The Time is Out of Joint.

Anthropocene and Ecocentric Reading of Literary Texts

Patryk Szaj

ORCID: 0000-0002-6315-3317

these are those things that will have had to have been, that will have had to yet occur 1 Evelyn Reilly

How then to write literary criticism in a time of acknowledged mass extinction without just seeming absurd? How far is such writing vulnerable to the claim that we are still denying or negotiating with the Anthropocene by trying to squeeze it into conventional categories? The insidious effect of the Anthropocene, as an emergent phenomenon with drastically revisionist after-effects, is that what most people take for normality must drift towards being a form of environmental denial².

Timothy Clark

Anthropocene's hauntology

On 21st May 2019, the Working Group on the Anthropocene recommended to officially recognize a new geological epoch (29 out of 33 members voted in favor of this recommendation)³. Regardless of whether this term⁴ is accurate, the awareness that the Holocene – an epoch of a stable

¹ Evelyn Reilly, *Apocalypso* (New York: Roof Books, 2012), 71.

² Timothy Clark, *Ecocriticism on the Edge. The Anthropocene as a Threshold Concept* (London-New York: Bloomsbury, 2015), 48–49.

³ See "Working Group on the 'Anthropocene", b.d., http://quaternary.stratigraphy.org/working-groups/anthropocene/.

⁴ See Ewa Bińczyk, *Epoka człowieka. Retoryka i marazm antropocenu* [Man's epoch. Anthropocene's rhetoric and stagnation] (Warszawa: Wydawnictwo Naukowe PWN, 2018), 77–103.

climate conducive to the development of human civilizations and life – is over, is an incentive to reorient research interests of not just environmental⁵, but also general humanities. Clive Hamilton, Christophe Bonneuil, and François Gemenne, editors of *The Anthropocene and the Global Environmental Crisis*, identify two powerful, convincing claims expressed in the Anthropocene hypothesis, which cannot be ignored by the humanities and social sciences: one, people have become a telluric force, transforming the way the Earth functions, and two, the human (and inhumane, one might add) inhabitants of the planet will experience a global environmental change of unprecedented speed and scale⁶. This means that a new geological regime has come. In a smaller, human dimension, it also means the ultimate question of a "modern constitution" that will demand the treatment of society and nature as two separate orders, and to limit the agency of human actions only to the former (and to simply ignore the agency of non-human actors)⁷.

"«The time is out of joint»: time is disarticulated, dislocated, dislodged, time is run down, on the run and run down, deranged, both out of order and mad. Time is off its hinges, time is off course, beside itself, disadjusted" – Jacques Derrida wrote in 1993. It seems that today those (not early) considerations have only become more up to date; Anthropocene is the time of disaster, but also a disaster of time. If etymologically katastrophe means "overturning, a sudden turn", a catastrophe of time boils down to denying its very linearity: it turns out that it simultaneously runs in several directions. Anachrony, dislocation, dis-locatio (literally disturbance from a proper, original, or usual place or state: rejection of phantasmic proximity of the "current" and the "present") concerns time as such, and instead bonding it anew, we should radically reconsider its disadjustment with itself.

Is it not what experiencing Anthropocene is about? Clive Hamilton stresses that the term does not simply mean *advancing* escalation of the environmental-climate crisis, but a paradigmatic change of planetary climate conditions: *disarticulation* in the functioning of the Earth system understood as a whole. The Great Acceleration – the period which started after WW2 – is considered one of the most stratigraphically reliable moments of the beginning of the Anthropocene⁹ – hence it divides the history of the Earth into two mismatched parts¹⁰. Authors of one of the most cited papers on the Anthropocene, *The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?*, Will Steffen, Paul Crutzen and John McNeill, write about a "planetary shift", i.e., a deep transformation of the relationships between humanity and all the other

⁵ See e.g. Serpil Oppermann and Serenella Iovino, eds., *Environmental Humanities: Voices from the Anthropocene* (London-New York: Rowman and Littlefield, 2017); Clive Hamilton, "A New Anthropocentrism,, in *Defiant Earth: The Fate of Humans in the Anthropocene* (Crows Nest: Allen&Unwin, 2017), who states that the Anthropocene is more likely to develop a "new Anthropocene" than posthumanist tendencies.

⁶ Clive Hamilton, Christophe Bonneuil, and François Gemenne, "Thinking the Anthropocene", in *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch*, edited by Clive Hamilton, Christophe Bonneuil, and François Gemenne (New York: Routledge, 2015), 3–4.

⁷ See Bruno Latour, Nigdy nie byliśmy nowocześni. Studium z antropologii symetrycznej [We have never been modern], translation into Polish by Maciej Gdula (Warszawa: Oficyna Naukowa, 2011).

⁸ Jacques Derrida, Widma Marksa. Stan długu, praca żałoby i nowa międzynarodówka, translated into Polish by Tomasz Załuski (Warszawa: Wydawnictwo Naukowe PWN, 2016), 42. English version: Specters of Marx: The State of the Debt, the Work of Mourning, and the New International (Psychology Press, 1994), 18.

⁹ See e.g. Will Steffen et al., "The Trajectory of the Anthropocene: The Great Acceleration", *Anthropocene Review*, 2015. The tables presented in the paper, clearly indicating exponential growth in various socio-economic trends and trend of Earth systems after 1950, are especially instructive.

¹⁰Clive Hamilton, *Defiant Earth. The Fate of the Humans in the Anthropocene* (Crows Nest: Allen&Unwin, 2017).

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actors of this world: "Human activities have become so pervasive and profound that they rival the great forces of Nature and are pushing the Earth into planetary terra incognita"11. The problem is not that cumulative effects of anthropopressure are increasingly more poignant, but that they result in a complete unpredictability of what will happen with Earth's systems in the next few decades. Jason W. Moore, a critic of the term "Anthropocene", is of a similar opinion. He states that "The news is not good on planet Earth. Humanity—and the rest of life with it—is now on the threshold of what Earth system scientists call a «state shit»"12. Finally, Tobias Boes and Kate Marshall observe that the basic premise of all Anthropocene theories is the conviction of a complete break with the past and an irreversible change of the human condition¹³.

