

Post-Apocalyptic Amazement: Aesthetics and Historical Consciousness in the Natural Contract

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Abstract:

The intention of my essay is to introduce the concept of "natural-history" (Naturgeschichte) to foster dialogue on the role of art, aesthetics, and historiography in speculative materialism and the wider debates around the Anthropocene. I will present my argument in four steps: The first will be a brief reconstruction of the natural contract as conceived by Michel Serres in Le Contrat naturel (1990). Since in his essay Serres largely dispenses with an aesthetics, in my second step I will argue that at the same time the utopian model of the new, human-built environment, Biosphere 2 (1991) manifested exactly an aesthetics as suggested in legal-theoretical terms by Serres. In the third step, using the example of three films by Ben Rivers, one of which is specifically about Biosphere 2, I will show that the potential of utopian ideals is preserved in their realization only insofar as it is documented in images of transience that may be identified as allegorical representations. This implies a critique of the concept of utopia. In a fourth step, I will therefore show that the natural contract's utopian body of ideas and the manifestation of the utopian concept in Biosphere 2 can be viewed from a historical-philosophical perspective, with reference to the allegorical representation of the film, as the fate of all nature in which history inscribes itself. To that end, Benjamin's formulation of "fallen nature" [gefallene Natur] will need to be differentiated here. This selective counter-reading of Serres against Benjamin and the films of Ben Rivers ultimately aims at the restitution of a historical-philosophical argument to the status of art in the natural contract or—in a broader sense—in the Anthropocene; more precisely, it also pursues the conception of an aesthetics of amazement in post-apocalyptic narrative time.

Keywords: natural contract, natural-history, Naturgeschichte, amazement, Biosphere II

How can we imagine a moment of amazement without placing it in correlation with the existence of human consciousness? This question—which I think is new in the history of the concept—has been raised in the last decade, at least indirectly, in the debates around the Anthropocene and the founding of speculative materialism. It arose indirectly since within these particular discourses two other problems or lines of inquiry stand primarily at the foreground: for one—in epistemological terms—the problem of the facticity of scientific knowledge in the absence of a contemporaneously existing human consciousness; and for another—in psychological terms—the question concerning the traumatic effects manifested in this consciousness in the face of the certain knowledge that something came before it and that it will end. In this sense, as we know, the Anthropocene does not just signify the emergence of humans as an influencing factor on the planetary scale; equally, as a geo-chronological category, it also demarcates the boundedness of the epoch that lies before the existence and after the extinction of human life. But the question of amazement also remains indirect in so far as it reveals itself to be a question bound to the human. Most assertions we encounter about amazement are ultimately based on the manifestation of certain phenomena in the interstices between nature and culture. For me, the question of an aesthetics of amazement—which, given the formulation of the issues by the discourse of the Anthopocene and speculative materialism, I would call an aesthetics of "post-apocalyptic amazement"—therefore arises, as it were, in the projection of a concept of amazement that subtracts the human being speculatively from his or her own experience.

If, in this sense, we transpose the basic argumentation regarding factuality in Quentin Meillassoux's *Après la finitude*¹ onto the ontological structure of art, as it was most prominently elaborated undoubtedly by Heidegger in his work of art essay, the conflict between Earth and World is at first preserved, to the extent that for Meillassoux as well, it is in the speculation of art that its possibility for truth unfolds, or better said: is embedded into the speculation of the work as a heretofore factual

¹ Quentin Meillassoux, Après la finitude. Essai sur la nécessité de la contingence, foreword by Alain Badiou (Paris: Seuil, 2006).

novelty. But Meillassoux and the speculative materialism based on his thought propagate a new conception of nature and matter against Heidegger and, more generally, against modernity. Although Schelling and Deleuze certainly remain points of departure, in *Après la finitude* we see a completely different radicality, with which the necessary contingency of the laws of nature are conceived in rejection of the constitutive significance of the proposition of reason.²

The Earth—according to Heidegger, the nature or matter (φύσις [physis]) uncovered and produced in the work of art—would on Meillasoux's account still be the material substrate, but the World that reveals itself in the art work would no longer be the horizon for the origin and future of a Dasein grounded there, developed through the history of being and understood transcendentally, but is rather the cosmological utopia of the general possibility of a "Fortsein" removed from any earthly roots. When the Earth—as hyletic material or the materiality of art—no longer provides any orientation but is instead subject to the absolute contingency of the laws of nature, then the world of the work of art can also no longer be described as "erected" in Heidegger's sense. What remains possible, however, is the speculation on matter, or the speculative stance of art—its projection toward or even from the future, or more concretely: its conception of utopian scenarios.

In what follows, I will attempt to show that in this sense, utopias in conception can do without finitude and without the correlationism rejected by Meillassoux, but in the transition to form, to a work, an event, or even, with regard to the history of ideas, in their form as thoughts, they remain bound to *History*. The conception of a utopia will thus not only never be able to realise its *own* world, but in the sense of the *futur antérieur* it will only have ever conceived of a world—the one of *its own history*. That in this way the idea of the world as a secure horizon of being no longer exists is

² See also Quentin Meillassoux, "Spéculation et contingence," in L'héritage de la raison. Hommage à Bernard Bourgeois, ed. Emmanuel Cattin and Jean-Pierre Zarader (Paris: Ellipses, 2007). Proximate arguments that simultaneously put more emphasis on continuity with Schelling's and Deleuze's natural philosophy are made in Iain Hamilton Grant, Philosophies of Nature after Schelling (London: Bloomsbury, 2006). Several problems of a possible aesthetics of speculative realism are addressed in the contributions ed. Baylee Brits, Prudence Gibson, and Amy Ireland, Aesthetics After Finitude (Melbourne: Re.Press, 2016).

particularly evident, to my mind, in the historical-philosophical perspective on the classical idea of amazement (θαυμάζειν [thaumazein]). In his theses On the Concept of History Walter Benjamin spoke, in this sense, of a state of "knowledge" in which a previous "philosophical amazement" is no longer tenable.³

According to Benjamin, this amazement had since the time of the Greek polis been experienced within a politically delimited world that was not—or only just temporarily—on the verge of falling apart. If it did fall apart—temporarily—as it did in the course of history, for instance in 1755 during the earthquake in Lisbon, such an "extraordinary world event" would be interpreted "only" as a catastrophe, and consequently as an exception in world history, even if such an occurrence may certainly provoke new metaphysical reflections. With the economic and ecological crises of the 20th century, and above all the beginning of the 21st, the state of exception has however been experienced increasingly more as the rule, which encompasses the entire planet and with it all humanity. The catastrophe is no longer simply a one-time, extraordinary world event precipitated by anonymous nature of the kind Goethe could still talk about. It is rather a permanent condition for which humanity is itself at least partially responsible. According to Jean-Luc Nancy, we thus find ourselves in an era that is continually aware of an "equivalence of catastrophes léquivalence des catastrophes".6

^{3 &}quot;The current amazement that the things we are experiencing are 'still' possible in the twentieth century is not philosophical. This amazement is not the beginning of knowledge—unless it is the knowledge that the view of history which gives rise to it is untenable." Walter Benjamin, "Theses on the Philosophy of History" in Walter Benjamin, *Illuminations. Essays and Reflections*, ed. Hannah Arendt and trans. Harry Zohn (New York: Schocken, 1968), 257.

