The Importance of Indigenous Knowledges in Times of Climate Crisis

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Abstract

The Anthropocene has placed humanity in a precarious position, defined by accelerating climate change, resource depletion, and a gradual loss of the skills that long enabled human survival. In many regions of the Global North, daily life depends on extensive infrastructures of energy, industrial agriculture, modern medicine, and mass production. Skills such as growing food, identifying edible plants, preparing nourishment, healing injuries, building shelter, or producing clothing have not only undergone cultural transformation but have also been largely delegated to specialists and machine systems. This condition may seem like the culmination of progress, yet it obscures the vulnerability created by our dependence on fragile and resource-intensive networks.

If these networks falter, survival will hinge on the ability to adapt. Historically, crises have led either to violent competition for resources or to the cultivation of new forms of cooperation and resilience. Adaptation is not only biological but also cultural, shaped by ways of knowing and relating. Traditions that emphasize coexistence, interdependence, and reciprocal engagement with the environment can be found across many cultures, particularly among Indigenous communities. These cultures are grounded in ecological knowledge systems that situate humans as participants within living environments rather than as their masters.

This perspective suggests two imperatives. First, following United Nations recommendations, Indigenous knowledge must be actively preserved. Second, rather than attempting to reproduce Indigenous lifeways, we should adopt their relational approach to the environment, fostering new ecological balances. Sustaining epistemic diversity is therefore not only an ethical task but a practical one for navigating an uncertain climatic future.

Keywords: Indigenous Knowledge, Epistemic System, Climate Crisis, Adaptation.

Introduction

The Anthropocene has brought humanity to a life-threatening juncture, marked by accelerating climate change, the depletion of natural resources, and the erosion of survival skills that sustained humans for millennia. Contemporary life—particularly in the developed countries of the Global North—relies heavily on energy supplies, ready-to-consume food, modern medicine, and mass-produced goods. Fundamental skills such as cultivating food, identifying edible resources in nature, preparing them into nutritious meals, practicing self-healing, constructing shelters, and producing clothing have not only evolved through cultural

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development but have also been largely outsourced to specialists and to machines powered by electricity. This dependency has contributed to the erosion of basic survival capacities.

At first glance, this dependency may appear to be a utopian achievement. Yet such a perspective overlooks the looming risk of civilizational collapse brought about by the overexploitation of Earth's resources. In a catastrophic scenario—which must be considered a genuine possibility—only those capable of adapting to new environmental conditions during and after collapse will survive. Adaptation may take two forms: on the one hand, the appropriation of others' resources, as history shows that conflict often accompanies crisis; on the other, the cultivation of ecological and environmental skills essential for resilience and survival. Adaptation does not take up only a biological form, but also socio-cultural adaptations, which are not always positive from the point of view cultivated within the environment imbued with Christian values.

Peaceful co-existence in the process of constant flow, exchange, and interaction is the direction indicated by various systems of beliefs, which have the strongest theoretical description in Far Asia, including traditional philosophical approaches and contemporary ones (Saito 1-640). Nevertheless, the conceptual standing of such a philosophical approach and its international recognition as a systematic knowledge, though different from the traditional Western European approach based on rational individualism, can be seen as relevant in general to existential practices present also in cultures of Africa, the Americas, Australia and Europe, within peoples more connected to the indigenous knowledges and practices within their cultures.

Indigenous cultures, deeply intertwined with nature, retain precisely these critical skills. Rather than perceiving themselves as separate from the environment, Indigenous peoples engage in reciprocal relationships with it. From this standpoint, I argue two main points: (1) We should follow the United Nations' recommendation to preserve Indigenous traditional knowledge. (2) Instead of attempting to replicate Indigenous lifestyles—which may not be feasible under changing conditions—we should adopt their relational approach to the environment, recognizing our interdependence with nature. Even in the most challenging futures, survival will depend on creating new, albeit temporary, ecological equilibria. This perspective highlights the enduring significance of Indigenous knowledge in the climate crisis, both in its content and in its underlying structure, underscoring the urgent need to safeguard epistemic diversity.

