

# WILL THE SYMBIOCENE BE OUR FUTURE? GLENN ALBRECHT IN AN INTERVIEW WITH MAGDALENA OCHWAT AND PIOTR SKUBAŁA

## Introduction

As a contribution to the central theme of the current issue of “Przegląd Kulturoznawczy” (“Cultural Review”) focusing on topics related to the Earth, we present our interview with a distinguished scholar and environmental philosopher, the author of *Earth Emotions: New Words for a New World*. The interview could be considered as a follow-up of the article “Lichens: Earth’s Alphabets of Reciprocity” (Ochwat, Wójcik-Dudek, and Skubała), published in this issue, where we explore the concept of symbiosis as a positive interspecies relationship that enables the functioning of lichens, placing symbiosis within the framework of posthumanist discourse. By introducing the concept of Symbiocene, Glenn Albrecht addresses the topic of holobionts and symbiotic relationships between different forms of life, which present a real alternative to the dominant anthropocentric model of life – individualistic, selfish, and exploitative. His primary goal is to present the Symbiocene as an alternative vision of coexistence on Earth, based on harmonious cooperation and mutual support.

Glenn Albrecht was Professor of Sustainability at Murdoch University in Perth, Western Australia, until his retirement in 2014. He is now an Honorary Fellow in the School of Geosciences, University of Sydney. He also worked at the University of Newcastle as Associate Professor of Environmental Studies until December 2008. He has published widely, including many book chapters and journal articles on environmental and animal ethics, social ecology and the existential impacts of environmental transformations. His major work, *Earth Emotions* (2019) has been published in French, Spanish and, in 2024, Dutch.

Glenn Albrecht gained international recognition for his concept of “solastalgia.”<sup>1</sup> The term describes the distress produced by environmental change impacting people

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<sup>1</sup> The experience of solastalgia is likely ancient and ubiquitous. What is new, however, is that solastalgia has, in recent years, become an emotion felt in connection with the climate and environmental crisis, as well as the stagnation of the Anthropocene. The concept of solastalgia has been applied to the study of negative environmental changes in many countries, focusing on the adverse impacts of mining, fires, floods, glacier loss, oil spills, changing weather patterns, and hurricanes. Solastalgia can also

while they are directly connected to their home environment.<sup>2</sup> In this sense, solastalgia is different from nostalgia, that is, melancholia or homesickness experienced by individuals when separated from their beloved home.<sup>3</sup> Solastalgia is now widely discussed in academic contexts and has also inspired creative pursuits in art, literature and music.<sup>4</sup>

In 2011, Albrecht developed a new conceptual framework for a new era. He proposed the idea of the Symbiocene to change the way we think of and talk about the world and to foster a new narrative of our human and non-human reality.<sup>5</sup> Described in depth in Albrecht's *Earth Emotions: New Words for a New World*, the term "Symbiocene" is derived from symbiosis (specifically, from the Ancient Greek words *symbios*, meaning "living together," and *kainos*, meaning "new," as in a new period in history). The Symbiocene highlights symbiotic interconnectedness of life permeated by the diversity of all living beings and promotes the balance of interests, and much needed equilibrium and collaboration, especially now, when we know that one being's domination over another leads to destruction.<sup>6</sup> Albrecht portrays the Symbiocene as a period in the history of humanity in which we put our intelligence into practice and begin to replicate the symbiotic and mutually reinforcing natural forms and processes in human societies across the planet. In *Earth Emotions*, he expresses his desire to be part of the "Symbiocene," where humans have learned to live in harmony with all other beings.<sup>7</sup> According to him, the Symbiocene will begin when we have come to see ourselves as a mere 'moment' in the totality of life, a realization that should become the basis of all our thought, policies and actions.<sup>8</sup>

**Magdalena Ochwat, Piotr Skubala: In the book *Earth Emotions*, in the chapter dedicated to solastalgia, you write about the psychological shock you experienced when confronted with the full destructive power of coal mining and energy**

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be a non-human experience. Solastalgia was first mentioned in the journal PAN, Philosophy Activism and Nature, in 2005. This emotion is referenced in the works of Richard Louv and Naomi Klein. G.A. Albrecht, *Earth Emotions: New Words for a New World*, Cornell University Press, Ithaca-London 2019, pp. 40–41.