⁴ Johann Wolfgang von Goethe, Aus meinem Leben. Dichtung und Wahrheit, Poetische Werke, vol. 8, Autobiographische Schriften, Part 1, ed. Liselotte Lohrer (Stuttgart: Cotta, 1950), 38.

⁵ For example, following Susan Neiman's thesis that "the rising expectations that the social and the natural worlds would be equally transparent [...] made Lisbon the shock it wouldn't have been without them." Susan Neiman, Evil in Modern Thought. An Alternative History of Philosophy (Princeton: Princeton University Press, 2015), 247.

⁶ Jean-Luc Nancy, L'Équivalence des catastrophes (Après Fukushima) (Paris: Galilée, 2012).

When catastrophe itself becomes the rule, however, its meaning is reversed. Thus, in his 1990 Contrat naturel Michel Serres already writes no longer from an apocalyptic perspective, but rather more from an anastrophic one, projecting an anticipatory retrospective view onto a world and a time in which future subjects will have found themselves. His resolutely legal-philosophical essay goes decidedly beyond the issues of ethical responsibility formulated some years previously by Hans Jonas. In contrast to Jonas, for Serres the subjects of a community and environment no longer operate morally solely under the "ecological imperative" that is oriented on and departs from Kant, but rather under a new contractual situation beyond the negotiating table and the courtroom. 10

In the open air, the forces and entities of nature in the midst of change—the lakes and rivers, forests and deserts, wind and rain, flora and fauna, as well as the metropolises and mega-cities—must for Serres be recognized as new, equally vested partners of a living and life-giving planet named "Biogea." ¹¹

After this condensed overture, which deliberately aims to only indicate the complex and novel issues of "post-apocalyptic amazement" and its aesthetics in the

⁷ On this point, see Maurice Blanchot, L'Écriture du désastre (Paris, 1980).

⁸ Michel Serres, *Le Contrat naturel* (Paris: Flammarion, 1990). Subsequent references will be indicated with the abbreviation NC. Quotations are taken from the English edition: Michel Serres, *The Natural Contract*, trans. Elizabeth MacArthur and William Paulson (Ann Arbor: The University of Michigan Press, 1995).

^{9 &}quot;Le Contrat naturel traite de philosophie du droit." Michel Serres, Retour au Contrat naturel (Paris, 2000), 7.

10 Jonas' essay on the ethics of responsibility continues to share its anthropocentric disposition with Kant. At stake is not a contract with nature, but an ethics for and in the image of the "good man." Jonas' chief objection against Kant lies in a new assessment of the relationship between mankind and technology. In accordance with his transposition of the categorical imperative into an ecological one: "'Act so that the effects of your action compatible with the permanence of genuine human life'; or expressed negatively: 'Act so that the effects of your action are not destructive of the future possibility of such life'; or simply: 'Do not compromise the conditions for an indefinite continuation of humanity on earth'; or, again, turned positive: 'In your present choices, include the future wholeness of Man among the objects of your will.'" See Hans Jonas, The Imperative of Responsibility. In Search of an Ethics for the Technological Age, trans. with the collaboration of David Herr (Chicago: University of Chicago Press, 1984), 11.

¹¹ Michel Serres, *Biogée* (Brest/Paris: Le Pommier, 2010). For an elaboration of this perspective see Emanuele Coccia, *La vie des plantes. Une métaphysiques du mélanges* (Paris: Bibliothèque Rivages, 2016).

Anthropocene, in what follows I will try to develop my argument clearer alongside four steps: The first will be the reconstruction of the natural contract as conceived by Michel Serres in Le Contrat naturel (1990) (I.). Since in his essay Serres largely dispenses with an aesthetics of the natural contract, in my second step I will argue that at the same time the utopian model of a new, human-built environment, Biosphere 2 (1991) manifested exactly an aesthetics as suggested in legal-theoretical terms in the Contrat naturel (II). In the third step, using the example of three films by Ben Rivers, one of which is specifically about Biosphere 2, I will show that the potential of utopian ideals is preserved in their realization only insofar as it is documented in images of decay or transience that, in their enhanced artistic form, may be identified as allegorical representations. This implies a critique of the concept of utopia. If it really were the case, namely, that utopias can never actually be achieved, then in a temporal sense, strictly speaking they have no history. If the utopia were actually to be attained or fulfilled, then an end would also be reached that would itself stand outside historical time—analogous to the conventional understanding of the ultimate apocalypse. An objection to the concept, however, is provided here by the narrative possibility of the post-apocalypic, which speculates in the form of a story about a time 'after' or 'beyond' the final catastrophe. Unlike the theological perspective, or rather, because from the traditional perspective the narrative appears to be missing, a new space of the possibility of post-apocalypse arises. Through the adaptation of theological texts, but moreover also in the invention of new narratives, it is thus absolutely possible to portray post-apocalyptic scenarios cinematographically or in literature.

It is particularly the 'logic' of the moving image that fills the void with its own materiality and technology in the absence of a post-apocalyptic narrative (III.). Fourth, the natural contract's utopian body of ideas and the manifestation of the utopian concept in *Biosphere 2* will thus be viewed from a historical-philosophical perspective, with reference to the allegorical representation of the film, as the fate of all nature in which history inscribes itself. To that end, Benjamin's formulation of

"gefallene Natur" [fallen nature]—the visual representation of which is the ruin and the formal purpose of which is allegory—will need to be differentiated here. This selective counter-reading of Serres against Benjamin and the films of Ben Rivers ultimately aims at the restitution of a historical-philosophical argument to the status of art in the natural contract; more precisely, it pursues the conception of an aesthetics of amazement in post-apocalyptic narrative time (IV.).

I.

Michel Serres' Contrat natural opens with an allegorical unpacking of Francisco de Goya's Duelo a garrotazos [Fig. 1]. The picture—part of the "Pinturas negras" cycle, which was painted between 1820 and 1823 on the walls of the Quinta del Sordo and has been in the collection of the Museo del Prado since the 1880s—depicts a duel between two men armed with sticks in the foreground of an anonymous landscape, under a clouded sky. Due to their struggle, the men are sinking ever deeper into the morass. The sky seems to darken, no ground seems to support them.



Fig. 1: Francisco Goya, Fight to the Death with Clubs, 1820-1823, mixed media on mural transferred to canvas, 123 x 266 cm, Madrid, Prado.

Serres is fascinated in this painting by the fact that the two protagonists obviously pay no attention to the independent existence of their environment. Given the convincing comparison that Ronald Paulson has drawn with William Hogarth's

¹² Walter Benjamin, Ursprung des deutschen Trauerspiels [1928] (Frankfurt a. M.: Suhrkamp, 1978), 158.