In this paper, I first argue that the pursuit of human comfort has accelerated the overexploitation of Earth's resources, then I argue for the importance of recognizing and reappropriating Indigenous skills and knowledge—both in their content and in their underlying structure. By "reappropriation," I do not mean a simple return to the past or the abandonment of scientific knowledge. Rather, I approach diverse Indigenous beliefs and practices as epistemic systems: distinct, but not necessarily in contradiction with scientific knowledge. Specific epistemic standards shape specific systems of knowing, each of which retains applicability within particular conditions.

As part of the intangible heritage of humanity, such epistemic systems deserve protection, both individually and collectively. As Fulvio Mazzocchi has shown (Mazzocchi 1-14), epistemic diversity and knowledge pluralism are values that must be acknowledged and safeguarded. Taken individually, Indigenous knowledge systems offer valuable insights into the uses of plants, soils, minerals, and animals. More importantly, however, they model a way of being that is acutely sensitive to its surroundings—engaging with the environment through reciprocal exchange, taking and giving in balance. This orientation may prove

essential for survival in the challenging futures that await us. It can also be approached as a kind of Philosophy, recognized as such in the Far East, both theoretically and practically, noticed as existing in Oceania, Africa, and the Americas, but still often overlooked in Europe, which is supposed to be so civilized, and surpassingly does not have the memory of its own indigenous practices and belief, epistemic systems, and philosophies of life.

The Life-Threatening Effects of the Anthropocene – the Abuse of Human Instinctive Drives

The Anthropocene has brought humanity to a life-threatening condition, both in terms of its self-regarding tendencies and within the broader context of all life on Earth. The human inclination toward self-centeredness and the pursuit of comfort has produced paradoxical effects. By focusing on its own well-being, humanity has inadvertently generated problems and destruction. The relentless quest for convenience has also – paradoxically – led to side effects such as fatigue and loneliness—symptoms of congestion and overindulgence in comfort, which are further exploited intentionally by delivering products and services that might alleviate the fatigue and the sense of loneliness, which continue to drive production by intensifying the experience of fatigue and loneliness.

This exploitation of human instinctive drives has become a powerful source of profit in capitalist economies. It was already forcefully diagnosed by Herbert Marcusein *One-Dimensional Man* (Marcuse, 11-20, 40-53), written during a period of social revolt in France. Yet the same mechanisms remain evident in analyses of 21st-century economies. They are made evident in socially oriented philosophical aesthetics as proposed by Arnold Berleant. Drawing on classical pragmatism, Arnold Berleant, in his late work *The Social Aesthetics of Human Environments*, demonstrates how capitalism manipulates human senses for profit, appealing to evolutionary drives such as the craving for sweet and fatty foods (Berleant, 83-94). This co-optation of natural sensibilities carries damaging consequences for health, society, and the environment. Berleant's attention to sensory experience—taste in particular, but also sound, smell, and touch—offers an innovative mode of critique of economic systems from a socially grounded aesthetic perspective. His approach has inspired other scholars, including Yuriko Saito, Mădălina Diaconu, Adrian Kvokáčka, Cheryl Foster, and Cheng Xiangzhan. It is also profoundly adequate, insofar as it addresses human beings in their entirety, including embodiment and contextual embeddedness. Building on this perspective, I apply social aesthetics to my own understanding of some of the underlying causes of the Anthropocene and its destructive consequences.

The Long-Term Consequences of the Human Drive for Comfort – Fatigue, Declining Health, and the Weakening of Community

Life in natural conditions is demanding and leaves little time for rest, requiring constant alertness and significant physical activity. The desire for rest, therefore, emerges naturally from the challenges of an Indigenous way of life. Yet the pursuit of comfort—realized through countless inventions, from armchairs to elevators, cars, and escalators—has reduced the need for movement in increasingly safe environments. This reduction of physical activity weakens the body's strength. A body insufficiently exposed to sun and air, deprived of adequate vitamin D and oxygen, and lacking in movement, becomes fatigued more quickly than under more natural conditions.

