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Special Issue on the 3rd
Metahuman Futures Forum:
Ending the Age of Denialism?
April 2026

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C O N T E N T S

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C O N T E N T S

Editor's Note

Special Issue on the 3rd Metahuman Futures Forum

It is a great honour and privilege to write this editorial note for the special issue on the 3rd Metahuman Futures Forum. Metahumanism, as 'a radical critique and a radical alternative to humanism', advocates relationality, symbiosis, hybridity, indeterminacy, radical planetary ethics, and co-constitution/co-becoming of human and more-than-human agencies. It offers a radical ontology of becoming and promotes radical pluralism, metaspecies relationality, proprioceptive modes of knowing. As a founder (along with Sorgner) and a leading proponent of metahumanism, Jaym*/Jaime del Val took the leading role to radicalise this philosophical thought in Europe and beyond.

This special issue brings together essays, reflection pieces, and interviews from leading theorists, philosophers, scholars, artists, curators, and activists, reaffirming the urgency of metahumanist thought in our time. Another distinguishing feature of this issue is its selection of both critical and creative pieces of writings that focus on navigating pathways towards liveable and sustainable futures. Contributors present a rich tapestry of intertwined ideas and thoughts from animal exploitation, politics, aesthetics, and ecology. Rather than promoting a stratified vision and a singular theoretical framework, the collected pieces demonstrate a diverse range of thoughts, perspectives and innovative methodologies that invite readers to reimagine planetary co-existence.

As the Editor-in-Chief of *Entanglements*, I extend my thanks to the contributors for their critical and reflexive deliberations, to the reviewers for helping bring out the best in the contributors' initial drafts, and to the whole editorial team for their dedication and coordinated efforts. I believe that this issue will foster provocations and further deliberations.

In solidarity and flux,

Sukhendu Das, Ph.D.

Editor-in-Chief, *Entanglements: Journal of Posthumanities*

April 2025

Highway to Climate Hell: Double Denialism and Human Supremacism — Introduction to the Special Issue on the 3rd Metahuman Futures Forum

Jaym*/Jaime del Val - Special Issue editor

The Metahuman Futures Forum Series

Metahumanism is a critical philosophy, aesthetics, and politics that takes further premises of critical posthumanism while sharply opposing transhumanism. It was launched as a movement in 2010 with "A Metahumanist Manifesto" (Del Val & Sorgner) but its philosophical roots and aesthetico-political pragmatics unfold since 2002 (Del Val *Metahumanist Philosophy*; *The Dances of Becoming*; *What is Metahumanism*). Metahumanism sharpens the critique of human supremacism while also proposing a pragmatics of becoming based on Radical Movement Philosophy (Del Val, *Ontohackers Parts 1 and 2.*)

The Metahuman Futures Forum was launched in 2022 linked to the EU-funded project Bodynet-Khorós[i] as alternative space to prevailing posthumanistic ones where the proposed critical frameworks are felt to be missing, and has had 5 iterations so far[ii]. It addresses the limitations and shortcomings of critical posthumanism, proposing a more radical critique and alternative than is usually the case in the latter by addressing some core unacknowledged assumptions of human supremacism that still seem to prevail much of posthumanist thinking.

As the MFF manifesto (MFF 2022 Lesvos Assembly) asks: "Till when are the critical intellectuals of the world going to continue finding a thousand excuses to reaffirm human supremacy in a more or less covert way, to not questioning their way of life, censoring the discussion and preventing the emergence of a collective, powerful and serious voice that puts on the table without palliatives the greatest taboos of supremacism: overpopulation and the way of life based on the devastating occupation of the earth, the abuse and extermination of other forms of life?"

With the Extinction & Trash-human Studies / Planetary Health & Metahuman Studies Programme, the Metahuman Futures Forum series wishes to start a new series of debates on what we consider to be the most challenging but unaddressed topics of our times. The Forum series proposes a space and process of radical critique, in contrast to the prevailing complicitness of academia, activism, and the arts, with what we will be calling the Planetary Holocide, challenging postures of fake criticality as well as those of rampant techno-fascism and concealed imperialism. The series proposes to face all the great taboo questions such as dominion over other life forms, human overpopulation, sedentary way of living, and the entire narrative of (trash-)human progress, taking further a number of existing critical frames in critical posthumanism, queer, decolonial, crip theory and other frameworks.

The 3rd MFF: Ending the Age of Denialism?

The 3rd MFF took place in 2024 in Lesvos under the following topic: *"¿Ending the Age of Denialism? Planetary Holocaust, Human Supremacism, and Extinction. Towards a Metahuman Justice and Freedom for all Life Forms."*

The most striking fact about the current *extinction crisis*, whose most imminent but not only threat is Climate Change, besides the crisis itself, is arguably the *denialism* of it practiced by humanity at large, including most of Academia and critical intellectuals, even in many fields of posthumanist thinking. Anthropocentrism seems to reign supreme, entering through the backdoor even there where beyond humanism discourses are proposed. The challenging of the totality of modes of destructive living enacted by certain dominant strands of the Sapiens since at least the Neolithic seems to be still a taboo, even for critical thinkers and many social, queer, environmental, and animal activists.

Since 2022 the MFF has been proposing an integrative frame for understanding the interrelatedness of all aspects of the crisis unleashed by human dominion over the past millennia, and to do so without concessions to the human supremacism that, either bluntly or under cover, still seems to reign supreme in other circles. In this 3rd edition of the MFF we aimed to bring the discussion further by focusing on the issue of denialism, including more specifically the mechanisms by which denialism reaffirms itself within circles of supposed critical thinking and in the academia, amongst others. This includes, of course, the denialism of denialism itself.

Reaching out toward meta-academic criticality and transdisciplinary life practices and knowledges, and against human supremacist indoctrination and fanatism**,** the EU project that served as frame for the 3rdMFF, Bodynet-Khorós, further instigated the activation of techniques of living and thinking that by far exceed any form of eurocentric, logocentric, verbocentric, academic supremacism: from indigenous knowledges to novel embodied choral practices and gathering techniques, for a metahuman mutation and a liveable future.

In words of United Nations Secretary-General António Guterres on Monday 7th November 2022 at COP 27 "We are on a highway to climate hell with our foot still on the accelerator [...] Humanity has a choice: cooperate or perish."[iii] In face of the ongoing 6th Great Mass Extinction created by anthropogenic action since the last millennia and exponentially accelerating, threatening all life on earth including "humans", it is urgent to stop our flight forwards. The challenge is that all life on earth needs to be equally taken care of. *There are no human rights without the rights and freedom of all other life forms.*

The forum addresses what one could call *double denialism:* the one actively promoted by lobbies of human supremacists (corporations, governments, media, etc.), and the implicit one due to unacknowledged human supremacism which seems to pervade most of current academia, critical intellectuals, and eco-social-animal activism, and which further entails the denial of denial itself.

The Papers and Topics

The papers in this volume are outstandingly varied and brilliant, with 15 pieces by first rank academics and artists covering a surprising range of topics, starting with those

focusing on the topic of denialism and evolving afterwards towards a wide range of metahumanist approaches to pathways towards liveable futures through a rethinking of politics, aesthetics, and the core role of the moving body in metahumanism.

Panagiota Georgopoulou's paper addresses directly the denialism of the climate crisis analysing its historical basis.

Jaym*/Jaime del Val exposes what they consider to be the biggest object of denialism today: animal exploitation food industries, and its central role in the extinction crises, and proposes ways towards a metahuman justice for all life forms.

Patricia MacCormack addresses the potential of certain nonsemiotic aesthetic practices as a politics of chaos that can regenerate the living, along with antinatalism, abolitionist veganism, and death activism.

Aleksandra Lukaszewicz addresses the importance of claiming and preserving indigenous knowledges in times of ecosocial crisis, another major metahumanist topic

Evi Stamou provides post-metahumanist perspectives on relations to plant as means to regain symbiotic forms of relation towards a regenerative coexitence.

Anthi Kosma addresses drawing as post/metahuman mode of expression and communication.

Luciano Zubillaga elaborates on his own notion of telepathy and his own cinematic practices under a metahumanist lense, as intra-active, proprioceptive practices of entanglement.

Emma Bigé's text, a translation of a chapter from her book *Mouvementements*, expands on her proposal of an ecopolitics of dance, moving across queer sexualities and race, through the notion of (wrong) contact zones and the novel ethics of relationality that certain dance practices can bring about.

Michela Bloisi researches into the very interesting concept of interkinaesthesia in her critical analysis of the potentials and limitations of the dance practice of Contact Improvisation for reinventing relationality.

The interview of Stelarc with Jaym*/Jaime del Val sheds a novel light on the artist's work and ideas from a fresh metahumanist perspective that may be more appropriate to certain aspects of his work than the more usual transhumanistic or posthumanistic readings, and is accompanied by a republication of his last published collection of statements, from 1998, the interview itself serving as an update to them, thus republishing a historical text that was currently unavailable.

The reflective piece by Jean Marc Matos further expands on the potential of dance with digital media for replying to contemporary challenges in times of algorithmic fascism, via a metahumanist claim for the moving body.

Lake Angela's reflective piece explores the significant topic of neurodivergence and mad language and its intersection with animality and nonverbal expression as another core axis to claim within the metahumanist spectrum.

The reflective piece by Marcus Ten Low expands on the very significant topic of kindness from unusual perspective that give it a broad ontological and ethico-political breadth, exploring both its various possibilities (such as veganism or antinatalism) and what hinders them from flourishing.

Lastly, the Book review by Evi Sampanikou dissects the first volume of the trilogy Ontohackers, by Jaym*/Jaime del Val, where the foundations of radical movement philosophy and hence of metahumanist philosophy are laid out.

...

I thank Sukhendu Das, the editor in chief of Entanglements, and my fellow co-editors Evi Sampanikou, Aleksandra Lukascewicz, and Joaquín Fernández-Mateo who were also coorganisers of the 3rd MFF, as well as all authors, for the wonderful achievement of this volume that we hope to expand in future through further open-access collections.

Notes

[i] See https://metabody.eu/bodynet-khoros/
[ii] See https://metabody.eu/metahumanities/.
[iii] See https://thehill.com/homenews/3723070-un-chief-we-are-on-a-highway-to- climate-hell-with-our-foot-on-the-accelerator/.

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Implicatory Climate Crisis Denial and the Dualism of Vacillation: From Enlightenment Thought to Contemporary Inaction

Dr. Panagiota Georgopoulou

Abstract

By bridging insights from sociology, posthumanist critical theory, eco-Marxist critical theory, and intellectual history, this article focuses on *implicatory climate crisis denial*—a term coined by sociologist Kari Marie Norgaard in *Living in Denial* to describe a paradoxical social stance in which the climate crisis is acknowledged yet bracketed from everyday life. Framing denial as a social question, it considers competing interpretations in contemporary theory: Bruno Latour's posthumanist critique of the human/nature divide, as articulated in the representative work *We Have Never Been Modern*, and Andreas Malm's eco-Marxist account of capitalism's structural imperatives, conveyed in key texts such as *Fossil Capital* and "The Future Is the Termination Shock." While these perspectives assume that dualism plays a significant role in shaping modernity and the dynamics of denial, this article challenges that view. Drawing on the work of philosopher and intellectual historian Panagiotis Kondylis in *European Enlightenment*, it contends that modernity is defined less by fixed binaries than by an oscillating "dualism of vacillation," in which humans are conceived simultaneously as natural beings and as masters of nature. This conceptual ambivalence, it argues, renders implicatory denial a contemporary symptom of modernity's unresolved paradox of emancipation.

Keywords: implicatory climate crisis denial, dualism of vacillation, posthumanism, eco-Marxism, Panagiotis Kondylis, Enlightenment thought.

Introduction

While the scientific reality of global warming is widely acknowledged, Western societies often fail to translate this awareness into transformative sociopolitical action. Kari Marie Norgaard's concept of implicatory climate crisis denial, introduced in *Living in Denial: Climate Change, Emotions, and Everyday Life*, captures this paradox: individuals recognize the seriousness of climate disruption and at the same time bracket it from cultural, political, and everyday life, thus leaving social practices largely unchanged. Building on this sociological

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insight, the paper treats denial as a socially organized stance rooted in cultural and politico-economic configurations rather than reducible to psychological or evolutionary bias.

This raises a theoretical question: does implicatory denial stem primarily from modern anthropocentric dualisms, as Bruno Latour suggests in *We Have Never Been Modern*, or from the structural imperatives of capitalism, as Andreas Malm argues in *Fossil Capital* and "The Future Is the Termination Shock"? Posthumanist thinkers such as Latour maintain that denial needs to be addressed by dismantling the entrenched human/nature divide, whereas eco-Marxists like Malm contend that without a clear distinction between nature and society it is impossible to assign responsibility or to analyse capitalism's structural drivers. Between these poles lies a spectrum of intermediate positions, yet all ultimately converge on the human/nature dualism as their shared point of reference.

Against this backdrop, the paper challenges the assumption that a rigid human/nature dichotomy constitutes the foundation of modernity. Drawing on Panagiotis Kondylis's interpretation in *European Enlightenment*, I argue that modernity is defined less by a fixed binary than by a "dualism of vacillation": an ambivalent oscillation between conceiving humans as part of nature and as sovereign over it. From this perspective, implicatory denial can be read as a symptom of modernity's unresolved paradox of emancipation, rather than as the residue of dualistic thought.

Before proceeding, it is important to clarify that this discussion approaches implicatory climate crisis denial as a socially organized stance that engages primarily with cognitive, cultural, and ideological dimensions. Seen through this lens, radical alternatives such as the metahumanist critique, as articulated by Jaime del Val in *Ontohackers*, Part II and III, which expand the idea of denial beyond ideology and cognition to the embodied, perceptual-kinetic frames, lie beyond the scope of this paper. From a metahumanist standpoint, both styles of critique, like Latour's of anthropocentric dualisms and Malm's of capitalism, shed light only partially on social apathy toward the climate crisis. The roots of climate denial, manifest in the persistence of human supremacism and the fixation on profit, are not merely ideological or structural but profoundly embodied. They arise from a sensorimotor atrophy that binds human beings to comfort, sedentarism, and self-referential human concerns, detaching them from nature, others, and themselves. In this sense, climate crisis denial embodies a form of alienation that is not merely intellectual or ideological but profoundly bodily and affective (del Val *Ontohackers* Part III).

The paper proceeds in three steps: it first examines Norgaard's concept of implicatory denial, then reviews competing interpretations in the Latour–Malm debate, and finally introduces Kondylis's notion of a dualism of vacillation, which reframes denial as an enduring ambivalence rather than a strict binary divide.

Defining implicatory climate denial as a social question

Despite the overwhelming evidence and public acknowledgment that the climate crisis is real, Western societies fail to transform this awareness into effective social action. Their usual response is to turn away from the reality of global warming, keeping it at a distance. As a result, everyday practices remain largely unchanged, and public pressure on governments continues to be weak. Meanwhile, the global capitalist economic system maintains its trajectory of endless growth, largely indifferent to its environmental impact. Given that this social apathy toward the climate crisis is evident in almost all Western societies (Norgaard "Climate Denial and the Construction of Innocence" 84), it has received significant attention and become an important topic of study for scholars across various fields, including environmental sociology (de Nadal et al.; Dunlap; Lübke), social psychology (Clayton; Kollmuss and Agyeman; Kovács et al.), and public opinion research (Nisbet and Myers; Pew Research Center; Shen and Wang).

How, then, should this attitude of living in denial be understood? Sociologist Kari Marie Norgaard, in her influential book *Living in Denial*, introduces the concept of implicatory climate crisis denial (10-11). This form of denial is distinct from explicit or literal denial, in which the scientific reality of climate change is rejected or its seriousness2downplayed; stances commonly associated with climate change sceptics, including populist radical right parties and figures like Donald Trump. Instead, implicatory climate crisis denial refers to a paradoxical social stance in which individuals, despite being aware of climate disruption, act as if it were not occurring, thereby making no behavioural changes. In this sense, denial does not stem from ignorance or misinformation. On the contrary, individuals are often well-informed and yet still somehow remain unable or unwilling to take effective social action. In this respect, Norgaard challenges what she calls the "information deficit model" (1). In her view, the core issue does not lie in lack of information or in misinformation, but in the contradiction between recognizing the pressing climate crisis and failing to act despite that awareness.

Furthermore, her insight challenges psychological and evolutionary accounts by framing implicatory denial as a fundamentally social question. While these mainstream approaches tend to view it primarily as a psychological or cognitive bias—either at the level of the individual or the species—Norgaard conceptualizes it as a "socially organized denial" that reflects a form of social rationality (12). Seen from the psychological standpoint, individuals often prefer to avoid negative information rather than face the dangers ahead (Haltinner and Sarathchandra 450). Denial protects them from disturbing information. In this view, anxiety and fear contribute to a systematic avoidance of the issue. Implicatory denial functions as a cognitive bias, akin to cognitive dissonance or the "ostrich effect," wherein individuals metaphorically bury their heads in the sand. Denial, then, is framed as a mental bias that blocks meaningful engagement with the climate crisis.

A related but broader explanation comes from evolutionary psychology, which suggests that denial stems from cognitive limitations inherent to our species (Goleman *Ecological Intelligence* 34). From an evolutionary standpoint, our brains have become well adapted over the last two million years to detect immediate and tangible threats—those we can see, hear, taste, or smell—which trigger defensive responses. Unlike immediate threats, our brains are not well equipped to perceive slow-moving, distant, and abstract dangers that unfold in an indefinite future, such as in the case of climate change. As a result, we have trouble understanding the complexity and the scale of the climate crisis. In this sense, denial can be seen as a failure or cognitive bias at the species level.

While these psychological and evolutionary perspectives illuminate certain cognitive tendencies, they risk reducing denial to individual or species-level shortcomings. Norgaard redirects the discussion by conceptualizing denial as socially organized, embedded in cultural norms and collective practices. Drawing on ethnographic research in a rural Norwegian community, pseudonymously named *Bygdaby*, she demonstrates that everyday expressions of climate denial function as a collective strategy to mitigate the emotional discomfort, potential social disruption, and social trauma that recognition of the climate crisis would entail (*Living in Denial*). Few are willing to confront the profound structural and lifestyle changes required to address climate change effectively, and so individuals and communities cultivate everyday practices that sustain socially organized denial, thus normalizing a perception of continuity in which "everything is fine" (208). Grasping this form of denial as socially constituted requires situating it within the cultural and politico-economic configurations that produce it.

Undoing implicatory climate crisis denial: the question of modern nature/society dualism

In contemporary environmental thought and in defining implicatory climate crisis denial as a social issue in particular, the question of whether it originates primarily from modern anthropocentric culture and its underlying dualisms or from the structural imperatives 3of capitalism remains a central and thought-provoking debate. From a posthumanist perspective, with Bruno Latour (*We Have Never Been Modern*; *Down to Earth*) as a pivotal voice, denial is understood as a consequence of the rigid human/nature dichotomy that underpins the modern anthropocentric framework and its doctrine of human exceptionalism. This "Great Divide," as Latour (*We Have Never Been Modern*) and Philippe Descola (*Beyond Nature and Culture*) term it, and which Descola (63–66, 78; "We, the Modern") identifies as a defining principle of modernity, positions nature as external to human societies. Society exists as its own autonomous domain, while the natural world is relegated to an insignificant "outside," stripped of intrinsic meaning and value. As such, the Great Divide operates as a regime of visibility (Latour "Onus Orbis Terrarum" 319): it shapes perception, constructs our sense of reality and permeates popular imaginary. Within this anthropocentric Constitution, natural history becomes disconnected from socio-cultural events. The climate crisis, framed

as part of "nature", is thereby perceived as unrelated to human affairs. By keeping nature and society separate, modernity obscures the interdependence of humans and nonhumans, as well as humanity's fragile relationship with the planet. The problem of climate change thus remains out of sight, conceived as too distant to demand urgent social action. If the climate crisis constitutes a blind spot within the modernist gaze, then social apathy toward it can be understood as an effect of this anthropocentric blindness.

From the eco-Marxist perspective, denial is seen as structurally embedded in capitalism. Specifically, Andreas Malm ("The Future Is the Termination Shock" 14) views climate denial as a structural condition of capitalism, which depends on a growth-driven fossil economy. As Malm contends, "Denial is not an idiosyncrasy or private pathology, but a certificate of membership in this particular [capitalist] society" (13). The interests of powerful corporations and corporate lobbies, along with media conglomerates and political actors, play active roles in shaping narratives that downplay or deflect the urgency of the climate crisis, thereby securing the continuation of extractive industries and shielding elite interests.

Within this capitalist political-economic-energy matrix, Malm (13-14) argues that climate crisis denial cuts across all social classes, albeit for different reasons. Among capitalist elites, a sense of omnipotence fosters the belief that green capitalism and technological innovation will resolve the climate problem. As a result, they refuse to acknowledge any real threat to their position or way of life. In contrast, members of the lower classes often feel trapped within dominant economic systems and the sheer scale of the climate crisis. Their denial, in this context, arises from a deep sense of helplessness and a perceived lack of agency in confronting the forces of capitalism and the global market economy.

At the heart of these competing interpretations, such as those of Latour and Malm, lies a philosophical debate often framed as *hybridism versus dualism*, centering on the enduring question of whether to reject or uphold the modernist conceptual divide between nature and society. From the posthumanist standpoint, thinkers aligned with Latour's logic, among them Michel Serres (*The Natural Contract*), Timothy Morton (*Hyperobjects*), Levi R. Bryant ("Regimes of Appearance"), and others, contend that dualistic thinking, as the modern regime of visibility or appearance, fails to account for the reality of climate and ecological problems. Addressing implicatory climate crisis denial entails unmasking anthropocentric ideology and dismantling the entrenched human/nature dichotomy. Deconstructing implicatory denial thus requires reconfiguring our understanding of the entangled relations between humans and nonhumans, emphasizing hybridity over dualism.

This position has faced sustained critique, notably from within the Marxist school of thought, most forcefully from Malm (*The Progress of This Storm* 59; "Against Hybridism"), but also from scholars such as Alf Hornborg ("Technology as Fetish"; "Artifacts Have Consequences") who challenge the posthumanist rejection of the nature/society divide. While not overlooking its problematic implications, they argue that retaining certain dualist

frameworks remains indispensable. As Malm asserts, the absence of a clear distinction between nature and society makes it nearly impossible to ascribe agency, responsibility, and culpability to human actors in the socio-ecological crisis. This, in turn, undermines both the diagnosis of capitalism's structural drivers and the articulation of transformative political strategies.