Election 4 (1758) [Fig. 2], it is particularly striking how Goya reduces the surrounding townscape, which still characterizes the representation in Hogarth's prints and paintings, to an apocalyptic landscape emptied of human presence. The only thing that still remains of the life of society is the battle between the two rivals. There are no witnesses to this rivalry within the image. The fight scene thus appears like a reduction of the essence of duelling. Moreover, in order to maintain control over their distance at such close bodily proximity, the duellists look each other directly in the eye. They blot out the nature that surrounds them. The apocalyptic landscape and the quicksand-like abyss that opens up beneath them isn't visible to them, although the coloration of the landscape in particular seems to pervade the forms of the fighters' bodies. The rivals, meanwhile, are focused only on their own combat. Winning this is the only thing that matters. The struggle against the forces of nature, the morass that threatens to swallow them, is something they can only lose. But even more grave is the fact that the two rivals are not even aware of nature. It is therefore, as Serres writes, "more than likely that the earth will swallow up the



Fig. 2: William Hogarth, Four prints of Election, Plate 4, 1757 or 1758, 403 x 540 cm.

¹³ On the comparison with Hogarth, see Ronald Paulson, *Representations of Revolution (1782–1820)* (New Haven/London: Yale University Press, 1983), 361, n. 61. Surprisingly, in this same note Paulson also cites René Girard's *La Violence et le Sacré* (1972)—a key work by the same author who would later bring Serres to Stanford and whom Serres, in turn, helped elect to the *Académie française*.

fighters before they [...] have had a chance to settle accounts" (NC 1).

Using this depiction of a fight as an example, Serres distinguishes between two scenes of violence: for one, the "historical war" (NC 2), in which the two duelists are allegorically involved, and for another, the "blind violence" (NC 2) that reigns in nature. Goya's painting thus figures for Serres as an allegory of the "theater of dialectics" (NC 11). "Dialectics" here alludes to the relationship between "master and slave" (NC 16) as elaborated by Hegel in the chapter about lordship and bondage in his Phenomenology of Spirit and transposed by Carl Schmitt to the theaters of war in the 20th century as the relationship from friend and foe. For Serres, this dialectic between master and slave, friend and foe is not just a key point in Hegel's Phenomenology of Spirit¹⁴ but moreover, in its significance, the central flaw of his critique of the social contract. The Contrat naturel comes to the conclusion that the Hegelian dialectic—at least, in the interperation that reduces it to conflictual social relationships¹⁵—does not suffice for a natural contract because it does not recognize and acknowledge the role of nature as a third "actor": "The dualists don't see that they're sinking into the muck, nor the warriors that they're drowning in the river, together. In its burning heat, history remains blind to nature." (NC 7). The "theater of dialectics" does not take into account on its stage that the floorboards can break, the actors can sink into the mud, or the entire house (οἶκος [oikos]) in which, in keeping with the theatrical metaphor, all the spectators sit as well, can collapse. That, however, according to Serres, is the point of departure that necessitates a new natural contract and a new ecology, because analogously to allegory as a rhetorical form, a

¹⁴ Here—although one could hardly count him among the ranks of the Left Hegelians—Serres stands in the tradition of French Hegel interpretation that goes back primarily to Jean Hyppolite. Hyppolite's Hegel interpretation had in its time significantly influenced Michel Foucault, which whom Serres had worked closely in the early 1960s in Clermont-Ferrand, Vincennes, Paris I. Cf. Jean Hyppolite, *Genèse et structure de la Phénoménologie de l'esprit de Hegel* (Paris: Aubier, 1946); ibid., *Etudes sur Marx et Hegel* (Paris: Rivière, 1955).

¹⁵ See here also Alexandre Kojève, Introduction à la lecture de Hegel. Leçons sur la phénoménologie de l'esprit, ed. Raymond Queneau (Paris: Gallimard, 1947). Unfortunately, Serres does not consider the dissertation by Alfred Schmidt, written under the supervision of Adorno and Horkheimer, and dedicated to the transformation of the concept of nature in Marx's late philosophy. Cf. Alfred Schmidt, Der Begriff der Natur in der Lehre von Marx (Frankfurt a. M.: Europäische Verlagsanstalt, 1971).

collapse of the house would bring the entire "theater of dialectics" to an end.

According to Serres, then, the historical war, or the "subjective war" (NC 10ff; 40) between the two duellists creates a dynamic horizontal within the structuralist square [\diamondsuit], which corresponds to the centripetal movement of the sticks in Goya's painting, and can perhaps best be conceived as a one-sided Mobius strip. This strip turns around an axis on the lower end of which is situated "the worldly world [le monde mondial] [...], the objective common enemy of the legal alliance between the de facto rivals" (NC 11, trans. corrected) and on the upper end of which the Earth as living environment threatens to collapse. Serres elaborates:

"The square turns, standing on one of its corners: such a rapid rotation that the rivals' diagonal, spectacularly visible, appears to become immobile, horizontal, invariant through the variations of history. The other diagonal of the gyroscope, forming a cross with the first one, becomes the axis of rotation, all the more immobile the faster the whole thing moves: a single objective violence, oriented more and more consistently toward the world. The axis rests and weighs on it. The more the subjective combat gains in means of destruction, the more the fury of the objective combat becomes unified and fixed." (NC 12)

In accordance with this diagnosis, Serres rejects not only the dialectic of master and slave (Hegel/Marx) but ultimately the Contrat social (Rousseau) as well, since, to put it briefly, the latter is based on war as "motor of history" (NC 11). Elsewhere, Serres offers the diagnosis that the major turning point in the modern age was the transition from the peasant life of the great majority of humanity to an industrial and urban environment, which led, among other things, to the paradox that we still want to feed ourselves almost exclusively with the products of the earth. Unlike Heidegger, however, Serres does not at all argue for the contemplation of the Dasein of "farm ontologies [ontologies agricoles]" (CN 17), but on the contrary for the acceptance of a Fortsein under the new conditions, for which a social contract could no longer be adequate on a planetary scale, but only a newly conceived natural contract would be

appropriate. Serres speaks of the "[...] necessity to revise and even re-sign the primitive social contract. This unites us for better and for worse, along the first diagonal, without the world. Now that we know how to join forces in the face of danger, we must envisage, along the other diagonal, a new pact to sign with the world: the natural contract." (NC 15).

From the art historical perspective, and with a view to an aesthetics of the natural contract, it may seem noteworthy that Serres introduces his reflections with a painting by Francisco de Goya, or later points out that only a false path estranged from the world could lead from the *Duelo a garrotazos* to a conception of life of the kind that Jean-François Millet still considered worthy of depiction in his painting *Angélus* (1857-59) [Fig. 3] (CN 37). But nowhere does Serres offer an aesthetic theory, much less an exemplification of art works that would be adequate for his world-inclusive natural contract or would actually correspond to an artistic experience. Given the legal-philosophical perspective that Serres obviously adopts, the view of art at first remains obstructed. But at the point where the thoughts of the natural contract manifest themselves as form and experiential space, if not earlier, the question of an aesthetics of amazement becomes critical.