Thus, it can be said that the Anthropocene is the destination of modernity. Regardless of whether it is true that we have never been modern (Bruno Latour¹⁴), or whether we have for a short while (Timothy Morton¹⁵), it is certain that we will never be modern again: linear human history has been broken by deep geological time. Earth has once again become a fullfledged actor responsible for - according to Latour - "a surprising inversion of background and foreground" that has taken place; now "it is human history that has become frozen and natural history that is taking on a frenetic pace"16.

We should add that for a long time climate experts have been stressing that climate changes are nonlinear, which means that they are not directly proportional to initial climate conditions. This is because of negative and positive feedback loops, i.e., when the climate system responds in a way which weakens or reinforces the effect of the factor which disturbs the balance. In the Anthropocene there are mostly positive feedback loops, because anthropopressure disturbs the fast carbon cycle¹⁷, consequently affecting the slow carbon cycle as well, i.e., the "processes of carbon exchange over long (thousands and hundreds thousand years) time («geological» time)"18, and which play the role of athermostat for the Earth. What is significant, feedback loops differ in terms of how fast they work - some operate on a genological scale, over thousands of years, whereas others operate on a human scale, over a few years or even a few weeks, whereby in principle positive feedback loops manifest themselves faster than negative¹⁹.

¹¹Paul Crutzen, Will Steffen, and John R. McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?", Ambio 8, No 36 (2007): 614.

¹²Jason W. Moore, "Introduction: Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism", w Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism, edited by Jason W. Moore (Oakland: PM Press, 2016), 1.

¹³T. Boes and K. Marshall, "Writing the Anthropocene: An Introduction", *The Minnesota Review* 2014, No 83 (2014): 62. See also Dipesh Chakrabarty, "The Human Condition in the Anthropocene", The Tanner Lectures in Human Values, 2015.

¹⁴Latour, *Nigdy nie byliśmy nowocześni. Studium z antropologii symetrycznej* [We have never been modern].

¹⁵Timothy Morton, *Hyperobjects: Philosophy and Ecology After the End of the World* (Minneapolis-London: University of Minnesota Press, 2013), 1-24.

¹⁶Bruno Latour, "Agency at the time of the Anthropocene", New Literary History 45, No 1 (2014): 12.

 $^{^{17}}$ See e.g. Crutzen, Steffen, and McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?"; Justin McBrien, "Accumulating Extinction: Planetary Catastrophism in the Necrocene", in Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism, edited by Jason W. Moore (Oakland: PM Press, 2016), 116-37.

¹⁸Magdalena Budziszewska, Aleksandra Kardaś, and Zbigniew Bohdanowicz, (eds.) Klimatyczne ABC [The ABC of climate] (Warszawa: Wydawnictwa Uniwersytetu Warszawskiego, 2021), 39.

¹⁹See Budziszewska, Kardaś, and Bohdanowicz, 186-92.

Another climatology notion indicating the nonlinearity of climate change is the concept of planetary critical points, i.e., threshold points for given parameters, the value at which an increment for the control variable (e.g., temperature) triggers a larger change in the response variable through feedbacks in the natural Earth system itself in such a way that it seeks a different balance²⁰. The process is thus irreversible (in terms of human time scales). Moreover, "notifications" sent by planetary boundaries are, so to say, late: we only learn about a critical point being reached when it is too late to stop the consequences²¹.

In Earth-system science there is also the concept of nine planetary boundaries proposed in 2009 by Johan Rockström and his team – crossing these boundaries can cause a nonlinear, sudden environmental change. Three of them, climate change, disturbed nitrogen and phosphorus cycles, and biodiversity loss have already happened. Three more, ocean acidification, depletion of freshwater, and changes in land use (related to deforestation and development of agriculture) are worryingly close to their critical thresholds²². All these transformations are irreversible, which is why the editors of *The Anthropocene and the Global Environmental Crisis* are unafraid to claim that the Earth system has already entered a different trajectory than in the Holocene – and it is moving fast along it²³.

The authors of the textbook *Klimatyczne ABC* [ABC of climate] employ a graphic contrast which visualizes the pace at which this process is happening in terms of geological categories: "moving from the last ice age meant an increase in average temperatures by 3-3.5 degrees Celsius over circa eight thousand years, which gave various species much more time for migrations etc. Currently we are dealing with such a change over 100-200 years"²⁴. In this context, Timothy Morton's words are worth quoting:

I read that 75 percent of global warming effects will persist until five hundred years from now. I try to imagine what life was like in 1513. Thirty thousand years from now, ocean currents will have absorbed more of the carbon compounds, but 25 percent will still hang around in the atmosphere. The half-life of plutonium-239 is 24,100 years. These periods are as long as all of visible human history thus far. [...] But 7 percent of global Warming effects will still be occurring one hundred thousand years from now as igneous rocks slowly absorb the last of the greenhouse gases. I have decided to call these timescales the *horrifying*, the *terrifying*, and the *petrifying*²⁵.

²⁰See Budziszewska, Kardaś, and Bohdanowicz, 32–35.

²¹For example, this is the case with Greenland's ecosystem, as announced in 2020 by Michaela King and her team. This means that Greenland's ice will not stop melting, even if we stopped all greenhouse emission: every year more ice melts than new snowfall can make up for (Michalea D. King et al., "Dynamic ice loss from the Greenland Ice Sheet driven by sustained glacier retreat", Communications Earth & Environment 1, No 1 (2020). The continental ice sheet of West Antarctica is also inevitable (Marcin Popkiewicz and Szymon Malinowski, "Rozpad lądolodu Antarktydy Zachodniej nieunikniony" [The disintegration of West Antarctiva's continental ice sheet is inevitable", Nauka o klimacie, 2015, https://naukaoklimacie.pl/aktualnosci/rozpad-ladolodu-antarktydy-zachodniej-nieunikniony-77.)

²²See Johan Rockström et al., "Planetary Boundaries: Exploring the Safe Operating Space for Humanity", Ecology and Society 14, nr 2 (2009).

²³Hamilton, Bonneuil, and Gemenne, "Thinking the Anthropocene", 11.