<sup>2</sup> G. Albrecht, G.-M. Sartore, L. Connor et al., *Solastalgia: The Distress Caused by Environmental Change*, "Australasian Psychiatry" 2007, Vol. 15 (1 Suppl), S95–S98, p. 45, doi:10.1080/10398560701701288.

<sup>3</sup> G.A. Albrecht, *Earth Emotions...*, op. cit., pp. 38–39.

<sup>4</sup> There have been many cultural-artistic responses to solastalgia in Poland over the years. See for example: <https://phmuseum.com/projects/fading-senses>, <https://www.verzio.org/en/2023/films/solastalgia>, <https://culture.pl/pl/dzielo/szymon-roginski-solastalgia>, <https://www.operabase.com/productions/kris-davis-and-paul-grabowsky-or-kris-davis-and-lutoslawski-quartet-the-solastalgia-suite-premiera-270743/en>.

<sup>5</sup> P. Skubala, M. Ochwat, *On the Role of Symbiotic Thinking in the Age of Anthropocene*, "Dialogue and Universalism" 2023, Vol. XXXIII (2), p. 41, <https://doi.org/10.5840/du202333217>.

<sup>6</sup> Ibidem.

<sup>7</sup> G.A. Albrecht, *Earth Emotions...*, op. cit., p. 103.

<sup>8</sup> Ibidem, p. 104.

**industry impacting people and the sense of place in the Upper Hunter region. We live in an area where coal extraction has caused significant landscape and environmental destruction. In Poland, we still derive 60% of our electricity from coal, while in Australia, it's now around 50%. It is very difficult to change the approach to mining and to convince politicians, among others, that it's high time to leave coal in the ground, just as the people of the Hunter River did. Why is it so difficult for us to move away from burning fossil fuels in Australia, Poland, and around the world?**

Glenn Albrecht: Unfortunately, coal mining in the Hunter Valley of Australia is still expanding. Despite a couple of wins in the courts, new mines are being approved and existing mines are being expanded. The reason for the continued reign of “King Coal” is simple, “power” (coal, electricity and iron) buys “power” (politics and economics). As one wise person once said, for people within the Anthropocene, “it is easier to imagine the end of the world than to imagine the end of capitalism.” In my work as a philosopher, I am doing my best to indicate that the Anthropocene is not only a symbiocidal mode of material existence, it is also a conceptual prison from which we are struggling to get out. I have created new conceptual tools to help us open the door of the cage, to let us fly once again and to go in the eutopian (good place) direction of the Symbiocene, a new era that will truly reflect our name of *Homo sapiens*.

**You created the meme “Symbiocene” to describe a conceptual framework for the new era founded on symbiosis, which you understand as organisms, such as plants and fungi, people and bacteria, or people and animals, living together. The Symbiocene, a new period (-cene) in human history, is characterized by the incorporation of symbiotic life processes in human activities, creative practices, and design. How did it start for you?**

My interest in symbiosis was sparked by my botanically inclined mother, when I was a very young man. In Western Australia, we have many species of ground orchids that have stunning flowers. I was tempted once to dig one up in the bush and replant it in our garden in the suburbs. My mother said: No, you cannot do that because the orchid relies on a fungal network under the ground to keep it alive and healthy. She elaborated that each orchid has its own fungus connection to help with nutrient gathering. Dig up the orchid and break the vital connection with the fungus, and you kill it. Ever since that time, I have learned more and more about symbiosis in nature. Key people I consider in the social aspects of symbiosis within *Earth Emotions* (2019) and since then include: Elyne Mitchell, Lynn Margulis and Dorion Sagan, Murray Bookchin, René Dubos, Vandana Shiva, James Lovelock, Bruno Latour, Gilles Deleuze and Félix Guattari, Donna Haraway, Tim Morton, Robin Wall Kimmerer, and Suzanne Simard. There are many others. My most recent “discovery”

