How to Deal with Cosmoecological Perplexities: Artscience, Critical Zones, Pluriversal Politics

CASPER BRUUN JENSEN
HONORARY FELLOW
INSTITUTE FOR SCIENCE AND SOCIETY
NOTTINGHAM UNIVERSITY
UNITED KINGDOM

Abstract

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Introduction
In 2020, I got hold of the slim Artscience (2021) by the Malaysian physicist turned writer and speculative designer Clarissa Lee. Subtitled A Curious Education, the unusual format brings together reflections on the relations between science and magic, industrial innovations and indigenous inventions, monsters and mediations, and much else, around several exercises and micro-games that might be played for fun with friends, or in school, as part of an experimentalized education. Artscience is exhibited as a practice that does not so much bring together as thoroughly entangle and mash-up art, design, and science in defamiliarizing, speculative scenarios. After one and a half years with Covid-19 effects so bad they occasionally made the previous prime time horrors of the Amazon and Australian fires seem like distant memories, it was a curiously refreshing read.

Why, you might ask, should this matter. When glaciers are melting, heatwaves scorch, species die, viruses propagate, and planetary boundaries are breached left and right, isn’t “a curious education” mere escapism for the privileged? Don’t we need something more hard-hitting? These are not stupid questions, especially given the recklessness and violence with which business as usual continues, while so many (humans and others) suffer.
But *Artscience* is vitalizing not anesthetizing. Rather than drowning out the horror show, or painting reality in a falsely flattering light, it has a multiplying effect. Rather than promoting a general, alternative model, it creates openings for getting differently involved in plural realities. It showcases possibilities of an ongoing *living laboratory*, which can be scaled to different problem topologies. All in all, then, it is quite a singular little book. That is not to say, of course, that it is altogether unique in creating vantage points for tackling planetary problems. To add a bit more cosmo-diversity, let me throw a few more into the mix and stir.

Around the same time, *Pluriversal Politics: The Real and the Possible* was published by the US-based Columbian anthropologist Arturo Escobar (2020). *Pluriversal Politics* adds another dimension to Escobar’s long-running search for alternatives to “development.” It engages with diverse inspirations and interlocutors, from political ontology and design to black feminist theory and indigenous social movements. And next to that, let me place the grand catalogue *Critical Zones: The Science and Politics of Landing on Earth* (Latour and Weibel 2020), edited by the Austrian artist and media scholar Peter Weibel and French theorist—at-large Bruno Latour, which puts research in diverse environmental and geo-sciences into conversation with media philosophy and literature, conceptual art, the history of science, and many other things.

It would be going too far to say the bases are covered—depending on tastes and inclinations it will not be difficult to put together a library of different but resonant texts—but at least this little set originates in different places (Latin America, South–east Asia, Europe), disciplinary orientations, agendas, and topics. Each book raises important questions about how to collectively imagine and pragmatically construct sustainable worlds for a multiplicity of *more-than-human beings* that have very different requirements in order to thrive.

Crucially, those questions are raised in some quite distinctive cosmopolitical (*sensu* Stengers 2005; Jensen 2022), and as I emphasize here *cosmoeccological* (*sensu* Despret and Meuret 2016; cf. Jensen and Morita 2020) keys. The issues are certainly ecological, but in a vastly expanded and transmogrified sense. A bit like the weird Area X that continuously encroaches in Jeff Vandermeer’s (2014) mind-blowing *Southern Reach Trilogy*, we are at no point quite sure what ecology covers, who are the inhabitants, and how they are related (see also Sangkhamanee and Jensen 2022). Which is exactly why these truly important questions pertain to what the *cosmos* consists of. Which kinds of worlds are we actually, currently inhabiting? Which ways of being affected and affecting are being destroyed by how we live at this very moment? How can we think about it? How might doing that make us act?