²⁴Budziszewska, Kardaś, and Bohdanowicz, Klimatyczne ABC, 96.

²⁵Morton, *Hyperobjects: Philosophy and Ecology After the End of the World*, 58–59. The last adjective – *petrifying* – is crucial for Morton, because it alludes to the fact that human remains also become fossils over deep geological time.

So, we live in at least two times simultaneously: in "regular" human history, and in geohistory, which is (seemingly) taking place alongside us²⁶. The deep geological future is already here. Paradoxically, this future comes from the *past* – each ton of CO2 (or its equivalent in the form of greenhouse gases) has been released into the atmosphere since the 18th century. In Derrida's words: "[...] what seems to be out front, the future, comes back in advance: from the past, from the back"²⁷.

However, if hauntology²⁸ helps us understand that "time is out of joint", it gives one more lesson: a lesson in protest against apocalyptic logics. The end of the world (as we know it²⁹) is not an end of the world (in general): specters that haunt us come both from the past and the future (what will come in the future $[l^2a-venir]^{"30}$: messianic promise for all people... and, what was foreshadowed in Derrida's³¹ subsequent works, non-people, or monstrous new forms of categorization, domestication, and colonization). Hence the Anthropocene is not just crisis time, it is also *kairotic* time: a turning, critical point, a time that indicates the urgency of challenges and the necessary, ultimate, conclusive decision, on which the future depends – not just for humanity, but for all actors of this world. This aspect is stressed by Michael Northcott, who states that we can no longer understand time in terms of *chronos* ("successive cyclical passing of day and might, moment by moment, generation by generation"), but rather in terms of *kairos* ("moments in time which herald great or sudden change, or the need for change"³²). In Derrida's words: "In the experience of the end, in its insistent, instant, always imminently eschatological coming, at the extremity of the extreme today, there would thus be announced the future of what comes"³³.

²⁶See Dipesh Chakrabarty, "Klimat historii. Cztery tezy" [The Climate of History: Four Theses], translated into Polish by Magda Szcześniak, *Teksty Drugie* 5 (2014): 168–99.

²⁷ Derrida, *Widma Marksa*. *Stan długu, praca żałoby i nowa międzynarodówka*, 30. [Page 10 of the English version]

²⁸On hauntology see e.g. Jakub Momro, Widmontologie nowoczesności. Genezy [Hauntologies of modernity. Origins] (Warszawa: Wydawnictwo IBL PAN, 2014); Andrzej Marzec, Widmontologia. Teoria filozoficzna i praktyka artystyczna ponowoczesności [Hauntology. Philosophical theory and artistic practive of postmodernity] (Warszawa: Fundacja Bęc Zmiana, 2015); Agata Bielik-Robson and Piotr Sadzik, (eds.). Widma Derridy [Derrida's specters] (Warszawa: Wydawnictwo IBL PAN, 2018). On employing Derrida's thought in conceptualizing the Anthropocene's problems see e.g. the thematic issue Deconstruction in the Anthropocene czasopisma Oxford Literary Review 34, No 2 (2012); Mark Fisher, Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures (Alresford: Zero Books, 2014); Boes and Marshall, "Writing the Anthropocene: An Introduction".

²⁹See Immanuel Wallerstein, *Koniec świata jaki znamy* [The End of the World as We Know It], translated into Polish by Michał Bilewicz, Adam W. Jelonek, and Krzysztof Tyszka (Warszawa: Wydawnictwo Scholar, 2004); Claus Leggewie and Harald Welzer, *Koniec świata, jaki znaliśmy. Klimat, przyszłość i szanse demokracji* [The End of the World as We once Knew it: the Climate, the Future and the Prospects for Democracy], translated into Polish by Piotr Buras (Warszawa: Krytyka Polityczna, 2012).

³⁰Derrida, Widma Marksa. Stan długu, praca żałoby i nowa międzynarodówka, 14.

³¹See Jacques Derrida, *L'Animal que donc je suis* (Paris: Galilée, 2006); Jacques Derrida, *Séminaire La bête et le souverain, t. 1* (Paris: Galilée, 2008); Jacques Derrida, *Séminaire La bête et le souverain, t. 2* (Paris: Galilée, 2010).

³²Michael Northcott, "Eschatology in the Anthropocene: From the Chronos of Deep Time to the Kairos of the Age of Humans", in *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch*, red. Clive Hamilton, Christophe Bonneuil, and François Gemenne (London-New York: Routledge, 2015), 107.

³³Derrida, *Widma Marksa*. *Stan długu, praca żałoby i nowa międzynarodówka*, 70–71 [Page 37 of the English version]. It is especially crucial for e.g. postcolonial ecocriticism focused on environmental justice issues and (human and non-human) climate migrations. See e.g. Andrew Baldwin, "Postcolonial Futures: Climate, Race, and the Yet-to-Come", *ISLE Interdisciplinary Studies in Literature and Environment* 24, No 2 (2017); Serpil Oppermann, "Introducing Migrant Ecologies in an (Un)bordered World", *ISLE Interdisciplinary Studies in Literature and Environment* 24, No 2 (2017).

From this perspective Boes and Marshall's reinterpretation of the Anthropocene is very interesting. They point out to the fact that the names of three previous geological epochs – the Pliocene, Pleistocene and Holocene mean "new time", "newer time", and "completely new time", respectively. Thus, the Anthropocene can be understood not only as "man's epoch" (including all of its anthropocentrism and exceptionalism), but as the "time of new man", anthropos kainos³⁴, man more-than-human, sympoietic³⁵, associated with other actors of this world.

Morton's reflection goes in the same direction. He puts forward a provocative thesis that the end of the world has already happened. What he means is the phenomenological concept of the world, which has become inoperative with the arrival of hyperobjects – products of the Anthropocene which escape human understanding and control, going beyond human spatiotemporal scales³⁶. For "the world" was something that – according to Martin Heidegger's famous lesson³⁷ – "belonged" only to man, whereas the other actors were either "impoverished" in it (e.g., animals), or completely deprived of it (e.g., inanimate matter). According to Morton, this "world" has not just come to an end – it never existed. From the perspective of speculative realism and object-oriented ontology, "Human beings lack a world for a very good reason: because *no entity at all* has a world" "human beings lack a world "there is closeness, connection, mixing, entanglement, "a number of unique beings (farmers, dogs, irises, pencils, LEDs, and so on) to whom I owe an obligation through the simple fact that existence is coexistence. I don't have to run through my worlding checklist to ensure that the nonhuman in question counts as something I could care for"³⁹.