At the same time, a range of blended perspectives lies between these positions. We refer to two particularly illustrative examples. Drawing on posthumanist currents, the social geographer Nigel Clark advocates a critical re-engagement with Enlightenment dualism, particularly the nature/society divide that underpins the modern Constitution (*Inhuman Nature*; Clark, Stasch, and Bialecki "Can We Have Our Nature/Culture Dichotomy Back Please?"). According to Clark, the effort to deconstruct the nature/society distinction has, in some ways, turned into a moral witch hunt. For him, dichotomies are not merely reductive but also productive, as they are a necessary part of thought and knowledge production. In this sense, reviving dichotomies in a heuristic way allows us to re-engage with the idea of nature as an independent force, helping us to realize the inhuman autonomy of geophysical processes and, thus, the fragility of humanity.

Environmental historian Jason W. Moore, informed by the eco-Marxist tradition, advances a posthumanist refusal of dualism in favour of hybridism (*Capitalism in the Web of Life*). For Moore, the anthropocentric divide between nature and society, the so-called Cartesian dualism, made possible the capitalist exploitation of nature as an external, passive resource; thereby legitimizing centuries of environmental degradation and social inequality. Overcoming this dualism, he argues, is essential both to transcending capitalism and to responding effectively to the climate crisis (2, 5).

Taken together, these theoretical disputes reveal a spectrum of positions, all of which treat dualism as a key point of reference. At the centre lies a profound concern over whether to dismantle or to preserve the human/nature distinction. On the one hand, posthumanist critiques view the nature/society divide as a source of the epistemic blindness that obscures climate change and the broader ecological crisis. On the other hand, eco-Marxist scholars argue that retaining a clear distinction between nature and society is indispensable to attribute responsibility and to diagnose capitalism's role in producing the climate crisis. Against this backdrop, however, it is worth asking: was this dualism ever as clear-cut within modernity's Enlightenment inheritance as this lively debate tends to assume?

This question is by no means novel; the extent to which the human/nature dualism has shaped the conceptual framework of modernity has been raised across successive debates and continues to animate scholarly discussions. Many posthumanist and new materialist thinkers strongly endorse the Latourian thesis of a "modern Constitution" structured through a rigid opposition between humanity and nature. On one side stands the human, endowed with autonomy, sovereignty, reason, and agency; on the other lies the blind, passive, and mute

realm of nature. Within this modern dualist imaginary, what Donna Haraway (*When Species Meet*) terms the "fantasy of human exceptionalism," nature becomes "decorative" (Serres *The Natural Contract*3), reduced to the inert and external background of culture and the history of human societies, stripped of any "agential" capacities (Barad *Meeting the Universe Halfway*). From this perspective, the degradation of ecosystems and the unfolding climate crisis register not as matters of urgent concern but as peripheral issues, provoking social apathy, what Latour evocatively calls mere "yawns of boredom" (*Down to Earth* 18).

Yet this account has not gone unchallenged. A number of scholars reject Latour's narrative as an oversimplification. Marxist ecologists such as John Bellamy Foster (*Marx' s Ecology*) and Paul Burkett (*Marx and Nature*) point to Marx's concept of metabolism to 5show that classical modern thought did not banish nature to an external realm but acknowledged a dialectical interchange between human labour and the biophysical world. Nigel Clark and Kathryn Yusoffin "Geosocial Formations and the Anthropocene," likewise complicate Latour's account, arguing that nature was conceived less as an external backdrop than as a "stable foundation" of social thought (3–4). As Claes Tängh Wrangel and Amar Causevic summarize this position in their article "Critiquing Latour's Explanation of Climate Change Denial," discourses of modernity "never conceived of nature as merely lying outside of humanity, as Latour and others maintain [...] nor was it simply assumed to be a 'backdrop to the human drama' [...] or a mere 'context' that geopolitics could 'take for granted' " (214–15).

Building on these critiques, I propose a complementary approach grounded in Panagiotis Kondylis's reading of Enlightenment thought. I contend that modernity can be interpreted as characterized less by fixed binaries than by a "dualism of vacillation," which encapsulates the unresolved paradox of emancipation at its core, a paradox that continues to inform contemporary debates on nature, society, and the climate crisis.

Kondylis and the dualism of vacillation: the tension of being both natural and sovereign

Panagiotis Kondylis (1943–1998) was a Greek philosopher and intellectual historian who wrote primarily in German and is regarded as one of the most original interpreters of modernity in late twentieth-century European thought. He was awarded the Goethe Medal in 1991 and the Humboldt Prize in 1994. Working as a *Privatgelehrter* (independent scholar) outside institutional academia, he maintained a critical distance from academic philosophy, emphasizing intellectual autonomy and a rigorously historical approach to ideas. In his major two-volume work *European Enlightenment* (1993), the Greek translation of the German original *Die Aufklärung im Rahmen des neuzeitlichen Rationalismus* (1981; reissued 2002)[i], Kondylis offers an alternative perspective that undermines the strict dichotomy between nature and society. Through Kondylis's overall view, the anthropocentric project of human emancipation and liberation—a central task of Enlightenment philosophy—is not grounded in a rigid human/nature binary but rather in a "dualism of vacillation," where the two

categories are at once intertwined and separated (*European Enlightenment* vol. 1 29; "Afterword or The Multi-Dimensional Enlightenment" 27).

In this regard, when considering the intellectual and cultural roots of implicatory climate crisis denial within the Enlightenment legacy, I suggest that it is not merely a consequence of the rigid human/nature dichotomy that underpins the modern conceptual framework. Rather, this denial expresses a "dualism of vacillation", a tension-filled relationship between the idea of nature and the modern ideal of human autonomy, an ambivalent oscillation that lies at the very heart of modernity.

It should be noted, however, that Enlightenment philosophy was far from a single, unified movement. Kondylis's analysis (*European Enlightenment* vol. 1 31–32) avoids a reductive view, distinguishing between two main strands: rationalism (for example, Descartes), which relies on the primacy of speculative reason and defends the normative moral ideal against skepticism, and empiricism (for example, Helvétius, Condillac, and Hume), which affirms the primacy of sensory experience and aligns with skepticism and even nihilism. He also portrays the development of Enlightenment thought as a war waged on two fronts: externally against the authority of Christian theology and internally against the spectre of nihilism, as seen in thinkers such as La Mettrie and de Sade.

At the core of Kondylis's original thinking lies his conception of the history of ideas as a history of struggles for power. As he put it, his approach takes as its point of departure, "the polemical essence of thought" (vol. 1 31). From this perspective, he conceives the history of Enlightenment philosophy as inseparable from social history. For him, ideas do not function as autonomous entities but as means of struggle within ongoing socio-political conflicts. As Kondylis writes[ii]2,"The fact that ideas have an effect means only that certain people refer to them. [...] Ideas become effective precisely because they are employed in situations that are not the product of ideas, but of existential-political gravity. It is the seriousness of the existential condition that renders the influence of ideas a serious matter" (vol. 1 43). Seen through the polemical nature of ideas, Kondylis depicts the formation of Enlightenment thought as revolving around a fundamental battle with the authority of Christian theology. In terms of social history, this polemical configuration is enacted as a struggle between the representatives of the Church and the proponents of a secular philosophy striving to liberate themselves from its power and authority. In this context, according to Kondylis, the rehabilitation of the state of nature in its physical sense functions as one of the most significant ideological "weapons" against the theological opponent, while at the same time standing at the forefront of modern thought's emancipatory and anti-theological project (vol. 1 28).

More concretely, the modern claim that "the human is a being of nature" provides the foundation for the emancipation of humanity from Church doctrine and Christian ascetic morality (vol.1 67). It is the state of nature, rather than religion, that constitutes the basis of

human life. Reason and human action can therefore unfold independently, no longer bound to the teachings and moral constraints of the Church. Since the human being is conceived as part of the natural order, the meaning of existence and the pursuit of happiness are displaced from a transcendent afterlife to the immanence of the physical and sensual world. At the same time, Kondylis underscores that rehabilitating the state of nature is not merely a theoretical matter but is intertwined with the social question, closely tied to the practical demands of the bourgeoisie to prioritize trade, production, and consumption.

Given the pivotal and emancipatory role of the concept of nature in contesting the authority of the metaphysical-theological framework, Enlightenment anthropocentric philosophy is more accurately understood as grounded in a constitutive interrelationship between nature and the human and not, as Latour and others suggest, as positing nature as an external and autonomous category opposed to the human. Following Kondylis's approach, the interrelation captured in the claim that "the human is a being of nature" constitutes the very condition for the Enlightenment's emancipatory project against theological–metaphysical hegemony.

Because the defence of the idea of nature underpins the anti-metaphysical and secular stance of modern thought, Kondylis (vol.1306-307) argues that it both affirms nature's autonomy from divine authority and advances its ontological revaluation. Within Deism, even though the order of nature is established by the will of God, the natural world is assimilated to a perfect mechanism operating without divine intervention. To prevail against the theological opponent, he adds, modern systems of thought are compelled to articulate a persuasive alternative vision of nature. In this respect, nature is ontologically reconfigured through the conviction of its inherent rational order. The medieval conception of the cosmos, where the earthly world appears as an imperfect entity, subject to change and decay, is thus displaced by the idea of nature as ordered and governed by eternal and necessary laws.

In polemical terms, modern thought needed to present the natural world as the primary domain of human life in a form capable of withstanding the theological demand for absolute and irrefutable truths. In this sense, as Kondylis (vol.1 142) argues, the uncertainty generated by setting God aside is offset by a vision of nature as governed by immutable natural laws. The ontological attributes once ascribed to divinity are secularized through their transposition into necessary and inescapable laws of nature. These transposed attributes, in 7turn, provide individuals and modern societies with a sense of stability, security, and control, thereby ensuring the social acceptance of the modern worldview (vol.1 143). Moreover, this modern conviction in the inherent order of nature elevates it into a privileged object of knowledge, paving the way for mathematical physics and enabling humanity to acquire the means of mastering the world.

Paradoxically, for Kondylis, the Enlightenment's ontological revaluation of nature, described as the very "nerve centre" of the emancipation project, ultimately turns against its

own aim (vol.1 153): the Enlightenment ideal of human self-determination and freedom. Conceived as essential to the modern effort to set God aside and to sever thought and humanity from the theological–metaphysical framework, this ontological reconsideration of nature later reveals its ambivalence in the development of modern thought. Kondylis (vol.1 154-157) identifies this as the "paradox of emancipation": modern thought rests on two incompatible premises: the human as a natural being, and the human as sovereign and master over nature. This constitutive tension renders the very claim to freedom problematic, insofar as humanity is inscribed within a nature conceived as a perfect mechanism governed by necessary laws. How, after all, can humans be truly sovereign if they remain bound within an unavoidable natural order?

In Kondylis's line of reasoning (vol.1 212-214), the adoption of a sharp Cartesian dualism between human and nature can be seen as a strategic conceptual attempt to resolve this constitutive tension. The separation of *res cogitans* from *res extensa* or mind from body installs human reason as exterior to nature, thereby enabling humanity to posit itself as distinct from nature even while materially inscribed within it. Within this Cartesian compromise, reason becomes the locus of human autonomy: the principle that transcends the determinisms of inner drives and the necessities of the external world, and thus imagines itself as unbound by the corporeal and natural order.

In this respect, following Kondylis's approach, the Enlightenment's project of emancipation is haunted not by a clear-cut dualism but by a "dualism of vacillation": an ambivalent, tension-laden relationship between nature and the human. Invoked as the ground of liberation from theology, the appeal to nature inscribes a relation of mutual entanglement with the human. Yet invoked as a threat to freedom, it reinscribes a rigid binary between the two.

Conclusion

Following Norgaard's approach, implicatory climate crisis denial can be seen as a paradoxical double life, a social stance sustained by a double propensity to both recognize and deny climate change. While debates over its origins, whether in epistemic and cultural anthropocentric dualisms, as Latour suggests, or in structural capitalism, as Malm argues, assume that dualism plays a significant role in shaping modernity, the problem may also stem from the Enlightenment legacy itself (Morton, *Hyperobjects* 9). Drawing on Kondylis, I contend that modernity's inheritance carries the conceptual traces of an unresolved paradox of emancipation: humans are at once part of nature, subject to its laws, and sovereign over it. This suggests that the distinctive feature of modernity is not a strict binary between human and nature but a "dualism of vacillation", an ambivalent, tension-laden oscillation between the two.

In this light, the paradoxical duality of implicatory climate crisis denial appears as a contemporary symptom of modernity's constitutive ambivalence. It emerges from the cultural resources of modern thought, swinging like a pendulum between recognition of human/nature interrelation and retreat into sharp Cartesian dualism. Within this framework, the climate crisis is simultaneously acknowledged and bracketed off from political, social, and private life. Coming to terms with this ambivalence provides deeper insight into climate denial and suggests that overcoming it demands confronting the dualism of vacillation at the core of modern thought. Certainly, addressing climate denial also requires relinquishing the humanist project of dominion, challenging the profit-driven logic of capitalist growth, and undoing the sensorimotor habits that binds the modern subject to comfort. Yet, in parallel with these imperatives, the struggle against climate denial may also be inseparable from the struggle to come to terms with modernity's own ambivalent inheritance.

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Notes

[i] Kondylis's interpretation of Enlightenment philosophy has remained largely overlooked within Anglophone scholarship, since his *Die Aufklärung im Rahmen des neuzeitlichen Rationalismus* was published only in German and in Greek (*European Enlightenment*, 2 vols.), and has never been translated into English. I cite the Greek translation. For an analysis of his work in English, see Panagiotis Lathyris, "Ideas in Trenches: Power and Polemics in Panagiotis Kondylis."

[ii] All translations from the Greek are my own.

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Planetary Holocide and Metahuman Justice: An Integrative Frame for Addressing the Extinction Crisis

Jaym*/Jaime del Val

Abstract

This paper starts by synthesising in unusual way the overwhelming evidences that show that the Animal Exploitation Food Industry (AEFI), an acronym and field of study here proposed, is recognised by science as the major cause of the climate and biodiversity crises, mass extinctions, global pollution, nonhuman animal abuse, threats to human/humanimal health, water and food security, human justice, equality, and peace, along their associated existential and extinction threats, historically and in the present. Nonhuman animal exploitation for food is hence the elephant in the room, the missing piece in the "extincton puzzle". But this is silenced in the global agenda so that States systemically violate human rights and those of all life forms by actively promoting such industries while human activism and academia mostly perpetuate Human Supremacism and speciesism. A double denialism is hence at play, both as actively orchestrated by the lobbies that control and underlie States and media for the sake of profit, and as deeper omnipresent expression of Human Supremacism, so that both the radicality of the extinction crisis and its deep sources are ignored, along with the needed replies: shift to plant based diets, deep degrowth towards indigenous ways of living, and voluntary, queer antinatalism.

An integrative, intersectional and holistic, metahumanistic frame is proposed that overcomes the usual fragmentation of ontologies, policies, and ethics in addressing the deep interconnectedness of humanimals, nonhuman animals, and environmental processes and problems, towards a metahuman justice capable of addressing the challenge of the current extinction crisis or Holocide. Ultimately this will require deep systemic shifts beyond reformist agendas, towards self-organisation and deep degrowth, undoing the destructive nature of human expansion on Earth for a potential planetary regeneration, as part of a VegAnarQueer and Metahumanist politics of Earth liberation during the upcoming collapse.

Keywords: Human Supremacism, Metahumanism, Extinction, Animal Exploitation, Denialism.

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Introduction: The Age of Planetary Holocide

In this paper I set out to outline an integrative frame which brings together issues which are mostly treated separately both in ontology, ethics, and politics, such as human-animal/humanimal[i], nonhuman animal, and environmental rights and problems. I do this by bringing together evidences of the degree to which food of animal origin is the major source, not only of the biggest machine of abuse and extermination of sentient beings in history, but also of the environmental crisis, as well as of human health and equality problems, and is so both now and historically, since the Neolithic.

By exposing the deep interconnectedness of these problems, and the central and historical role of animal exploitation in them, I seek first to expose the pervasive speciesism and unacknowledged Human Supremacism visible in most of human societies, politics, and discourses. I further seek to expose the implicitly criminal existence of States as grounded on this exploitative and expansive human agenda that is itself now seen as having no imminent future, as well as the criminal nature of silencing it and of feeding the underlying industries on behalf of all States. This implies a turn in fields such as green criminology and in justice, embracing a more transversal metahumanist approach, defining a new concept of justice.

This further implies outlining a transformative agenda that goes beyond State politics, which is arguably linked to the management of exploitation since its start, and points to a deeply intersectional metahumanist and VegAnarQueer movement that challenges the totality of human expansion and its associated supremacism while addressing the extreme urgency of the ecological and climate crisis. The latter is possibly unavoidable at this point due to the criminal inaction of States, hence invoking a turn in politics from averting collapse to mutating as it happens, but in any case, pointing to the undoing of human expansion and dominion on Earth as sole means for a metahuman justice and a liveable future.

We live in the age of Planetary Holocide, where human "progress" is grounded on a hidden horror of such magnitude that it is disrupting the terrestrial ecosystem and unleashing most, if not all, human ills. Holocide is a term I coin for bringing together the totality of forms of Ecocide (the global disruption and destruction of ecosystems and wildlife, and their associated mass extinctions), Zoocide (also referred to as Animal or Planetary Holocaust[ii], including all forms of animal exploitation, most of which by far are in the food industry), Genocide (mass killing of and damage to populations human and nonhuman based on supremacist criteria), and of exploitation, oppression and disruption of life and ecosystems, human and non human, animal and other, organic and inorganic. It aims at bringing together all aspects of the current mass extinction event that threatens all of life, human included, while highlighting the denialism of the crisis itself, and of its sources, that "humanity" at large performs.

Highway to Climate Hell[iii]

In July 2022 The General Assembly of UN stated that having a healthy, clean, sustainable environment is a fundamental Human Right (UN General Assembly) stating that "environmental degradation, climate change, biodiversity loss, desertification and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to effectively enjoy all human rights". According to the UN reports on Climate Change (IPCC. *Synthesis report*, 25, 30) and biodiversity (IPBES, *Global Assessment Report*, 24-27; GBO, 2, 9), and to over 15,000 scientists (Ripple et al., *World Scientists' Warning 2017*) Humanity faces an unprecedented challenge in history, an existential threat to civilisation (Lenton et al., 4; Sprat and Dunlop) while UN has been repeatedly announcing a threat of extinction due to the exponential undermining of liveable conditions for humans and millions of other species on Earth caused by human action. 6 of 9 Planetary Boundaries are already beyond the "safety zone for humanity" (Richardson et al.). Massive threats to human health and life, equality, food security, and peace are already visible and well under way due to climate collapse and ecosystem disruption, (IPCC *Summary for Policymakers*, 12-18) threats which, far from diminishing, are growing exponentially (Ripple et al., *World Scientists' Warning 2020*).

This is largely due to flagrant inaction of States and industries over the past six decades, so that now the window of action has closed down to only the next five years, or less: 2030 (IPCC, *Synthesis report*, 21). The more we advance, the greater the shock measures needed, and very soon it will be too late to avoid an ecosocial collapse: it is now or never (Ripple et al., *World Scientists' Warning 2020*). But instead of diminishing impacts, "business-as-usual" carries on the tendency to exponentially increase them so that current expectations may lead to well over 5 degrees Celsius global mean temperature increase in this century: an extinction scenario.

The international scientific community, UN and multiple other institutions have been claiming for decades that the major source of the crisis, above fossil fuels, is the food industry, around 80% of whose impacts have to do with animal-based food, yet this major, historical and present driver of the crisis is also the most silenced one, being entirely missing in the national and global agendas: Animal Exploitation Food Industries (AEFI).

Food of mass destruction: Statement of the Facts for a Trial against all States.

In the following section I detail how the Animal Exploitation Food Industry (AEFI) is described by science as greatest existential threat for, and violation of, the right to life of all life forms (humans included). I coin the term Animal Exploitation Food Industries (AEFI) in order to highlight a specific intersectional blind spot that is often overlooked in the prevailing approaches by outlining the field where most human, nonhuman, and environmental problems seem to stem from. This section corresponds partly to the actual revised text of the lawsuit against 46 states I presented at the European Court of human rights (ECtHR) in 2023.[iv]

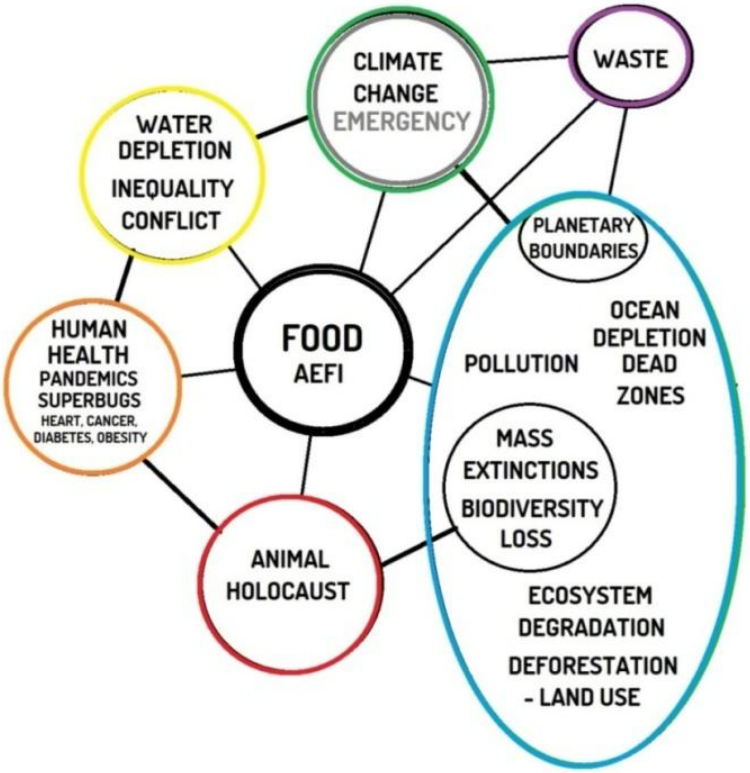


Fig. 1: Animal Exploitation Food Industry as major source of all major problems. (Image by author)

AEFI as Major source of mass extinctions and pollution

AEFI are the *major driver of mass species extinctions, loss of biodiversity and of ecosystem functions* fundamental to life (FAO *Livestock*, 181; Westhoeck et al.; Benton et al.; Dasgupta; Ministerio de Consumo, 14), of *ecocide*, deterioration of ecosystems and of Planetary Health. Food systems are the major driver of transgression of Earth System Boundaries that define liveable conditions for humans on Earth (Rockström et al.), with over a million species and 25% of life threatened with extinction, and around 50% of decline of natural ecosystems (IPBES *Global Assessment Report*, 26-27; GBO, 9), a Planetary Health crises (Whitmee et al.) that is defined by experts as major existential threat to a liveable future of humans on Earth (IPCC, *Synthesis report*, 25, 30; Sprat and Dunlop; Ripple et al. *World Scientists' Warning 2017*).