Fig. 3: Jean François Millet, L'Angélus, 1857-1859, oil on canvas, 55,5 x 66 cm, Paris, Musée d'Orsay.

II.

In aesthetic terms, Serres' legal-philosophical conception of a new natural contract has a prominent counterpart—not least in its ambitions—in Biosphere 2, the research project conceived primarily by John P. Allen. Indebted in its architectural language to the geodesic designs of Richard Buckminster Fuller, Biosphere 2 was initiated in 1991 in Oracle, Arizona and for a short time tested the stability of an ecosystem independent of the Earth's biosphere. [Fig. 4]. The potential of Biosphere 2 at the start of the 1990s, however, turned out to be a source of amazement not so much for the scientific community but rather for the media public, and in particular for viewers in front of their television sets. The life of the eight inhabitants came into people's living rooms much like, a few years later, the "human zoo" would do on the TV show Big Brother, created by John de Mol and significantly influenced by Biosphere 2namely, as Reality TV. The reality of a second biosphere was consequently simulated, but this simulation was itself real. The ground on which a utopia such as Biosphere 2 could arise, beyond the conventional research projects of established US universities, had been prepared early on in particular by new conceptions of the world, such as Alexis Carrel's L'Homme, cet inconnu of 1955, as well as by science fiction and new age literature.



Fig. 4: Still from Ben Rivers, Urth (2016).

Now, how can the status of this utopia be assessed in retrospect, and what essential gain can be derived for an aesthetics of the natural contract from this perspective? One possible way of answering this question is, in my view, offered by *Urth*, a film by Ben Rivers, 16 which was produced as a filmic installation in 2016 at the invitation of the Renaissance Society of Chicago and documents the afterlife of *Biosphere 2*. In addition to the images, the voice-over narration is crucial for the reception of the film from the very start. The film opens with an epigraph read over abstract, nebulous fields of color, then blurred images of *Biosphere 2*, and finally, a flat grass-green monochrome. The quote is taken from Mary Shelley's apocalyptic novel, *The Last Man*, of 1826, 17 to which the dystopian voice-over narration of the rest of the film—written in the form of a diary by the science-fiction author and art theorist Mark von Schlegell—responds with appropriate contemporary references.

The amazement at the possibilities of a second, man-made biosphere is here transformed meta-reflexively into bewilderment at the imagination of this attempt. A genuine potential of "post-apocalyptic amazement" is thus manifest. After all, from a historical-philosophical point of view—just as the pre-modern world was increasingly threatened by the hazards of progress—there had to be a time

The title of the film may be understood—in the Derridean sense—as différance with respect to Earth and at the same time it plays on a reference to Norse mythology. On this point, see the comments made by Timothy Morton in an unpublished lecture, the manuscript of which Ben Rivers generously shared with me: "Urth is where we are. Urth is Earth, with a U. Urth is uncanny Earth. Urth is Earth with you in it. [...] It's a Norse myth: the Norns entwine it. One of them is called Urth. Urth means twisted. From urth we get the English word weird. Weird can mean strange of appearance, and weird can also mean fateful in an uncanny twisted way." Timothy Morton, "Lights, Camera, Stillness," unpublished lecture delivered at Anthropo/seen: Black Ecology, Utopia and Uncertain Futures, Forum of the Future, Porto, Portugal, November 10, 2017.

[&]quot;But the game is up! We must all die; not leave survivor nor heir to the wide inheritance of earth. We must all die! The species of man must perish; his frame of exquisite workmanship; the wondrous mechanism of his senses; the noble proportion of his godlike limbs; his mind, the throned king of these; must perish. Will the earth still keep her place among the planets; will she still journey with unmarked regularity round the sun; will the seasons change? the trees adorn themselves with leaves, and flowers shed their fragrance, in solitude? Will the mountains remain unmoved, and streams still keep a downward course towards the vast abyss; will the tides rise and fall, will beast pasture, birds fly, and fishes swim, and the winds fan universal nature; when man, the lord, possessor, perceiver, and recorder of all these things, has passed away as though he had never been? O, what mockery is this!" Mary Shelley, *The Last Man*, vol. 2 (London: Henry Colburn, 1826), 150.

in which futuristic visions of a new, human-constructed "survival world" (Überlebenswelt) could insert themselves between the dystopias of the Cold War and the utopias of modernist technophilia. In the place of futuristic visions, therefore, Rivers' Urth does not just display their decay. His film about the ruined remains of Biosphere 2 is much more a demonstration of the impossibility of a utopian conception when—as a "concrete utopia" tenters the realm of the fate of its manifestation, its past future.

The optimism inherent in the ideational utopia of Biosphere 2, and to a large extent, in Serres' legal-philosophical futurology as well, does not therefore turn completely into its opposite in Rivers' Urth. Rivers' later documentary film essay about the ruin of the utopia in Arizona is much more aligned with a pessimistic attitude in Benjamin's sense, though it is oriented to the idea of happiness in its plea for the profanation of the everyday lifeworld. For what end, after all, if not for an everyday lifeworld—here understood quite simply as an environment in which life is possible—would a natural contract or a new bio-sphere be designed? One can safely assume that here in this new living sphere, too, it is all about living a good life in pursuit of happiness. Rivers thus cinematically arranges what in Benjamin is called "pessimism," by allowing empathy with the necessity, legitimation, and boundedness, the before- and after-life of utopian forms, the dreams of their visionaries, and the autonomous life of their manifestations. It is less the case here that hope is awakened of an infinite future in a new biosphere—in the sense of a hypostatization of a biospherological correlate between human and living environment that is assumed to be constant—and more that the euphoria of utopian conceptions as 'human, all too human' is represented.

Hans Ulrich Obrist takes the term from Yona Friedman, in John P. Allen, Kathelin Gray, and Hans Ulrich Obrist, "The Search for a unique, non-repeatable experience," in *Mousse* 57 (2017), 75–83, here 77. The term "concrete utopia" is of course on its face improper, or an oxymoron, since *by definition* a utopia (non-place, from où- [ou] "non-" and $\tau \acute{o}\pi o\varsigma$ [topos], "place") cannot be "concrete." In so far as *Biosphere 2* is however an experimental design testing the possibility of an artificial biosphere that promised a second living environment independent of the Earth and for a certain time during the experiment was able to stabilize it, it makes concrete a place that, de facto, from the terrestrial perspective, does "not yet" exist. On the attempt to resolve the contradiction between utopia and concretization, see Michel Foucault, "Des espaces autres," (conférence au Cercle d'études architecturales, 14 mars 1967), in *Architecture, Mouvement, Continuité* 5 (1984), 46–49.