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1 In practice, the making of such a nice library depends on many circumstances and infrastructures. On [www.amazon.com](http://www.amazon.com), for example, readers can purchase *Pluriversal Politics and Critical Zones* but not *Artscience*. Readers will have to look elsewhere online. (Where I live, you can’t easily buy either, and there are no public libraries). These are also facets of pluriversal politics across uncommon worlds.
The set is distinguished by what could be called an *acritical* disposition. But this has nothing to do with the bogeyman (always spectrally hovering around Latour) of being quietist, uncritical, or anti–critical. One way of thinking about it is in terms of the realization that new repertoires of thought and action are needed because the targets of critique have become too slippery and are dispersing in too many directions. Another is that with the definite loss of the god’s eye view, critical capacities are relativized, lateralized, and redistributed across the entire (cosmo)ecology of practices (*Blok and Jensen 2020*).

Meanwhile, there is no denying that the only planet we have is an increasingly critical, volatile, and unpredictable state. An older sense of critique as a matter of making distinctions in contexts of crisis and threshold situations in order “to stave off catastrophe” (*Brown 2005*, 20) is gaining in relevance. To navigate our threatened, threatening world, it *therefore* seems more important than ever to seek out new alliances and sophisticated conjunctions. There is an urgent need to come up with new propositions—speculative, conceptual, pragmatic, and political—for dealing with cosmoecological perplexities. And so, we are in the end also not that far from the outlook of *Pluriversal Politics*. At least, we are not on an entirely different planet.

What is exciting about these books conceived as a set is that they collectively encourage us to rethink the *terms of engagement*. Clearly, this entails leaving behind compartmentalized theories that weaponize knowledge and thrive on suppressing differences. But while that’s very important it is just the starting point. What I referred to as *refreshing* is how each of the books *divergently nourish* uncommon conjunctions and pragmatic speculations about the earth and its heterogeneous inhabitants.

*Artscience* consists of seven short chapters around which are wrapped a prologue, a discussion of thinking with diagrams, and “an artscience manifesto for an ever–moving present” (*Lee 2021*). The prologue puts in connection the divergent meanings of eclipses in Asiatic folklore and modern astronomy and depicts both actual laboratories set up in the Malaysian archipelago and missed encounters between Einstein, who visited Singapore in 1922, and indigenous “citizen scientists.” *Lee* refers to the pursuit of narrow disciplinary specializations that rely on static dichotomies (art and science, nature and culture) as a “grave mistake” (*ibid., 9*). It leads to the creation of “minds in a groove” (*Whitehead 1926, 196–7*): citizens, artists, politicians, or scientists that are only able to think the same kind of thing over and over. But the book is less critical than open–ended and fascinated. Its real aim is to move minds *out of their grooves*. In this vein, rather than merely bringing the arts and sciences together, while leaving both essentially intact, the aspiration is to give “birth to a chimera that bears no resemblance to either parent” (*Lee 2021, xviii*). It is a matter of providing artscience with a room of its own and exploring what it could look like. There are no fixed models, but many practices *could* provide inspiration, and Lee takes the reader on a tour of some possible forms. If diagrams play a central role, it is because of their lateral potentials: they can be rigorous, poetic, and speculative all at once. This means that diagrams are good for creating passageways between heterogeneous domains and generating transversal intelligence.

The experimental disposition is embedded in the recurrent usage of the expansive *could*. Not the narrow and skeptical “might,” and especially not the judgy “should.” A scientist, for example, “could use a diagram to
help herself or other people picture a stubbornly abstract and non-intuitive physical interaction” (Lee 2021, 4). Or, “we will consider how design fiction could be useful for participatory engagement in citizen science and design” (ibid., 85). Coulds create openings. They offer resistances to clear-cut answers and formulaic solutions. In their place, we get stimulations, illustrations, and exercises.

Chapter one moves from discussion of mirror neurons and the designs of beehives (“replicated iteratively through generations”) to neuroaesthetics and bio-arts en route to an exercise in how to brain-storm on artscience (ibid., 19). This could take you to the library to learn about a new scientific idea, the salient features of which could be used to creatively re-describe a mundane object as a preliminary storyboard. Chapter three connects the curiosity cabinets or Wunderkammers—where European aristocrats, merchants, and early scientists gathered assorted notable objects—with observations on natural history and its relations to theoretical biology, colonial science, and the capitalization of nature via the Malaysian archipelago. It ends with an exercise that encourages the building of your own Wunderkammer while reflecting on the relation between magic and reality. Elsewhere, one is asked to imagine a future version of the scientific subject and build a board-game around a Frankenstein creature (“basically a euphemism for creating a project that enters into unexplored/underexplored terrain” (ibid., 46)), to speculate with indigenous people conceived as artscientists, and to construct a fusion wayang kulit (puppet theatre play) with inspiration from Einsteinian relativity, Chinese time travel adventures, and the I Ching. Throughout, the reader is invited to embark on their own curious education, quite a fitting term for the adventure facilitated by replacing fixed boundaries between art/culture and science/nature with dynamic conjunctions and speculative experiments, which weave the ecology of practices.