In a wide body of anthropological and ecological research, food procurement in foraging and early agrarian communities is understood not simply as physical labour but as an embodied, relational practice embedded in multispecies ecologies (Sahlins1-39; Lee 36-47;

Bird-David 27-34). By contrast, industrial food systems – while reducing the need for ecological knowledge and daily environmental engagement – have reorganized human metabolic relations in ways that often diminish nutritional quality and resilience (Landecker167-194; Guthman 1-28, 69-92). This does not suggest a nostalgic appeal to an imagined "natural" vitality, but rather indicates how different socio-technical infrastructures generate distinct bodily capacities and vulnerabilities. A similar dynamic can be observed in health practices: contemporary biometrical interventions reduce suffering, yet they also reshape bodies and long-term dependencies within wider economic and political structures (Clarke et al. 162-187). From this perspective, the issue is not a simple opposition between "natural" and "civilized" life, but an examination of how shifting food and medical ecologies alter human embodiment, environmental attunement, and relations with the more-than-human world.

Populations of weakened bodies now fill developed cities, where people continue to seek connection, driven by another evolutionary impulse: the need for community. As communal beings, humans have formed groups for survival, shaped by psychological and emotional needs, at least since the time of cooperative hunting of large fauna, which necessitated the development of symbolic communication, cooperation, and rules for sharing meat (Tomasello 36-41). The emergence of such obligatory cooperation, as Tomasello argues, did not simply make humans more efficient hunters; it created a form of interdependence in which individuals relied on one another for survival itself. This mutual reliance forged early moral expectations – commitments, shared intentions, and norms of reciprocity – that regulated behaviour from within the group. Human sociability, then, is not an incidental trait but an adaptive response to ecological conditions that forced our ancestors into coordinated collective action.

Yet the construction of mass housing and megacities—concentrations of people designed to ensure access to the goods of civilization—has not erased the desire for genuine community. If anything, it has revealed the limits of proximity without cooperation. Vertical housing, dense clusters of strangers, and urban infrastructures of anonymity create an illusion of togetherness while offering little of what Tomasello would call the shared intentionality necessary for meaningful social bonds. The result is a paradox of modern life: physical nearness combined with psychological distance. Virtual interactions, dominated by symbolic cues detached from embodied co-presence, intensify this distance further. They simulate connection without providing the multi-layered social feedback – emotional, sensory, motivational – that humans evolved to expect from communal life. that lack the embodied sense of co-presence.

From a distance, civilizational development appears as a process of acceleration accompanied by entropy. Humanity's persistent drive to make life easier leads to declining bodily strength and health, as well as the weakening of social bonds and emotional well-being. As Tomasello suggests, cooperation once demanded effort, coordination, and physical presence – conditions that cultivated resilience and interdependence. Today, many of those demands have been replaced by technological convenience, outsourcing, and automation of forms of labour and relational engagement that once bound people together. Effort, though demanding, is essential for growth. When effort is eliminated – whether physical or social – the entropy of the human species begins: bodies become fragile, and relationships thin out, no longer sustained by the shared commitments that once defined our humanity.

The Paradoxical Effect of the Effort to Order Chaos – Rationality Driving Us into Climate Crisis and Global Disorder

A persistent paradox within dominant historical narratives is the tendency to retrospectively portray the major civilizational shifts of the Neolithic – intensified plant cultivation, animal domestication, and the emergence of hierarchical social structures – as outcomes of benign intentions or attempts to improve human life. Research by Scott (3-38), Graeber, and Wengrow (239-262), and others suggests that these developments were neither inevitable solutions to pre-existing problems nor guided by intrinsically "good" aims. Rather, they emerged through heterogeneous processes marked by experimentation, ecological pressure, asymmetries of power, and the gradual consolidation of extractive and accumulative logics that produced new forms of dependency and coercion. To invoke "good intentions" is therefore to adopt a narrative constructed long after the fact – one that has often served to legitimize practices of domination, fragmentation, and exploitation, rather than to explain their origins. Recognizing this historiographical layer allows for a more critical understanding of how systems of control become naturalized and how contemporary relational theories challenge the very premises on which justification rests.