Rivers had already distanced himself from an immutable notion of utopia with regard to *A Spell to Ward Off the Darkness* (2013), his first collaboration with Ben Russell. He says in an interview that "the idea of utopia is ill-conceived, which is what Marx thought. If it's too dreamy, if you think you can create something which is lasting, then it's too idealistic and it's dangerous. [...] We started thinking about it as something temporary, like the idea of temporary autonomous zones [...]."¹⁹

Rivers' citation of "temporary autonomous zones" is a reference to a postulate proposed by Hakim Bey that attracted notice between anarchism and post-situationism, particularly in subcultures. Its philosophical foundations however are grounded in the Pauline conception of messianic time, which had gained relevance again around the turn of the 21st century. 20 What is crucial in eschatology, according to Paul, is not the end itself but rather—to follow Benjamin, Taubes, and Agamben—what remains in a time that has already begun to end; be it in the opening up to the present or in the katechontic delay of the approaching or threatening end.21 The process brings to light what I call "penultimate wonder": the amazement at phenomena that are characterized specifically by the fact that they become apparent only in the experience of a post-apocalyptic time. What is illuminating in this experience from a historical-philosophical perspective is that it was already possible in various other times in a comparable way. Rivers' two-minute short film, The Shape of Things (2016), first shown at the 2017 Triennale di Milano, allows a comparison in this regard between the demise of the self-contained classical culture of the Maya (3rd-9th centuries) and the present eschatology of the Anthropocene. The Shape of Things refers to the form of two Mayan clay sculptures, which Rivers filmed in the ethnographic collection of

¹⁹ Giovanni Marchini Camia, "Interview with Ben Rivers," in Annabel Brady-Brown and Giovanni Marchini Camia, eds., fireflies: Pedro Costa/Ben Rivers, 4 (2016), 57-63, here 61.

²⁰ See Hakim Bey, T.A.Z. *The Temporary Autonomous Zone. Ontological Anarchy, Poetic Terrorism* (Brooklyn: Autonomedia New Autonomy Series, 2003).

²¹ Between the two crucial possible interpretations of St. Paul—the consciousness of the time that remains, in which the present then opens up in the sense of *kairos* and life through the Messiah, or the katechontic power that puts off the end times—Bey, and with him Rivers too, falls on the side of the kairological reading. Compare the, in many respects complementary, interpretations of Paul by Agamben and Cacciari: Giorgio Agamben, *Il tempo che resta. Un commento alla Lettera ai Romani* (Turin: Bollati Boringhieri, 2000); Massimo Cacciari, *Il potere che frena. Saggi di teologia politica* (Milan: Adelphi, 2013).

the Harvard Arts Museum for the duration it takes to hear the reading of the poem At Tikal by William Bronk, recorded in the Woodberry Poetry Room of the Harvard Library in 1956 [Fig. 5]. The poem closes with a line that recognizes in the uniqueness of Mayan culture the finitude of the return of infinte utopias: "And oh, it is always a world and not the world."²²



Fig. 5: Still from Ben Rivers, The Shape of Things (2017)

Thus, in the experience of post-apocalyptic time, a notion of amazement returns that was, not insignificantly, conceived in conjunction with the work of art as an object that evokes finite worldliness from an infinite perspective; a perspective that is found in Heidegger's work of art essay, but also in Wittgenstein's remarks on aesthetics: "The work of art is the object seen *sub specie aeternitatis* [...]. The usual way of looking at things sees objects as it were from the midst of them, the view *sub specie aeternitatis* from outside." What is crucial, then, are the conditions under which the possibility of the existence of a world can be sustained. In Serres' words, what is crucial, ultimately, are "the conditions in which we are born—or ought to be reborn tomorrow." (NC 44)

²² William Bronk, "At Tikal," in *Life Supports. New and Collected Poems* (San Francisco: North Point Press, 1981), 39 [my emphasis].

²³ Ludwig Wittgenstein, notebook entry, October 7, 1916, in *Notebooks 1914-1916*, ed. G.H. von Wright and G.E.M. Anscombe, trans. G.E.M. Anscome (Oxford: Blackwell, 1961), 83e.

III.

So I propose to read Serres' futurology and Benjamin's philosophy of history in conjunction with each other; and with a view to another film by Ben Rivers: Slow Action—a 16 mm film in anamorphic widescreen from 200—opens with a sequence of grainy, horizontally cropped black and white photographs, which are reminiscent of the montage techniques in the films of Guy Debord, and especially of the opening of Artur Aristakisyan's *Palms*. Wide-eyed, frightened, suffering, exhausted, and at times contemplative gazes evoke on the whole a nameless presence that, though it makes an impression, returns in the course of the rest of the film only in the privative form of the traces of human existence. The structure of Slow Action is built on the idea of dividing the film into four chapters, each devoted to four different islands that form a new archipelago on Earth in the distant future after the sea level has risen. The four islands are: 1) Lanzarote ("Eleven"), one of the driest places on Earth; a desert island on which Rivers films primarily the gardens and almost formless buildings designed by César Manrique, as well as the volcanic landscapes; 2) Tuvala ("Hiva"), a Pacific archipelago made up of several tiny islands ("The Society Islands") on which the volume of plastic refuse from the consumer products imported from Fidji can barely be processed or concealed; 3) Gunkanjima ("Kanzennashima")—literally, battleship island—an actually abandoned island of ruins, on which in Slow Action the fictional madman Tadashi Harai lives; and 4) Somerset, Rivers' home region, where he grew up and which the film represents in the distant future as a fictional island separated from the British mainland.

In other words, in *Slow Action*, Rivers films the life forms of Serres' *Biogea*—deserts, seas, islands, coasts—in which, even in time lapse sequences, often nothing changes other than the light and the cloud formations. Domesticated animals—cats, donkeys, dogs, pigs, ducks, roosters and chickens—who may not have survived their irreversible domestication and connection to house and home, but certainly survived their overlords—are in a double sense witnesses to the master-slave dialectic rejected by Serres; to its former existence and its justified overcoming. After the "theater of dialectics" is gone, these animal scenes suggest that between master and slave

Hegel has forgotten nature, as Serres understands it—namely, as a third actor. The same also goes for the reduction of the human presence to a few children, which suggests that animals and children were both excluded from the history of the spirit and would not become active agents of the Anthropocene. In their innocence, lack of cares, and integration with their environment, they are not protagonists of world history. Of the adults on the ruined island of Gunkanjima, only Harai survives as a witness to such history. As a lone hermit who seems to have found his desert, Harai equally eludes the "theater of dialectics," although in his way of life and in his care for the ruins, he adheres to a humanistic ideal. Mark von Schlegell's narration constructs this pradox very precisely:

"The utopia is antihuman in the sense that Harai is its only inhabitant, but it is humanist in that it's in the human history of its architecture and physical development that Harai chases its ideal state." [Fig. 6]

Aside from these traces of animalistic, childlike, and isolated existence, astounding inanimate relics also repeatedly appear in the film and are lent a sculptural aura; not least because their function is seldom truly evident. The world we perceive—the abandoned landscapes, the ruined architecture, the objects left behind—is all bathed in an atmospheric light made possible by Rivers' analog cinematographic process, which together with the repetitive orchestration of the score in *Slow Action*, often reduced to high strings, produces an uncanny atmosphere [Fig. 7].²⁵

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²⁴ Ben Rivers, *Slow Action* (2001), with text by Mark von Schlegell. Harai thus follows the human traces in the ruins that—in contrast to Foucault's "visage de sable"—have not been eradicated or washed away by the ocean's waves. Timothy Morton, writing with reference to Meillassoux, had recognized that hidden in "Foucault's image of the sandy face is a metaphor for what some now call correlationism." Timothy Morton, "How I Learned to Stop Worrying and Love the Term Anthropocene," in *Cambridge Journal of Postcolonial Literary Inquiry* 1, 2 (2014), 257–264, here 258.