Perhaps surprisingly, this locates the slim Artscience in the vicinity of Latour and Weibel’s (2020) massive Critical Zones, a term, which in the eco- and geo-sciences describes a novel transdisciplinary agenda focused on interacting processes in and on the thin, inhabitable layer of the planetary surface, the “skin of the earth.”

The polysemy of the keywords “zone” and “critical” is strikingly exhibited in contributions from paleobiology to infrastructure studies and landscape architecture to art history (ibid.). We are presented with a range of fascinating inquiries into what livability could entail on a rapidly climate-changing earth. But despite its heterogeneous specifications, the “zone” has one general, appealing effect: it scales down the somewhat bloated idea of the Anthropocene. Every time, it is a matter of exploring more-than-human flows and relations within a specific slice of existence: a watershed, an art installation, an asphalt road, a desert. And in each case, the zone must be inspected in terms of the heterogeneity of its population—from plants and bacteria to clouds and soils—all the diverse elements that tend to be relegated to invisibility when “the human” holds center stage.

If we take a step back, it is not implausible to use artscience as an anchor for making sense of this sensory overload. In its entirety, Critical Zones could be seen as a site of artscience experimentation, premised on moving laterally between the arts and natural sciences—but also the humanities and social sciences—the better to articulate the innumerable processes, events, thresholds, and transformations that occur in the planet’s skin.
The sheer diversity on display is something to behold. It is certainly chimeric. Over eight sections, we travel between Jan Zalasiewicz’s geological unpacking of the “Anthropocene square meter” and Anuradha Mathur and Dilip da Cunha’s exploration of the ubiquitous wetness of the Indian monsoon (sindhu). With Über as the prime example, Timothy Mitchell examines how “advanced” capitalism is economically formatted to eat our future, while Benedikte Zitouni describes the apparently successful environmental protection of Antwerp’s wetlands eco-systems as a sinister consequence of their integration in the international system of trade and production. At one point “the infinity of the Anthropocene” is depicted in a thousand names (Hallé and Milon), at another, “tidings from terrestrial tongues” is depicted as “glossolalia” (Korintenberg, Libeskind, Preusse, Rau). Olga Lukyanova experiments with visualizations that better resonate with holobionts (entities comprised of a host and their symbiotic microbes) by leaving realism behind. There are entries on extractivism and sedimentology, Jesuit geophysics and transhumanist eschatology. There is more.

Observare, we are reminded, means not only to observe but also to look after, take care of, and to esteem (ibid., 383). In the landscape, critical zone observatories strive to gather a mere “leopard skin of data separated by large spans of ignorance” (ibid., 9). This focus on patchiness and heterogeneity leads to a break with a cartographical view of the planet and any kind of ideological aspiration to global, political unity or unification. As Latour exclaims at one point, “It’s one thing to celebrate your roots and quite another to learn from botany!” (ibid., 7). What those who have forgotten must relearn to esteem is cosmo-diversity of many kinds.

Against this backdrop, the frequent guest appearances of Alexander von Humboldt are quite fitting. After all, he was the author of Cosmos: A Sketch of a Physical Description of the Universe (1849) at the very threshold where romantic and adventurous forms of natural history (on which he had embarked) gave way to distributed planetary knowledge infrastructures (that he helped inaugurate) (Morita 2017). (Humboldt is, indeed, at one point described as the hero (Latour and Weibel 2020, 325) of the catalogue. This could well be tongue-in-cheek; still, the curators evidently could not help themselves, they had to have one...). In any case, von Humboldt’s pride of place is of more than passing interest here, since his whole cosmos was formatted in accordance with a particular aesthetics shaped by trajectories of colonial science, as also evoked in Artscience. And this connection in one direction is complemented by one running in the other, since the editorial insistence that shaking the order of politics is also “shaking the cosmic order” (ibid., 3) (and vice versa) creates a cosmoecological pathway to Arturo Escobar’s Pluriversal Politics.