This is mostly due to the fact that AEFI, particularly relative to the animals falling under the speciesist labels of "livestock"[v] and "poultry", with "beef" and "dairy" at the forefront (Bailey 2014) is *the major driver of agriculture, land use, and land-use change:* 80% of all agricultural land, covering one third of the habitable land surface of the planet, over 3.7 billion

hectares, is for feeding "livestock" and "poultry" (FAO, *Livestock*, 74, 115, 269; IPBES, *Summary for Policy Makers*, 30; Westhoek et al.; Poore and Nemeck, 8), while animal-based food constitutes only 18% of human calories. Animal agriculture is by far the major driver of deforestation: 41% of all tropical deforestation is through extensive "livestock" for raising beef alone with 2,1 million has. worldwide, 85% of it in the Amazon with 1,8 million has. per year, like half the surface of the Netherlands (Ritchie and Roser). This land use is the major driver of mass extinctions and ecosystem degradation on land (IPBES, *Summary for Policy Makers*, 30).

AEFI are the major source of chemical substances (pesticides, fertilisers, antibiotics, disinfectants, vitamins, plastics, etc.) polluting water, soil, animals, plants, and human bodies. The abuse of pesticides and fertilisers in animal agriculture, as well as the gigantic amounts of slurry from farms, are polluting the soil, rivers and 40% of underground freshwater reserves currently threatened by depletion (FAO, *Water Pollution*) and destroying marine ecosystems through fertilisers creating eutrophication and over 700 massive dead ocean zones all over the planet (Breitburg et al. 3; Desmit et al.); while pesticides are bringing pollinators on the verge of extinction, putting life on Earth at risk (Kevan et al.). Extensive "livestock" implies far more land use and GHG emissions than intensive, and is hence not a substitute for factory farming with the current and expected meat production (FAO *Livestock*, 114; Pieper).

"Livestock" is also a major consumer of fishing and aquaculture and hence of destruction of marine life and ecosystems (FAO *Livestock*, 205, 276). Fishing and Aquaculture themselves are the major drivers of destruction of marine ecosystems and of mass extinctions in the oceans, with over 160 billion fish and 600 billion molluscs in farms, and with over two trillion fish caught per year (Mood & Brooke; Mood et al.), 28 trillion including shrimps (Romero & Autric); 90% of big fish having disappeared, 40% due to bykill; industrial fishing covers over 55% of the oceans, four times more that the totality of global agriculture (Kroodsma et al.), and is by far the major source of destruction of marine ecosystems and of extinctions at sea (IPBES *Global Assessment Report*, 24-29) while trawling destroys every year 150 times more ocean floor than the totality of land deforestation (Watling & Norse); fishing is also the major source of plastics in the oceans, with 75-86% from fishing gear (Lebreton et al., 11) which get eaten by plancton and fish, often killing them, and end up as micro- and nanoplastics in our bodies (Yee); and aquaculture is source of massive attacks against animal welfare resulting in massive diseases of fish and sealife, and of pollution through toxic chemicals (disinfectants, pesticides, antibiotics) that end up in the oceans and in our bodies, including heavy poisonous metals (Sultana).

AEFI as Major source of Climate Collapse

AEFI are the major driver of climate collapse and Greenhouse Gas (GHG) emissions (IPBES, *Global Assessment Report*, 30; FAO, *Livestock*, 112-115; Goodland and Anhang; Dopelt et al; Burney et al.), with food systems representing 34% of GHG emissions[vi] (UNEP, *Emissions Gap Report 2022*, 13; Crippa et al.), "livestock" and animal agriculture are source of *more direct*

emissions than all transportation[vii], mostly stemming from the methane of rumiant's digestion in extensive livestock, with red meat and milk contributing 55% of total agriculture emissions (Romanello et al., 1638). Meat and dairy are the major source of destruction—through deforestation—of carbon sinks, which are considered the most important solution to the climate crisis, and of deterioration of the ozone layer through nitrous oxide (N2O); of air pollution and acidification of ecosystems through ammonia (NH3) (Dopelt et al.); meanwhile fishing is the major source of destruction of the other main carbon sinks, the oceans, which are also core to sustaining the planet's cycles and its liveable conditions (Del Val, *Los Océanos*).

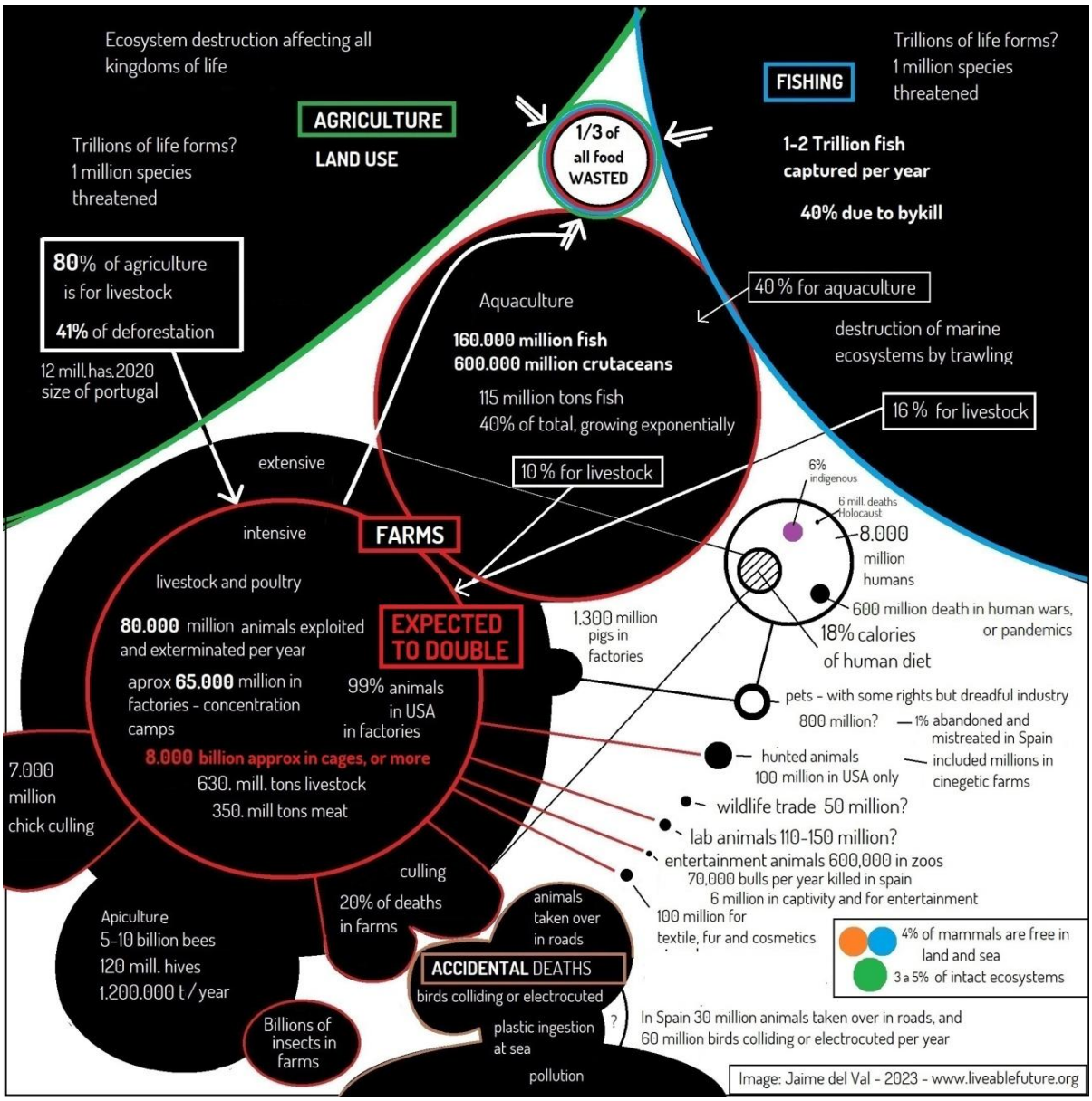
AEFI as Major source of animal abuse and Planetary Holocaust

AEFI are by far the major driver of systemic mistreatment, abuse, and extermination of sentient beings, whose conditions of extreme exploitation are ethically unacceptable, described by historian Y.N. Harari as "the greatest crime in history" and "the most pressing ethical issue of our times" (Harari) and directly affect human and environmental health in a vast amount of ways, with farming accounting for over 99% of all exploited animals in land, a Zoocide and Holocaust of over 100 billion animals slaughtered per year on land[viii], 70% to 99% of them in factory farms (FAIRR). Every day over 200 million animals are slaughtered on land, ten to thirty times more in aquaculture and fishing (Fig.2) estimated as 40 trillion over the past 100 years (100 trillion including fishing), though new estimates for shrimps multiply this figure again by ten with estimated 28 trillion shrimps (also considered sentient beings) slaughtered per year by fishing alone (Romero & Autric). This means that every three days as many land animals are slaughtered as the deaths in all human wars in history, and if including sea animals an amount greater than all human population is killed every day.

These animals are considered sentient beings with complex cognition, emotions, unique individuality and capacity to suffer, hence with rights and moral status, by science (Low et al; Brown; Marino; Marino and Colvin; Colvin et al.), philosophy (MDAE; Fernández-Mateo et al.) and law (TFEU article 13 and COUNCIL DIRECTIVE 98/58/EC of 20 July 1998 art. 3, 4), but they mostly live in life-long confinement and filthy overcrowding, billions of them in cages the size of their bodies (CIWF), under systemic suffering, abuse, torture, mutilation, and cruelty (Wang and Chang; Fiks; Spoolder; Garmendia) systematically developing diseases, tumours and infections due to their living conditions, and being massively treated with antibiotics (WAP) and numerous toxic chemicals, also in aquaculture, including use of heavy metals (Sultana et al.), that end up in human food posing most severe threats to public health, but all of it hidden behind the secrecy of the industry (Fiber-Ostrov & Lovell) protected by governments and law, a secrecy that ensures the complicity of populations. This veil of secrecy is undermining not only animal rights, and animal welfare law, but also public health, planetary health, and Human Rights.

Core to this is also the disinformation spread by the AEFI lobby (Lauber et al.), whose false statements about supposed environmental, health, and animal welfare seamlessly spread with the support, not only of governments and media of all kinds, but even of the large environmental NGOs (Del Val & Mas).

Associated to the above is also the ongoing culling of hundreds of millions of animals due to the health problems intrinsic to farming and transportation in terrible conditions, and of 7 billion newborn chicks discarded per year and immediately grinded or gased. Besides this 10%-20% (Garmendia) usually die in the farms due to overcrowding, abuse, stress, and lack of hygiene; in Aquaculture the figures are even higher with close to 50% fish or shrimps dying



prematurely (McKay & McAuliffe). Besides this over 30% of food is wasted per year globally, which means that over 30% of this Holocaust and its associated ecocide has been for nothing.

Fig.2: The numbers of the Animal Holocaust and its associated extinctions. (Image by author)

The exploited nonhumans are forced to breed, brutally inseminated or raped[ix] with their offspring immediately taken away (sequestrated and stolen), especially in dairy industry. They are quickly fed till their legs cannot hold them, developing pus infections and tumours, living crowded and confined in their feces and amongst the corpses of fellow animals, massively medicated with antibiotics, vitamins, hormones, and dozens of other toxic substances that end up in the food humans eat. They are systematically hit, amputated without anaesthesia (beaks, tails, teeth, testicles, and more, and even skinned alive in the fur industry)**,** and killed by slitting the throat hanging to death, with painful stunning techniques that often don't work, or even just strangling or hitting, including killing fetuses and pregnant animals.[x] Animal suffering in factory farms can be even higher in rich countries which may have certain animal welfare laws because farm animals have radically different standards from other such as pets and where a greater percentage of animals are confined in factories.

AEFI as Major source of human health problems

AEFI are the major driver of direct attacks and threats to human health, affecting more vulnerable populations, and hence of genocide. Animal farming and exploitation, and its related animal agriculture and land use change, are by far the major source of zoonoses that constitute 75% of human diseases, and of virtually all pandemics in human history (FAO, *Livestock*, 269; IPBES, *Pandemics* 2, 12, 14, 19; IPBES, *Global Assessment*, 24) which have caused near to a billion deaths; of abuse of antibiotics, with over 80% of all antibiotics being used for nonhuman animals (Martin et al.) so that farms are the major source of antimicrobial resistance (WAP), that is seen as upcoming major threat to health, with expected 10 million deaths per year by 2050 (O'Neill Report); of unhealthy diet with excess of animal products and sodium and lack of fruits and vegetables that is behind 11.5 million deaths per year (GBD) far more than tobacco and twice those of the entire COVID-19 pandemic, through cardiovascular diseases, cancer, diabetes, obesity, and many more, especially affecting poor populations (Ministerio de Consumo 15; WHO), with red meat causing more deaths than road accidents in Spain (Martin-Calvo et al.), and one million deaths worldwide (Watts et al., 55-57), with two million deaths per year due to meat and dairy (Romanello et al., 1638), causing a 20% increase in risk of death (Pan et al.); hence animal based food underlies most of the major sources of premature death: a true *pandemic*, larger than COVID-19 and equivalent to having several 9/11 attacks every day or several plane crashes every hour, but with no media attention. Besides this there is food poisoning, mainly due to the conditions of animals in farms; and yet unknown effects of the numerous chemicals that animals are given to the animals, or effects of genetic modification (Greenpeace, *Less is more*). AEFI are also the major source of pollution of water, soil, and air affecting human health directly (FAO, *Water Pollution*), and of indirect health effects due to climate change, species extinctions, and ecosystem degradation (Romanello et al., Whitmee et al.).

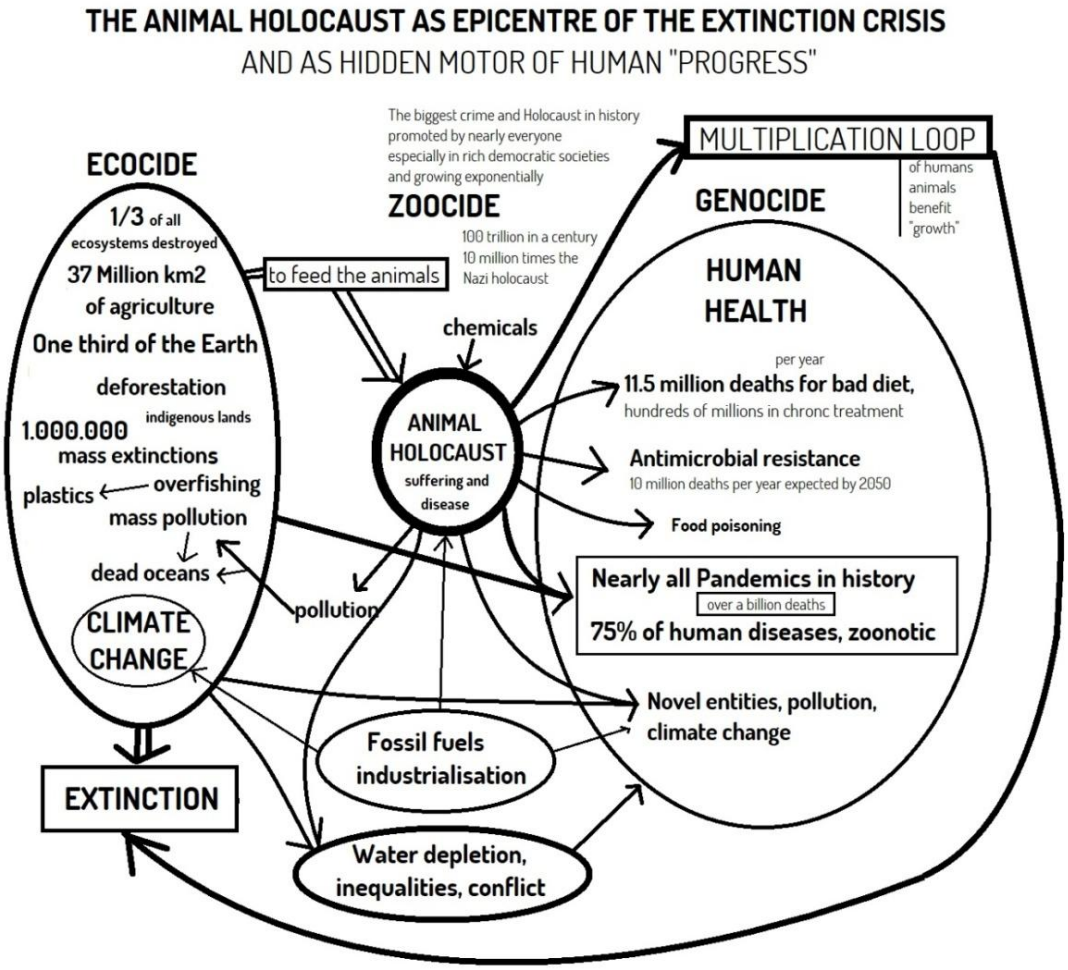
AEFI as Major source of food insecurity, water depletion and human inequality

AEFI are the major driver of human inequality, water-food insecurity, and conflict: of fresh water insecurity, scarcity, depletion and pollution, with 70% of all freshwater consumed by animal agriculture (IPBES, *Summary*, 30; FAO, *Livestock*, 167), with 40% of reserves already depleted or polluted (FAO, *Water*; Dalin et al.); the major source of food insecurity in a scenario of global desertification, intensified by climate change affecting the vast land surfaces used for "livestock" production, disproportionately affecting vulnerable populations, particularly women, in discriminatory manner, with over 3.5 billion people in highly vulnerable regions (IPCC *Summary for Policy.*, 12-18; IPCC *Synthesis*, 5; GBO, 8; FAO, *Future of Food*, 123); AEFI constitute an unimaginably inefficient food system where most of the Earth's resources, land, and see are used to feed nonhuman animals that constitute a small and unnecessary part of the human diet, with massive delocalisation, hence also favouring food waste; hence it is the major source of human poverty, famine, malnutrition (including obesity), inequality, and mass migrations with over a billion climate refugees expected by 2050 (Bellizi et al.); this is also due to higher prices of crops for feeding "livestock", and to delocalisation of agriculture in poor countries, where local people don't have access to the crops being grown for global "livestock"; and with water and food scarcity already and

expected as imminent major source of global conflict, wars, social polarisation, and threat of global collapse.

Fig. 3: The animal Holocaust as epicentre of the global crisis, underlying both the environmental crises and most human health problems and inequalities, while being itself the biggest crime in history and the most pressing ethical issue of our times. (Image by author)

"Livestock" is also the major source of expropriation and killing (through paramilitary armies) of indigenous people for deforesting tropical forests for crops and pasture for feeding cattle, indigenous people who instead are presented in UN reports as guardians of biodiversity and the ones from whom to learn practices of living for a liveable future (IPBES, *Global Assesment*, 33, 47; IPCC *Synthesis*, 30). Animal agriculture, "livestock", and fishing are a major current source of human exploitation and slavery as well as their historic source through



plantations in colonialism, with over 1 billion workers globally. Meanwhile activists voicing it are killed in Brazil or prosecuted as terrorists in the USA (Potter) and organisations are criminalised all over Europe and North America: Les Soulevements de la Terre (France), Just Stop Oil (UK), Letzte Generation (Germany), Extinction Rebellion, Scientist Rebellion,

Futuro Vegetal (Spain), and many more. In short, AEFI are by far the major driver of *ecocide* (mass environmental destruction), *zoocide* (mass exploitation and killing of nonhuman animals), and *genocide* (focusing on mass attacks on human health, equality, food-water security, and peace, suffered by vulnerable populations, with tens of millions of deaths per year, but eventually also including non-humans), all together forming a Planetary Extinction Crisis (PEC), or *Holocide* (complete killing).

The Hyperloop: Farming as Historical Source of the Crises and as Missing Piece in the Puzzle of Extinction.

Due to the above and to extensive anthropological and historical evidence I argue that farming is both the epicentre and historical origin of the Biodiversity crisis and 6th Mass Extinction[xi], starting before 10.000 years ago in the Neolithic as well as of all forms of systemic human oppression. Although extinctions of megafauna may have started between 20,000 and 45,000 years ago due to excessive hunting, along with the use of language and a slight population increase of the Sapiens, the Neolithic unleashed a much more dramatic impact on landscapes, and exploitation of animals, plants, water, and soils.

The fact that humans and "livestock" have gone from being 2% to 98% of all mammals, and hence wild free land mammals have gone from 98% to 2% (Bar-On et al.) is itself a sign of the extreme destruction of biodiversity and ecosystems of the past millennia, with farming as historical, ongoing, and now exponential source. Charles Patterson denounces and analyses at the beginning of *Eternal Treblinka*, the emergence of the "Great Divide" of Human Supremacism, which Freud called human megalomania and Montaigne called human arrogance, which Ron Lee, founder of the Animal Liberation Front, denounced as even more entrenched than sexism, and which Milan Kundera denounced as the most fundamental debacle of the human. Citing numerous authors, he exposes the gradual emergence of animal slavery at the hands of the most defenceless of animals.

There is also overwhelming anthropological evidence that faming gave rise both to massive human overpopulation and to worse human life conditions than those of gatherer-hunters. Animal and plant exploitation in the Neolithic is the historical, millennia-old source[xii] of overpopulation, accumulation, sedentarism, property, exploitation, extraction, mass extinctions, and human inequality, unleashing a *hyperloop* of homogenisation, self-referential closure, and quantitative expansion (Fig. 4) that has imposed itself at the expense of biodiversity. Arguably it gave rise to all systemic human inequalities and conflicts, to sedentary ways of living and property that deplete the environment, create gender inequalities, slavery and war, and of course to systemic animal abuse and exploitation of plants, water, and land.

Numerous anthropologists argue that for 99% of its history, before agriculture and farming, the Sapiens was under 1 million global population of egalitarian nomad gatherer-hunters without any exploitation of other life forms nor destructive impacts in the environment, working mostly two to four hours per day, with a lot of time for leisure, good life spans, health, and nutrition, and with none of the preoccupations on future programming that came with agriculture, as expressed in the *Original Affluent Society* theory (Sahlins; Scott; Suzman).