What later came to be framed as "chaos" or "threat" often reflects retrospective ideological constructions rather than the lived realities of earlier modes of subsistence. These discourses, rooted in dualistic and hierarchical worldviews, positioned "nature" as unruly matter in need of human mastery, even though this separation between mind and world was itself a relatively late development. Contemporary relational approaches—such as Latour's Actor-Network Theory (Latour 10–156), Jane Bennett's work on vibrant materiality (Bennett 20–38), and Katherine Hayles's concept of "cognitive assemblages" (Hayles 115–216)—challenge these inherited assumptions by emphasizing co-agency, interdependence, and the multiplicity of actors shaping shared processes, thus offering alternatives to narratives that retrospectively justify domination or human exceptionalism.

The dualistic approach to nature—opposing subject and object, human and nonhuman—remains paradigmatic, yet it is neither transcendental nor immutable. As Gernot Böhme argued (Böhme29-37), this paradigm can and must be transformed. He highlights the importance of reconfiguring our understanding of the "nature within us" in order to reshape our relationship with the external world. Conceptualizing "nature" as an aspect of being both in relation to the external world and from the point of view from which we are speaking, that is, of our bodies, Böhme argues for the transformation of our approach to our own bodies so that it is not focused on control, objectification, and (ab)use. According to him, such a transformation is necessary because it is in our approach to our own bodies as parts of nature and the material world that paradigmatically the approach to nature and the material world is configured.

The rationalistic stance toward nature has produced practices that attempt to dominate and reshape it: redirecting rivers, cutting forests, draining wetlands for construction, exterminating animals seen as competitors, and extracting materials for urban and civilizational growth. Among these practices, energy production occupies a particularly central role today. Access to energy has transformed the daily rhythms of life once ordered by the sun, but it has also become one of the greatest contributors to climate change, resource depletion, and the global ecological crisis. This dependence is especially evident in the countries of the Global North, where everyday life relies on energy supplies, ready-to-consume food, modern medicine, and mass-produced goods. In turn, this reliance accelerates the erosion of survival skills that sustained humans for millennia. Basic capacities such as growing food, identifying edible resources, preparing meals, self-healing, building shelters, and making garments have not only evolved through cultural development but have been increasingly outsourced to specialists and machines powered by electricity.

Visions of a future built on endless progress have long ignored the looming risk of civilizational collapse brought about by the overexploitation of the Earth's resources. In this sense, the human drive for comfort, when considered in the long term and at a global scale, outlines a catastrophic scenario that must be taken seriously. Adaptation, however, need not take a single path. History suggests at least two possibilities: (1) the appropriation of others' resources, often leading to conflict and violence—in the line sketched by Leviathan (Hobbes57)—expounding one of the possible logics in action, or (2) the cultivation of ecological and environmental skills essential for survival. Given the challenges ahead, survival will require the creation of new—though necessarily temporary—ecological equilibria.

Indigenous Skills and Knowledges as Epistemic Systems

Without idealizing a "natural" way of life or Rousseau's notion of the *noble savage*, it can be acknowledged that pre-capitalist communities lived in greater balance with their natural surroundings, as was recognized by Marshall Sahlins (Sahlins 1-39). Since the Neolithic and the rise of agriculture, human societies began to accumulate—and later also to exploit—natural resources for comfort. As argued, for example, by John Zerzan (Zerzan, *Future Primitive*; Zerzan, *Against Civilization* 1-3, 68-72) and Jaym*/Jaime del Val (Del Val 128), this shift contributed to the estrangement of humans from ecological reciprocity. Both advocate for the reactivation of nomadic ways of life—not as global nomads, but as neo-anarchist gatherers, and in the case of Del Val, as vegan gatherers rather than gatherer-hunters. While I have not pursued this path so far, I emphasize that pre-capitalist and pre-urban communities possessed sets of knowledge and skills deeply relevant to their environments. These knowledges and skills, still preserved to some degree within Indigenous communities, form epistemic systems: ways of conceptualizing the world and situating oneself within it as an active member of a community. Skills can be recognized as forms of practical knowledge.