The end of the world has happened for one more, no less important reason. Referring to the findings of quantum physics, Morton proves that the linear concept of time is a purely aesthetic phenomenon. Time turns out to be folded in a Derridean style – it does not play the role of "background" where the existence of things takes place. Quite the opposite: every object exists in its own temporality, and different temporalities are constantly overlapping. Hyperobjects, i.e., "entities that are massively distributed in time exert downward causal pressure on shorter-lived entities. Thus, one vivid effect of global warming has been phenological asynchrony: the way plant and animal life events have gone out of sync" Hence the horrifying, the terrifying, and the petrifying temporal scales of the Anthropocene. When I look at petroleum, I look into Earth's past. When I burn fossil fuels, the past is drilling into my present. This is why the end of the world is not a sudden, apocalyptic event – it is

³⁴Boes and Marshall, "Writing the Anthropocene: An Introduction", 61.

³⁵On sympoiesis, see Donna J. Haraway, "Staying with the Trouble: Anthropocene, Capitalocene, Chthulucene", in *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism*, edited by Jason W. Moore (Oakland: PM Press, 2016).

³⁶On hyperobjects see also Anna Barcz, "Przedmioty ekozagłady. Spekulatywna teoria hiperobiektów Timothy'ego Mortona i jej (możliwe) ślady w literaturze" [Objects of eco-annihilation. Timothy Morton's peculative theory of hyperobjects and its (possible) traces in literature], *Teksty Drugie* 2 (2018): 75–87.

³⁷Martin Heidegger, *Die Grundbegriffe der Metaphysik. Welt-Endlichkeit-Einsamkeit* (Frankfurt am Main: Vittorio Klostermann, 1983).

³⁸Morton, Hyperobjects: Philosophy and Ecology After the End of the World, 108.

³⁹Morton, 125.

⁴⁰Morton, 67.

something that stretches into deep geological time. This - as Morton puts it - is the "spectral" reality of the Anthropocene⁴¹.

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Ecocriticism in the times of the Anthropocene

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So - how to conduct literary studies in times of a planetary environmental-climate crisis? Is it not true that literary studies, uninterested in the paradigmatic shift in the Anthropocene, seem anachronistic - not in the hauntological, but axiological sense: inadequate for today's challenges? Is it not true that modes of anthropocentric reading constitute shrinking from responsibility? And finally: is it not true that Anthropocenic discourse has posed serious challenges to ecocriticism so far?

Timothy Clark is among scholars who are trying to answer these questions. He treats the Anthropocene as a "threshold concept," and questions the basic dogma of ecocriticism (as explained by Lawrence Buell) according to which the ecological crisis is also a crisis of the imagination⁴², and of questions such as "can poetry can save the Earth?", "can the act of writing and careful reading save the planet?"43. According to Clark, too many ecocritics have fallen prey to the illusion that environmental problems can be solved using cultural means, whereas exaggerating the significance of the imaginary is related to reinforcing something like a diversionary side-show, blind to its own insignificance"44 compared to the power of the material means of production, eating habits, energy consumption, reproductive trends, etc. This kind of awareness has been present in ecocriticism for a long time now - for example, already in 2002 Kate Rigby stressed that "it is important to acknowledge the influence of social, political and economic structures in the perpetuation, transformation and displacement of those vies of nature which are conveyed by the texts of culture"45, also the growing methodological awareness of ecocriticism related to evolution from the first to the fourth wave⁴⁶ was concerned with identifying its own weaknesses. Nonetheless, according to Clark crossing the threshold of the Anthropocene has completely turned the tables:

⁴¹ Morton, 194.

⁴²Lawrence Buell, The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture (Cambridge-London: Harvard University Press, 1995), 2. In an interview with W.S. Merwin conducted by Julia Fiedorczuk there is an even stronger statement: "tylko wyobraźnia może nas uratować" [Only imagination can savee us] (W.S. Merwin and Julia Fiedorczuk, "Już tylko o ogrodach" [Only about gardens now], Tygodnik Powszechny, 2013, https://www.tygodnikpowszechny.pl/juz-tylko-o-ogrodach-19688).

⁴³See John Felstiner, Can Poetry Save the Earth? A Field Guide to Nature Poems (New Haven: Yale University Press, 2009); Ken Hiltner, "General Introduction", in Ecocriticism. The Essential Reader, edited by Ken Hiltner (London-New York: Routledge, 2015) (the second quotation: Aleksandra Ubertowska, "'Mówić w imieniu biotycznej wspólnoty'. Anatomie i teorie tekstu środowiskowego" [Speaking on behald of the biotic community. Anatomies and theories of the environmental text], Teksty Drugie, No 2 (2018): 18).

⁴⁴Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 21.

⁴⁵Kate Rigby, "Ecocriticism", in *Introducing Criticism at the 21st Century*, red. Julian Wolfreys (Edinburgh: Edinburgh University Press, 2002), 157. See also "Reconnecting the Social and the Ecological" from the same

⁴⁶See e.g. Ubertowska, "'Mówić w imieniu biotycznej wspólnoty'. Anatomie i teorie tekstu środowiskowego" [Speaking on behalf of the biotic community. Anatomies and theories of an environmental text].

The Anthropocene names a newly recognized context that entails a chastening recognition of the limits of cultural representation as a force of change in human affairs, as compared to the numerous economic, meteorological, geographical and microbiological factors and population dynamics, as well as scale effects, such as the law of large numbers that arise from trying to think on a planetary scale⁴⁷.

It is those effects of scale that are central to Clark's considerations. His starting point is a reference to the concept of the three levels of complexity of technology/human interactions by Braden R. Allenby and Daniel Sarewitz⁴⁸. Level 1 is about instrumentally treating technology as a simple tool. On level 2 this tool is incorporated into complex sociotechnical systems, which are less predictable and more complex. On level 3, complications and unpredictability have even more serious implications – it is the level of radical contingency, which Clark compares to Morton's hyperobjects due to the fact that it escapes our capabilities to model, predict, or even understand.