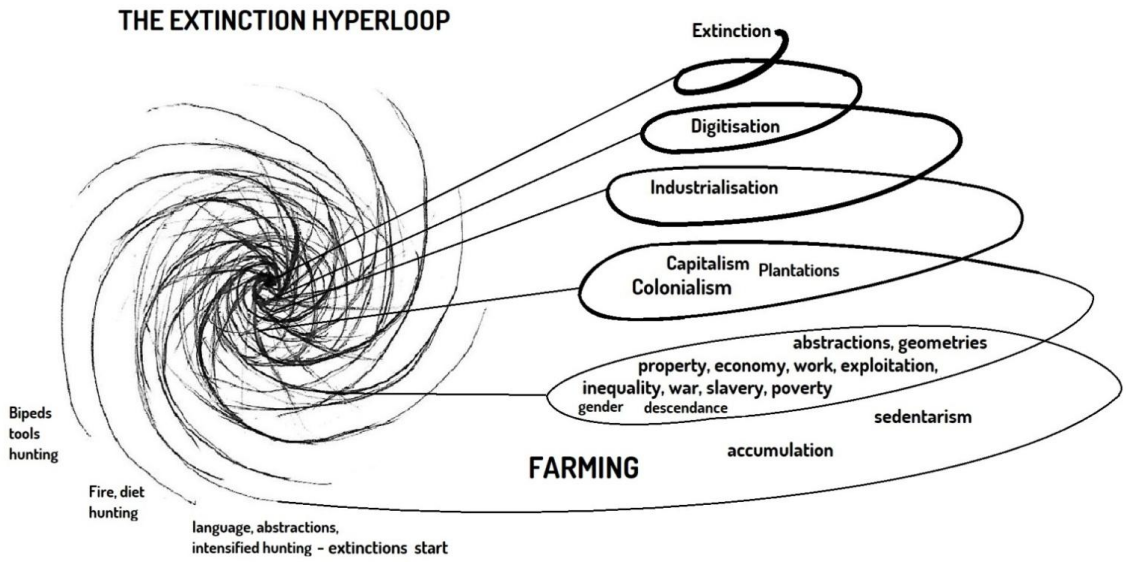


Fig. 4: Extinction Hyperloop with Farming as historical source of the crises. (Image by author)

Since its onset around 10,000 years ago, to maintain and increase "livestock" and crops, the dominant human created fences, houses, accumulation, property, the need to ensure descent and hence gender inequality[xiii], laws, oppressive norms, and around these, States, wars, slaves, kingdoms, empires, colonialism, plantations, capitalism, growth economy, and an exponential population growth which was not the result of a better living but a demand of a destructive and geologically anomalous expansionism. With industrialization it accelerated its expansion until it rapidly exceeded all liveable planetary boundaries, exploding a finite planet to supposed infinity; in this way, it went from a million gatherer-hunters in continuous movement in nature, coexisting with other species, to 8 billion sedentary superpredators and consumers, cultivating immobility and destructive dominion, obsessed with the accumulation of property and money, and with perpetuating the self-referential system of norms, economies, and increasing "profit" for the elites, that has become the aspiration of majorities. Digital culture is only the newest turn to this tendency to all-encompassing accumulation and dominion which accelerates along with its associated extinction crisis, the quickest one known in Earth history. A black hole of exponential nihilism has been created where the

tendency to increase profit through homogeneous accumulation and fragmentation has turned into the destruction of the very conditions of life, which is based on the opposite: symbiosis and diversification, so that this anomaly of exponential human expansion seems to have no imminent future. Its collapse is dragging millions of other life forms along and may even pose a threat to future liveable conditions on Earth altogether.

The Needed but Ignored Replies

In words of United Nations: "a substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products" (UNEP, *Assessing the Environmental Impact*, 82[xiv]). There is widespread consensus that "global food production is the largest pressure caused by humans on Earth" (Willett et al.), that "more than fossil fuels, agricultural activities directly influence ecosystems by occupying large land areas and using huge quantities of water" (UNEP, *Assessing*, 81), that "a radical transformation of the food system is needed" (GFS), that around 80% of damages come from animal exploitation food industries (Leip et al.), that "the global environment cannot sustain the cumulative impact of rising per capita beef consumption" (McAlpine et al.), so that "dramatic reductions in meat and dairy consumption [...] are crucial for keeping warming to 1.5°C and avoiding the most catastrophic climate change scenarios" (Johns Hopkins Centre). "Only with the recognition of the urgency on this issue [...] meaningful progress can be made on climate" (Ripple et al.). Several reports estimate the needed reduction in around 50% globally, which for EU countries means a reduction of 71-76% by 2030 and 84-86% by 2050 (Greenpeace *EU Briefing*; Springmann et al. *Options for Keeping*; Rise Foundation) though many reports quantify the far greater benefits of a 100% shift to plant diets for climate, biodiversity, human health, equality, food security, and animal wellbeing. A global emergency needs to be coordinated on this core epochal challenge (Ripple et al. *Warning 2017*), analogous to, or larger than, the COVID-19 or WWII emergencies.

Vegetable Diet as Global Emergency

The report "Food of Mass Destruction" (Del Val, *1st Liveable Futures Report*) has gathered evidence from, and made a comparative study of over 100 high profile international reports and rigorous quantitative scientific studies, about the imperative need to address the change of diet and food systems as priority 1 in the global agenda. Over 60 of these studies actually quantify the impacts that the global shift to a vegan diet or to different scenarios of reduction of animal products would have. The studies agree that the vegan diet (especially in rich countries, and including various protein substitutes) is the one that would have by far greater benefits both for human health and equality, for the environment, and for Climate Change mitigation, besides eliminating over 99% of global animal abuse.

Amongst others it is estimated (by Springmann et al. *Analysis and Valuation*; *Options for Keeping*; roughly coinciding in the numbers with around 10 other studies, including the IPCC *Special SRCCL Report*) that global shift to a vegan diet would imply GHG emission reductions of 8GtCO2, more than eliminating the totality of global transportation. According

to the Spanish Consumption Report (Ministerio de Consumo) meat alone has 4 times more impact on planetary boundaries than commercial aviation and shifting to plant based diets has up to 40 times more impact than recycling and up to 10 times more impact than energy efficiency.

Other studies (Hayek; Eisen) quantify the possibility to sequester carbon by regenerating and reforesting the land and oceans used and disrupted by animal agriculture, which would provide the most powerful solutions climate change by providing 66-68% of the mitigation measures needed. According to the very cited and broad study by Poore and Nemeck a global shift to a vegan diet would reduce global land use by 76% approx so that 3.3 bill. has. of land would be liberated for nature regeneration and carbon sequestration, reducing acidification by 50%, eutrophication by 49%, and water depletion by 19%. The latter would have deeply beneficial impacts on human equality and avoidance of global conflict.

Springmann et al. (*Analysis and Valuation*); also calculated a reduction in 8.5 million deaths (10% of total mortality estimated for 2050, 22% of premature mortality—and over 74% of the current estimated 11.5 million deaths due to non-communicable diseases attributed to diet), with over 1 trillion dollar savings in healthcare costs, though a "value-of-statistical-life" approach gave 30 trillion $ savings with the vegan diet, for both health and environmental costs, equivalent to 13% of estimated global GBD for 2050. This however also does not take into account many of the fundamental health impacts of animal-based food industries, such as pandemics and AMR. The needed reduction will vary enormously in countries and regions: even just for a global reduction of 50% in animal-based products a 70-84% reduction will be needed in most EU countries, US or Brazil, whereas African countries would not need reduction, and would instead have to increase in 190% intake of fruits and vegetables. Yet the tendency is exactly the opposite: to double animal products by 2050 (Yitbarek).

Animal welfare is seldom taken into account but the enormous figures can be traced in the literature: a vegan diet would eliminate, per year, the extreme suffering of over 80 billion animals on land and over 800 billion animals in aquaculture who currently undergo life-long exploitation, confinement, mutilation and slaughter, and at least one trillion killing of fish, per year.

For a deeper comparative discussion of 60 of the mentioned studies see Del Val, *1st Liveable Futures Report*. The conclusion of the quoted reports is overwhelming: the quick global shift to a plant-based diet is the most urgent and primordial step to avoid a climate catastrophe as well as other devastating effects for humans, nonhuman animals, and the planetary environment.

A Silenced Uncomfortable Truth

But the Animal Exploitation Food Industry is also the one *whose impacts are most concealed* (Bailey et al., Dopelt et al.). This primordial driver of the global crisis is also the greatest

taboo, the "elephant in the room", silenced by governments and hidden behind the secrecy and misinformation of the industry, leading to an astonishing *policy and awareness vacuum*. The numerous reports mentioned proof that States have the information, yet ignore it, both due to the unwillingness of politicians to address the dietary habits in populations, and due to the weight of the industry, so that no policies exist on the matter nor awareness in populations. Instead States actively contribute to the crisis through subsidies, promotion, imports and exports, of the farming and fishing activities and their goods. In comparison with fossil fuels the situation with animal food products is as if no debate on climate change had ever happened and emissions were still projected to double or triple. The Gap between trends and needs is already extreme in fossil fuels (UNEP, *EGR 2022*) but is even more extreme in food. According to UN and following 5 decades of inaction, efforts would need to multiply by 5 or more till 2030 (UNEP, *EGR 2020*) to avoid a climate catastrophe, as emissions have only kept growing in all sectors (Aisch) and they keep growing. In food there are hardly any mitigation measures, so action needs to be even more drastic.

Deep Degrowth

More generally the promotion by States of a growth economy, and of programmed obsolescence and overconsumption in all areas, along an ever-growing population, is seen as entirely incompatible with a liveable future on Earth (Crist et al.; Meadows et al.). The only feasible solution to immediate reductions of GHG emissions and other impacts on planetary boundaries, besides the diet change, would be in drastic reductions in consumption-production across all sectors with a coordinated global emergency.

This actually implies the need for a *deep degrowth*[xv] strategy across all industries, transportation, construction, extraction, use of energy in buildings, ICT, pollutants and waste (including, especially, food waste), banning programmed obsolescence and overconsumption, enforcing recycling, reusing, repairing, along with massive plans of nature restoration, rewilding, and protection from damage and illegal activities, cooperating with indigenous communities in moving towards deeper changes in ways of living, while stopping subsidies to harmful industries and to population growth, while empowering women and defending sexual diversity as parts of the strategy towards a much needed and voluntary demographic degrowth (Ripple et al. *Warning 2017*). This, however, is not put in practice because it does not favour the global business whose interests are blocking the needed systemic change for a liveable future on Earth.

Denialism: On the Criminal Responsibility of States Beyond Green Criminology.

Following the above it can be affirmed that all States, to a greater or lesser extent, omit their primary duty: to act reliably against what is recognized as the greatest challenge in human history. Indeed States and the EU actively promote the economies creating the crises, especially in relation to food industries, which have massive subsidies of billions of Euros. States—and the industries they support—may be *committing high crimes against humanity not only through inaction, and concealment, but by active promotion of the most damaging industries on*

Earth. States violate human rights[xvi] by actively promoting, concealing, and not adopting effective measures against, food industries of animal exploitation, that constitute the major but most ignored cause of the climate and biodiversity crises, mass extinctions, animal abuse, and their associated existential and extinction threats, as well as of direct threats to human health, water and food security, human equality, and peace.

Here I am binding together different areas that often appear separated within realms such as Green Criminology[xvii], exposing for instance the interrelatedness of the ecocide and animal agriculture and even proposing that crimes against human populations should be considered part of a larger environmental and planetary crime against the totality of the living. On the one hand the human should not be considered separately, but as part of the totality of the living, and on the other human ills mostly stem from the damage to the living (diet, pollution, climate change) or to the life styles of exploitative civilizations (sedentarism, normativity, stress, etc.).

History of a Holocidal Silence.

The foundational role of the food industry in the extinction crisis has been known since at least the 1960s and 70s and governments in the international community are 50 years late in addressing this issue, which was silenced by climate activists in the past (such as Al Gore). Making a bit of history, Rachel Carson's 1962 book *Silent Spring*, which is recognized as launching environmental awareness, was already about the devastating effects of pesticides in the food industry. Since 1971 there have been books that expose the urgency of moving to plant-based diets (Lappé), just before the climate summits began in Stockholm in 1972, and the famous report for the Club of Rome (Meadows et al.) denounced this same year that growth economy is a collective suicide, while Arne Naess launched the principles of deep ecology (Naess).

In 1992, at the same time as the United Nations Climate Convention began and the Rio'92 summit was held, the international scientific community launched the first of a series of "Warnings to Humanity" (Kendall et al.) about the imminent existential crisis and the need for deep and immediate changes. In 2005 the Kyoto protocol entered into force.

In 2006, the seminal FAO report *Livestock's Long Shadow* was published (FAO *Livestock*), and studies on the subject have multiplied since then on the devastating impacts from "livestock". In 2009, Johan Rockström with other scientists created the concept of Planetary Boundaries (Rockström et al. *A Safe Operating Space*) that define the habitability conditions for human civilization, associated with the unusual climatic balance of the Holocene. In 2015, at the same time as the Paris Agreement, the concept of Planetary Health was inaugurated by the commission of the same name (Whitmee et al.). In 2017, the scientific community's warnings to humanity were resumed (Ripple et al. *Warning 2017*), this time signed by more than 15,000 scientists, repeated in subsequent years (Ripple et al., *Warning 2020*; Crist et al., *Scientists' warning on population*).

In 2019, the concept of a "planetary health diet" was launched (Willett et al.), while one year before the IPCC reports warned in unprecedented form about the climate crisis, giving rise to global mobilizations such as Extinction Rebellion, and confirmed that there was only *one decade*, until 2030 to avoid disaster with drastic measures, while the IPBES in 2019 and the GBO in 2020 confirmed that there are a million threatened species and 50% of ecosystems seriously degraded, and UNEP (*EGR 2020*) denounced that efforts should be multiplied by 5 to avoid a climate catastrophe. In 2023, the Earth Commission report (Rockström et al. *Safe and Just*) confirmed that 7 of 8 Planetary Boundaries have already been exceeded beyond the safety zone for humanity, 6 of 9 in the account of Richardson et al. 2023, while numerous reports abound on the fact that the climate and biodiversity crisis is accelerating much more than expected (Ripple et al., *Many risky feedback loops*; IPCC *Impacts*; *Synthesis Rep.*).

Double Denialism and Human Supremacism

This criminal silencing of the core factors of the crisis, and the silencing of the crisis itself, has as its sources, on the one hand in the economic interests of lobbies within what one could call a global *lobbycracy* influencing or even underlying States, and more generally in the global generalised tendency to affirm a growth economy, whose deepest roots may go back to human expansion since the Neolithic, of which States are intrinsically part.

But there is an even deeper aspect to it which explains the even more troublesome fact: that the mentioned problems are also largely silenced and ignored in circles of ecosocial activism and in academic circles of critical thinking.

It is a fact that, while most current leftwing ecosocial movements share antiracist, antihomophobic, antisexist, antiableist and "green" concerns, instead antispeciesism keeps being the minoritarian concern of animal rights and vegan movements, and is even absent of most social justice or environmental movements. The latter is particularly shocking in so far as it is well known in those movements that the livestock and fishing industries are a major source of climate change and of the ecological crisis. This fragmentation of politics in social, environmental, and animal niches fails to see the underlying transversal problems that this paper seeks to highlight.

In order to look for the deeper sources of this problem one could argue that indeed the double denialism of the crisis itself and of its deep sources, and hence of the needed replies, is itself core to the deeply rooted beliefs and perceptions that underlie Human Supremacism altogether.

Against the idea that people know about the climate crisis but are somehow "wired" not to act against such long-term threats (Marshall) I argue that both the radicality of the crisis and its deep roots are ignored, and that the informations populating public discourse are superficial and fitting human supremacist assumptions.

At play is what one could call a *double systemic misinformation* based on a *double denial*: not wanting to stop profit and hence growth economy (organised denial) and not wanting to

accept the failure of the human project of dominion (psychotic denial), where solutions are, at best, patches that never address the real problem. This paper has been attempting to unearth the deeper hidden story and provide a comprehensive picture of it.

But the story is more complex and involves specific forms of disinformation as in the systemic defence of extensive livestock performed even by most environmental movements (Del Val & Mas) based on a small body of very questionable denialist scientific literature that goes against the overwhelming evidences that place extensive livestock as even far more damaging to biodiversity and the climate crisis than intensive livestock, and for obvious reasons as it is the one occupying far more land and creating far more direct methane emissions (Del Val, *Por qué no es defendible*) although intensive livestock is of course also very damaging, especially for nonhuman animals.

The above helps understand the otherwise astonishing fact of how "Humanity" at large seems to deny the core aspects of the crisis that is erasing its own future. Seen from a larger perspective this could be seen as a state of planetary psychosis and altered perception, eventually created by the miseries, alienation, and individualism of urban live in sedentary cultures.

Towards a Paradigm Shift. Planetary Health and Animal Good Living as Needed for Human Life and Rights.

Biodiversity reports from UN stress the need for a healthy biodiverse planet as core to sustain human life, so do the numerous institutional projects on Planetary Health (Whitmee et al.) or on One Health[xviii]. Planetary health and that of all other life forms should be an integral aspect of the right to human life. The rights of animals, their wellbeing, Good Living, and free movement, are core to human health and to the integrity of ecosystems and biodiversity, which in turn is fundamental to afford human life and health (Del Val *Ontohackers part 2*). I say here Good Living because "animal welfare" is a term that has been abused and emptied by industries that pretend there can be welfare in a farm, thus used for justifying exploitation. The concept of Good Living has been proposed by peoples from Andine countries as alternative to false ideals of "Sustainable Development" and as holistic concept that involves the harmonious coexistence with all the living as foundational to a good life, inspired by indigenous ways of living (Hidalgo-Capitán et al.).

"Ecosystem Services", is an existing (but very anthropocentric) concept for the totality of processes necessary to sustain the conditions for live, such as natural plague control, pollination, water, soil, and air regeneration, carbon sequestration, food chains, and other necessary process for life. Biodiversity is that which characterises ecosystem integrity and NCPs (Nature's Contributions to People). These "services" are being radically disrupted by human supremacist action.

For instance, the proliferation of plagues is caused by the erasure of biodiversity in monocrops and monocultures. Sound ecosystems of free animals control or self-regulate the populations of viruses and bacteria through the dynamic equilibriums of the relations between

species, their movement, and their healthy immune systems. This is so called "Landscape immunity" (Plowright et al.) intimately linked to genetic diversity, unlike the genetic homogeneity, the immune system stress, the unhygienic confinement, and the extreme stress and suffering of animals in farms. Restoration of degraded ecosystems in the 80% of global land used for feeding "livestock" would afford landscape immunity that can prevent pandemics and restore "ecosystem services" that are essential for human health and life, while avoiding the major sources of disease transmission and antimicrobial resistance: farms.

This implies that, even from the perspective of currently dominant systems, recognising the rights of all life forms as human rights should be core to the continuation of "humans" as "species". For all these reasons, *planetary health and that of all other life forms of life should be an integral aspect of the right to "human" life.*

Animal Good Living = Human Health = Planetary Health

The rights of nonhuman animals[xix], their wellbeing and free movement, are core to the integrity of ecosystems and biodiversity, which in turn is fundamental to afford human-animal (humanimal) life and health. Welfare of nonhuman animals implies criteria such as absence of stress and the freedom to move without restrictions in open, appropriate non-degraded natural environments, socialising with its kind, following ethological behavioural needs. Ecosystem integrity and biodiversity depend largely on this. In words of the World Organisation for Animal Health (WOAH) "the health of animals, humans, and the environment are interdependent."[xx]

The Animal Exploitation Food Industry that dominant humanimals have created since the Neolithic is a radical reversal of the above, implying genetic homogeneity, agglomeration and confinement that disrupts both animal wellbeing and ecosystem health. Suffering animals imply poor immune systems, which along with filthy overcrowding and confinement lead to mass diseases and mass antibiotic treatments as well as environmental pollution affecting human health and rural populations.

Even by the best of standards conditions of animals in factory farms are incompatible with any standards of animal welfare, wellbeing, and Good Living, as core ethological principles of free movement, expression of normal behaviour, socialisation, freedom from fear, stress, discomfort, pain, injury, and disease are systemically and flagrantly vulnerated. Farms are a priori opposing core evolutionary principles of free movement (of animals, seeds, microbes and flows) that affords remix and regeneration of matter in the biosphere, and go against the fundamental principles of symbiosis and diversification, implying instead homogenisation, fragmentation, and overcrowded confinement.

Animal wellbeing and health is core to ecosystem and planetary health and to human and public health and needs to be urgently considered a core issue of human rights in the same way as a healthy environment has been considered a core issue of Human Rights by UN in 2022 (UN General Assembly), but AEFI are the major force preventing this recognition.

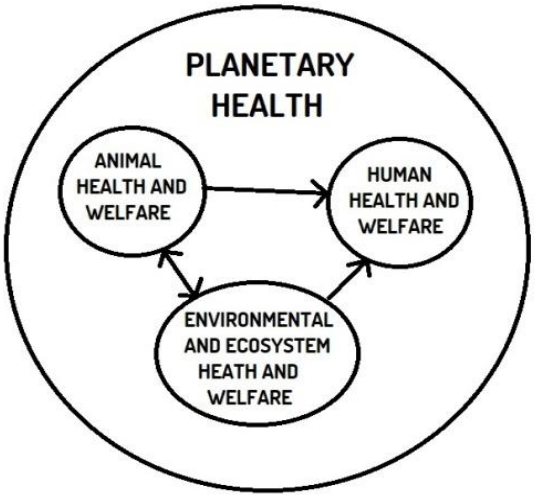


Fig 5: Planetary health diagram. (Image by author)

Towards an Integrative Frame for Action.

As proposed above, any serious approach to the extinction crisis should take an integrative framework that does not exclude any core factor, and instead deepens in the interrelations of them all. In face of policy and politics the following 5 factors[xxi] (Fig. 6) are proposed as provisional parameters for an integrative measure of the extinction footprint of current "humanity".