Charles Sanders Peirce's pragmatic maxim reflects this understanding: the meaning of a belief lies in its customary actions, its specific and habitual behaviours[i]. A contemporary expression of this view appears in interpretations of situated, contextualized, and embodied cognition. Many philosophers of mind and cognitive scientists recognize that knowledge is Embodied, Embedded, Enactive, and Extended (e.g., Gallagher 1-248; Menary1-66). Extension, in particular, has been convincingly argued by Andy Clark and David Chalmers, beginning with their influential paper *The Extended Mind* (Clark and Chalmers 7-19). Importantly, extension need not be digital or online: it can be as simple as a notebook serving as an external memory aid, or as a collective activity, like a dance. Marshall McLuhan described media as extensions of the human body, while Clark and Chalmers framed technology as an extension of the human mind (Clark and Chalmers 7-19). Both perspectives highlight how humans rely on environmental affordances (Gibson 119-135)—whether technological or not—through active bodily engagement. The active bodily engagement, that is embedded, enactive, and extended, can be understood also not just in relation to the individual human body, but the human bodies that commonly co-act in interactions in a specified environment and with involvement of some meaningful artefact. This is most notable in improvisatory practices, like a chorus of "dancing and singing bodies, with extraordinary varieties of masks and body extensions" that appear in a prehistoric cultural context (Del Val 143-144).

It is equally important to acknowledge that we can no longer treat knowledge as a single, unified entity—*Knowledge*—toward which all "true" findings supposedly contribute. This situation is similar to earlier debates about *Culture*. Initially, anthropologists like Edward Burnett Tylor (Tylor 1-70) posited one universal Culture, with other societies labelled

"primitive" or "developed" relative to this ideal[ii]. In reaction to flaws and reductions implied by the early evolutionary approach in cultural studies, there emerged in the early twentieth century cultural relativism with such figures such as Franz Boas (Boas 270-294), Margaret Mead (Mead & Boas xiii-xv), and Ruth Benedict (Benedict 15-31, 161-180), who challenged the early evolutionary view, emphasizing the incompatibility of distinct cultures—a position later echoed by Richard Rorty (Rorty). Lacking the possibility to relate one culture to the other, resulting in the impossibility not only of putting all cultures on one line of development towards a certain goal which was recognized as oppressive, but also of meaningful comparisons. Since the 1980s, however, a new evolutionary approach has emerged in cultural studies, focusing not on "Culture" as a whole but on the evolution of practices, beliefs, skills, languages, and other cultural units (Cavalli-Sforza 845-856). This allows for balanced comparative studies of cultures, acknowledging both similarities and differences across synchronic and diachronic perspectives (Łukaszewicz, Gitonga & Shylinhouski208-221).

An analogous shift applies to the concept of knowledge. For centuries, knowledge was equated with a single form—*Scientific Knowledge*—while other beliefs, such as traditional healing practices, were not recognized as knowledge at all (Orzechowska 197–204). Today, academic discourse increasingly acknowledges the existence of multiple knowledges, rejecting—at least in principle—the dominance of a single "true" Knowledge and an exclusive objective Truth. Instead, it embraces various situated and contextualized knowledges.

