductors of perspective [...] operating in a zone of interspecificity.” Viveiros de Castro, *Cannibal Metaphysics*, 151.

⁴³ Librandi-Rocha, “Becoming Natives of Literature: Towards an Ontology of the Mimetic Game (Lévi-Strauss, Costa Lima, Viveiros de Castro, and the Nambikwara Art Lesson),” *Culture, Theory and Critique* 54, no. 2 (2013): 169f.

⁴⁴ Ibid., 179.

⁴⁵ Haraway, “Introduction,” in *Staying with the Trouble*, 3.

⁴⁶ Librandi-Rocha, “A Multiplicity of Holes,” lecture given at ICI Berlin, March 24, 2022, video, 55:29, <https://www.ici-berlin.org/events/a-multiplicity-of-holes/>.

⁴⁷ Ibid. Viveiros de Castro, *Cannibal Metaphysics*, 66 ff.

unknown Latour calls the “terrestrial,” as “a new political actor.”⁴⁸ Designing ‘by sensing’ or ‘senso-poetics’ enables to become terrestrial, to undergo a ‘metamorphosis’ allowing to embody viewpoints hitherto unknown: In *The Wasteland | Pasts, Presents & Futures*, Veronica Restrepo uses a “series of black holes” on Seattle’s Union Bay Natural Area landfill to uncover the ways in which its design serves as a strategy of “silencing” the city’s colonialist history and to suggest using waste “as an act of remaking the world.” Alexis Bouchard envisioned *Terrestrial Tattoos* to explore “themes of consent, trauma, and the terrestrial, and how we might one day repair the relationship we once had with the geoderma that we inhabit.” Facundo Jaime reflects upon *Pneuma*, the breath, spirit, and soul, as enabling a “continuous metamorphosis” of identity as “dynamic exchange of energy between body, mind, and environment.”

The ‘red’ group was affiliated by what Librandi-Rocha called a “poetics of listening,” a designing “by ear,” or an “echopoetics.”⁴⁹ The group’s use of music offers what Vikram Prakash terms an “opening towards transspecies” design, “something that can speak to the other animals which can speak to the flowers which has the possibility of opening us up,” thereby turning the designer into what Magda Hogness called a “music producer” mixing the voices of more-than-human actors. In *Jazz Dislocations: Assembling the Future from Fragments of the Past*, Leila-Jackson explores Hogan’s Alley in Vancouver, British Columbia as agent of Jazz as an “improvised language of resilience, transcending time and begetting new constructed realities through the process of assemblage.” *Mud / Digging the Duwamish* by Hannah McCreary explores the “political agency” of mud in turning the Duwamish River into an environmentally just “assemblage of human and more-than-human characters.” In *CODA: a Journey Through Trauma at the End of an Anthropocene*, Max Clairó entangles infrastructural and digital technology to “reenact spiritual rituals” turning Seattle’s Harbor Island into an agent healing from the “trauma to the land and to the body.” Steven Barcikowski’s composition *Grief* is a “journey through emotions” amplifying the voices of those who are “lost” in conversations about climate change but play a key role in its production: factory farmed animals. In *‘The Etymological Tree’: Transforming Language and Architecture into Living Organisms*, Colten Danks gives voice to “architecture, artifacts, and language [as] living organisms changing and adapting the same way as human beings.”

The ‘yellow’ group is connected by its designing ‘by living,’ by a *tempo-poetics*, addressing the fears of living in an epoch conceived of as characterized by anthropogenic disaster, dystopia, and (post-)apocalypse, an epoch in which, as Déborah Danowski and Viveiros de Castro observed in *The Ends of The World*, it is “time itself, as the dimension of the manifestation of change [...], that not only seems to be speeding up, but qualitatively changing *all the time*.”⁵⁰ Adopting Viveiros de Castro’s pluriversal temporality, the co-existence of multiple times, the ‘yellow’ group translated the poly-rhythmic processes of being into forms of *tempo-poetics*. In *Our Own Little Post-Apocalypse*, Darryl Vallejos explored the “crossroads” of spacetimes, repetition and difference, a time which spins “[o]ver and over again [...], but never is it the same” to overcome the traumas of colonization. *Go Now, before they Wake* is a time travel in which Alondra Garcia conveys a “story of resilience, of struggle, and the messiness and wonder that hope can create to inspire real change” in the face of climate injustice. In *Life in the Anthropocene*, Elijah Hansen-Lints re-imagines “apocalyptic landscapes to reflect the resilience of people, and the earth, to what might commonly be thought of as a climate apocalypse.” In *Means to no End*, Emily Saeger asks how we might situate “ourselves in our impermanence through collective conversation and lessons from our plant-kin shift us from a debilitating fear of death, towards the hope of transformation, and generative futures from within.” Accompanied by Jessica Curry’s cantata *All the Earth*, Ryan Mackey invites us to *Decenter* asking “how much do we have to strip back of our concrete jungle to reveal the natural below and relearn what it is to be terrestrial.”