1. **Biodiversity crisis, mass extinctions**
    a. transgression of Earth System Boundaries
    b. ecosystem degradation, loss of ecosystem functions
    c. disruption of geophysical cycles
    d. overexploitation of species
    e. invasive species (through human action)
    f. land use and deforestation
    g. pollution, eutrophication, and destruction of ocean ecosystems
2. **Climate Change emergency**
    a. GHG emissions
    b. destruction of carbon sinks
3. **Animal Holocaust**
    a. level of confinement and overcrowding, level of stress
    b. mutilations, abuse, cruelty, slaughter systems and other factors, level of suffering

c. chemical treatments and diseases of animals
d. sacrifices, percentage of deaths in farms and "accidental deaths" in the industry

4. **Human Health**
   a. Pandemics, zoonotic diseases
   b. AMR
   c. cardiovascular diseases, cancer, diabetes, obesity, etc.
   d. food poisoning
   e. novel entities
   f. climate chance and ecosystem degradation
5. **Inequality, and conflict**
   a. water depletion and pollution
   b. food insecurity
   c. human exploitation
   d. inefficiency of the food system, waste
   e. poverty, malnutrition and inequality
   f. conflict

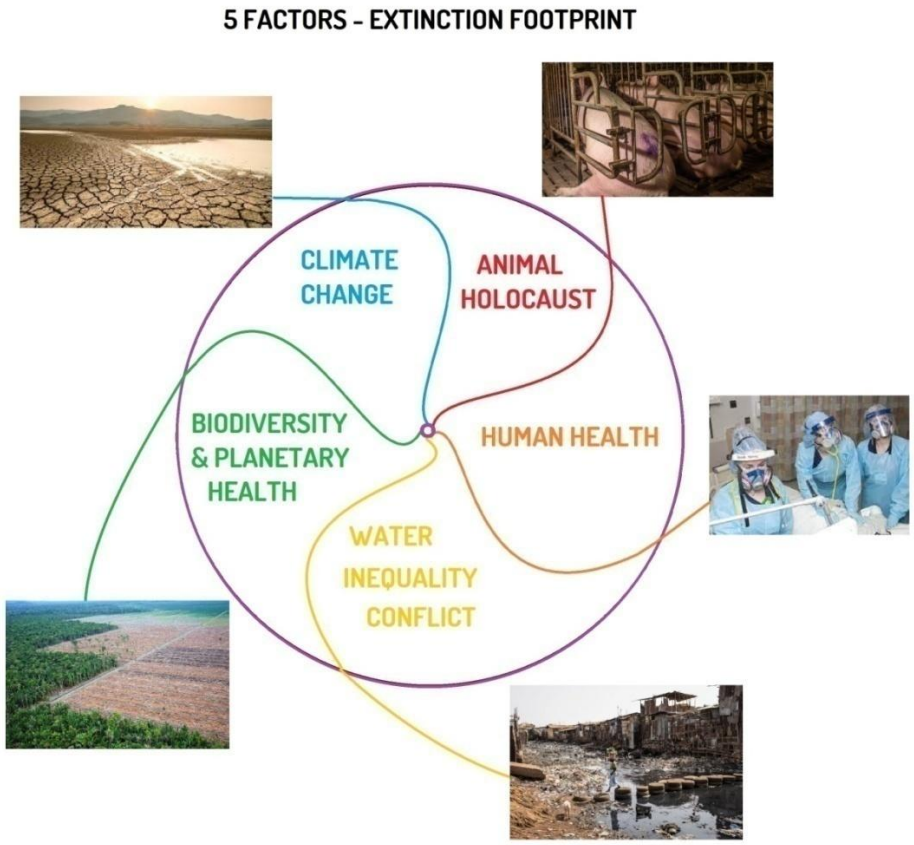


Fig. 6: The 5 factors diagram. (Image by author)

Moreover many aspects of the puzzle and the interrelations between factors still need to be more deeply studied. In the following diagram (Fig. 7) we propose a rough estimation of the lacks in this novel transdisciplinary research field on Animal Exploitation Food

Industries (AEFI), Planetary Extinction Crisis (PEC), and systemic change, on the basis of the literature studied. This diagram opens numerous future potential focuses of study. Non-western philosophies, for instance Indian non-dualism and Advait Vedanta, are also considered as future fields of study.

Towards a Metahuman Justice

It is urgent to understand the interrelation of non-human animal health, ecosystem health and "human" health for a systemic and profound redefinition of justice. Human rights that don't consider the rights and freedoms of all life forms, in light not of human interest but of the flourishing of biodiversity, are paradoxically undermining human rights themselves, as exploitation of other life forms has created a mass extinction crisis that affects dominant humans at least as much as other species.

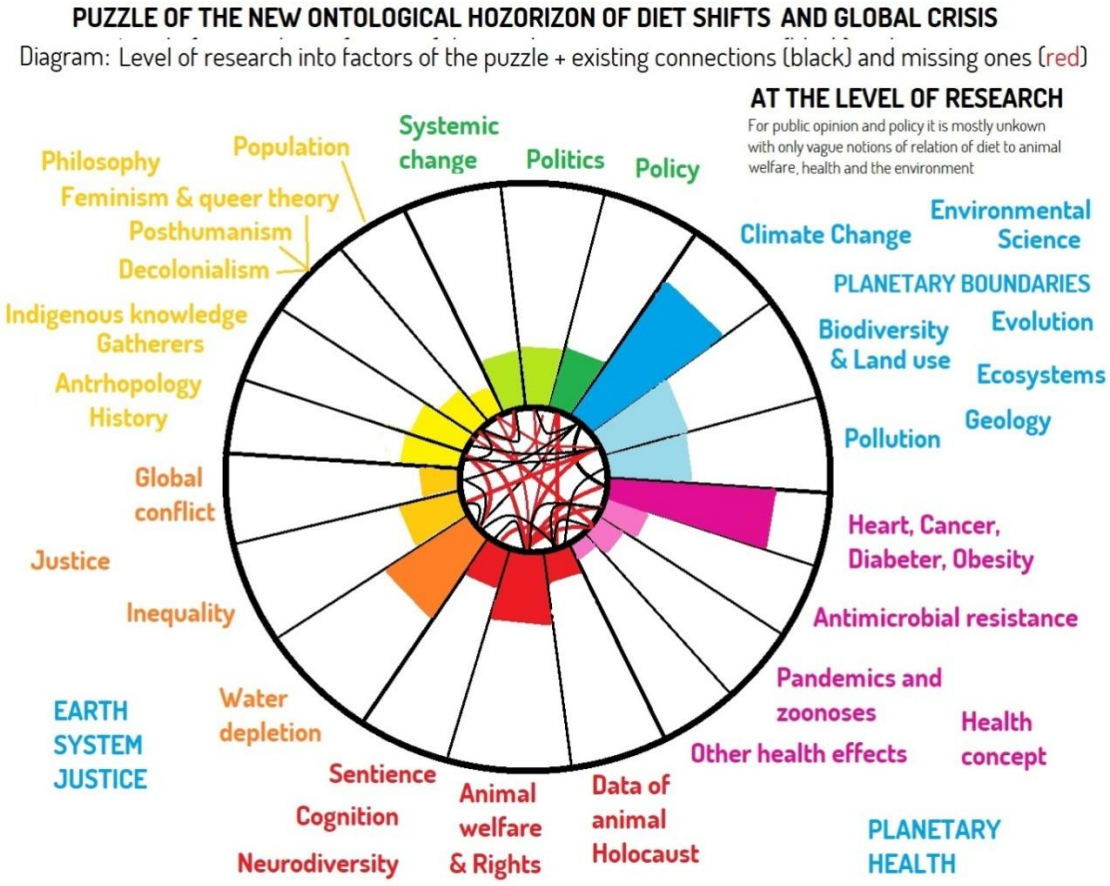


Fig. 7: the puzzle of the new ontological field on AEFI, PEC and GDS. (Image by author)

For this I will build upon the frame proposed by metahumanism (Del Val *Metahuman Studies*; MFF Lesvos Assembly-Chorus) which strives both for an ontological redefinition of

life as symbiotic mutation and for a ruthless critique of Human Supremacism in all its forms, along a critique of the concepts of "human" and of "humanity" as constructs that are links to supremacism.

Recent notions of Planetary Health (Whitmee et al.) and Planetary Boundaries (Rockström et al. *A Safe operating space*; Steffen et al.) need to be revised, since, promising though they may be, they have also been conceived under an anthropocentric bias: the health of Humanity and the Planetary Boundaries needed for it to keep flourishing as it is, not the health of all life forms and the conditions for their flourishing, which may demand a shrinking "Humanity" that stops being a destructive force in the biosphere and contributes again to overall biodiversity.

Justice more broadly needs to be radically revised as it stems from the defence of human property and no patches can fix such a problematic and limiting origin. Planetary health needs to be redefined not as the health of all humans and their civilizations (Whitmee et al.), but as the health of the planet and the biosphere, with humans as part of it, and as one of the 8.7 million species. Planetary Boundaries need to be redefined not as the conditions for sustaining human civilizations (Rockström et al. *A Safe operating space*, Steffen et al.) but for the flourishing of biodiversity and all of life, away from any human pressure.

Gupta et al. and Rockström et al. (*Safe and Just*) propose criteria for an *Earth System Justice* that includes *Interspecies Justice*, as essential for sustaining liveable conditions for humans on Earth altogether, along with *Inter- and Intragenerational Justice* and *Intersectional Justice* stressing the way more vulnerable populations are more exposed to the problems. The study exposes the total interdependence of human rights and life with interspecies rights and Earth System Justice.

Building upon the *Earth System Justice* framework we propose a *Metahuman Justice* that integrates Interspecies Justice with Human Justice, the latter including Intergenerational as well as Intragenerational and Intersectional Justice.

I propose to extend Interspecies Justice to an *Ecosystem Justice* and a *Biosphere Justice* for all life forms, which includes as well as overcomes individual species rights, animal rights, sensocentric ethics (focusing on sentience) and pathocentric ethics (focusing on suffering) by focusing on relational indeterminacy as core evolutionary condition: evolution thrives through mutualistic relations constituting all life supporting systems. This approach includes and goes beyond (without excluding) sensocentrism, pathocetrism, and even biocentrism in recognising life as relation web (symbiosis principle) of co-evolution through the ongoing mutation of all flows and species intra-acting indeterminately (relational mutation principle), resulting in ongoing diversification through free movement of animals, seeds, microbes, and flows. *Metabiosis* is a name I propose for the evolutionary principle of ongoing variation based on symbiotic or mutualist relations (Del Val *Ontohackers Part 2*). Metabiosis elaborates on the centrality of the concept of biodiversity as necessary to sustain life, as recognised in environmental sciences or biology. Hence evolutionary success of a species is not in

multiplication but contribution to overall biodiversity, for which it cannot grow too much, since then it becomes a plague that destabilises mutualistic relations.

Justice also needs to get expanded to a *Justice of Commons* that accounts for all substances on Earth as a commons for, and ontogenetically inseparable from, all life forms: water, soil, atmosphere, ice, minerals; for a *Geosphere justice*: Hydrosphere, Atmosphere, Lithosphere and Cryosphere; and of the earth cycles: carbon, water, nutrients.

Biosphere and Geosphere Justice altogether constitute a *Bio-Geo justice*. In a first step the latter can be seen as elements to be integrated with Human Justice, but in a second step the question is for *human justice to become part of Bio-Geo Justice: as just one of the 8.7 million species, not as distinct one with special status* (Fig. 8).

An *Earth Commission and Earth System Court (ESC)* would need to be enacted for giving actual status to ESJ and Metahuman rights. Human Rights courts would be subsumed as part of the ESC and not as distinct from it. However, it is doubtful that human legal systems can take on such a deep systemic shift, in what follows we suggest a different direction.

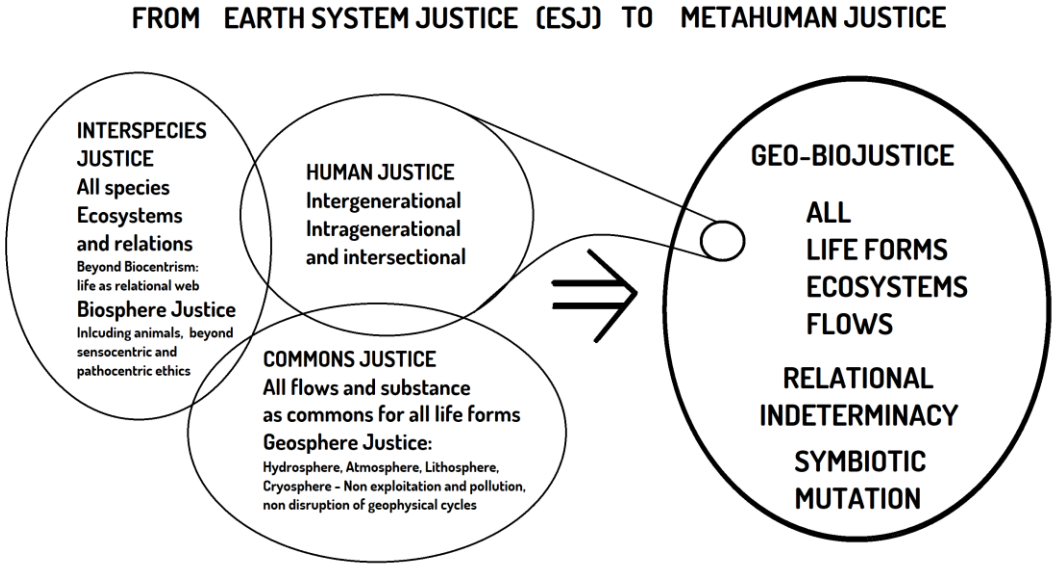


Fig 8: From Earth System Justice to Metahuman Justice

Conclusions. Earth liberation and Liveable Future

Recapitulating, from the comparative literature overview it is concluded that the most powerful measures[xxii] that can be taken from the personal as well as the political sphere are, both for urgent shock measures and for mid and long term change, in this order[xxiii]**:**

1. Switch to a vegetable diet, especially in rich countries, and from there to local, seasonal, self-cultivated or harvested consumption and ultimately back to nomad gathering.

2. Deep Degrowth in all other sectors of consumption, production, extractivism, and waste, away from the devastating expansion and occupation of the Earth by sedentary, exploitative civilizations, which ultimately entails facing the taboo of overpopulation (see next point), learning from indigenous communities, ultimately and gradually towards regaining nomadic living.

3. Deciding not to have children, defending sexual diversity and queer kinships as ecological principle, empowering women, and dismantling oppressive heteronomative reproduction regimes, ultimately towards the population threshold that anthropology suggests is the only one under which no mass extinctions were created by *Homo sapiens*: well under one million (Del Val, *Metacuerpos*, 380).

Such proposals go well beyond a reformist agenda. Metahuman Justice, by assuming a radically non-anthropocentric vision, takes into account the destructive nature of human expansion since the Neolithic, and criticises the role of States in guaranteeing Human Supremacism, while acknowledging without palliatives the degree to which we face a civilizational collapse. In face of the latter the metahuman proposal does not aim at clinging onto the very sedentary form of civilization that has unleashed the extinction crisis, rather, it aims at a deeper systemic transformation for a true relational justice for all life forms.

This ultimately points to undoing the devastating human occupation of the Earth and all forms of colonialism, returning to self-organized, smaller, nomad communities, undoing property and the state, defending indigenous and neurodiverse modes of relation to environments. Arguably no state will undertake these measures since all States are grounded on, and emerged with the systemic exploitation of life. Thus, anarchist self-organization would be the way to go, accompanied by a return, not only to the local, but to the body, recovering lost sensory capacities and collective practices that make us less dependent on unsustainable technologies while enriching our experience, moving away from the impoverishment stemming from urban and industrial systems, and from the predominance of verbal, numerical, and semiotic abstractions, recovering the importance of non-verbal forms of communication and thought that connect us, and put us at the same level with all forms of life.[xxiv]

The mentioned proposals are principles of the VegAnarQueer[xxv] and Metahuman[xxvi] movements, and apply both for immediate shock measures in face of the climate crisis and for long-term transformations towards stopping to be a destructive force in the biosphere. At stake is the undoing of Human Supremacism (Del Val, *Trash-human*, MFF Lesvos Assembly-Chorus 2023) as prerequisite for the thriveability of all life forms ("humans" included), and of life as symbiotic network, not for the sustainability of a sedentary civilization that has been unleashing a mass extinction right since its onset.

If we don't end it, it will end, and us with it, since, like the report *The Limits to Growth* (Meadows et al.) clearly stated, this mode of proliferation has no future. The core question is ¿till when are the "critical" intellectuals and activists of the world going to continue trapped in the *holocidal* Human Supremacist narrative and its double denialism?

The challenge which appears as most troublesome is precisely the fact that not only the global far right, not only left-wing governments and media, but also most if not all of today's eco-social-animal activism and "critical intellectuals", posthumanist included, seem to ignore the broad picture here proposed, and to reproduce fundamental assumptions of a selfcomplacent Human Supremacism and its associated double denialism. This coopts the possibility of any real change and confirms the current tendency to an accelerating collapse, all the more visible and blunt in the return, in 2025 with Donald Trump, of a global disruption based on brute force, protectionism, and rising psychosis.

Specific strategies of ontological hacking and "therapy"[xxvii] may be needed, for eventual though minoritarian moves beyond this denialism. In *Ontohackers part 2* and *Metacuerpos* I explore more in depth the foundations of Human Supremacism and propose a variety of techniques for overcoming it, both discursive and kinaesthetic. In this essay I have condensed the blunt facts on the Holocide that current science acknowledges but human Supremacism denies and have proposed an overview of the systemic implications and responses needed in face of this unprecedented challenge.

The task ultimately implies, not only a profound undoing of the constructs of "human" and "humanity" but a profound mutation across prevailing cognitive, sensorimotor, and living structures, an actual species mutation away from tendencies to dominion and abstraction, a metahuman mutation towards restoring symbiotic coevolution with the rest of the living.

A new integrative frame for more than human and relational justice, rights, health, and freedom is needed in face of the failure of human-centred paradigms and their unleashing of a Planetary Holocide. For this, a complete questioning of Human Supremacist biases needs to be faced. A metahuman frame will go beyond existing proposals in undertaking a radically non anthropocentric vision in which the totality of life, as symbiotic network, is put at the centre, and where *relational freedom* of all life forms, as non-determination of ecosystems' movements core to individual, social, and planetary health, lies at the core of a reconceptualisation of health, life, justice, and fundamental rights, as condition for a liveable future. For this, critical intellectuals and activists need to step out of selfcomplacent and unacknowledged human supremacist stances and assume the need to undo the prevailing denialism.

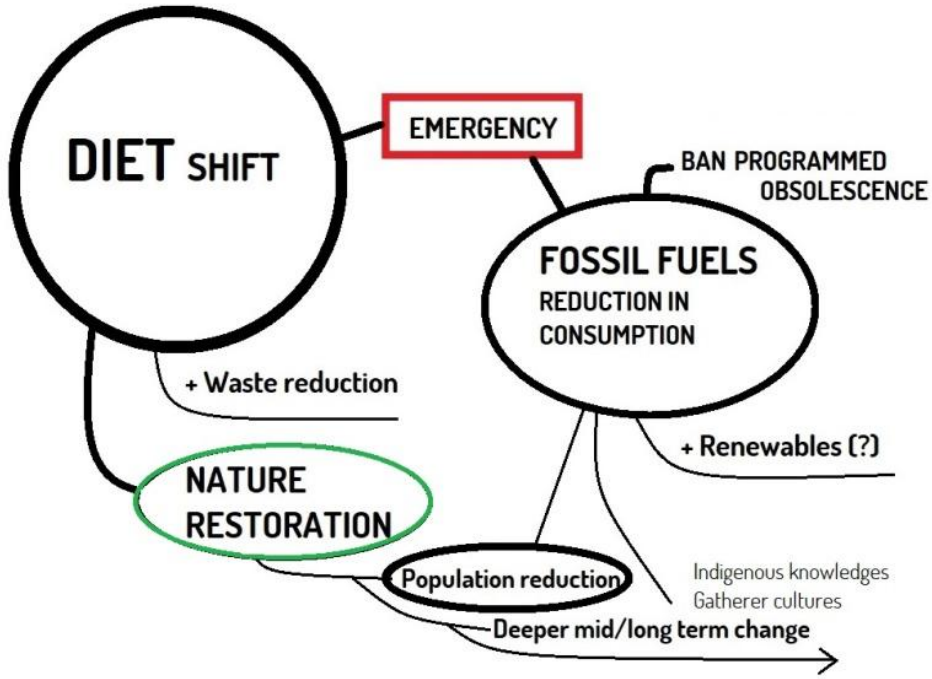
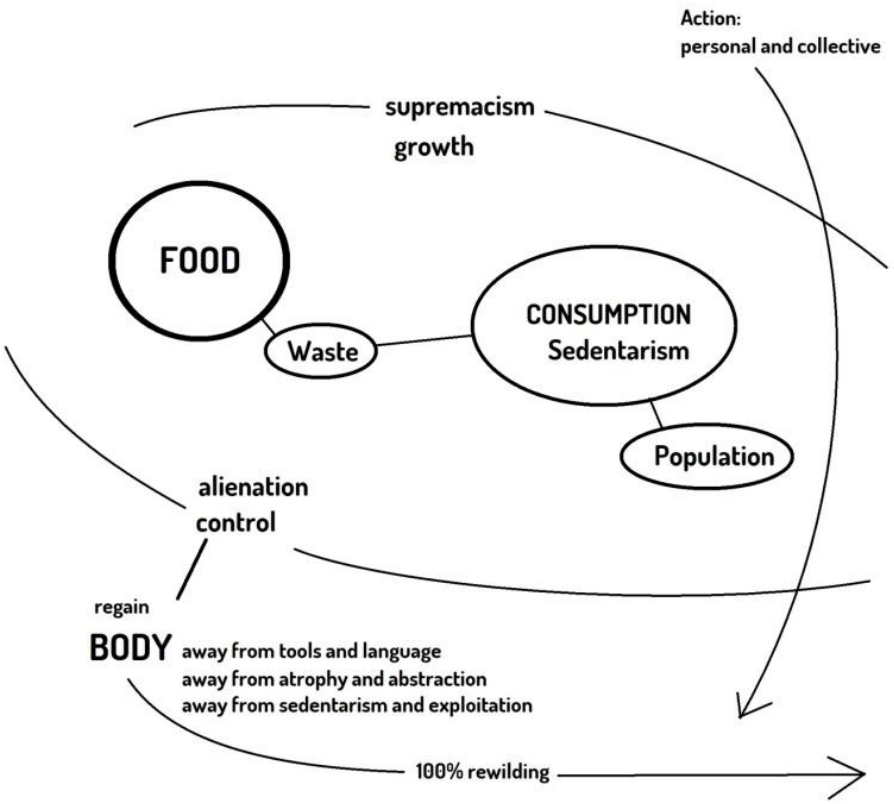


Fig 9 a and b: The transition puzzles. (Images by author)



Acknowledgements

This essay includes a partial, modified extract of the lawsuit against the 46 States of the ECHR presented in August 2023 at the ECtHR in Strasbourg and of parts of the report "Food of mass destruction" (Del Val, *1st Liveable Futures Report*).