Because, in line with varied ontological turns in STS and anthropology (Jensen 2017a), that book explores the proposition “that realities are plural and always in the making, and that this has profound political consequences” (Escobar 2020, ix). It consists of a substantial preface, eight essays (ensayo) primarily dealing with Latin American contexts, and a conversation with the post-development pioneer Gustavo Esteva.

What the essays depict is nothing less than “a struggle over a new reality, which might be called the pluriverse” (ibid., xii). Aside from political ontology, this proposition and its accompanying concepts have varied sources of inspiration: as previously noted they include diverse social movements and forms of
indigenous practices, as well as decolonial and feminist formations. But just as critical zones could be seen as an artscience installation, pluriversal politics can also be viewed as a variation on critical zones as the earth’s living skin. For starters, Escobar evokes pensamiento de tierra (earth thought) as a way of rethinking the pluriverse.

Escobar’s gambit is to once and for all leave behind the flawed certainties of modernity and learn to sentipensar (think–feel) ontological transformations. Such rethinking is necessary because we now face “modern problems for which there are no longer modern solutions” (ibid., 69). The problems are modern, since it is colonial violence coupled with capitalist extraction, which has led to the current confluence of planetary and civilizational crises. And the solutions cannot be modern, since they will have to decouple from both of the aforementioned and from the fictive notion of infinite progress that has sustained destructive practices across the earth.

This involves a simultaneous labor of collective learning and unlearning. First, it is critically necessary to become “mindful of the multiple ways in which our actions depend on, and often reinforce, the metaphysical infrastructure of the current dominant systems” (Escobar 2020, xxxi). We must learn what we are presently living on the inside of, the more effectively to rid ourselves of “the ontologies of separation and a single real that shape our bodies and worlds.” In line with friends and colleagues Marisol de la Cadena and Mario Blaser (2018), the point is to become capable of seeing, and making oneself available to, possible ontological openings traversing a world of many worlds (see also Omura et al., 2019). In Escobar’s terminology it is a collective matter of reconstructing—the meaning of, and the relations between—the real and the possible. The search is thus on for not yet invented forms of amodern politics and practice premised on taking multiplicity on board and willing to experiment seriously with planetary, cosmoecological transitioning.

Along this trajectory, there are numerous encounters with black and Latina feminisms, Zapatista thought, indigenous cosmo–visions, and the relational ontologies of Columbian Afro–descendants. The struggles of the Nasa people of Northern Columbia to liberate Mother Earth are recuperated as a principle for political and design action. One chapter puts sentipensar with the earth into conversation with Boaventura Sousa de Santos’ epistemologies of the south, while another presents a speculative vision for a cutting-edge transition of the Columbian Pacific Coast region to sustainable models of life. “Beyond ‘Regional’ Development” experiments with an ontological design perspective in support of socio–natural reconfigurations.

It is quite possible that Escobar would resist to my characterization, a few paragraphs back, of this endeavor as a variation on critical zone research. I doubt the objection would be based on a sense of pluriversal politics having being slighted and belittled, as if it was merely the poor cousin of critical zones. In any case that would be a misunderstanding: the reduction of one set of thoughts to another has very little to do with the new alliances I am after. But Escobar would probably still insist that there is a crucial difference between sentipensar and any Western environmentalism or form ecological thought, critical zones included. Because rather than objectifying socio–ecological processes within the scientific system, the former presupposes the recognition of those who inhabit a territory of an “indissoluble connection with the Earth and with all living
beings” (Escobar 2020, 34) regardless of whether those connections are acceptable to “rational thought.” From one angle, this provincializes the separation of nature and culture as a peculiarly Western obsession. From another, it dramatically expands on the cosmoecological bestiary, which is now able to accommodate earth-beings (de la Cadena 2015) and many other esteemed elements and entities.