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was that an amateur botanist, Edith Coleman, from Victoria, Australia, in the early 20th century, was the first person to discover pseudocopulation in orchids, where the orchid mimics the anatomical shape of a female wasp, hence tricking a male wasp into copulation and thereby facilitating pollination. She wrote her first paper on orchids in 1922. That discovery paved the way for Deleuze and Guattari to write about the orchid and the wasp, symbiosis, and the concept of “deterritorialization” in 1987. I am happy to report that I am still a student of symbiosis!

**How do the symbiotic interactions in ecosystems, described by researchers such as Lynn Margulis, James Lovelock, or Suzanne Simard, shape your thinking about the modern world? In what way does biology, treated as an ‘interpretative system’ of reality, influence your approach to the world, and what implications does this have for contemporary humanities and social research?**

As a philosophical realist, I place the highest emphasis on the importance of ‘discovery’ in the realm of biology, not interpretation. As an activist, I am also a follower of Karl Marx, but only in the respect that he famously stated “The philosophers have only interpreted the world, in various ways. The point, however, is to change it.” I am committed, on the basis of new knowledge about life as holobiont partnerships, to change as rapidly as possible, from the Anthropocene to the Symbiocene. The revolution in thinking that symbiosis has generated in biology can also be the stimulus for a revolution in the arts, humanities and the social sciences. ‘Sumbiocriticism’ in literature, for example, can help reveal the tendencies in past literary form and structure to mirror the colonialist, reductionist and anthropocentric (patriarchal) aspects of what we now call the Anthropocene. From that critical foundation, new, symbio-centric forms of production can inform creative output and new research priorities. Transdisciplinary fields such as sumbiology can help demolish old Anthropocene disciplines and silos.

**How have your personal experience growing up on your grandparents’ farm and in close contact with nature influenced the development of your idea of the Symbiocene and shaped your approach to the relationship between humans and Earth, as described in your book *Earth Emotions*? Would this fit into the paradigm of situated knowledge?**

I have deliberately placed my creative thinking within the idea of a sumbiography, as detailed in my book, *Earth Emotions*. I have done so to avoid drowning the reader in the old debate within philosophy about truth, objectivity and relativism. As someone who was also sociologically trained, I am acutely aware of the historical, social, cultural and ideological factors that influence a thinker’s ‘position’ on any particular

topic/subject. I understand the powerful influence of e.g., patriarchy on the life and career of Lynn Margulis, however, it was and remains her great contribution to our factual understanding of life by symbiosis that she is rightly famous for. Positionality is important and I went out of my way to acknowledge my background and influences in *Earth Emotions*. Yet, if we focus too much on positionality and situated knowledge, we lose sight of what is important about the factual or conceptual contribution that is being made by a person.

As a scientific realist, I respect the progressive evolution of the objective truth about reality and wish to incorporate new knowledge into new ways of being human. For example, we have only just found out the surprising fact that ancient (500 million years) retrovirus genetic material makes up 8–10% of the human genome and is crucial for our survival, including the way the human embryo develops. The positionality that is important here is the discovery that humans are “more than human” as our contemporary genome reflects symbiosis with microorganisms such as retroviruses. The discovery, that the relationship between humans and the rest of life, is based on the co-evolution of e.g., viruses and apes is for me is the crucially important point here. We did not know this fact before 2024, so I am focussed on applying this revolutionary discovery of partnerships between the microcosmos (retroviruses) and the macrocosmos (human bodies) to a new philosophy of life. My grandparents and my mother influenced my past sumbiology, but new discoveries in symbiotic science influence my views on sumbiology and the Symbiocene into the future.