⁴⁸ Latour, *Down to Earth: Politics in the New Climatic Regime*, transl. Catherine Porter (Cambridge, UK, Medford, MA: Polity Press, 2018), 40. All following quotes without footnotes are taken from submitted project documents and the recording of the final discussion.

⁴⁹ Librandi-Rocha, *Writing by Ear: Clarice Lispector and the Aural Novel* (Toronto: University of Toronto Press, 2018), 9.

⁵⁰ Danowski and Viveiros de Castro, *The Ends of the World*, transl. Rodrigo Nunes (Cambridge, UK; Malden, MA: Polity Press, 2017), 8.

Conclusion

The studio on *SEATTLE-FUTURISMS* explored the impact of climate change on the future of architectural education by complementing design methods of predicting — such as prescripting, preempting, and prototyping — with one of unpredicted: climate-fiction. To transpose cli-fi into design, the studio responded to Jarzombek's challenge to *dislocate futurity* by turning the genre's 'erotics of the future' into a 'poetics of the future.'

To *poeticize futurity*, we redirected the narrative routes of cli-fi into the speculative spaces of *Alternative* or *Co-Futurisms* such as *Afro-*, *Indigenous-*, *Latinx-*, or *Queer Futurisms* thereby including the semiotics of what Eduardo Kohn calls 'sylvan, wild, or savage thinking.' This form of a 'sylvan' design thinking expanded the 'unpredictability' of poesis, of 'making,' into that of *sympoiesis*, of 'making with,' or *zoopoiesis*, of 'co-making.' By engaging in co-making, the studio complemented the practices of formal, spatial, or systematic design with one of *de-signing* intertwining thinking and doing, presence and absence, known and unknown. This form of co-making converted designing into co-signing, poesis into bricolage which Viveiros de Castro calls a type of 'worldmaking' seeking to 'unpredict the world' and thereby to *de-sign futurity*.

De-signing futurity did not create a collective design strategy but a 'pluriverse' of coexisting worlds including the invisible and the imagined, the repressed and the silenced thereby turning design into fiction, into a co-signing in which the peoples of *Co-Futurisms* are joined by peoples called 'site' or 'environment' expanding the genres of *Afro-*, *Indigenous-*, *Latinx-*, etc. *Futurisms* by an open-ended design genre called *Seattle Futurisms*.

Co-signing futurity also informed the studio's pedagogy. Expanding the tools of design thinking such as 'parti,' 'conceptuality,' and 'performativity,' it focused on fictionality thereby shifting the focus from a series of projects to a 'network of voices,' from speaking to sensing, listening, and living, from concepts to conversations, from products to processes, and from presentations to exhibitions. Assembling walks, talks, and snacks, the exhibition featured groups formed not by categories but by relationalities and affinities: by the interweaving of content and form, of the themes of 'identity,' 'time,' and 'landscape,' of 'body,' 'trauma,' and 'transformation' and the techniques of '*senso-poetics*,' '*echo-poetics*,' and '*tempo-poetics*.'