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Author Bio

Jaym*/Jaime del Val in is an artist-philosopher-activist, promoter of Metabody, Reverso the Metahuman Futures Forum and the Metabody Forum, through which they have organised over 70 events in 30 countries. Jaym* is the promoter of metahumanist philosophy, has published over 120 essays and is author of the book trilogy ***Ontohackers:*** *Radical Movement Philosophy in the age of Extinctions and algorithms.* Since 2001 they develop transdisciplinary projects in the convergence of all the arts, old and new technologies, philosophy and activism, which have been presented in over 30 countries on 4 continents. As a postqueer, environmental, and antispeciesist activist Jaym* has led international initiatives. As a musician Jaym* has recorded 13 albums, and exhibits work as a visual artist. They are promoting a rural metahuman space in Salamanca while preparing to become a naked nomad gatherer in the desert of Almeria, dancing till death arrives. Jaym* identifies as non-binary non-human animal, neither human nor cyborg, neither man nor woman, and is not on "social media". http://jaimedelval.com

Notes

[i] I reject here the problematic human supremacist distinction human/animal since humans are part of the animal kingdom and propose to differentiate nonhuman-animal and human-animal or humanimal, though for economy purposes or when referring to the specific constructs of human supremacism I may be using the term human or "human", considered as problematic construct subject to deconstruction, not as a priori existing entity.

[ii] On the use of the term Holocaust and the analogy between the Nazi Holocaust and animal exploitation, I want to clarify that I use it with full awareness of its controversial implications. I thereby extend a tradition arguably initiated by the Jewish writer Isaac Bashevis Singer, Nobel Prize for Literature in 1978, who introduces the question in many of his short stories and novels, particularly in "The Letter Writer" a short story from 1968 (Singer, 271) where it reads "In relation to them, all people are Nazis; for the animals, it is an eternal Treblinka", a quote that gave rise to Charles Patterson's book "Eternal Treblinka" (Patterson)[ii]. The latter actually shows the historical evidence of how Nazi extermination techniques were derived from US factory farming. There are also similarities in the breeding and selection techniques, which reflect an arché-Nazi ideology applied by humanity to the whole of nature.

This is one strong argument in favour of the use of the term. Another strong argument is that most complaints against the analogy have, in my view, a speciesist background by which it is found unacceptable to compare the suffering of non human and human animals, even if similar but often less intense controversies have

arisen around comparisons between human forms of oppression. The controversies tend to erase this fundamental speciesism, and even reproduce it by invoking the fear of reverse negative impacts of the comparison on the respective human groups.

There are further similarities in that both are based on supremacist ideologies: in one case Aryan Supremacy, in another *human* supremacy, with the difference that the second is shared by (almost) all of humanity. There is also a similarity regarding the complicity and silence of the population, with different degrees of involvement, but again with the difference that almost all of humanity is complicit with the Animal Holocaust.

Furthermore, given a non speciesist frame, the situation and suffering of nonhuman animals in farms is at least as bad, if not far worse, as those of humans in concentration camps, but hundreds of thousands of times larger in number and with complicity of all humanity except the minority of vegan an animal rights activists.

I take a radical antispeciesist move by not assuming any categorical distinction between human and nonhuman animals, and focus on the mode of exploitation instead. At stake is not to make a comparison between humans and nonhumans but to focus on the underlying forms of oppression that gave given place to the very notion of the human as well as to racist, heteronormative or ableist oppression. For this I take a metahumanist perspective, see more on this below.

Reversing the concerns exposed by Crary this take is meant indeed as reversal of the animalization of Jews, due to which the extermination strategies of animal agriculture were arguably imposed on them. This however shows the deeper roots of supremacism pointing in all sedentary, exploitative human civilizations since the Neolithic, and the need to make visible the degree and size of their hidden horror.

Echoing Kim there is both the need to express the degree of the horror against a wall of silence and to counteract the human/animal divide, while I don't see dangers here of a reinforcement of antisemitic feelings that Kim alludes to as potential critique to past uses of the analogy by PETA. See further on the controversies here *Wikipedia,* s.v., "Holocaust analogy in animal rights," https://en.wikipedia.org/wiki/Holocaust_analogy_in_animal_rights.

The animal holocaust is different because it is not simply extermination out of hatred: animals are bred and subjected to life-long enslavement, producing always more generations of enslaved animals, in unimaginable numbers, always based on supremacism and contempt, and leading anyway to slaughter. Another difference is that the animal Holocaust is of such magnitude that it is the most polluting human industry and the one that contributes the most to climate change, the biggest death and destruction machine that has ever existed.

Differently to what Syl Ko observes, the term aims at exposing that considering animals different and subject to exploitation is as untenable as considering this for any human group. It is also an opportunity for deepening intersectional views on the common sources of all forms of oppression. This is all the more the case given the extreme urgency of the climate crisis and of current human destructivity, and the pervasiveness of Human Supremacism including in academia and ecosocial activist movements, which requires a strong awareness raising.

Having said this, the term Animal Holocaust, or Planetary Holocaust can be interchangeable depending on context with terms such as Zoocide, genocide, or extreme animal abuse and is itself part of a larger Holocide comprising the totality of modes of destruction underlying the current Great Mass Extinction event.

[iii] At COP28 2022, the coordinator of the United Nations said "We have our foot on the accelerator on the highway to climate hell. [...] Humanity has a choice: cooperate or perish" See https://www.un.org/sg/en/content/sg/speeches/2022-11-07/secretary-generals-remarks-high-level-opening-of-cop27 . At COP27 2021, the United Nations launched the campaign "Don't choose extinction". See https://dontchooseextinction-toolkit.undp.org/.

[iv] See https://metabody.eu/1st-liveable-futures-report/ and www.liveablefuture.org.

[v] These speciesist terms will be used between inverted commas as implying exploited land mammals (livestock) and exploited birds (poultry). These speciesist terms are relative to the industries that execute the exploitation and define ontological objects that are inapplicable outside of the exploitation industry itself.

[vi] This needs to be nuanced. The totality of fossil fuel emissions is far larger than livestock's non-fossil fuel emissions (methane, nitrous oxide) but food is the single activity producing more emissions, and livestock alone produces more than transportation, see next footnote. If we add onto this the indirect emissions due to ecosystem disruption and land use, then animal-based food is by far the larger emitter.

[vii] See Goodland and Anhang for the report claiming that livestock is responsible for **51**% of all emissions. It is a reply to the 2006 report from FAO claiming that livestock is responsible for **18**% emissions, above transport, this was corrected by FAO in a 2013 report stating that emissions are **14,5**%, presumably just below transport, a report criticised because of its link to the industry, see https://en.wikipedia.org/wiki/Livestock%27s_Long_Shadow. But livestock emits more than transport even if contrasting the 2013 FAO figures for livestock (7,1 Gton), with the GHG transport emission figures in the 2014 IPCC report (7 Gton), see Bailey et al 2014 4. Following IPBES 2019 30, agriculture, land use and fertilisers imply 25% of GHG of which Livestock is 75%= **18,75%.** This doesn't include the retailing, transport, machinery or energy, like it doesn't include all emissions from the animal-based food industry such as fish, that would bring ot closer to, or above 20%. Xu et al indeed recalculate animal-based food as **20%** of all GHG emissions (57% of all food, which is calculated as 35% of all emissions), this is calculated to be *twice* the emissions of plant food (29% of food emissions). Sailesh Rao goes up to estimating animal agriculture as responsible for **87%** of emissions by taking into account the transcendental role of nature based solution for carbon sequestration related to the over 3 billion hectares of land used for animal sequestration, the related deforestation and dead ocean zones. Ragardless of the shifting figures, even by the lowest standards the figures are enormous, representing more than the entire USA's emissions, and twice those of the EU. Furthermore, transport and energy (which together take most emissions) are transversal to all human activities, hence the only specific human activity with such huge GHG emissions is food, and particularly livestock. On Livestock as the most devastating industry see also Monbiot and Oppenlander.

[viii] On the number of around 80-100 billion slaughtered animals on land per year see amongst other https://en.wikipedia.org/wiki/Animal_slaughter and https://worldanimalfoundation.org/advocate/how-many-animals-killed-each-year/.

[ix] See Rosenberg on how the US bestiality laws were suspended to allow insemination of farm animals, where the human performing it must mimic the courtship and reproduction movements of the male pig for instance.

[x] On the situation of radical abuse and suffering of farmed animals see amongst other the documentary *Dominion:* https://www.youtube.com/watch?v=LQRAfJyEsko.

[xi] See https://en.wikipedia.org/wiki/Holocene_extinction. According to Forest et al. 30% of species may have already been driven to extinction. According to the UN Convention on biological Diversity (CBD) current extinction rates could be of 150 species going extinct per day. According to McCallum current extinction rates may be over 100 times quicker than in the previous great mass extinction.

[xii] Jason Hribal claims that non human exploited animals should be part of the working class. Here we denounce their historical status as slaves who are continually, massively and eugenically bred, exploited and exterminated, and that they constitute very foundations of the culture of work since the Neolithic.

[xiii] See the documentary film *Riddle of the bones: gender revolution* (Birgit Tanner & Carsten Gutschmdit, dirs. 2020, Germany, ZDF public Tv, Gebrueder Beetz Filmproduktion) which shows proof of gender equality in food and tombs in pre-agrarian cultures in China and Europe and how it was the Neolithic revolution that created inequality in the bronze age in China and Europe. Inequality came eventually due to: (1) property and the need to defend it through war, placing stronger men above, (2) population growth and new food sources for babies allowing more frequent pregnancies for each women and enforcing the role of women in the house, (3) the institution of marriage emerging related to property and the need to secure descendance and creating patrilocal and exogamic migrations of women transferring knowledge as well as genes. The Neolithic created hierarchy,

male domination, war, worse nutrition, as well as overpopulation, sedentary lives of very bad quality, nonhuman animal slavery and slaughter, human slavery, monocrops, and the devastating occupation of the Earth that has unleashed the 6th Great Mass Extinction.

[xiv] Along similar lines there is a multitude of high profile reports on the matter emerging since at least 2006, see Del Val *1st Liveable Futures Report* for a comparative comment of over 60 reports that quantify the benefits and need for a shift to plant based diets).

[xv]The international *Degrowth* movement, though being wide and diverse (see https://en.wikipedia.org/wiki/Degrowth), has often a cosmetic approach to these issues, see for instance the programme of the International Degrowth Conference 2024 https://esee-degrowth2024.uvigo.gal/en/. My proposal for a Deep Degrowth implies not only more drastic reduction in consumption and production than usually considered, but a deeper systemic shift away from industrialised and sedentary ways of living, as we will see below.

[xvi]A lawsuit was initiated in August 2023 at the European Court of Human Rights against Spain and the other 45 states of the European Convention of Human Rights for the above mentioned reasons, following the emergent path of climate cases such as Duarte-Agostinho, six Portuguese children against 33 states for climate inaction. See www.liveablefuture.org and www.holocausto-planetario.org. And yet in March 2024 the ECtHR has released a verdict against the Duarte-Agostinho case which slams the door on such multinational lawsuits.

[xvii] On Green Criminology see https://en.wikipedia.org/wiki/Green_criminology.

[xviii] See https://www.who.int/groups/one-health-high-level-expert-panel.

[xix] The recognition of rights to some animals with similar level to humans is slowly making its way: In 2015 an Argentinian court recognised the status of non human person to the Orangutan called Sandra. In 2020 a Colombian court recognised the rights of a pet to public health care as member of a human family and as sentient being. In 2021 Colombia started to discuss a law to ensure public health to pets. The EU was pioneer in this by recognising in 1997 the sentience of animals and the need to protect their wellbeing.

[xx]See https://www.woah.org/en/what-we-do/ and https://www.woah.org/en/what-we-do/publications/scientific-and-technical-review/.

[xxi]A sixth criterion could be *waste*: the amount of food wasted per year, around 30% exposes the massive inefficiencies of the system and means that the devastating effects of the previous points have been for nothing - but eliminating waste requires transforming the global food economy towards local seasonal production, though eliminating animal product will allow a very substantial part of it.

[xxii] For more concrete immediate policies such as the end of subsidies to "livestock" and many others see Del Val 2023a.

[xxiii] See a more extensive account of these, including antinatalism, in *Ontohackers part2*

[xxiv] On the relation of these proposals with anarcho-primitivist traditions see Del Val *Ontohackers part2*.

[xxv] See www.veganarqueer.net.

[xxvi] See www.metahumanism.net and https://metabody.eu/metahuman-futures/.

[xxvii] See https://metabody.eu/ontological-therapies-hst/.

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To Die To Live: Activism, Chaos, Art

Patricia MacCormack

Abstract

Human exceptionalism retains a desire for forms of immortality through abstractions of economic increment, population increase, and technological transhumanistic impulses, all of which devastate the materiality of ecological thriving of the extra-human, the Earth and its nonhuman environments and inhabitants. New techniques of knowledge are required, from the posthuman, metahuman and ahuman, to challenge the paradigms by which we can know how to dismantle human exceptionalism. This article explores the inter-relationship of death activism, art as a ubiquitous experiment in thought and radical ecology as an entry point for this dismantling. Taking its cue for the radical transformation of humanity through acts of compassion, such as veganism, antinatalism, and rewilding (of ourselves and the world) elucidates concepts such as sustainability as anthropocentric nostalgic phantasies. This article deliberately provokes through extremes of Dionysian and ecstatic activisms in order to emphasise the urgency of artistic thinking and embodied practices which act as a counterfoil to the economic abstractions and violent environmental extractionism of late stage capitalism.

Keywords: Radical Ecology, Veganism, Antinatalism, Death Studies, Art, Activism.

In an unsurprising contradiction, the epoch of what Michel Serres' calls hominiscence, finds the dominant species of human as simultaneously "either empty and vain, the ego swells up from public acclaim, or it lives from avoiding it [being an organic species amongst other living organisms]" (*Hominiscence* 221).Our ability to navigate the deep ideological hangover of Rousseau's Social Contract and Descartes' Animal Machines while ourselves becoming virtualised (along with our reality) means that in many ways we as enfleshed anthropocentric subjects are already gone, whilst the world overflows with the anguish of suffering flesh, human and nonhuman. If the divide of the world Descartes perpetuated for 4 centuries has caused a more urgent need to think otherwise in times of crisis, including climate, apocalyptic, genocidal, extinctionist, now 'Man's' former war on nature via the civilising effects of culture is transforming into the two exceptions to both life and death, what Serres (3) calls the human led artificial creation of life (which also involves the overcoming of death and invention of new species, biological and technological) and the deep anguish caused by late capitalism's welcoming of mass death machines, not just military threats but machines of wealth dissymmetry leading to preventable death, ecological death and, for any kind of activist, the

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deaths which remind us that human life is not life defined by species but hierarchy, and where all other species fall away.

This article will propose that humans can, and are, undergoing many forms of virtual death—of ego, of power, of perceptibility—in order to allow our own and other species' lives to thrive. These practices are forms of art because they require innovations which separate them from patterns of repetition in the attainment of identity recognition, acclaim, power escalation and other features which tend to bolster late capitalism's hero culture from billionaires to far right supremacists, or any of the other 'usual suspects' for whom superiority and ascendency at the expense of those deemed inferior is the goal of peak anthropocentric existence. Key to this idea is remembering the flesh, without returning to it as matter to be signified or subjectified. The flesh, integral to art, is where life resides, whilst perceptibility and recognition devoid of relationality and enfleshed ethical encounter, are also devoid of ethics, and are a tomb where victory is more important than joy.

Who Counts as Life?

I have proposed elsewhere (*Death Activism*) that being an animal abolitionist activist can be configured as a form of grieving. Billions of animals are murdered daily (yes, daily) by humans and human technology for 'use' and profit. The only way to do so is to configure nonhuman animals (itself an enormous encompassing and homogenising word) as not really counting as being alive. Descartes named them machines, Heidegger claimed they are poor in the world. Both philosophers were oriented around knowing what it means to be humans through isomorphic exclusion and refined hierarchies that extended to what actually counts as life. The world exists as an anthropocentric expression where man is the centre. Current debates around where future AI models will be placed morally continue this idea that for something (or in the case of nonhuman animals, someone) to be alive it must be or resemble, the human. Certain activisms are premised on pitting man against himself through counting many organisms previously thought of as 'ungrievable' as both alive and worthy of their own expression of life. Nonhuman animals, because they are unable to participate in debates concerning their will to liberty are the most obvious, yet I deliberately use the term 'man against himself' due to the long histories of misogynist and colonialist, ableist and queerphobic violence that has posited humans who count as alive expressors of the world against humans who either do not count or whose death is not grievable. Posthuman ecologies such as those of Timothy Morton, Erin Manning, Felix Guattari and Christine Daigle, attempting to reorient the hierarchies of subjectification, have placed all living things within a connective tissue as worthy of analysis. Nonhuman animals, but also plants, environments, nematodes, algae, and their own specific unique environmental relational areas are now considered life worthy of attention. Practicing activism on their behalf, against other humans, can be its own form of performative grief simultaneous with joy—grief at the often paralysing overwhelming projects and joy at the innovation that these localised projects urgently require. This undeniably welcome overthrow of the Kings of Anthropos now must vie against the conversion of the word 'life' itself to profitability in late Capitalism's new era of signification through the simulacrum of value, specifically consumptive and utility value in either making or adding money to increasingly fewer individuals, themselves convinced that abstract net worth is a form of immortality.

In the case of nonhuman animals Bentham's 'can they suffer' and Montaigne's pre-Cartesian celebration of the superiority of animals (or indeed the Ancients such as Porphyry) show there have always been protests and nonhuman activism, evincing it was not the most interesting but most self serving philosophers whose ideas prevailed. These voices remained in the realm of degree or the 'yes, but…'. Animals are sentient, yes, but not as sentient as humans. Animals suffer, yes but they must suffer in service to humans. This mode of argument that posits yet another Cartesian binary, that of logic versus compassion, continues in contemporary animal rights work (which is why I adamantly use abolitionism rather than rights). How can we think a logic of compassion? How can we think of a posthuman, more-than-human, asignifying logic? How can we ensure our grief is balanced by joy or at least not atrophied by mourning? Activism as an ethical practice necessitates taking each encounter, its haeccetic circumstances and needs, and acting upon them via the imagination required to hope for the best possible opening for the freedom of the other to be liberated. This Spinozean view is deeply attentive to the failings of overarching moral principles which structure assistance and regulate possibilities into edicts and prescriptive practice (or even 'laws'). Morality is what Spinoza calls *potestas* while ethics is *potentia.*

The innovation, imagination, and ultimately faith an activist or group is required to exert in our practices is not guaranteed, not pre-set, and often not legal when working within a space where the legal status of nonhumans is that of property or speciesist classification. Importantly, as John T. Maher has stated:

> Law is the ultimate deontological manifestation of the misrepresentation and unattainability of social justice. The possibility of an inclusive justice for animals is an illusion as long as humans define speciesbased ontologies and decide what justice might mean for all species. (259)

Activism as ethics is not ontologically limited to acting within the confines of any one episteme. Changing the law needs artistic creativity simultaneous with the legal (or not) direct action of activists, and the near and far activism of things such as veganism, rescue, protests, and other phenomena of activism.

Nonhuman activism is often an activism born of and compelled by grief. Many, if not most, abolitionist activists are catalysed into action through bearing witness to the horrors of animal conditions which are considered normal, banal, and legal. The pain of compassion, and the fact that the enemy is our own species, is a uniquely postmodern form of anguish. We are living in a world where the creation of new lives for use and the decimation of lives human and nonhuman due to not being useful enough, or useful alive, elucidate Serres' two modalities. Transhumanism covets the technological virtualisation of human life to eternity, and the creation or genetic modification of other organic and inorganic forms of life for their modelling use value for humans as service entities or equivalence in biomedicine. Death machines are created in various realms. Just as in animal agriculture, life is created and modified only in order that it is ultimately annihilated, whether it be breeding nonhuman animals to slaughter or vivisect or simply terminate when their use is obsolete. These new death machines are part of the more traditional death machines of genocide and war machines. So it seems even if anthropocentrism's fantasies of Frankenstein are fulfilled, whether they be inorganic or organic, the ultimate fate of any entity is its inevitable death

due to use value, not longevity, which emphasises its life was only ever dependent on a human's attitude to it existing in the first place. In this regard, we have not evolved far from Heidegger's claim that Man is creator of the world or even Judeo-Christian beliefs of Anthropos as the Earthly God of the world. The world itself becomes an abstracted entity, much as nature means everything and nothing outside of man for Descartes, which means man is not only creator of world, man *is*the world. All the world is a perception expressed by man. This monodirectional mode of perception and expression makes the concept of affect in ethics difficult to configure.

While man creates a *potestas* by which all things are known, his affects will only be gleaned through their reflection upon himself, so the world is both created by man and all its inhabitants are reflections of him. Good done toward nonhumans (and while I am using Man I include those not counted under this rubric, the not-quite-humans of women, racial others, disabled, and queer folk)is equivalently evaluated by the man who perceives. The various incarnations over the centuries and deep into posthumanism for alterity to be represented in order to be recognised and perceived as valuable life risks co-operating in this dialectic of tenets of representation which make up the lexicon of the dominant, of phallologocentrism (challenged by for example, Irigaray), ethnocentrism (Derrida and Hall), ableism (in crip studies, mad studies, and crip queer), heteronormativity (queer theory), and, most vastly, speciesism (Dunayer).To claim to know is to annihilate everything from the specificity of an individual and the teeming multitudes contained within each individual, to species, certain humans, and creativity itself in service to power. Serres, in this needfully extensive passage, explicitly laments that this technique of knowledge, which constitutes the social contract in repudiation of a natural contract, is a mode of violence, a death machine:

> The order of reasons is repetitive. The knowledge linked up in this way, infinitely iterative, is but a science of death. A science of dead things and a strategy of the kill. The order of reasons is martial. The world is in order, for this mathematical physics, where the stoics meet Plato, up the way, and Descartes down, and order reigns amidst the heaps of corpses. The laws are the same throughout, they are thanatocratic. There is nothing to know, to discover, to invent, in all this repetition. It falls, in the parallel of identity. Nothing new under the reign of the same. This is the zero state of information, redundancy. The chain of causation, the fall of atoms and the indefinite repetition of letters, three figures necessary to the zero point of science. The perpetrators of bloody dominion may well have been thrilled to find this world and seize the laws of determination, theirs, the same as theirs, those of extermination [...] nothing new under the reign of the same and under the same reign preserved. Nothing new and nothing to be born, no nature. This is death, eternally. Nature, put to death, its birth unwanted [...] the law is plague. Reason is the fall. The reiterated cause is death. Repetition is redundancy. And identity is death. Everything falls to zero: the nullity of information, the emptiness of knowledge, non-existence. *The Same is non-Being.* (*Birth of Physics*,109)

Serres makes clear that the physics of perception is what limits our openness to the unthought and unthinkable. Like Capitalism, post-Lucretian physics has captured all novelty through a logic of static, reification, use value in service to martial power, and knowledge over creativity

or love. Love refers to the inevitable ophidian, molecular amorphousness by which all entities exist with and within one another and thus affect and are affected by multiple other entities at once, in perpetual transformation as a state of perturbance that Lucretius calls the *clinamen.*Knowing the other is not necessary. Knowing the other is also a myth of exhaustible transcendentalism reflecting the philosopher's obsession with knowing himself, both of which serve to create a vindication of asymmetrical power more than a curiosity regarding the infinite unknowability of nature.