**In your book *Earth Emotions*, you propose a new term: “sumbiocracy.” It defines a new form of government for the Earth, one where everyone can live well together, across the scales, from the local to the global. This new form of government is founded on symbiotic organic processes and manifests itself in the creation and operation of what some deep ecologists call a “council of all beings” and in the extension of the right to legal and ethical protection from humans to non-humans. How close is deep ecology to you?**

I am at one with Deep Ecology until it retreats into subjectivism and a nebulous notion of the self. I admire Arne Naess and his use of symbiosis to reconstruct the human-nature relationship. I once met him, and we got on very well. Joanna Macy’s<sup>9</sup> “Council of All Beings” is close to sumbiocracy, but I want the “sumbios” in sumbiocracy to strengthen the symbiotic relationships between species, not to focus exclusively on species themselves (or ecosystems, which are also abstractions). Maybe to/a separate “species” is a reductionist atom of a reductionist biology? Margulis

<sup>9</sup> Joanna Macy (eco-philosopher, Buddhist scholar, and deep ecology activist/teacher) is one of the creators of the Council of All Beings – a communal ritual in which participants step aside from their human identity and speak on behalf of another life-form. More see: <https://www.rainforestinfo.org.au/deep-eco/Joanna%20Macy.htm>.

wrote about holobionts... that makes more sense to me. Life knows no boundaries... it is home to the biocomunen, the life we all hold in common. I also dislike the implication that Deep Ecology is “deep.” That implies all other positions are shallow (inferior). “Deep” Adaptation has made the same mistake! Sumbiocracy is offered as a form of inclusive governance for all.

**You also propose establishing “sumbiology” as a new transdisciplinary ‘discipline,’ a domain that studies the relationships between people and other living organisms and ecosystems. In *Earth Emotions*, you envisage a research community of sumbiologists and call yourself a professor of sumbiology, hinting at your affiliation with other sumbiologists. How do other biologists respond to your idea? Would you include humanities scholars in “sumbiology”?**

My position on symbiosis is informed by bioscience. I am not sure about affiliation with other “sumbiologists.” I wish that was true! I think Murray Bookchin, as a social ecologist, is the closest I get to another thinker who understands symbiosis as a transdisciplinary social/cultural/political revolutionary concept. I have met him as well... he spent most of the time we had together arguing against my use of complexity theory. Feisty bastard!!! (But I hugely respect his legacy). In *Earth Emotions* I encourage scholars and creatives from all domains to use transdisciplinary thinking to re-unite the world ‘we’ have fragmented. I argued: “In the spirit of the concept of ‘sumbiology,’ the study of the life-supporting relationships at all scales, I invite scholars and artists of all kinds to take up the new concepts and ideas presented in *Earth Emotions* and critique, develop and apply them further. For my part, I can see a union of the sumbio-humanities with the symbio-sciences in the creation of the Symbiocene. What a great foundation for a university.”<sup>10</sup>

**The new era of the Symbiocene is supposed to be a time of a positive affirmation of life, providing people with opportunities to connect to the rest of life. How is your vision perceived in the world of scientists and among people outside science? Do they think that the Symbiocene gives hope and can indeed be implemented? Or do they say that it is purely utopian? Which is the prevailing view? When we talk of your views, we often hear that they (views) are utopian and that it is impossible to implement this project.**

I have radical anticipation of the Symbiocene... I do not have hope. The Symbiocene is eutopian (a good place), but not utopian (an impossible place). It is the Anthropocene that is utopian! I have mounted a decade-long effort to get the Symbiocene up as a meme (cultural replicator) worthy of our commitment. I feel that (at

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<sup>10</sup> G.A. Albrecht, *Earth Emotions...*, op cit., p. 196.

last) I am getting some solid support, even from scientists. The choice we have is now organically clear... a good life or a bad death?