²⁵ Rivers adopts the film music by Wolfgang Zellers from Carl Theodor Dreyer's *Vampyr* (1932). David Bordwell describes it as Zellers' "eerie score." David Bordwell, *The Films of Carl-Theodor Dreyer* (Berkeley/ Los Angeles: University of California Press, 1981), 217.



Fig. 6: Ben Rivers, Slow Action.



Fig. 7: Ben Rivers, Slow Action.

Mounds of trash or rusted out shells of cars are reminiscent of the aesthetic presence of Arte Povera or the ultimately formalist trash aesthetic of someone like John Chamberlain, but crucially, in *Slow Action* they appear precisely *not* with the pretention of art works on display. In addition, Rivers uses the historicity of anachronistic projection techniques to produce geometric bodies that, in accord, with the soundtrack can be perceived to recall sci-fi genres. These cubes will return in *Urth*, as well, in the botanical interior of *Biosphere 2*—strangely and unexpectedly, as factual objets trouvés, which Rivers did not even have to stage, since they actually

existed in *Biosphere 2*. In the film, they often appear in the same kind of light as in *Slow Action*—overexposed, with a colored, mostly red or yellowish tinge [Fig. 8]. The cinematic alienation effects of these images stand in an analogous relationship to the contamination of nature, the toxic effect of which is often indifferent to its appearance. In *Slow Action*, the "idea of an island," as well as the perception of the deserts or coastlines, is therefore no longer possible in the sense of an "innocent landscape," but neither does it close itself off from the albeit broken beauty that, astonishingly, persists.



Fig. 8: Ben Rivers, Slow Action.

Rivers defines the concept of island in general as "a habitat, which is surrounded by a non-habitat." In its isolation, the island, like the ruin in a park, becomes an

²⁶ Ben Rivers presented his film in 2013 at the film festival *Doc's Kingdom - International Seminar on Documentary Film* on the Azores. It was shown under the title *Idea of an Island* and was introduced in the program as follows: "A program of utopian and dystopian visions of the world we live in: insulated places where the entire world is condensed, discovered territories where, as in a stratified rock, different ages and origins, solitary gestures and collective gestus, tensions between the visible and the invisible, word and image, interior and exterior, real and imaginary, memory and transformation are overlapping."

^{27 &}quot;It is no longer possible to contrast an innocent landscape with an alienated humanity. The landscape can no longer be so naïvely delimited. Hardly anyone with his wits about him can now wander through the landscape, bathe in the sea or ramble through field and forest without scenting the poisonous sewage in the seaweed and roots, the exhaust fumes in the wilting leaves, the lethal pesticides in the blossoms. The landscape is so saturated by the toxins of civilization that it has been forced out of its former role and into a new one: it no longer compensates for civilization, but raises it to a higher power." Martin Warnke, *Political Landscape. The Art History of Nature* (Cambridge, Mass.: Harvard University Press, 1995), 146.

²⁸ Ben Rivers in conversation with the author at Cafe OTO, London, January 2017.

allegory of disastrous nature. The desert too—far from being an idealised, innocent landscape—is much more an absolute metaphor and paradigm for desolation.²⁹ If in his chapters on the concept of beauty in *Contrat naturel* Serres is essentially laboring on a consciousness-raising critique of ecology, Rivers' cinematographic achievement may be understood, with Benjamin, as a form of "redemptive criticism," in so far as in his work the phenomena survive in order to preserve the experience of amazement over them. In the process, Rivers pursues the intent already expressed by Kant in relation to the concept of amazement, whereby a phenomenon remains astounding even after the experiencing subject becomes aware of the causal explanation of its origin, existence, and perhaps even its historical nullity.³⁰ This amazement, however, no longer engenders any terror. It is, namely, no longer the distanced experience that, since the Romantic aesthetics of the sublime, generates a yearning

On the "absolute metaphor" (Blumenberg) of the desert, I would like to point to two recent essays of mine: "Die Wüste als absolute Gegenmetapher der Quelle. Zur Metaphorologie der Nach- und Endzeit von Kunst und Geschichte," in Einfluss, Strömung, Quelle. Aquatische Metaphern in der Kunstgeschichte, ed. Ulrich Pfisterer and Christine Tauber (Bielefeld: transcript, 2018), 257-270; "Das vierte Höhlengleichnis. Zur politisch-theologischen Ökologie von Wüste und Bunker", in: Re: Bunker. Erinnerungskulturen, Analogien, Technoide Mentalitäten, ed. Katrin von Maltzahn and Mona Schieren (Berlin: Argobooks, 2019), 94-105. An important additional point of reference for Slow Action is Werner Herzog's Fata Morgana (1971) and the less known La Soufriére – Waiting for an Inevitable Disaster (1977). The parody of the sublime gets almost lost in Herzog's late Lessons of Darkness (1992) and some of his self-theorization, see especially Werner Herzog, "Vom Absoluten, dem Erhabenen und ekstatischer Wahrheit", in Werner Herzog. An den Grenzen, ed. Kristina Jaspers and Rüdiger Zill (Berlin: Bertz & Fischer, 2015), 165-174.

³⁰ Here, I am following the history of the concept traced by Hepburn, in particular in his commentary on Kant (the English word he uses is "wonder," rather than "amazement", but these concepts are of course closely related): "Although wonder itself has a questioning and questing aspect, it rests in its objects, once they are judged in some way worthy of wonder. [...] 'The halo in the grotto of Antiparos is merely the work of water percolating through strata of gypsum' [Kant, Critique of Judgment, Critique of Aesthetic Judgment, §58], but our aesthetic pleasure is not threatened by denying such 'objective finality'; for we can autonomously exercise our aesthetic judgment on the perceived forms of nature nevertheless. [...] a vivid blue ocean, a dazzling sheet of mountain-ice... They are phenomenally irreducible, even though causally explicable. The wonder is not vulnerable to the Baconian going 'behind the curtain.' For it is not the genesis of the phenomenon that elicits the wonder, but the phenomenon itself, color, sound, or combinations or impressions, There is no 'going behind' it." See Ronald W. Hepburn, "In Inaugural Address: Wonder," in Proceedings of the Aristotelian Society 54 (1980), 1-23. Hepburn's concept of wonder can also be substantiated in passages from Goethe and Wittgenstein. See Goethe's famous dictum, "Search nothing beyond the phenomena, they themselves are the theory" ("Man suche nur nichts hinter den Phänomenen; sie selbst sind die Lehre"), and the reception of it in Wittgenstein's Bemerkungen über die Farben. On Goethe and Wittgenstein, see Joachim Schulte, Chor und Gesetz (Frankfurt a. M.: Suhrkamp, 1990).

for the end in the imaginary contemplation of catastrophe,³¹ but rather the composed waiting after the apocalypse: in the narrative time of the post-apocalyptic.