This reflects tenets of contemporary ecofeminist activism, where Carol J. Adams and Lori Gruen state:

> The feminist care tradition focusses on affective connections, including compassion and empathy, and shows how these connections have a cognitive or rational component [...] ecofeminists want to avoid the dualisms that appear in much writing of affect theorists who maintain distinct divisions between the system of reason and emotion, intention and embodiment, cognition and affect. (3)

The description of ecofeminism as a post-Cartesian, high Spinozist repudiation of the anthropocentric tendency to binaries (and always where one term is valued over the other) resonates with Serres' exposure of science as a law of anthropocentric motive, and a martial one at that. Put reductively, one could say that Serres shows that anthropocentric impulses to know, motivated by power, control, and use value, limit the world of complexity, making we humans poor in the world through our claim to create it. Adams and Gruen summarise a long tradition of animal rights, ethology, and traditional evaluations of moral value in organic nonhuman beings as plagued by dividing the logical from the compassionate, as if these two are mutually exclusive, which means one must choose between knowing the animal is lesser or claiming it deserves compassion. This 'knowledge' is built on an a priori belief that the animal is indeed lesser which resonates more with superstition or religion than science. According to Serres the fallacy comes from claiming to know in the first place. Like ecofeminism, Serres emphasises the interconnectivity of life in an extensive web where self and other are inextricable while self itself is its own mesh of perturbations. Martial logic arrives with its own knowledge presumed, the curse of the hypothesis, because life itself is too complex for humans to know and we are too filled with hubris to claim not to know or that we cannot know. Our relationship with knowledge as a mapping of the world, whether this *potestas* is moral, legal or scientific, deadens the world and its many selves into phantasmatic simulations afraid of the infinite variability of life. Scientifically we may find tactical patterns, but science in service to capital does not seem concerned with the same affects that a science of compassion, or deep ecology would be interested in. The episteme is irrelevant, it is the motive, the anthropocentric acceleration of capital and immortality which is consistent through science, religion, morality, and law and which denies the *potentia* of ethics that is exquisitely sensitive to the varied perturbations of the *clinamen.*

From Chaos to Ecstasy

"Trying to think, trying to produce, presupposes the taking of risks, the living of one's life, precisely in the surging outside of the encyclopaedia. Let us then introduce the concept of chaos" (Serres, *Genesis* 98). Thinking (not understanding) animals, animal species, animal

behaviour (not to know but to configure beneficial ethical entanglement) involves acknowledging that animality will never be intelligible to anthropocentric logic and so will always present as artistic chaos. In numbers only, let alone affects, expressions, and perturbations, the idea we can know what is meant by animality beyond 'not-human' or not the part of humans we think are different to animals or unique to ourselves (also infinitely homogenising and problematic) shows a phenomenon both impossible and joyful, a phenomenon central to ethics, which is the impossibility of knowing. Various posthuman philosophers and their inspirations offer alternatives. For Deleuze and Guattari it is the concept (defined simply as a problem, not to be solved but to catalyse becoming) (*What is Philosophy?* 15-34), for Irigaray it is the germinal being born of relations of irreducible difference, for Spinoza it is thinking the *potentia* of relations via *conatus* as an intuitive singular expressivity and porous affectivity rather than the sovereign subject describing the world of objects, for Serres it is love via the Natural Contract (Serres, *The Natural Contract*).

These new tactics, and many others, including and perhaps especially queer theory whose very name seeks no definition, rely on unknowability as a means toward rather than a prevention of action, movement, revolution, and transformation. Chaos is the state of nature, where anthropocentrism tends to configure chaos as the enemy of order and order the primary beneficiary of anthropocentric superiority. The world is neither chaotic or ordered, this would create yet another Cartesian binary. There are expressions, affects, and modes of movement under consideration. Human exceptionalism expresses power to affect the world through ordering and classifying it where the modes of movement are consumption, extraction, use, and destruction. Simultaneous dismantling of human exceptionalism and pursuing activisms of radical ecology beyond hierarchy and the pursuit of power are expressions of disorder—clandestine, what Saidiya Hartman calls wayward, occult, wilding (227-228). The affects rely on ethical relations which open joy but what Adams and Gruen in *Ecofeminism* claim may lead to 'empathic mistakes' (3).The risk of ethical entanglement comes from its lack of guarantee, which is also what differentiates it from an imposed reified moral order. This risk is nonetheless compassionately thoughtful, joyful, sorrowful, and logical in a non-anthropocentric way, a perhaps oxymoronic anti-logocentric logic. Our modes of movement come from the infinite potentiality of the world, unique to every body and collective of bodies.

Serres describes the annihilative force of rational/martial ordering as oriented toward homogenous outcomes, whether through scientific, judiciary or moral epistemes. For activism I loosely use the term 'art', which excludes no episteme and which does not order epistemes as discrete. Art simply refers to the de-unification of the anthropocentric goal of use/extraction value, desire for power and hierarchical exceptionalism veiled in a claim of truth. Art begins with chaos without a desire for anthropocentric order. Deleuze and Guattari claim that chaos is not the enemy of art, although art attempts to create intelligible pathways of becoming which ignite thought and action. Rather, art struggles against opinion, broadly equivalent to Serres' rationality. Deleuze and Guattari state: "Art is not chaos but a composition of chaos that yields the vision or sensation, so that it constitutes [...] a chaosmos, a composed chaos—neither foreseen nor preconceived" (*What is Philosophy?* 204). Art is a reorganisation of bodies and affects in order to open fields of new modalities of connectivity and the way these are thinkable. Contemporary issues with activism often come

about because we fight with anthropocentric logic, with the same hierarchies. The signifying regimes keep us within a prison of finite possibility, games of winners and losers where the conditions of discourse themselves predetermine the activist will fail while tempting us with capitalist desires for power, ascendency, and equivalence. That mode of desire is the problem, and it is also a problem of opinion when activism follows the opinion that it must speak the language of the dominant in order to be recognised by the dominant. Opinion is a desiring machine. To succumb to this form of activism subsumes desire into transforming from the recognised (or not) to the recogniser, the namer, the annihilator. Chaotic artistic desiring machines dissipate our flesh and ourselves into oceans of connective becomings that can allow us to access the other/s without demanding we know or recognise them and beyond the hierarchy of ascendent equality politics.

We must learn artistic chaos, rather than adapt animals into an apprehensible logic. This form of chaotic artistic activism is an ecstatic desire. We are activists as agents whose agency does not reflect ourselves but is a conduit for the opening of liberty and expressivity for unknowable others. The human is dead under these circumstances. The sovereign subject is redundant. This is not martyrdom. What is painful about sacrificing a self that was (sometimes) barely defined or mediated by the dominant? This is not sacrifice. There is pain involved, but also joy, so this is a form of activism as ecstasy. Moving beyond the concept of activism as grief, yes, activism may be catalysed by grief, but grief can become overwhelming melancholy and atrophy our liberationist becomings with nonhumans. Artistically, we must create from chaos temporary and tactical trajectories of liberation, small acts and large campaigns, both. Each with its own unique artistic logic of compassion and minute goals to liberate one life, this life, while changing the world. We cannot do everything, but we can do more than one thing because we can be more than one/becoming-imperceptible. Relations of qualities and differences, of expressions and affects, create selves which emerge and submerge as necessary (the difficulty for ethics is deciding how and what is necessary at any given time, for this Spinoza tells us there is no guide expect an expansion of joy).

In the death of the sovereign human subject we live artistically, sensorially, deeply materially but not as forms or objects. Rejecting anthropocentric systems is more than a churning antediluvian chaos. Claire Colebrook reminds us that in the turn from morality to ethics, from *potestas* to *potentia* "The ethical turn, like the affective turn, is a turn back away from a supposed human imprisonment within language, to the real and collective conditions of existence" (167). Colebrook emphasises that critical animal studies and critical posthuman studies, far from seeking a 'beyond' human, demand address of real, material bodies as they are in the world. The desire to move away (or back as Colebrook claims) from human signifying regimes shows the limit of language and logic. This may explain why activism as art can tend to sound vague or even esoteric. What it really shows is how abstracted from life and interconnectivity of materiality of existence on earth human regimes of knowledge have made us. Current posthuman questions of what constitutes life, especially considering the rise in novel viruses, are fascinating examples of how the basic ordinary materiality of, for example, a pig's life or a sheep's life being lived in absolute horror is something worth liberating so that pig or sheep someone (not something) may express their life well, seems beyond human thought. Such activisms are named hippie, or woke, or terrorist, simply in

affirming that within contemporary signifying systems there is no real address to material lived existence. Indeed, currently it is plausible to argue there is no real.

Entangled Ethics as Artistry

Critical posthumanism exposed the concept of the human as a myth. Chaosmos concepts, and especially after Karen Barad, theories of entanglement, show that discrete selves and identities and organisms are also a myth. Barad simultaneously critiques anthropocentrism's cleaving of culture and nature as that of representation and immutable, somehow a priori in perpetuity, matter (133). Some versions of anthropocentric attempts to think matter or the myth of the natural world see it as simpler, less abstract, and less complex than the cultural world of signifiers. This risks orienting matter as itself a new version of 'poor in the world' albeit ideologically holding it at a higher esteem. The tendency to not allow matter its complexity and its beyond culture is where posthumanism finds various fetishisations of nonhuman animal behaviours, 'learning' from how animals do things as a charity to how we treat the animals in question and a way to claim we can perceive as animals even though any nonhuman individual animal, even before species, will have a mode of perception utterly inscrutable by anthropocentrism. Barad, instead of co-option and fetishisation of matter, be it as primevally immutable or available for capture, proposes performative acts of both discursive construction and opening the world to multiple complex ontological understandings without claiming all can be subsumed into anthropocentrism (134).

Many posthuman theorists have interpreted entanglement as merely relations with other species, without examining the power and representational violence which occurs whether the relation is inevitable or deliberately sought. And what many, if not most, non-critical animal studies performsis driven by a concerning lack of consent on the nonhuman animal's part. Animal studies without consent denies nonhumans agency, autonomy, and acknowledgement of the ability to exist unto themselves. That whichBarad advocates is what shows that they create their own ontological understandings of the world, the systems of representation which we can never comprehend (so for which consent can never be given).The lack of consent in the often optimistic well meaning forced acts of 'entanglement' in posthumanism denies the most frequent animal-affect of becoming Deleuze and Guattari call the 'escape route' (*Kafka: Toward a Minor Literature*).Escape routes are both escapes from the demand to enact majoritarian dominant norms and material, actual escape from the threat of those who fulfil the criteria as a real possibility of capture, of violence, based on species, gender, race, sexuality, ability. This affect of animality is an overlap shared more between minoritarians and nonhuman animals than one which divides humans from nonhumans. Critically, Barad's view of performative action is one of mutation and movement that liberates self and object from the atrophying violence of representation: "The move toward performative alternatives to representationalism shifts the focus from questions of correspondence between descriptions and reality (e.g. do they mirror nature or culture) to matters of practices, doing and action" (135). The ethical component would here come both before and within any entanglement of relationality. Before action, a de-representationalism would see only an entity as its expressions, and act according to how best those expressions can expand in joy and liberty. Most late-Capital actions interpret expressions as potential for use and the other is acted upon according to capture and extraction. Representationalism is what constitutes the vindication of the logic of captureafter it is known. Representation,

especially that of correspondence where lives and beings are placed in a hierarchy, is the excuse of anthropocentrism for its singular desires of exceptionalism and power.

In activism, the ecstasy that comes from the dissolving self, itself now non-representational except in relation with our potential expressions toward affective liberty, vibrates with the thought that could be described as a logic of sensation, after Deleuze, and the other is unknown, the relationship is schematically and tactically propositional.

> In short, *in becoming propositional, the concept loses all characteristics it possessed as philosophical concept*; its self reference, its endoconsistency and its exoconsistency. This is because a regime of independence (of variables, axioms, and undecidable propositions) has replaced that of inseparability [...] by separating [logical linked propositions] from their psychological as well as their sociological adhesions, we would be able to show how thought as such produces something *interesting* when it accedes to the infinite movement that frees it from truth as supposed paradigm and reconquers an immanent power of creation. (*What is Philosophy?* 137-8, 141)

I would add that we need to separate our social representational understanding of what we call nature and its adhesions, especially of dominion, to this rethinking of knowledge becoming thought.

Acts of activism are often immanent, especially in moments of rescue which may resists 'logic' and law. The nuances involved in the ethical event do not have the luxury of distance, contemplation, and objectification. Species is irrelevant in the face of individual need, whether it be through direct action or the cessation of any mass forms of animal torture and murder. Crucially, that individual is not knowable, they simply exist as expressive affects and capabilities within an ecological constellation of other entities. Barad's advocation for thinking through movement makes ethics a molecular practice, one prevented by morality as inherently representational and molar. Entanglement is molecular, its inexhaustibility part of the need for a tactic of performativity where absolutes of knowledge are merely practices of human hubris. Performativity requires artistic modes of thinking to foreground the interesting (over the cliché), thought (over knowledge/opinion),and resistance to practices of repetition of anthropocentric power. This allows activism without epistemic discretion, for as Deleuze and Guattari tell us:

> The plane of philosophy is prephilosophical insofar as we consider it in itself independently of the concepts that come to occupy it, but nonphilosophy is found where the plane confronts chaos. *Philosophy needs a nonphilosophy that comprehends it; it needs a nonphilosophical comprehension just as art needs nonart and science needs nonscience.* (*What is Philosophy?*,218)

Barad emphasises the elegant art of chaos in physics. How can we think this molecular enmeshed coming-into-being for material activism, also with the chaos of artistry and the logic of hopeful outcomes of liberty? We cannot exist in isolation, particularly in global late capitalism where every purchase, every use of technology, every foodstuff, directly and materially affects real bodies.

Activism as art is both designified and materially real. Capitalism is a world becoming pure simulation where wealth and power have real world affects but no increase of joy.Artistic performative activism is thinking of new ways to eat, sharing recipes, pedagogic transformation, living philosophy more than professing it. Art activism is practicing liberation according to gracious dance rather than military trooping, expressive acting without identity or reward, submitting to the potential of lives unrecognisable, a poetics of tactic, science as compassionate logic without extractionist desire. It is shit and tears and blood and hay and fur and scales. No longer human, so these elements are before abjection. They are exactly what they are. And they can lead to laughter and joy and bleating and liberty.

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Patricia MacCormack is Professor of Continental Philosophy at Anglia Ruskin University Cambridge. She has published extensively on philosophy, feminism, queer and monster theory, animal abolitionist activism, ethics, art, occultism, and horror cinema. She is the author of Cinesexuality (Routledge 2008) and Posthuman Ethics (Routledge 2012) and the editor of The Animal Catalyst (Bloomsbury 2014), Deleuze and the Animal (EUP 2017), Deleuze and the Schizoanalysis of Cinema (Continuum 2008) and Ecosophical Aesthetics (Bloomsbury 2018). Her newest book is The Ahuman Manifesto: Activisms for the End of the Anthropocene. She recently completed a Leverhulme Fellowship researching and developing Death Activism. https://www.aru.ac.uk/people/patricia-maccormack

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The Importance of Indigenous Knowledges in Times of Climate Crisis

Aleksandra Łukaszewicz

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).

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Not Unlike a plant: What humans can learn from observing vegetals. Embodied practices inspired by floral collectivism

Evi Stamou

Abstract

"Not Unlike a plant" (an on-going research-artistic project I conduct along with filmmaker Pietro Radin) focuses on plant observation, explores plant-life, and proposes the engagement with plants as a way to reconnect with human-plant knowledges and re-establish relations that have been lost through the disembodied rationale of modern science. Collecting writings left by artists and writers of the 20th century, who created and took care of their gardens while facing terminal illnesses or trying to cope with grief, we collaborate with dancers, performers, and people who would like to express themselves through movement, to activate the body as a medium to perceive and learn about the world. By using excerpts from artists' writings, as well as by observing how plants respond to light and darkness, how they negotiate for space -with patience and dignity-, how they respond to danger or even migrate due to climate change, we draw inspiration for collective video choreographies that reflect on alternative ways of moving and being. The work's outcome, as well as this paper, aims to address issues related to the life and routines of plants, illness as an equally accepted situation as health, the relation between art and the every-day, the ecologies of care and co-existence, and the multiple possible ways of re-imagining ourselves and our futures.

Keywords: Plant Life, Collective Choreographies, Embodied Practices, Vegetal Biodiversity, Human-Plant Relations.

Are plants worth observing?

The rate at which species go extinct is a barometer of the health and stability of Earth Systems. As the environmental writer Elizabeth Kolbert states in *The Sixth Extinction* "there is a crash and disappearance rates spike, eliminating a significant proportion of existing biota" (Fowkes 191). This refers to mammals, birds, fish, insects that are disappearing with an unheard rate during the last 50 years, as well as to other lifeforms, that are part of the ecosystems on which planetary wellbeing depends.

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The threat to vegetal biodiversity posed by anthropocentric changes to Earth systems is prompting a renewed alertness towards beings that Western epistemology regularly dismissed as unmoving, inactive, unthinking, unfeeling, and inanimate (126). Yet, during the 20th century, the work of multiple botanists, observers, artists, and neurobiologists proves the opposite: "the plant possesses everything that distinguishes a living creature—movement, sensation, the most violent reaction to abuse, and most ardent gratitude for favours", according to the Austro-Hungarian botanist Raoul Heinrich France (1874-1943) and their "chemical language is a complex form of communication, which our human senses are too dull to comprehend" (127), as the artist-composer Christine Ödlund observed while working on the score of her electro-acoustic piece *Stress Call of the Stinging Nettle* (2010), a work that records the reaction and chemical activity of a population of stinging nettles when one of them is attacked by a larva.

Today, we know that plants communicate through a complex underground network, their roots. They socially interact with each other and perhaps with members of other kingdoms (Ciszak and Mancuso 163); through the root system, they acquire most information about their condition and the condition of the environment in which they are immersed: they come into contact with other neighbouring individuals, exhibiting collective behaviour and forming clusters of individuals with similar kinetic features (165) as well as collectively managing the risks and difficulties of underground life (Coccia 80). "The roots make the soil and the subterranean world a space of spiritual communication. Thanks to them, then, the most solid part of the Earth is transformed into an enormous planetary brain through which matter circulates along with information on the identity and state o the organisms that populate the surrounding environment." (89) according to Emmanuel Coccia who paints a very different image of earth's bowels, which are anything but sunk in "eternal night" and in a "long and deaf sleep" (80).

And although a discussion on vegetal wellbeing and plant agency has begun (with a landmark decision in 2008 Swiss constitutional law that, following a 1992 referendum, was amended to include two provisions that impose strict limits on genetic and reproductive technologies in humans and non-human species, affirming the "Dignity of plants as living beings"[i] in modern biology, which is based on our knowledge of animals, plants are almost completely disregarded. The conventional evolutionary literature is mostly zoocentric and plants are treated "as decorations on the tree of life, rather than as the forms that have allowed the tree itself to survive and grow" (Niklas, *Plant Evolution* viii).

A classic example of this great indifference towards plants is the simple experiment of the botanical philosopher Norbert Peeters: he shows people a picture of a leopard in an acacia tree and asks, what do you see? They usually answer: a leopard, sometimes a leopard in a tree, but hardly ever a leopard in an acacia tree, an answer that proves, that, as humans, we need to reevaluate the plant-life relationship to get a better understanding of biodiversity[ii], as Peeters argues analyzing the botanical work of Charles Darwin. "We can definitely appreciate

plants, but to a lot of people even basic concepts in botany are not really part of a general knowledge [...] Plants are in the background of animal life" he states during an interview given to Ricardo Lopes in August 2025, addressing the issue of "plant blindness" (a term initially used by the botanists *James* Wandersee and Elisabeth Schussler) which he believes is a modernity problem that occurs due to industrialized society and the disengagement from agriculture (Peeters, 11:24), but also the incomplete release from the idea of hierarchy that stems from Aristotle, which can be found in Darwin's writings and is still very dominant right up until the 19th century: an idea indicating that plants are lower on the scale of hierarchy of living beings, a step below animals. "Stones and minerals are a step below plants, and then above plants we have animals, human beings, and maybe if you're Christian, an angel, god, etc." (Peeters, 42:47).

Answering the question "Are plants inferior?" professor of botany W. Marshall Darley says that "As animals we identify much more immediately with other animals than with plants. Plants do not move around; they do not eat or drink and they do not respond (in an obvious way) to anything in their environment. It is almost as if plants are less alive than animals. We "kill" or "butcher" an animal, but we "pull up" weeds, "harvest" or "pick" vegetables and fruits, and "cut down" trees—words that do not suggest are we are ending a life [...] it follows that we consider plants to be inferior—after all, they don't even have brains!" (Darley 356). As he later explains in the same article, the lack of brain isn't due to inferiority, but it aligns with plants' lifestyle: as plants are spread in the environment in order to absorb the necessary materials to live, their nutrition mode does not require a nervous system (and thus a brain to control it) to move around. "Plants are just as well adapted to their lifestyle as animals are to theirs. If we feel animals are superior it is only because we are animal chauvinists" (Darley 356).

Of course, there is still a long way to go before humans truly understand the profound similarity they share with other animals. We are living in the Anthropocene– a geological epoch defined by human domination over ecosystems, species, and the planet's life-support systems. And although most movements defending other-than-human species' rights focus on animals' rights, global initiatives like the UN Sustainable Development Goals (SDGs) contain no explicit recognition of nonhuman animal welfare (Fernández-Mateo and Franco-Barrera 2), nor acknowledgment of other animals' ability to suffer, feel pain, or experience emotional states. This omission is profound, because scientific and philosophical recognition of animals as sentient beings makes them worthy of moral consideration, liberties, and rights, as, for example, direct rights against abuse, violence or cruelty (2).