**Sumbiocriticism, which you pioneered, is a branch of ecocriticism that examines human/non-human relations from the perspective of symbiotic connections and explores the human sense of kinship with various beings. Sumbiocriticism aims to show the degree of interconnectedness between the social world and the biological and ecological systems. In our understanding, sumbiocriticism combines the humanities, including literature, history, philosophy, and culture, with the natural sciences and fathoms narratives/stories for the various forms of life on the Earth to convey more than just the human image of the world—an extremely complex image in which all the elements (plants, animals, people, and microorganisms) are connected in the most diverse ways. Do you also think we need close collaboration between the humanities and the natural sciences? New alliances, new collectives?**

Getting rid of “silos” is a massive thing. But what is a silo? A site of temporary storage (grain, missiles). I am looking for something permanent, something that houses life, not death. I am seeing the use of sumbiocriticism in various forms of literature, and, in particular, the use of my psychoterratic terms such as solastalgia in the psychoterratic evaluation of literary works. The literary response to landscape distress was just as bereft of the ‘right’ words for emotional responses as that of ordinary people within those landscapes or their home regions. With the Symbiocene as a shared narrative about the integrity and beauty of the Earth, it should be a lot easier for the humanities and the sciences to come together as we all share this wonderful home.

**We see a huge potential in symbiotic stories. These are stories that can provide answers to the current environmental problems. Such narratives often integrate Traditional Ecological Knowledge with Western science and thus produce a more complete knowledge of the world, without privileging the scientific way of knowing. We believe that they enable us to reunite with the world and establish relationships with all species, rather than with only one. Do you think new stories are needed for these dark times? What do you think of symbiotic stories? Do you have any examples of literature that can be considered symbiotic stories?**

I fully agree with your points. I see the Symbiocene as a meta-narrative that can be applied to any domain of human interest. The need for more positive symbiotic stories, especially for adults, is hugely important. As a grandfather, I have found very few stories for children. However, *Finding Nemo* is one that my now nine-year-old

granddaughter and I really enjoyed.<sup>11</sup> The Australian national scientific institution CSIRO has published a series of books on symbiosis for kids.<sup>12</sup> I have written to them and given them my full support. Books for Indigenous kids that feature their own symbiotic culture are now being produced, and many are in their own language! Generally, anti-symbiotic books sell really well, as do dysbiotic films. It is time we all worked hard to change that. Sumbiocriticism of those dysbiotic trends could be a useful first step. I am encouraged by new film, art, dance, poetry, and prose that are moving in the direction of the Symbiocene (in many languages).<sup>13</sup>

**In one of our articles on the Symbiocene (“On the Role of Symbiotic Thinking in the Age of the Anthropocene”), published in *Dialogue and Universalism*, we say that it worries us that Darwinian ideas, with their central concepts of cutthroat competition and survival of the fittest, are still the foundation of modern thinking about nature for many people. We believe that moving away from this way of thinking is crucial. How do you see the role of Darwinian thinking?**

I see the symbiotic revolution in bioscience as a paradigm shift in Kuhnian terms. Darwin was much smarter than crude Darwinism as he did study symbiotic relationships in nature, but was unable to connect all the dots, for example, with pseudocopulation between certain species of orchid and the wasp. As mentioned above, that discovery was to be made by the Australian botanist Edith Coleman in the 1920s. Darwinian evolution is not to be dismissed, but the sheer weight of Margulisian (acknowledging the work of the late Lynn Margulis) knowledge of evolution by symbiosis means that we must consider both. Since the 1930s, we have been able to employ powerful microscopes to render visible the invisible in nature. It turns out that, as Margulis called it, the “microcosmos” is the symbiotic base of all complex life. It is time for the economic “Darwinians” to eat humble pie and learn the meaning of symbiosis, or harmonious living with unlike others. Competition between species and organisms exists, but without cooperation and the evolution of new organs and species by symbiogenesis, simply, life would not be possible.