Epistemic Standards Different from Scientific Ones

The knowledges and skills most often granted recognition as epistemic systems alternative to the dominant Western one, today, are Indigenous ones. This recognition is possible only if we accept the existence of multiple epistemic standards. Each standard specifies the conditions under which "particular propositional attitudes are qualified as knowledge" (Gélinas & Bouchard 48) within a given epistemic system. Recognizing multiple epistemic standards is essential because, as Claude Gélinas and Yves Bouchard, who researched Northern Algonquian traditions in North America, argue:

> ⁅I⁆f knowledge is understood solely in terms of SK ⁅Scientific Knowledge⁆, then IK ⁅Indigenous Knowledge⁆ seems to be relegated to the realm of mere beliefs and the term 'knowledge' does not seem to mean exactly the same thing in IK than in SK. (Gélinas & Bouchard 49)

For this reason, an epistemological framework must be constructed at a meta-level—capable of embracing different epistemic systems with their various standards, without imposing any prior hierarchy. As Gélinas and Bouchard note, hierarchy arises only under conditions of transferability (Gélinas & Bouchard 53). For example, the assumption that universality is a necessary criterion for validity is specific to Scientific Knowledge. Other epistemic standards may privilege properties such as reliability or indefeasibility (Gélinas & Bouchard 51), or, as in the case of Northern Algonquian traditions, contextual and immediate efficiency (Gélinas & Bouchard 56). Such plurality demonstrates that Indigenous epistemic systems are not merely belief systems, but coherent frameworks of knowledge with their own standards of validity.

Indigenous Epistemic Systems as Intangible Heritage

In recent decades, Indigenous knowledges have increasingly been incorporated into the concept of intangible cultural heritage. According to UNESCO:

> The 'intangible cultural heritage' means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage.
>
> This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. (*Intangible Cultural Heritage Convention* 2003, Article 2.1)

UNESCO recognizes that heritage[iii] is embodied in people and that its creation and maintenance depend on social structures (Kirshenblatt-Gimblett52-65). For this reason, the active participation of local, including Indigenous, communities is essential for safeguarding intangible heritage, particularly given the "ecological significance of indigenous knowledge" (Mazzocchi10). Indigenous practices, attuned to their environments, contribute to ecological balances that vary across conditions. They propose various solutions in various settings, biological, historical, social, cultural, and political that cannot be simply reduced one to the other, but that share certain practices and beliefs – forms of doing and knowing that one should not be imposed one on the other, but that together constitute a multiplicity of cultures, systemic cultural responses to the bio-cultural environment. As Bonneuil and Fressoz observe, "[t]he wealth of humanity and its capacity for future adaptation come from the diversity of its cultures, which are so many experiments in ways of worthily inhabiting the Earth" (Bonneuil and Fressoz 71–72).

Each culture cultivates specific beliefs and practices that together constitute epistemic systems. These systems are based on different standards of reliability, which means that "there are different ways of being epistemically successful" (Mazzocchi10). Just as cultural diversity contributes to the resilience of human societies, epistemic diversity strengthens our species' cognitive resilience, particularly in the Anthropocene. As Mazzocchi argues, epistemic diversity functions as "an overall 'emergent' feature: just like bioecological diversity (…) [it] ensures a greater adaptive ability to the entire humankind" (Mazzocchi 9).

Fulvio Mazzocchi highlights the contrast between Western science and Indigenous epistemologies:

> Western science seeks an understanding of physical reality in a way that mainly enables manipulative and predictive power. This has given us an unprecedented ability to transform nature by technological means, which has yet also resulted in a perilous exploitation beyond control. In indigenous environments, the priority is instead knowing how to behave in line with their perspective of unity and relationality – all elements of the universe are interlinked, interdependent, and immersed in relations of reciprocity – living in balance with natural and social surroundings. […] Indigenous expertise is indeed a genuine, cultural expertise of long-term sustainability. (Mazzocchi 11)

Indigenous cultures, deeply intertwined with nature, retain many skills that may prove crucial in an era of ecological crisis. Rather than perceiving themselves as separate from the environment, Indigenous peoples maintain reciprocal relationships with it. Once dismissed as "premodern" and devalued, this relational perspective is increasingly recognized—across Asian, Native American, Aboriginal Australian, African, and historically European traditions—as both culturally significant and scientifically valid, particularly in light of

twentieth-century advances in physics and chemistry. Today, a variety of languages—philosophical (e.g., post-phenomenological thought), religious, Indigenous, New Age, and scientific—are available to describe the immersion of body, mind, and spirit (or emotions) within the environment, from which every entity emerges only temporarily and conditionally[iv].