While interpretations related to levels 1 and 2 dominate in traditional cultural, political, and ecological models – as well as in traditional literary studies – "a growing number of events and problems of the Anthropocene are appearing on level 3, rendering those ways of thinking which are limited to levels 1 and 2 archaic, even if those levels still describe the ways most people think."⁴⁹. As Allenby and Sarewitz explain, if one understands it, it is not true – and if it is true, you cannot understand it.

In Clark's reflection, multidimensional contradictions between the human and planetary scales come to the fore. He establishes "terrestriality" as the norm which he – similarly to Morton – contrasts with "the world". It is mostly about the need to extend the "normal" temporal and spatial scales of the Anthropocene, and the fallacy of commonsensical conceptualizations of "the world of life", and at the same time Earth's agency as a(n) (menacing and sovereign, as Latour would put it⁵¹) actor. Importantly, the non-intuitive character of this extension results not only from cultural habits, but from deeper evolutionary conditionings of *Homo sapiens*. From the evolutionary perspective, we are adjusted to reacting to sudden, direct threats, rather than those that are long-term and abstract. The thing is that the Anthropocene reveals something like an ironic "double entanglement" between the biological limitations of human perception and the extent to which this perception is maladjusted to the detachment that is taking place:

We understand distance, time, and breadth in terms of the given dimensionality of our embodied existence [...]. This is not a merely cultural matter, susceptible of change by cultural means, but a given, unavoidable mode of reading things [...]. The Anthropocene entails the realization how deeply this scale may be misleading [...]⁵².

⁴⁷Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 21.

⁴⁸See Braden R. Allenby and Daniel Sarewitz, *The Techno-Human Condition* (MIT Press, 2018).

⁴⁹Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 9.

⁵⁰Allenby i Sarewitz, *The Techno-Human Condition*, 186.

⁵¹Latour, "Agency at the time of the Anthropocene", 6.

⁵²Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 30.

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It forces one to look critically also at many insights formulated by more recent currents of ecocriticism. Clark remains skeptical of, for example, material ecocriticism, and the concept of embodied embeddedness, which on the one hand are trying to restore the relationship between man and other matter (simultaneously highlighting the agency of the matter itself)53, and on the other, are characterized by "transcendental stupidity" 54 - being limited to the closest "world of life": actors with whom we are directly connected. Similarly to Morton, Clark thinks that the world understood in this way is at best an epiphenomenon, and at worst - a phantasm concealing elusiveness, intellectual difficulty, and the non-intuitive nature of everyday life in the Anthropocene. Latour puts the same question analogically: "things have become so urgent and violent that the somewhat pacific project of a contract among parties seems unreachable. War is infinitely more likely than contract. [...] Words such as symbiosis, agreement, accord, all those ideals of deep ecology smack of an earlier, less benighted time. Since then everything has taken a turn for the worse"55.

Those latter qualities are related to the "emergency" status of the Anthropocene as an event whose newness does not find any adequate discourse. By any means, the Anthropocene can be called an effect of a radical and unpredictable emergency in the condition of the world, a proliferation of a situation of the third level of complexity⁵⁶. It is this emergency that decides the anachrony inscribed in the Anthropocene's condition: our cognitive, ethical, political, social, etc. paradigms prove to be deeply inadequate for the challenges we are facing. This also applies to hitherto reading norms and beliefs regarding the conditions that a reliable interpretation of literary texts should meet:

The cognitive and ethical claims of the Anthropocene underline just how deeply a text is not completely "understood" by being resituated solely in the cultural context of its time of production. It jumps out, lingers and may have unexpected consequences⁵⁷.

Interpretation as a kind of activity merging together different senses of a literary text is in opposition to the Anthropocene's lesson - "ecocritical reading cannot just be some act of supposed retrieval, but now becomes also a measure of irreversible break in consciousness and understanding, an emergent unreadability"58. A postulate of reading a text in a way accommodating for cumulative effects of scale, which "at a certain, indeterminate threshold, numerous human activities, insignificant in themselves (heating a house, clearing trees, flying between the continents, forest management), come together to form a new, imponderable physical event, altering the basic ecological cycles of the planet"59. Interpreting literary texts with this awareness means implementing mass- and multiple-scale reading, despite the fact that divergent scale effects are incompatible as they escape traditional plots limited to interpersonal

⁵³See e.g. Serenella Iovino and Serpil Oppermann, ed., *Material Ecocriticism* (Bloomington: Indiana University Press, 2014).

⁵⁴Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 38.

⁵⁵Latour, "Agency at the time of the Anthropocene", 5.

⁵⁶Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 47.

⁵⁷Clark, 65.

⁵⁸Clark, 62.

⁵⁹Clark, 72.

dramas, and even inventive models of zoo- or eco-poetics⁶⁰. Clark distinguishes three interpretative scales: the first is related to experiences of an individual protagonist or protagonists of a text, the second– the most common in literature studies – extends to national cultures and its representatives in terms of space, and in terms of time to a certain "historical period" significant for the text's message. In the context of the Anthropocene, the third is the most important and at the same time most difficult to imagine: in it, the effects of scale cumulate and start to slowly overshadow conventional reading. In terms of time, it can stretch over *at least* several centuries, and in terms of space – over the whole planet. It is also the scale which takes on a dehumanized outlook on human actions.

For example, let us consider a poem by Julia Fiedorczuk from the volume *Tlen* [Oxygen], *Płynie Wisła, płynie* [Vistula is flowing, flowing]:

across the Polish land if anything is alive there it will soon die^{61}

Here the first case is actually irrelevant – indirect lyric poetry indicates a reflection that goes beyond the individual level, momentarily referring to the second scale: the poem alludes to a patriotic hymn by Edmund Wasilewski both in terms of content and form, including its characteristic syncope rhythm. But why does the text employ this intertextual reference? In answer to this question, I need to turn on the third scale: I am beginning to consider such issues as like the contamination of groundwater with side-effects of industrial meat production, soil eutrophication due to nitrogen-phosphorus fertilizers (one of the three crossed planetary boundaries), biodiversity loss (second out of three crossed planetary boundaries), and finally steppe-formation and increasingly burdensome droughts ("all time low" levels of water in the Vistula announced every year).