Still, the capacious pluriversal recognition of multiple forms of existence—crucial to cosmoecology—does not have as a prerequisite any exclusion in reverse (which would leave in the cold all those scientists and other concerned people that happened to grow up as nature–culture dualists). It is more fruitful to think in terms of more–or–less negotiable contrasts and variations than by fixed oppositions that shut down any possibility of new alliances. And especially since critical zone research specifically would like to take the living skin of the earth, all its inhabitants and processes, as its matter of concern.

Certainly, Escobar’s (2020, x) call to “imagine possibility differently” resonates across the whole spectrum. And given that pluriversal politics is given speculative and pragmatic life in discussions that move laterally between indigenous practice and struggle, social theory, myths, stories, and arts, the term also captures important aspects of what is at stake with Clarissa Lee’s curious education. Cosmoecologically speaking, we have then come full circle.

Critical zones as artscience. Pluriversal politics as critical zones. Artscience as pluriversal politics.

What does it mean to say that each could be a possible variation of the others? It certainly does not mean that they all are part of, or reducible to, the same thing. Nor does it imply or establish any hierarchy. As Gilles Deleuze and Félix Guattari (1987), Isabelle Stengers (2010), and Barbara Herrnstein Smith (2018) have never stopped insisting it is up to each practice to create its own event and adventures, its own problems and modes of response. It follows that no practice can function as the abstract model for any other, just as concepts cannot be copied at leisure (Jensen 2018).

This has many different implications, but here I pause only to remark on the theorist, whose role is no more the prophetic one of dazzling the masses than it is to propagate theoretical terms (intersecting identities, hyper– or withdrawn objects, neoliberal, intra–action, more–than–human…) for general deployment across the board. The principal problem with such concepts (selected at leisure, they could obviously be quite different) is neither that they are ill-conceived or that they presuppose or entail dubious motives or bad politics. It is rather that, in the uptake, these terms have proven so useful and powerful, so easily extendable to each and every setting, that they presently carry a high risk of inducing blindness to many other transformations—of thinking, feeling and acting—brought about by the very people the theorist set out to theorize. Cosmoecology places the theorist in the landscape among those many, many others in pursuit of enhanced forms of collective intelligence.

With reference to the set of books that have held my attention here, this could entail cultivating awareness of their potential to mutually complicate and enrich the others. It could be a matter of drawing attention to their gaps, crevices, and particular curiosities, not with a view to denouncing them but to enrich and enlarge them. From one side, artscience eggs on critical zones to yet more chimerical explorations, while from the
other the pluriverse pushes for more cosmoecological—and less Euro-centric—open-endedness. Critical zones suggest that the pluriversal dichotomy between Western reductions and the expansive plains of earth-thought could be overdrawn—too dichotomizing in its own way—while artscience pushes for deeper engagement in ontological redesign. At the same time, artscience could well be inspired to engage more seriously with thought collectives beyond art and science—something to which Lee indeed also aspires in other work—and it could also learn from critical zones how to expand its cosmoecological scope.

Of course, none of this is a neutral description. It is, rather, a deliberate performative redescription, aimed at potentializing certain conjunctions, variations, or trajectories in the ecology of practices. But I don’t think any of these characterizations are entirely figments of my imagination. They have certainly been inspired by all of the books.

I would go further and claim that the propositions formulated above have also been encouraged and enlivened by the micro-worlds so variably and curiously explored in the books. Each offers a suggestive scale-model of what collective experimentation, learning, and intelligence could look like elsewhere, given careful and attentive translation. Together, they shape an image of an unfenced uncommons (Blaser and de la Cadena 2017; Jensen 2017b) open to surprising alliances, thriving on multiplicity, and firmly oriented to less murderous and suicidal cosmoecologies.

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Author Biography
Casper Bruun Jensen is an anthropologist of science and technology currently residing in Phnom Penh, Cambodia. He is the author of Ontologies for Developing Things (Sense 2010) and Monitoring Movements in Development Aid (with Brit Ross Winthereik) (MIT 2013) and the editor of Deleuzian Intersections: Science, Technology, Anthropology with Kjetil Rødje (Berghahn 2009) and Infrastructures and Social Complexity with Penny Harvey and Atsuro Morita (Routledge 2016). His work focuses on climate, environments, infrastructures, and speculative and practical ontologies.

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