Diverse epistemic systems require protection both for the sake of their content and for securing epistemic diversity, knowledge pluralism, and the safeguarding of diverse practices that have been vital throughout human history.

From this perspective, my call to action is that:

1. We should follow the United Nations' recommendation to preserve Indigenous traditional knowledges.

2. Instead of merely replicating Indigenous lifestyles—which may not be possible under present conditions—we should adopt their relational approach to the environment, recognizing our interdependence with nature and others around us.

Even in challenging futures, survival will require the creation of new, albeit temporary, ecological balances. Indigenous epistemic systems thus have enduring significance in the climate crisis, both in their content and in their structure, highlighting the urgent need to protect epistemic diversity.

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Notes

[i] "Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object" (Peirce, C. S., *How to Make Our Ideas Clear*)

[ii] The early evolutionary approach in cultural studies, understanding the Culture as one developing a different pace in different world locations when judged morally or analyzed critically, has to be framed in its context and timing. Before the adaptation of Darwinian perspective to cultural studies, it was widely believed that other creatures in other parts of the world are not people and therefore do not possess any form of culture, which is a distinctly human characteristic. The use of an evolutionary approach – even in a simple and reductionist way – was seen as a very progressive view in those days, recognizing the cultural character of different people around the globe.

[iii]The concept of "heritage" is not immobile, but is transforming, since the 1950s when it was concentrated on material cultural heritage (UNESCO Recommendations of New Delhi 1956), through the recognition of Natural Heritage (1962, 1972), to Intangible Cultural Heritage (2003), and further on to digital cultural heritage – putting it briefly.

[iv] I am of the opinion that one of the most elegant arguments for this view comes from the interpretations by Alain Badiou of Plato's Parmenides from one side and the Set Theory by Cantor, onthe other, showing the "counting as one" of a former multiplicity as the activity that is constitutive for the existence of any object, person or phenomenon (Badiou).

Works cited

Badiou, Alain. *Being and Event*. Translated by Oliver Feltham, Continuum, 2005.

Benedict, Ruth. *Patterns of Culture*. Routledge & Kegan Paul Ltd. 1935.

Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2010.

Berleant, Arnold. *The Social Aesthetics of Human Environments*. Bloomsbury Publishing, 2023.

Bird-David, Nurit. "Beyond 'The Original Affluent Society': A Culturalist Reformulation." Current Anthropology, vol. 33, no. 1, 1992, pp. 25–47.

Boas, Franz. *Race, Language and Culture*. The Macmillan Company, 1940.

Bonneuil, Christophe, and Jean-Baptiste Fressoz. *The Shock of the Anthropocene*. Verso, 2016.

Böhme, Gernot. *Filozofia i estetyka przyrody w dobie kryzysu ekologicznego*. Translated by Jarosław Marecki, Oficyna Naukowa, 2002.

Clarke, Adele E., et al. "Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine." *American Sociological Review*, vol. 68, no. 2, 2003, pp. 161–194. https://doi.org/10.2307/1519765.

del Val, Jaime. *Ontohackers: Radical Movement Philosophy in the Age of Extinctions and Algorithms. Part 2: R/evolution Technologies*. Earth, Milky way: punctum books, 2025.

Cavalli-Sforza, Luigi Luca. "Cultural Evolution." *American Zoologist*, vol. 26, no. 3, 1986, pp. 845–856. https://doi.org/10.1093/icb/26.3.845

Clark, Andy, and David Chalmers. "The Extended Mind." *Analysis*, vol. 58, no. 1, 1998, pp. 7–19. https://doi.org/10.1093/analys/58.1.7

Gallagher, Shaun. *How the Body Shapes the Mind*. Clarendon Press, 2005.