Actually, Fiedorczuk's poem is not representative for Clark's considerations. What he intends is to also include texts that were beyond the scope of the interests of traditional ecocriticism (e.g. they did not match the definition of "environmental texts" by Lawrence Buell⁶², although we should bear in mind that second-wave ecocriticism postulated reading texts which were not explicitly about "nature", and that Buell also coined the term "ecological unconsciousness"⁶³), i.e., an ecocritical interpretation of any kind of texts, especially

⁶⁰See e.g. Kate Rigby, "Earth, World, Text: On the (Im) possibility of Ecopoiesis", New Literary History 35, No 3 (2004); Anna Barcz, Realizm ekologiczny. Od ekokrytyki do zookrytyki w literaturze polskiej [Ecological realism. From ecocriticism to zoocriticism in the Polish literature] (Katowice: Wydawnictwo Naukowe Śląsk, 2016); Anita Jarzyna, Post-koiné. Studia o nieantropocentrycznych językach (poetyckich) [Studies in non-anthropocentric (poetic) languages] (Łódź: Wydawnictwo Uniwersytetu Łódzkiego, 2019); Julia Fiedorczuk and Gerardo Baltrán, Ekopoetyka. Ekologiczna obrona poezji [Ecopoetics. Ecological defense of poetry] (Warszawa: Muzeum Historii Polskiego Ruchu Ludowego, Uniwersytet Warszawski, 2020).

⁶¹Julia Fiedorczuk, *Tlen* (Wrocław: Biuro Literackie, 2009), 23: po polskiej krainie jeśli coś w niej żyje to niedługo zginie.

⁶²See Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Malden-Oxford-Carlton: Blackwell Publishing, 2005).

⁶³Lawrence Buell, Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond (Cambridge-London: Harvard University Press, 2001), 18–27.

those whose discourse remained blind to environmental issues. So, when I read, say, <code>Baśń</code> o weżowym sercu. Słowo wtóre o Jakóbie Szeli [Tale of snake's heart. Second word about Jakób Szela] by Radek Rak, on the first scale, to me it is a story about the bizarre connection between the lives of Jakób Szela and Wiktoryn Bogusz, on the second scale – a narrative about nineteenth-century serfdom relationships, which were soon to be abolished, although they would leave a deep impression on Polish culture. On the third scale I start to consider the broader context: internal colonization of Poland by the aristocracy, the semi-peripheral status of Polish culture in the contemporary capitalist system-world; the exports of grain and wood, which fed Eastern Europe and constructed European ships sent to colonize the world, exchange goods with Columbia, and to exterminate native peoples of both Americas; the planetary unification of plants and animal species which followed; the structural similarities of the lives of peasants and Black slaves working on plantations in both Americas; "cheap culture" ideology" — and so on. In short: I start to place this story in the context of the Capitalocene, which many scholars blame for today's environmental-climate crisis.

Is this an overinterpretation? Of course. The thing is that the Anthropocene calls for an environmental, climatic, more-than-human, creative overinterpretation in a sense proposed by, among others, Jonathan Culler or Colin Davis. The "twist" here is that it is impossible to read literary texts only on the level of their intentionality, which is a well-learned lesson (also by ecocriticism⁶⁵) in deconstruction. However, Clark's proposal has far furtherreaching implications. If every kind of writing exposes itself to a free game of signs, then it is also an argument against naïve ecocriticism that wants to change our cultural habits and develop "ecological awareness"; if all actors of this world say something - as biosemiotics claims⁶⁶ -then their message is also subject to dissemination, they cannot be treated as focused, meaningful, complete information. This is why, e.g., Morton criticizes "ecomimesis", commonly applied in ecocriticism, which is about the substantial conceptualization of nature as something tangible, omnipresent, possible to experience directly, and as such inevitably anesthetized⁶⁷. Boes and Marshall seek to replace it with "ecodiegesis" - writing which does not imitate "nature", instead giving the planet and its actors their own voice, as well as indicating an inevitable narrative distance that denies the illusion of immersion in the world of life⁶⁸.

⁶⁴See Raj Patel and Jason W. Moore, "Tania natura" [The Rise of Cheap Nature], in *O jeden las za daleko*. *Demokracja, kapitalizm i nieposłuszeństwo ekologiczne w Polsce* [A forest too dar. Democracy, capitalism, and ecological disobedience in Poland], edited by Przemysław Czapliński, Joanna B. Bednarek, and Dawid Gostyński (Warszawa: Książka i Prasa, 2019).

⁶⁵ See e.g. Serpil Oppermann, "Rethinking Ecocriticism in an Ecological Postmodern Framework: Mangled Matter, Meaning, and Agency", in *Literature, Ecology, Ethics: Recent Trends in Ecocriticism*, edited by Timo Müller and Michael Salter (Heidelberg: Universtitatsverlag Winter, 2012), 35–50; Scott Knickerbocker, *Ecopoetics: The Language of Nature, the Nature of Language* (Boston: University of Massachusetts Press, 2012).

⁶⁶See e.g. Wendy Wheeler, "The Biosemiotic Turn: Abduction, or, the Nature of Creative Reason in Nature and Culture", in *Ecocritical Theory: New European Approaches*, editeed by Axel Goodbody and Kate Rigby (Charlottesville-London: University of Virginia Press, 2011).

⁶⁷See Timothy Morton, *Ecology without Nature*. *Rethinking Ecological Aesthetics* (Cambridge-London: Harvard University Press, 2007).

⁶⁸Boes and Marshall, "Writing the Anthropocene: An Introduction", 64.