In this regard, however, amazement can still be conceived—as it was first in the modernist period, especially in Samuel Beckett—only ex negativo: as the experience of being indeed astounded that despite all the atom bombs and world wars, the end as apocalypse does not arrive, and cannot even arrive in the form of such an experience. It is then not an amazement at the dread, horror, or unfathomability of an impending end, but rather the wonder at its penultimate beauty—"mutilated beauty" (la beauté mutilée) (NC 24), of which Serres also speaks in the natural contract; a beauty that is broken as well, just as humans in the Anthropocene are subject to more than the traumatising intuition of the end of their own species—and this no longer only because of the absolute finiteness of the sun as a star, but rather more because of the concrete feeling of powerlessness and at the same time responsibility in the face of the impactful role the species plays in its own extinction before the sun burns up. Consequently, "post-apocalyptic amazement" proves to reference concepts that cannot do without human beings and their non-existence as a correlate.

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³¹ Undoubtedly, the philosophical text that remains most influential in this regard for the history of art and aesthetics is Edmund Burke, A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful (1757).

³² See Clov's impressive monologue in Samuel Beckett's *Endgame*: "They said to me, That's love, yes, yes, not a doubt, now you see how— [...] How easy it is. They said to me, That's friendship, yes, yes, no question, you've found it. They said to me, Here's the place, stop, raise your head and look at all that beauty. That order! They said to me, Come now, you're not a brute beast, think upon these things and you'll see how all becomes clear. And simple! They said to me, What skilled attention they get, all these dying of their wounds. [...] I say to myself— sometimes, Clov, you must learn to suffer better than that if you want them to weary of punishing you— one day. I say to myself—sometimes, Clov, you must be better than that if you want them to let you go—one day. But I feel too old, and too far, to form new habits. Good, it'll never end, I'll never go. (Pause.) Then one day, suddenly, it ends, it changes, I don't understand, it dies, or it's me, I don't understand that either. I ask the words that remain— sleeping, waking, morning, evening. They have nothing to say. (Pause.) I open the door of the cell and go. I am so bowed I only see my feet, if I open my eyes, and between my legs a little trail of black dust. I say to myself that the earth is extinguished, though I never saw it lit. (Pause.) It's easy going. (Pause.) When I fall I'll weep for happiness." Samuel Beckett, *Endgame* (New York: Grove Press 1958), 80–81.

IV.

The work of Meillassoux, as the essential founder of speculative materialism, and the general debate surrounding the Anthropocene, pointed at the beginning merely to the question of amazement beyond the correlation with the existence of human consciousness. Meillassoux' central thesis that true speculation, and thus also the truth of art, requires the recognition of the absolutely necessary contingency of the laws of nature points however—after the attempt to sketch a possible aesthetics of post-apocolyptic amazement on the basis of these conditions—to another problem that can be described, in Adorno's words, as a "problem of historical contingency." But Meillassoux's project would then shift in such a way that even the necessary contingency of the laws of nature would prove to be transitory in the final analysis. The transience of contingency would be its history. But this history itself would then refer back to the contingency of natural history that transpires within it. Consequently, the idea of natural history—between the contingency of the laws of nature and the transience of history—can only be represented insofar as the concrete facticity, or what I would call the contingent uniqueness of the respective world, is revealed.

However remote and certainly controversial this counter-reading may seem at first glance, it is, to some extent, already philosophically established or at least laid out by Adorno. After all, his early text on the *Idea of Natural-History* develops from the concept of contingency a forceful critique of the tendencies of dehistoricized ontology (Scheler), the tautological conception of the history of being (Heidegger), and a historicist philosophy of history (Dilthey) in order, finally, to counter these classical positions of the early 20th century with a different, materialistic position, namely that of *natural history*, as developed by Walter Benjamin out of Lukacs' concept of *second nature*. ³⁴ In his study on the *Origin of German Tragic Drama*, which I hold as much

³³ Theodor W. Adorno, "The Idea of Natural-History," [1932], in *Telos. Critical Theory of the Contemporary* 60 (1984), 111-124, here 114 [my emphasis].

^{34 &}quot;The retransformation of concrete history into dialectical nature is the task of the ontological reorientation of the philosophy of history: the idea of natural-history." Adorno, "Natural-History," 117. Here, Adorno also explicitly makes reference to early Lukács, whereby Benjamin goes decidedly beyond Lukács' approach of second nature: "Lukács can only think of this charnel-house ["charnel-house of rotted interiorities" is a formulation found in Lukács' Die Theorie des Romans of 1920—T.H.] in terms of a theological

too under-appreciated in philosophies of speculative materialism, Benjamin also develops a new concept of the allegorical, which he brings directly in conjunction with the concept of nature. Nature, allegorically considered, is "eternal transience." 35

In allegory, history and nature intersect. The ruin is an allegory of natural history, and "it is fallen nature" according to Benjamin, "which bears the imprint of the progression of history." Benjamin thus suggests that in allegorical forms such as the ruin, a temporality of the past intersects with one that is projected toward the future and striving for fulfillment there. Utopia is in this way interpreted eschatologically. In its translation into political utopias, as effected by historical materialism since Hegel and Marx, eschatology, the future and finitude are thus interwoven, whereby the idea of the post-apocalyptic first becomes possible and its meaning plausible. The melancholy of allegorical reflection lies in this—having been utopia, but now fated as a ruin to exist always already in the attainment of its spatio-temporal uniqueness, its transience, in the consciousness of its futur antérieur.

This melancholy is overcome when the utopian idea is maintained within the allegory. But since allegories are not eternal figures, but "decay" as ruins in time, what is utopian within them can only be conceived as a brief timespan. The expiration of all allegory thus corresponds to the instantaneousness of the utopian: a present time or a *kairos* in the future.

resurrection, in an eschatological context. Benjamin marks the decisive turning-point in the formulation of the problem of natural-history in that he brought the resurrection of second nature out of infinite distance into infinite closeness and made it an object of philosophical interpretation" (ibid.). Around the same time Adorno presented "The Idea of Natural-History," he also explored the theme in his summer seminar of 1932. See Theodor W. Adorno, "Seminar vom Sommersemester 1932 über Benjamins Ursprung des deutschen Trauerspiels," in *Frankfurter Adorno-Blätter IV*, ed. Theodor W. Adorno-Archiv (Göttingen: edition text + kritik, 1995), 52–77.

³⁵ Walter Benjamin, The Origin of the German Tragic Drama [1925], trans. John Osborne (London/New York: Verso 1998), 179.

³⁶ Benjamin, The Origin of the German Tragic Drama, 180.