**Appreciating the importance of the wisdom of Indigenous people in managing environmental resources without over-exploiting them has been a characteristic element of documents issued by the UN agencies IPCC (Intergovernmental Panel on Climate Change) and IPBES (Intergovernmental Scientific-Political Platform on Biodiversity and Ecosystem Services) for many years now. Traditional**

<sup>11</sup> Here is a teaching aid that goes with this movie: <https://www.teacherspayteachers.com/Product/Symbiosis-and-Adaptations-in-Finding-Nemo-727757>.

<sup>12</sup> See: <https://www.publish.csiro.au/books/series/81>.

<sup>13</sup> See, for example, this play produced in Malaysia: <https://www.thestar.com.my/lifestyle/culture/2023/11/29/in-039symbiocene039-a-future-malaysia-is-populated-by-human-animal-plant-hybrids>.



**Ecological Knowledge, once ignored and considered primitive, is now treated as a realistic platform of knowledge, practices, and beliefs for building alternative solutions to those based on hard science as a privileged way of knowing and capitalist practices. Do you think that as much as we need Western science, we also need to tap into the wisdom of Indigenous peoples? Can this be a source of hope for you? What gives you hope anyway?**

Yes, to all that. In *Earth Emotions*, I highlighted the importance of Indigenous knowledge. I especially highlighted the symbolic aspects of Australian Indigenous knowledge, which closely maps the symbiotic knowledge that science has discovered in the last 150 years. In a recent work on the element, fire, I have put the case for the “Indigenocene” as a new division in Earth history. The Indigenocene celebrates the huge cultural diversity in the adaption to the huge bioregional diversity to be found on this remarkable planet. The paper will be published in *Humans and Nature* in mid-2024. In this paper, I concluded that a dynamic mixture of bioscience, Indigenous knowledge, and citizen science would be what is needed to enter the Symbiocene. Input from all three groups to governing bodies is vital to get the Symbiocene off and running. In achieving these novel “voices to governance,” we not only bring cultural and biological knowledge to the fore but also allow the expression of human emotions connected to fire. I have coined the emotion of “reverfyre,” meaning a state of special reverie or trance in front of a roaring fire, to capture but one of the special emotional connections humans have to fire. It is my hope that as we control the furnace of the fossil-fuel-based heating of the planet, we also get back control of fire in landscapes.

I do not have hope in the face of our present dilemmas; I have radical anticipation for the future Symbiocene. I have put the case that the Symbiocene is a decolonial agent as it can be understood and applied by anyone, and any sector in society. Engaging in symbioactive processes at local and regional levels returns productivity to people in place and eliminates the need for importation of non-sustainably produced “food” elsewhere in the world. It removes cancerous extractivism from all contexts and puts in its place the symbio-production of everything needed by humans from living organisms and benign processes. That is how humans have lived for the bulk of their evolution on this wonderful Earth. That is how we will live again in the Symbiocene future. That prospect is not utopian and not hopium; it is the expression of the very best that humans can do. We are, after all, *Homo sapiens*. The Symbiocene will be... our only future.

**In *The Arrogance of Humanism*, his 1978 book on the condition of humanity on the Earth, David Ehrenfeld, professor of biology at Rutgers University, wrote: “Humanity is on the march, earth itself is left behind.” Do you believe that humanity will abandon this suicidal path? Do you believe that we will recover and build a new world?**

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We have two clear choices available to us now: stay on the symbiocide path or get off it. I think that most humans will prefer health and life over sickness and death. Most want their children and grandchildren to have a desirable future to live within. The life-affirming Symbiocene provides a powerful antidote to the death-affirming culture of the Anthropocene. As I indicated earlier in this interview, the Symbiocene is not radical or utopian; it is conservative and eutopian (a good future). It is the Anthropocene that is dangerously radical and utopian (not possible). My choice is to enter the Symbiocene!

Early View