However, if Clark encourages us to read any literary text anachronistically, then another scholar interested in reorienting ecocriticism, Lynn Keller, focuses on poetry after 2000, when the term "Anthropocene" was already popularized by Paul Crutzen and Eugene Stoermer⁶⁹. The author of *Recomposing Ecopoetics* dubs it "self-conscious Anthropocene":

I have coined the phrase "self-conscious Anthropocene" to provide a term, distinct from the label for geological era that may have begun centuries ago, that foregrounds this very recent awareness. It identifies the period since the term Anthropocene was introduced when, whether or not people use that word, there is extensive "recognition that human actions are driving far-reaching changes to the life-supporting infrastructure of Earth" 70.

In the introduction, similarly to Clark, Keller stresses the necessity to extend the scope of ecocriticism's interests, so that it is not limited to the traditional *nature writing* or ecopoetics, but instead includes any texts of the "conscious Anthropocene" indicating man's comprehensive impact on the planetary system of the Earth. This is not just about the representations of this influence (scalar changes of the Anthropocene make such a presentation impossible), but also about experimental-avant-garde poetry crossing the borders of (human) communication. As explained by Evelyn Reilly, the aim is to develop a new ecopoetics, which would help realize the full implications of our position as those who use the language of animals in a world that consists of mutual dependencies; ecopoetics has to be a question of finding formal strategies, which result in a broader change of paradigm, and actually participate in undermining the aesthetic use of nature as a mirror for human narcissism⁷¹.

Hence, Keller proposes redefining the role of ecopoetics, which rather than practicing ecomimesis (presenting "pure nature") should point out contamination in two senses of the word: 1) connecting human and non-human actors, the impurity of the nature-culture division, 2) completely literal contamination: the fact that with air we also breathe in particulate matter, that even the most "organic" food can contain micro- or even nano-plastic, that the seas have been acidified by absorbing excessive anthropogenic greenhouse gases – and so on⁷². Thus, a poet becomes someone like a "radical epistemologist"⁷³, or – as I would put it – a radical hermeneutist, who on the one hand points out the need to extend "understanding" to non-human actors, and on the other – highlights the aporeticity of this claim.

⁶⁹Paul Crutzen and Eugene Stoermer, "The Anthropocene", IGBP Global Change Newsletter 41 (2000).

To Lynn Keller, Recomposing Ecopoetics: North American Poetry of the Self-Conscious Anthropocene (Charlottesville-London: Univeristy of Virginia Press, 2017), 1. Keller quotes one of the most important papers from the starting point of the Anthropocene debate: Simon L. Lewis and Mark A. Maslin, "Defining the Anthropocene", Nature 519, No 7542 (2015): 171–80. Authors propose year 1610. Chakrabarty writes about a similar "epoch awareness" of climate change, Chakrabarty, "The Human Condition in the Anthropocene".

⁷¹Evelyn Reilly, "Eco-Noise and the Flux of Lux", in *Eco Language Reader*, edited by Brenda Iijima (Brooklyn: Nightboat Books, 2010), 261.

⁷²In his dark ecology project, Morton goes into a similar direction. See Timothy Morton, *Dark Ecology: For a Logic of Future Coexistence* (New York: Columbia University Press, 2016).

⁷³Joan Retallack, "What Is Experimental Poetry & Why Do We Need It?", *Jacket* 32 (2007), http://jacketmagazine.com/32/p-retallack.shtml.

Where does this aporeticity come from? Similarly to Clark, for Keller scalar changes are a fundamental aspect of the Anthropocene: mixing highly contradictory scales – temporal, spatial, technological, environmental, or those referring to human agency. The Anthropocene's self-awareness thus requires thinking in terms of both far broader and far smaller scales than those we are used to due to the ideology of human exceptionalism. Especially that – as Derek Woods observes – they do not function like the cartographic scale which can be zoomed in or out, all while maintaining the right proportions⁷⁴. To the contrary, the non-cartographic concept of scale points out to the fundamental lack of linearity – this is why the planetary scale means twisting the human scale.

Moreover, it turns out that human agency is in fact not human, because it constitutes a sum of terra-forming assemblies consisting of humans, non-human species, and technology⁷⁵. Moreover, all this causes cognitive and affective "scalar dissonance" – an unpleasant tension resulting from the contradiction between small individual agency and the huge collective impact of humanity on the Earth system: "as we collectively lurch into one tipping point after another, each of which has cascading consequences we can barely comprehend, the individual feels tiny and helpless"⁷⁶. The other side of this coin is the loss of the sense of individual responsibility for the climate crisis. For example: the more people participate in the globalized model of consumerist society, the smaller the individual responsibility, the bigger cumulative effect of their actions.

Hence, Keller no longer encourages "ecological overinterpretation", instead studying the texts of the conscious Anthropocene – experimental works that investigate the entanglement of human and non-human actors in the scalar consequences of the existence of hyperobjects (Kacper Barczak's work would be close to that⁷⁷), that form affective interspecies communities (Ilona Witkowska's poetry⁷⁸), that cross the border of human language and strive for inter-species "bio-semiotic translation" (in the Polish context Urszula Zajączkowska's works are the closest to that), and ultimately that take the "cosmic", dehumanized perspective close to Clark's third scale (for example *Cielenie lodowca* [Calving] by Marcin Ostrychacz, *Nebula* by Anna Adamowicz, or *Zakłady holenderskie* [Dutch bets] by Radosław Jurczak)⁷⁹.

⁷⁴See Derek Woods, "Scale Critique for the Anthropocene", Minnesota Review, No 83 (2014): 133–42.

⁷⁵Woods, 134.

⁷⁶Keller, Recomposing Ecopoetics: North American Poetry of the Self-Conscious Anthropocene.

⁷⁷See e.g. Jakub Skurtys, "Pieśń kopalin i tworzyw sztucznych (wokół 'Wierszy organicznych' Kacpra Bartczaka)" [Songs of fossils and plastics (on "Organic poems" by Kacper Bartczak), in *Ekokrytyka* [Ecocriticism] (Poznań: Wydawnictwo WBPiCAK, 2018), 22–36.

⁷⁸See e.g. Dawid Kujawa, "Od stawania-się-zwierzęciem do stawania-się-molekularnym. Poezja w ujęciu ekozoficznym" [From becoming-an-animal to becoming-molecular. Poetry from the ecosophical perspective], in Ekokrytyka (Poznań: Wydawnictwo WBPiCAK, 2018), 81–91; Monika Glosowitz, "Wspólnoty afektywne. Ilona Witkowska" [Affective communities], in Maszynerie afektywne. Literackie strategie emancypacji w najnowszej polskiej poezji kobiet [Affective machineries. Literary strategies of emancipation in the moden women's poetry] (Warszawa: Wydawnictwo IBL PAN, 2019), 198–223.