References

- Aalto University Summer School. "Climate, Health and Architecture." All websites accessed September 10, 2022. <https://www.aalto.fi/en/aalto-university-summer-school/climate-health-and-architecture>.
- Andersen, Gregers. "Introduction: The Birth of a New Type of Fiction." In *Climate Fiction and Cultural Analysis: A New Perspective on Life in the Anthropocene*, 1-14. Milton Park, Abingdon, Oxon: Routledge, 2020.
- Chakrabarty, Dipesh. *The Climate of History in a Planetary Age*. Chicago Ill: The University of Chicago Press, 2021.
- Chandler, David and Julian Reid. "Becoming Indigenous: The 'Speculative Turn' in Anthropology and the (Re)Colonisation of Indigeneity." *Postcolonial Studies* 23, no. 4 (2020): 485–504.
- College of Built Environments, University of Washington. "College of Built Environments. *Architecture*." <https://www.washington.edu/students/crscat/archit.html>.
- Danowski, Deborah and Viveiros de Castro. *The Ends of the World*. Translated by Rodrigo Nunes. Cambridge, UK; Malden, MA: Polity Press, 2017.
- , "Humans and Terrans in the Gaia War." In *A World of Many Worlds*, edited by Marisol de la Cadena and Mario Blaser, 172-203. Durham, NC: Duke University Press, 2018.
- Deleuze, Gilles. *Le pli: Leibniz et le baroque*. Paris: Minuit, 1988.
- Dezeuze, Anna. "Assemblage, Bricolage, and the Practice of Everyday Life." *Art Journal* 67, no. 1 (2008): 31–37.
- Dillon, Grace L. "Introduction: Indigenous Futurisms, Bimaashi Biidaas Mose, Flying and Walking towards You." *Extrapolation* 57, no. 1–2 (2016): 4.
- , "Maampii Dibendaagoziyaang, 'Here is Where We Belong:' Decolonizing Anthropocenes in Indigenous Futurisms." Lecture given at CBE, May 4, 2022, video, 1:44:03. <https://hhf.be.uw.edu/about/>.
- , "Why Intersectionality in Fiction Matters." *Grist. Climate. Justice. Solutions*, September 28, 2021. <https://grist.org/fix/intersectionality-in-climate-fiction/>.
- Emanuel, Kerry, Miho Mazereeuw, and Paul O'Gorman, "Preparing for a New World of Weather and Climate Extremes." *MIT Climate Grand Challenges*. <https://climategrandchallenges.mit.edu/flagship-projects/preparing-for-a-new-world-of-weather-and-climate-extremes/>.
- Entekhabi, Dara, Miho Mazereeuw, and Danielle Wood. "The Future of Coasts: Changing Flood Risk for Coastal Communities in the Developing World." *MIT Climate Grand Challenges*. <https://climategrandchallenges.mit.edu/research/changing-flood-risk-for-coastal-communities-in-the-developing-world/>.
- Everett, Laurie. "Preemptive Design Saving Cities." *MIT News*, March 6, 2015. <https://news.mit.edu/2015/preemptive-design-saving-cities-urban-risk-lab-miho-mazereeuw-0306>.
- Forthomme, Claude. "A Chat with the Man Who Dreamt Up Cli Fi." *Impakter*, July 30, 2014. <https://impakter.com/climate-fiction-a-chat-with-the-man-who-coined-the-term-cli-fi/>.
- Gibbs, Anna. "Fictocriticism, Affect, Mimesis: Engendering Differences." *Text: Journal of Writing and Writing Courses* 9, no. 1 (April 2005). <http://www.textjournal.com.au/april05/gibbs.htm>.
- , "Writing as Method: Attunement, Resonance, and Rhythm." In *Affective Methodologies: Developing Cultural Research Strategies for the Study of Affect*, edited by Britta Timm Knudsen and Carsten Stage, 222-236. London: Palgrave Macmillan UK, 2015.
- Grierson, Elizabeth, Harriet Edquist, and Hélène Frichot. "Introduction." In *De-Signing Design: Cartographies of Theory and Practice*, edited by Ibid, xvii-xx. Lanham, MD: Lexington Books, 2015.
- Haraway, Donna. "Sympoiesis: Symbiogenesis and the Lively Arts of Staying with the Trouble." Chap. 3 in *Staying with the Trouble: Making Kin in the Chthulucene*, 58-98. Durham, NC: Duke University Press, 2016.
- Jarzombek, Mark. "The Epic of Gilgamesh and the Political Symbolism of the Periphery." *Perspecta* 52, (December 2019): 136-145.
- , "Future Visions — Dislocations." Lecture given at CBE, January 6, 2022, video, 1:27:20. <https://hhf.be.uw.edu/about/>.
- , "Oracular Visions and the Fungal Futures with Mark Jarzombek." Interview by Vikram Prakash. *Architecture Talk* 119. Podcast Audio, 55:50, January 14, 2022. <https://www.youtube.com/watch?v=Es-4dvEcfWI>.
- Kammerbauer, Mark. "Was die Architektur von Climate Fiction lernen kann." *Bauwelt* 98, no. 4 (2022): 11.
- Kohn, Eduardo. "Anthropology as Cosmic Diplomacy: Toward an Ecological Ethics for Times of Environmental Fragmentation." Chap. 4 in *Living Earth Community: Multiple Ways of Being and Knowing*, edited by Sam Mickey et al. Cambridge, UK: Open Book Publishers, 2020.
- , "Beyond Language." Interview by Philippe Chiambaretta. *PCA-Stream*, November 4, 2017. <https://www.pca-stream.com/en/explore/beyond-language/>