Gélinas, Claude, and Yvan Bouchard. "An Epistemological Framework for Indigenous Knowledge." *Revista de Humanidades de Valparaíso*, no. 4, 2014, pp. 47–62.

Gibson, James J. *The Ecological Approach to Visual Perception*. Houghton Mifflin, 1979.

Graeber, David, and David Wengrow. *The Dawn of Everything: A New History of Humanity*. Farrar, Straus and Giroux, 2021.

Guthman, Julie. *Weighing In: Obesity, Food Justice, and the Limits of Capitalism*. University of California Press, 2011.

Hayles, N. Katherine. *Unthought: The Power of the Cognitive Nonconscious*. University of Chicago Press, 2017.

Hobbes, Thomas. *Leviathan*. Andrew Crooke, 1651.

Kirshenblatt-Gimblett, Barbara. "Intangible Heritage as Metacultural Production." *Museum International*, vol. 56, nos. 1–2, 2004, pp. 52–64. https://doi.org/10.1111/j.1350-0775.2004.00458.x

Landecker, Hannah. "Food as Exposure: Nutritional Epigenetics and the New Metabolism." *Bio Societies*, vol. 6, 2011, pp. 167–194.

Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press, 2005.

Lee, Richard B. *The !Kung San: Men, Women and Work in a Foraging Society*. Cambridge University Press, 1979.

Łukaszewicz, Aleksandra, Patrick Gitonga, and Kiryl Shylinhouski. "Transcultural Identity of Twerking: A Cultural Evolution Study of Women's Bodily Practices of the Slavic and East African Communities." *Social Epistemology*, 2024. https://doi.org/10.1080/02691728.2023.2291767

Marcuse, Herbert. *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Beacon Press, 1964.

Mazzocchi, Fulvio. "Diving Deeper into the Concept of 'Cultural Heritage' and Its Relationship with Epistemic Diversity." *Social Epistemology*, 2022, pp. 1–14. https://doi.org/10.1080/02691728.2021.2023682

McLuhan, Marshall. *Understanding Media: The Extensions of Man*. McGraw-Hill, 1964.

Mead, Margaret, and Franz Boas. *Coming of Age in Samoa*. W. Morrow, 1928.

Menary, Richard. *The Extended Mind*. MIT Press, 2010.

Orzechowska, Sylwia. *Kobiety i rośliny w folklorze polskim*. Wydawnictwo Naukowe Scholar, 2024.

Peirce, Charles Sanders. "How to Make Our Ideas Clear." *Popular Science Monthly*, vol. 12, 1878, pp. 286–302. Reprinted in *Writings of Charles S. Peirce*, vol. 3, Indiana University Press, 1986, pp. 257–276.

Rorty, Richard. *Contingency, Irony, and Solidarity*. Cambridge University Press, 1989.

Sahlins, Marshall. "The Original Affluent Society." *Stone Age Economics*, Aldine–Atherton, 1972, pp. 1–39.

Saito, Yuriko. *The Aesthetic Appreciation of Nature: Western and Japanese Perspectives and Their Ethical Implications*. PhD dissertation, University of Wisconsin–Madison, 1983.

Sahlins, Marshall. "The Original Affluent Society." *Stone Age Economics*, Aldine de Gruyter, 1972, pp. 1–39.

Scott, James C. *Against the Grain: A Deep History of the Earliest States*. Yale University Press, 2017.

Tomasello, Michael. *A Natural History of Human Morality*. Harvard University Press, 2016.

Tylor, Edward B. *Primitive Culture*. Murray, 1920.

Zerzan, John. *Future Primitive and Other Essays*. Autonomedia, 1994.

Zerzan, John, editor. *Against Civilization: Readings and Reflections*. Feral House, 2005.

UNESCO. *Convention for the Safeguarding of the Intangible Cultural Heritage*. 2003.