⁷⁹See also Julia Fiedorczuk, "Poezja samoświadomego antropocenu" [Poetry of self-conscious Anthropocene], in *Prognoza niepogody. Literatura polska w XXI wieku* [Bad weather forecast. Polish literature in the 20th century], edited by Maciej Jakubowiak and Szymon Kloska (Wołowiec: Czarne, 2020), 81–93 Fiedorczuk also proposes other ways of translating Keller's ideas into the context of the Polish poetry.

However, from a slightly different perspective, "the Anthropocene's awareness" remains a false one, unless it indicates the catastrophic agency of the capitalist system. We should remember that Derrida's reflection regarding twisting time happened in the name of being faithful to a *certain* legacy of Marx, and – as it would seem – this legacy is worth investigating also due to the scalar effects of the Anthropocene. Hence, when I read e.g., *Bailout* by Tomasz Bąk, to me it is not just a story about the consequences of the 2008 economic crisis (Clark's second scale), but – and perhaps predominantly – a criticism of Capitalocene. In this text I find enough about the temporal inadequacy of short-term gains and long-term consequences of capitalist production to say that Bąk writes – among other things – about a "metabolic split" between capital and the planetary system, without which it is impossible to understand the reasons of the environmental-climate crisis⁸⁰.

The Anthropocene and the possibility of another literary history

Perhaps the most confusing scalar effect of the Anthropocene is the realization that it defined the condition of life on Earth before anyone was aware of it. If we have been living in the "conscious Anthropocene" since 2000, then its menacing (or rather "humenacing" to refer to Michał Pranke's successful neologism⁸¹) specter must have been around at least since 1945 (beginnings of the Great Acceleration). *The past has been here for a long time*. Derrida called this state of affairs a "peep-hole effect": we do not see who is looking at us, "the Thing meanwhile looks at us and sees us not see it even when it is there".

Does this mean that the Anthropocene is not calling for a new, anachronistic history of literature? Is it not true that the (contaminated) light it throws on the modern constitution, ideology of progress, emancipatory movements limited only to human actors etc., also entails reevaluation of hitherto historical-literary conclusions and environmental-climate over-interpretation of potentially any text written after 1945? Should we not repeat the question about the possibility of another history of literature? Especially that when it was first asked by Teresa Walas (notabene: the same year when Derrida's Specters of Marx was published), she already observed that history "can be shaped as parallel and overlapping courses of events of different size and level of vividness" "83".

⁸⁰See e.g. John Bellamy Foster, *Marx's Ecology* (New York: Monthly Review Press, 2000); Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso, 2015). Also Crutzen, Steffen and McNeill point out that the system of Earth operates on completely different temporal scales than economic systems (Crutzen, Steffen, i McNeill, "The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature?", 619). See also Hamilton's ironic observation that the climate crisis does not result from malfunctioning markets – they are the consequence of markets functioning too well: their metabolism is much faster than that of the Earth's system (Hamilton, "Human Destiny in the Anthropocene", 35).

⁸¹ Michał Pranke, Rant (Łódź: Dom Literatury w Łodzi, 2018), 30.

⁸²Derrida, *Widma Marksa. Stan długu, praca żałoby i nowa międzynarodówka*, 26. [Page 6 of the English version]

⁸³ Teresa Walas, Czy możliwa jest inna historia literatury? (Kraków: Universitas, 1993), 131.

In other words, it would be about the "anachronistic reading" postulated also by Joseph Hillis Miller, based on the premise that creative anachrony is immanently inscribed into every literary text: "it is always possible that new, unforeseen contexts will alter the text retrospectively, giving it changed and perhaps prophetic force"⁸⁴. This is how, according to Clark, "retrospective ironies of the Anthropocene" work, exposing any human activity to the contingency of deep geological history⁸⁵. And it is those retrospective ironies that should encourage a new, post-1945 history of literature.

translated by Paulina Zagórska

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⁸⁴Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 63. See also J. Hillis Miller, "Anachronistic Reading", Derrida Today 3, No 1 (2010): 75–91.

⁸⁵ Clark, Ecocriticism on the Edge. The Anthropocene as a Threshold Concept, 129. In a way, this is not shocking – is it not what Charles Sanders Peirce's limitless semiosis is about?

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KEYWORDS

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ABSTRACT:

The first part of the paper offers a theoretical consideration of the Anthropocene as an epoch in which human and geological times have radically mixed. It outlines insights formulated within the Anthropocene discourse, as well as findings of climatology. They encourage developing the Anthropocene's hauntology as an epoch in which "the time is out of joint". The second part of the paper applies theory to literary studies practice (especially in terms of ecocriticism). Author reconstructs proposals to practice ecocriticism in the times of the Anthropocene formulated by Timothy Clark and Lynn Keller, and undertakes initial attempts at translating them into the Polish context.

HAUNTOLOGY

geohistory

NOTE ON THE AUTHOR:

Patryk Szaj – born in 1989, PhD in humanities, literary scholar. He works at the Pedagogical University of Cracow. His research interests include environmental humanities, the Anthropocene discourse, relationships between literature and philosophy. Author of Wierność trudności. Hermeneutyka radykalna Johna D. Caputo a poezja Aleksandra Wata, Tadeusza Różewicza i Stanisława Barańczaka [Faithfulness to difficulties. Radical hermeneutics of John D. Caputo and the poetry of Aleksander Wat, Tadeusz Różewicz, and Stanisław Barańczak] (2019) and Od modernizmu do antropocenu. Szkice z hermeneutyki dekonstrukcyjnej [From modernism to the Anthropocene. Sketches in deconstructive hermeneutics] (2021, in press). Commissioning editor of the series Environmental Humanities (Wydawnictwo WBPiCAK). Permanent collaborator of a cultural biweekly "artPapier" and "CzasKultury.pl".