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Bibliography

- Adorno, Theodor W., "The Idea of Natural-History," [1932], in Telos. Critical Theory of the Contemporary 60 (1984), 111-124.
- Adorno, Theodor W., "Seminar vom Sommersemester 1932 über Benjamins

 Ursprung des deutschen Trauerspiels," in *Frankfurter Adorno-Blätter IV*, ed.

 Theodor W. Adorno-Archiv (Göttingen: edition text + kritik, 1995), 52-77.
- Agamben, Giorgio, Il tempo che resta. Un commento alla Lettera ai Romani (Turin: Bollati Boringhieri, 2000).
- Allen, John P.; Gray, Kathelin and Obrist, Hans Ulrich, "The Search for a unique, non-repeatable experience," in *Mousse* 57 (2017), 75-83.
- Beckett, Samuel, Endgame (New York: Grove Press 1958).
- Benjamin, Walter, "Theses on the Philosophy of History" in Walter Benjamin,

 Illuminations. Essays and Reflections, ed. Hannah Arendt and trans. Harry

 Zohn (New York: Schocken, 1968).
- Benjamin, Walter, Ursprung des deutschen Trauerspiels [1928] (Frankfurt a. M.: Suhrkamp, 1978).
- Benjamin, Walter, The Origin of the German Tragic Drama [1928], trans. John Osborne (London/New York: Verso 1998).

- Bey, Hakim, T.A.Z. The Temporary Autonomous Zone. Ontological Anarchy, Poetic Terrorism (Brooklyn: Autonomedia New Autonomy Series, 2003).
- Blanchot, Maurice, L'Écriture du désastre (Paris, 1980).
- Bordwell, David, *The Films of Carl-Theodor Dreyer* (Berkeley/Los Angeles: University of California Press, 1981).
- Brits, Baylee; Gibson, Prudence and Ireland, Amy (Eds.), Aesthetics After Finitude (Melbourne: Re.Press, 2016).
- Bronk, William, "At Tikal," in *Life Supports. New and Collected Poems* (San Francisco: North Point Press, 1981).
- Cacciari, Massimo, Il potere che frena. Saggi di teologia politica (Milan: Adelphi, 2013).
- Foucault, Michel, "Des espaces autres," (conférence au Cercle d'études architectura les, 14 mars 1967), in *Architecture, Mouvement, Continuité* 5 (1984), 46-49.
- Goethe, Johann Wolfgang von, Aus meinem Leben. Dichtung und Wahrheit,

 Poetische Werke, vol. 8, Autobiographische Schriften, Part 1, ed. Liselotte
 Lohrer (Stuttgart: Cotta, 1950).
- Grant, Iain Hamilton, Philosophies of Nature after Schelling (London: Bloomsbury, 2006).
- Hepburn, Ronald W., "In Inaugural Address: Wonder," in *Proceedings of the Aristotelian Society* 54 (1980), 1-23.
- Herzog, Werner, "Vom Absoluten, dem Erhabenen und ekstatischer Wahrheit", in Werner Herzog. An den Grenzen, ed. Kristina Jaspers and Rüdiger Zill (Berlin: Bertz & Fischer, 2015), 165-174.
- Hildebrandt, Toni, "Die Wüste als absolute Gegenmetapher der Quelle. Zur Metaphorologie der Nach- und Endzeit von Kunst und Geschichte," in *Einfluss*, *Strömung, Quelle. Aquatische Metaphern in der Kunstgeschichte*, ed. Ulrich Pfisterer and Christine Tauber (Bielefeld: transcript, 2018), 257-270.
- Hildebrandt, Toni, "Das vierte Höhlengleichnis. Zur politisch-theologischen Ökologie von Wüste und Bunker," in Re: Bunker. Erinnerungskulturen, Analogien, Technoide Mentalitäten, ed. Katrin von Maltzahn and Mona Schieren (Berlin: Argobooks, 2019), 94-105.
- Hyppolite, Jean, Genèse et structure de la Phénoménologie de l'esprit de Hegel (Paris: Aubier, 1946).

- Hyppolite, Jean, Etudes sur Marx et Hegel (Paris: Rivière, 1955).
- Jonas, Hans, The Imperative of Responsibility. In Search of an Ethics for the

 Technological Age, trans. with the collaboration of David Herr (Chicago:

 University of Chicago Press, 1984).
- Kojève, Alexandre, Introduction à la lecture de Hegel. Leçons sur la phénoménologie de l'esprit, ed. Raymond Queneau (Paris: Gallimard, 1947).
- Marchini Camia, Giovanni, "Interview with Ben Rivers," in *Annabel Brady-Brown* and Giovanni Marchini Camia, eds., fireflies: Pedro Costa/Ben Rivers, 4 (2016), 57-63.
- Meillassoux, Quentin, Après la finitude. Essai sur la nécessité de la contingence, foreword by Alain Badiou (Paris: Seuil, 2006).
- Meillassoux, Quentin, "Spéculation et contingence," in L'héritage de la raison.

 Hommage à Bernard Bourgeois, ed. Emmanuel Cattin and Jean-Pierre

 Zarader (Paris: Ellipses, 2007).
- Morton, Timothy, "How I Learned to Stop Worrying and Love the Term Anthropocene," in Cambridge Journal of Postcolonial Literary Inquiry 1, 2 (2014), 257-264.
- Morton, Timothy, "Lights, Camera, Stillness," unpublished lecture delivered at Anthropo/seen: Black Ecology, Utopia and Uncertain Futures, Forum of the Future, Porto, Portugal, November 10, 2017.
- Nancy, Jean-Luc, L'Équivalence des catastrophes (Après Fukushima) (Paris: Galilée, 2012).
- Neiman, Susan, Evil in Modern Thought. An Alternative History of Philosophy (Princeton: Princeton University Press, 2015).
- Paulson, Ronald, Representations of Revolution (1782-1820) (New Haven/London: Yale University Press, 1983).
- Schmidt, Alfred, Der Begriff der Natur in der Lehre von Marx (Frankfurt a. M.: Europäische Verlagsanstalt, 1971).
- Schulte, Joachim, Chor und Gesetz (Frankfurt a. M.: Suhrkamp, 1990).
- Serres, Michel, Le Contrat naturel (Paris: Flammarion, 1990).
- Serres, Michel, *The Natural Contract*, trans. Elizabeth MacArthur and William Paulson (Ann Arbor: The University of Michigan Press, 1995).

Serres, Michel, Retour au Contrat naturel (Paris, 2000).

Serres, Michel, Biogée (Brest/Paris: Le Pommier, 2010).

Shelley, Mary, The Last Man, vol. 2 (London: Henry Colburn, 1826).

Warnke, Martin, Political Landscape. The Art History of Nature (Cambridge, Mass.: Harvard University Press, 1995).

Wittgenstein, Ludwig, *Notebooks 1914-1916*, ed. G.H. von Wright and G.E.M. Anscombe, trans. G.E.M. Anscome (Oxford: Blackwell, 1961).