- , "Further Thoughts on Sylvan Thinking." *Hau: Journal of Ethnographic Theory* 4, no. 2 (2014): 275–288.
- , *How Forests Think: Toward an Anthropology Beyond the Human*. Berkeley: University of California Press, 2013.
- Kluge, Alexander et al. *Pluriverse*. Translated by Rebecca van Dyck, Nathaniel McBride. Leipzig, Germany: Spector Books, 2017.
- Latour, Bruno. *An Inquiry into Modes of Existence: An Anthropology of the Moderns*. Translated by Catherine Porter. Cambridge, MA: Harvard University Press, 2013.
- , "Le futur a-t-il de l'avenir ?" Lecture given at Sciences Po Executive Education Paris, December 12, 2013, video 16:30. <https://www.sciencespo.fr/executive-education/video-bruno-latour>.
- , *Down to Earth: Politics in the New Climatic Regime*. Translated by Catherine Porter. Cambridge, UK, Medford, MA: Polity Press, 2018.
- Lerner, Ben. "No Art | Poetry, Fiction, Criticism, Fiction, Poetry." Interview by Foyles, UK. November 1, 2016, video, 7:48. <https://www.youtube.com/watch?v=8PGkC6e855Q>.
- Librandi-Rocha, Marília. "Becoming Natives of Literature: Towards an Ontology of the Mimetic Game (Lévi-Strauss, Costa Lima, Viveiros de Castro, and the Nambikwara Art Lesson)." *Culture, Theory and Critique* 54, no. 2 (2013): 166–182.
- , "A Multiplicity of Holes." Lecture given at ICI Berlin, March 24, 2022, video, 55:29. <https://www.ici-berlin.org/events/a-multiplicity-of-holes/>.
- , *Writing by Ear: Clarice Lispector and the Aural Novel*. Toronto: University of Toronto Press, 2018.
- Marlon, Jennifer et al. "Yale Climate Opinion Maps 2021." Yale Program on Climate Change Communication. February 23, 2022. <https://climatecommunication.yale.edu/visualizations-data/ycom-us/>.
- McAulay, Scott. "Architecture Schools Need to Reform their Teaching to Combat Climate Change," *Architect's Journal*, July 31, 2020, <https://www.architectsjournal.co.uk/news/opinion/architecture-schools-need-to-reform-their-teaching-to-combat-climate-change>.
- Mercier, Thomas Clément. "Uses of 'the Pluriverse': Cosmos, Interrupted – or the Others of Humanities." *Ostium* 5, no. 2 (2019). <https://ostium.sk/language/sk/uses-of-the-pluriverse-cosmos-interrupted-or-the-others-of-humanities/>.
- Moe, Aaron. "Toward Zoopoetics: Rethinking Whitman's 'Original Energy'." *Walt Whitman Quarterly Review* 31, no. 1 (2013): 1-17.
- Natural Building Lab, Technical University Berlin, Germany. "Prototyping the Post-Fossil City." Summer 2019. <https://www.nbl.berlin/projects/prototyping-the-post-fossil-city/>.
- Newman, Saul. "Ontological Anarchism." Chap. in "Postanarchism" in *The Palgrave Handbook of Anarchism*, edited by Carl Levy and Matthew S. Adams, 301f. Cham, Switzerland: Palgrave Macmillan, 2019.
- Reed, Brian. "Poetics, Western." In *The Princeton Encyclopedia of Poetry and Poetics*, 4th ed., edited by Roland Greene et al., 1058-64. Princeton: Princeton University Press, 2012.
- Seymour, Nicole and Briggetta Pierrot. "Contemporary Cli-Fi and Indigenous Futurisms." *Departures in Critical Qualitative Research* 9, no. 4 (2020): 92–113.
- School of Architecture and Planning, Massachusetts Institute of Technology, MA. "School of Architecture and Planning Creates Climate Action Plan." January 26, 2021. <https://news.mit.edu/2021/school-architecture-and-planning-creates-climate-action-plan-0126>.
- Temple Hoyne Buell Center for the Study of American Architecture, Columbia University, New York, NY. "Course Development Prize in Architecture, Climate Change, and Society." <https://power.buellcenter.columbia.edu/initiatives/course-development-prize-architecture-climate-change-and-society>.
- Turner, Nicholas. "Heat Wave Gives Washington Residents a Wake-up Call." *Seattle Times*, July 29, 2022, A 1.
- Viveiros de Castro, Eduardo. *Cannibal Metaphysics*. Minneapolis: University of Minnesota Press, 2014.
- , "Cosmological Deixis and Amerindian Perspectivism." *The Journal of the Royal Anthropological Institute* 4, no. 3 (1998): 469–88.
- , "Exchanging Perspectives." *Common Knowledge (New York, N.Y.)* 25, no. 1–3 (2019): 21–42.
- , "On Models and Examples." *Current Anthropology* 60, suppl. 20 (2019): 296–308