Cultural traditions, entrenched anthropocentrism**,** and a worldview that draws a morally relevant dividing line between humanity and the rest of nature, normalize the exploitation and invisibility of animal suffering and feeds the "separation between human and animal [which] has become a commonplace in the intellectual world" (Coccia 4). This mindset allows practices that would be considered crimes if inflicted on humans—intensive

confinement, mutilation without anesthesia, deprivation of movement, psychological terror, and violent slaughter—to be accepted as routine.

A similar distinction is not made with regard to plants, which are almost entirely absent from public discussions about the rights of non-human beings. "The right of animal life, over plant life does not seem to be questioned, as if the latter is a completely unworthy life" (Coccia 4). This total indifference leads Coccia to conclude that, "in a sense, antispecies animalism is just another form of anthropocentrism and a kind of internalized Darwinism: it extends human narcissism to the animal realm" (4).

The plant-obliviousness is leading to their silent extinction at a very rapid pace. 40% of plant species were at risk of extinction in 2020 (Carrington) and although 4000 species of plants and fungi were discovered in 2019, according to Wikipedia, *one million species of plants and animals* were at risk of extinction the same year. "We are losing a race against time as we are probably losing species faster than we can find and name them" states professor Alexander Antonelli (Carrington). And although people have started to realize the large scale of their extinction, the loss mainly troubles them in relation to the lost opportunities for humankind, again through a human-centric perspective where plants mainly serve human needs, constituting a "treasure chest"[iii] for food medicine and biofuels.

Plants, on the other hand, are not at all interested in lost human opportunities, much less in human survival and longevity. They have been in the world much longer than us[iv]. They have seen, or more accurately, they have experienced (since they don't have eyes) the world long before other lifeforms and, to a large extent, they have cocreated the planetary ecosystem. Plants are essential to our lives; we owe them the conditions that made our lives possible. Thanks to them, the atmosphere as we know it stabilized: the spread of vascular plants helped gather enough oxygen to exceed the oxidation limit from the chemical elements found in the sea and on land. In other words, thanks to them (and through them) our planet produces its atmosphere and allows the beings that cover its surface to breathe.

Reading about them in the context of this research, I realized that contrary to the widespread belief that plants had to find the right environment to thrive, they actually shaped the suitable environmental conditions that allowed them to grow and move from the sea to the land: "Plants have transformed the world into reality of breath" (Coccia 11). The life of plants is a cosmogony, the incessant birth of our world, writes Emanuele Coccia in his book 'The Life of Plants, a metaphysics of mixture'. "Botany, in this sense, has to ⁅…⁆ describe all the forms of life capable of photosynthesis as inhuman and material divinities, domestic titans that do not need violence to found new worlds" (Coccia 10).

The history and evolution of plants show that living beings produce the space in which they live rather than being forced to adapt to it" (Coccia 10), making the world in which they participate possible. In this way, "plants challenge one of the pillars of the biological and

natural sciences of the past few centuries: the priority of the environment over the living, of the world over life" (10). When plants moved from the watery environments they inhabited for aeons onto land, they created a new reality, one that allowed other life forms to emerge and share this transformed world with them. To achieve this, plants modified not only the climate, but also themselves, their entire nature.[v]

Reestablishing Human-Plant relationship - the examples of Derek Jarman and Pia Pera

Although plants seem motionless and "nature, we believe, takes forever" moving with "infinite slowness through the many periods of its history" (Mckibben 3), the transformations that plants undergo are often surprisingly rapid. Leave a plant in someone else's care for just ten days and upon your return you may find it subtly, yet unmistakable changed—new leaves unfurling, fresh blossoms appearing, its form reaching higher towards the light. One of the most profound differences between plants and animals, beyond how they nourish themselves, is this: plants never cease to grow. Unlike humans and animals whose growth comes to a halt upon reaching maturity, plants continue to evolve throughout their entire lives. This growth is not linear but rather resembles an unending transformation, a continuous act of becoming.

Goethe writes at *The Metamorphosis of Plants*: Whether the plant grows vegetatively, or flowers and bears fruit, the same organs fulfil nature's laws throughout, although with different functions and often under different guises. The organ that expanded on the stem as a leaf, assuming a variety of forms, is the same organ that now contracts in the calyx, expands again in the petal, contracts in the reproductive apparatus, only to expand finally as the fruit (Goethe 100).

Plants have the ability to change and transform –this fact was well known already to the ancient Greeks, and it is no coincidence that plants often appear at the heart of myths about self-transformation and metamorphosis. Let's take, for example, the very well-known myth of Narcissus, "the young man who met his death vainly trying to embrace his reflection in crystal water", as described by the artist and filmmaker Derek Jarman in his diaries (Jarman 18). As the myth tells, from the spot where Narcissus drowned, flowers blossomed–for he did not perish, but was transfigured, reborn in the form of a flower.

"How would you like to be remembered?" a reporter for Sunday Corresponded asked Jarman in 1989, 3 years after his HIV-positive diagnosis and 5 years before his death. "As a flower" he answered (Jarman 122), making an obvious reference to Narcissus. The subject of self-transformation is a recurring theme in the writings and art works he created during his stay at Prospect Cottage, his sanctuary and home in Dungeness, where he moved soon after his diagnosis and decided to create a garden, while keeping notes about the development of his plants and his disease. Thinking about the origin of the word Narcissus, and the fact that is derived by the Greek word "ναρκάω" (*narkao* = to benumb), he got the idea of creating a photographic portrait of a young man holding a daffodil, a flower he cultivated in his garden

and eagerly awaited to bloom each spring. "Narcissus, narcotics, self-absorption: benumbed retreat into self" (Jarman 18), writes in his diary along with the notes for the photographic project.

Jarman was diagnosed in a time when HIV was not yet treatable and the average life expectancy for an individual with AIDS was three years after diagnosis. Moving in his new place, a former fisherman's cottage on Dungeness Beach in Kent, he took with him the sealed box with the gardening tools, which had been gifted to him by his parents when he was a child, and which he never thought he would use again. Soon the wild open space near the nuclear power station and the English Channel seashore became a garden with plants resilient enough to withstand the shingle and the fierce, salty winds—alexanders, sea kale, foxgloves, poppies, daffodils, and more. His garden still exists today, thirty years after his death, and serves as something of a pilgrimage site for fans of the acclaimed filmmaker who arrive from all over the world to visit it.

The garden was for Jarman an everyday occupation, which he performed diligently and methodically, without a break. The prospect cottage was for Jarman, Jonny Bruce writes, "a retreat from both prejudice and disease, (a way) to create a secluded paradise on the edge of the world" (Bruce 155), of a world of an antagonistic political situation, where stigma and maltreatment of lgbtqi+ community was the norm. If we also consider the fact that Jarman had lost enough friends to know the marginalization of people dying of AIDS, "the act of garden-making takes on profound significance, both as an act of optimistic resilience and of resistance" (Bruce 155).[vi] Jarman wanted his garden to be an open and inclusive space, thus he built no fences—the plants themselves defined its boundaries. The land surrounding the cottage, though not barren, neither technically a dessert[vii], but quite abandoned before Jarman bought it, could fit the concept of the Third Landscape, as it was proposed by botanist and gardener Gilles Clément, who describes such spaces—in which nature has not taken over with its conservative balance, nor are they subject to urban or agricultural transformation by man, but rather their fate is yet to be decided–as an opportunity to welcome diversity. And although Clément was referring mainly to biodiversity, there is a political element both in Jarman's garden and in Clément's Third Landscape: "After all" as Scuola del Terzo Luogo argue interpreting the Third Landscape "the third landscape is not a physical place, but a political place [...] Basically, it is a question of trying to think outside of rigid political-economic categories, such as those of the State and the Market, which seem to hold exclusive dominion over what we call the common good. The third landscape is neither, but perhaps that preliminary dimension that allows them both, as places—perhaps insufficient—of exchange and participation".

The notion of self-transformation and the necessity for a renewed relationship with the garden—as a physical, but also as an existential place and as a safe place, as the one that resembles childhood—is also central in the writings of the Italian writer and gardener Pia Pera, who, like Jarman, was facing a terminal illness and recorded her last years and her

relationship with her garden in a memoir tilted: " I haven't told my garden yet". "If I love the garden so much, she writes, "I believe it is due to a kind of instructive gratitude: there, at least, I experience the wonderful, almost childlike sensation of being connected and being in a safe place" (Pera 56).

Pera was already a gardener when she diagnosed with ALS, a nervous system disease that affects nerve cells in the brain and spinal cord and cause loss of muscle control. As her disease got worse over time and Pera was progressively losing her autonomy, she experienced this change and difficulty to move as a gradual transformation of the self from a constantly moving human being to a plant rooted in earth, as if she was also part of the garden. Already from the second page of the first chapter of her book, she describes with incredible lucidity and accuracy the new conditions formed by her inability to move the same way she used to, as well as how her relationship with her garden changed:

> I am no longer the same person [...] the different pace, the slowness of walking, the circumspection with which I proceed from step to step, the caution with which I consider whether it is really worth moving or not, corresponds a new perception of the world [...] Not unlike a plant, I too suffer damage from the elements, I can dry up, wither, lose parts, and above all, not move as I would like [...] Immersed in the present moment, as never before, I am finally part of the garden, of that fluctuating world of constant transformation. (Pera 22-23)

Pera cultivated her garden until her last days, and throughout this time she was showing up on daily basis for her garden, and the garden gave her back a reason to get out of bed. "This garden (every garden?) is a song of light in the darkness of death" (Pera 53) she writes quoting the author and garden historian Teodor Cerić. Between the search for assisted dying clinics in Switzerland and her extensive reading on gardening and art, her engagement with the garden also functions meditatively, as a place she can retreat to in difficult moments. "The garden is the ideal place to die; there is a kind of magic there, the magic of surprise" (Pera 74). Jarman says in an interview about his film "The Garden" which Pera watched in YouTube. In the garden we go through cycles of resurrection she answers, years after his death. The relation between death and gardening, as well as the exchange between humans and plants in the enclosed universe of the garden preoccupied her deeply. When a young friend sends her a letter to express his admiration of her garden, wondering at the same time how the creator of such a beautiful work can bear such elements of disharmony in her body, only to conclude that the secret must be not to reject but to include the sick and malfunctioning members, to accept them as parts of the whole, she answers that this is not the case: "when a plant gets sick, I let it die" (Pera 125), she says, emphasizing that plants must be able to survive in order to become part of the garden – the garden must accept them. And the role of the gardener? Pera admits that for certain plants she was particularly fond of, she made more than one attempt at integration, letting the reader understand that the

relationship between humans and plants is a dialogical one, based on reciprocity, on mutual agreement.

Pera formed a relationship with her plants and flowers that goes beyond that of the dominated and the dominator, a symbiotic relationship of mutual care. By losing the ability to move, she realized there are more ways of being, but integrating into (rather than cultivating) the garden, existing in what Tetsumi Kudo defined as "new ecological system": "It is not possible that human dignity alone should retain the hauteur of a king. But, it is very difficult to remove the sentiment of privilege (human dignity) and the sentiment of colonialism of the head of humanity that calls itself "humanist" (Kudo 33), he writes in one of his manifestos.

The new botanical revolution is not about naming, controlling, limiting, and exploiting living beings, but rather about a different attention to the complexity and intelligence of all life forms and their co-dependent relations (Cluitmans 115). This applies to plants, fungi, insects, but also to humans, animals, and technology, which coexist as part of the ecosystem and can be equally vulnerable and recipients of change. A representation of their relationship can be found in Kudo's installation titled "Grafted Garden / Pollution-cultivation – Nouvelle Écologie" (1970-1971) where fragments of limbs—arms, legs, penises—merge with flowers, snails, and trees, grafted onto aluminium poles, forming a garden that, like a mirror, reflects our world and looks into the future where (r)evolution is possible (Cluitmans 117).

The relationships that develop within the ecosystem are deep and wise: as proposed by Del Val, ecosystems are "relational webs in which all elements constituting the field are constantly mutating in intra-active and entangled coevolution creating ubiquitous slow changes. Mutation thus comes before fitness as the conditions constituting eco-systems are constantly shifting. The conditions for "fitness" change all along due to all the ongoing, unavoidable, and ubiquitous relational mutations" (Del Val, *Ontohackers Part II* 119).

All of life is in a double planetary entanglement: symbiogenetic or evolutionary and ecosystemic in the present. Life unfolds entangled, like the quantum fields emerging in the universe's Big Bang (120).

Not Unlike a Plant: Translating observation into (experimental & experiential) methodologies.

Inspired by Pia Pera's verse, "Not Unlike a plant" is a work[viii] that includes a series of video-choreographies along with documented observation of plant's symbiotic relationships in gardens. The work incorporates writings by artists and writers of the 20th century, who created and took care of their gardens while facing terminal illnesses, trying to cope with grief or dealing with challenging conditions, like displacement. Its purpose is to propose a critical rethinking of relations between humans and plants, focusing on the maintenance of

gardens and the healing power of plants against the backdrop of a synthetic world in which indigenous lands and beliefs collide with colonialism, extractivism, and neo-liberalism. Currently in the phase of research, it aims to constitute an improvisational collective experience whose outcome will be organized, in a later stage, into an audiovisual work.

Our approach includes the "visual translation" of the qualities of plants into body movements, as if the body was simultaneously part of and a whole autonomous ecosystem. "A body is a field with endless possibilities of internal change, variation, or fluctuation. In turn, a body displacing, as its field fluctuates, can also be seen as a change in a larger fluctuating field (city, ecosystem, biosphere, etc.)" (Del Val, *Ontohackers Part I* 53). Each encounter between bodies, and between bodies and the environment aims to create a safe place—something like the gardens of Jarman and Pera—where participants will feel free to create, co-exist and allow themselves to transform and mutate.

The methodology includes staying in nature and observing the surrounding environment through walks in the geographical space that we each time defined as a garden– a space that may have either distinct or indistinct boundaries. This wandering through space is defined not only in the traditional sense, as walking, but aims at experiencing the space with the fullest extent of our senses and the surface of our bodies[ix]: moving horizontally or upside down, crawling on the ground, closely coexisting with stones, trees, plants, insects, animals, fruit, roots, and other organisms—adopting an inclusive perspective that shows the same degree of respect for both human and non-human beings, while also not excluding the other elements: mountains, stones, water, and air.

The aim is to create a less superficial relationship with the ground and the sky—like plants, which are immersed in both: rooted in the earth and reaching into the air with their branches and leaves. They possess the same ability to imagine and shape their bodies (in the most unexpected forms) and to connect with the environment and the spaces, demonstrating that the relationship between living beings and their surroundings cannot be understood in terms of exclusion, but always in terms of inclusion "as an inclusion of the universal, as that something that connects after having specified, which is neither quantitative nor qualitative" (Daudet, *Melancholia* 16). After all, to live, to breath, means to contain the atmosphere in which I am contained. It means allowing the atmosphere to enter me, while I exist within it—I become one with my environment, and in doing so, I transform it, just as I am transformed. Withal, we are all made of the same materials.

The methodology also includes meditation exercises, based either on pre-existing texts about plants or improvised by members of the group with relevant experience. These exercises aim to help participants understand, on a spiritual level, what is like for their bodies to have a different composition and different qualities. It also includes movement exercises that emerged from both the meditative process and from the observation and imitation of

plant movements. The goal is to redefine our relationship with the apparent stillness of plants and to embody their inherent quality of constant transformation.

Readings from the works of Pera, Jarman, and other 20th-century artists who created gardens while facing health conditions—conditions that led them, or perhaps allowed them, to form a deeper relationship with plants and the passage of time as marked by the changing seasons and the finiteness of human life—serve as invitations to reconsider our relationship with time and the accelerated rhythms of contemporary daily life. As seasons repeated their circles, Jarman's health deteriorated. The same applies to Pera, who notes in her memoir: "The gardener and death. Reality is not what I had imagined. Everything weakens as my energy diminishes. The comparison with what I was still capable of last year saddens me" (Pera 92). Yet, year on year, daffodils bring hope to Jarman's encroaching darkness (Colquhoun 240). Their annual reappearance marks another year where he survived and also encourages him to keep going too (Colquhoun 240). Jarman meticulously records their appearance: "Monday 13 of February – The first rain in weeks [...] by noon the first daffodils opens" (Jarman 13), while he is disturbed by the advance of capitalism and technological civilization that has lost the excitement with which seasonal flowers and fruits were welcomed (Jarman 12); the first daffodil, strawberry, or cherry are now things of the past, along with the precious moments of their arrival. Even the tangerine—now a satsuma or clementine—appears de-pipped months before Christmas. I expect one day to see daffodils for sale in Berwick Street market in August, as plentiful of strawberries at Christmas (Jarman 12).

Jarman died on February 19th, 1994, just days before he could see the new daffodils bloom – did he perhaps manage, after all, to be transformed and returned the following spring as one of them?

Gardening makes us forget "calendar time" or "clock time", allowing us to focus instead on circularity (Cluitmans 115). The playwright Samuel Beckett once wrote that "the end is in the beginning and yet you go on" (Beckett, *Endgame*). The circularity he implies is one of always continuing, no matter whether you succeed or not (Cluitmans 115).

So let us try again by daring to incorporate, to experiment with, and to rewire—to reprogram —the limits of our own human body, taking plant life as an example. It's an idea we can adopt and begin to consciously work on, setting goals that we approach one step at a time. Would it be worth exploring, for example, whether by changing something as fundamental as the way we move—or walk—could change the way we live, express ourselves, react, or think? "It rained, so we don't have to water" Pera writes in her book (Pera 79) and perhaps it makes for a beautiful phrase to take metaphorically, to begin our own work starting from the conclusions of a person who, because she could no longer move in the usual way, reached much deeper insights about our relationship with other beings and nature. "How we move is how we think, feel and relate" (Del Val, *Ontohackers Part I* 45) claims Jaym*/Jaime Del Val in the first part of their book "Ontohackers: Radical Movement Philosophy in the

Age of Extinctions and Algorithms", a claim that "implies the capacity to transform and open up—ontohack—all aspects of any reality too reductive toward a more plastic and less determined one" (45).

This could be a (collective) act of rebellion—a way to resist the mainstream forces and forms of power, by inventing new modes of existence, ways of relating and self-creation. As proposed by Katy Bowman (2021), one would already gain enormously by reintroducing movement as much as possible within our civilized practices and environments, in every aspect of daily life (Del Val, *Ontohackers Part 2* 513). Del Val proposes to "go beyond and have movement become a radically transformative practice of all civilized environments, undoing them for a deeper regaining of the dance of life, for a life in ongoing (semi)dancing, flowing as the animal that we are and need to fully become again" in a process of self-rewilding and of rewilding of the entire biosphere, undoing human supremacist dominion; of regaining our self-management as a manifestation of resilience, like flora that thrives in the wreckage of deindustrializing cities and abandoned spaces, free from human interventions, chemical poisoning, uprooting for urban development, genetic meddling, or exploitation for political and/or aesthetic reasons (as was the case with the 17th century gardens, that were designed to showcase the military and political power of kings, serving as models of material domination of nature in which land was surveyed and measured and stamped as something under human control) (Fowkes 151).

"The world being made of movement relations, how we move crafts everything, not only ourselves, but the environments we are part of" (Del Val, *Ontohackers Part 1* 46). In a time when both bodies and environments are increasingly shaped—and constrained—by algorithms, norms, and extractive systems, reclaiming movement becomes a radical act. Not just movement as a physical gesture, but movement as a way of being, sensing, and knowing. By embracing the fluid and the immersive we breakaway from linearity and control and step into an ecology of presence, where bodies are not separated from their surroundings but are co-creators of meaning and matter.

Author Bio

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communities (via workshops and interactive performances) and people from different disciplines. Her works have been selected to participate in international film festivals, video art festivals and contemporary art exhibitions in Greece and abroad (Cinemed International Mediterranean Film Festival of Montpellier, Strangloscope Experimental Film, Audio & Performance International Festival, *Visions du Réel* International Film Festival, Venice International Experimental Art Festival, Athens Digital Arts Festival – ADAF, International Meetings of Video art and Video performance, Thessaloniki International Documentary Festival etc.), as well as in independent art spaces and galleries in Greece, USA (New York - Chicago), Brazil, Poland, Ireland, Italy, Spain, Indonesia and China.

Notes

[i] This provision has been met with considerable scepticism in recent years: to cite just two examples, in his article titled "Constitutionalizing nature's law: dignity and the regulation of biotechnology in Switzerland" which was published in the Journal of Law and Biosciences in 2020, James Toomey states that the Swiss constitutional concept of dignity embraces the normative theory that the natural order is a source of moral value and is analogous to the adoption of a religious theory in a constitution (Toomey 1). Also, Maja and Reuben Fowkes argue that by declining to protect plants from destruction for a "rational reason", this partial expansion of planetary jurisprudence did not go as far as to question their instrumentalization. The decision squeezed plants into the narrowly anthropocentric categories of the western legal tradition (Fowkes 145).

[ii] As W. Marshall Darley explains in "The Essence of 'Plantness'": a consequence of their many indeterminate apical meritisms is that plants lack a distinct germ line and are more likely than animals to incorporate evolutionary novelties (e.g., somatic mutations or polyploidy) into their germ line. As a result, rapid and dramatic evolutionary change can take place.

[iii] The term was used by Prof. Alexander Antonelli in an interview published in Guardian's article titled "40% of world's plant species at risk of extinction"in 30 Sept. 2020

[iv] There is evidence that cyanobacteria and multicellular thalloid eukaryotes lived in freshwater communities on land as early as 1 billion years ago (Strother*, Battison, Brasier, Wellman, 2011)*

[v] In the earliest stages of their evolution, plants appear to have existed without roots. The first evidence of roots dates back about 390 million years, when the earliest root-like structures were in fact functional modifications of the stem and horizontal rhizomes that lacked leaves (Rothwell & Erwin, 1985).

[vi] On the same subject, in a 2010 issue in the journal *Queer Ecologies,* Catriona Sandilands makes the strong argument that "AIDS does not and cannot propel a retreat into Nature in order to find solace and harmony".

[vii] Matt Colquhoun makes a further analysis on the reasons Dungeness is far from lifeless in the epilogue of his book "Narcissus in Bloom" p.234.

[viii] The work is co-created by myself with the filmmaker Pietro Radin.

[ix] You can watch a sample of the work in the following link: https://vimeo.com/883407306 Password: latomeio3

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Drawing Beyond the Human: Traces and Graphic Gestures in a Posthuman Language

Anthi Kosma

Abstract

This article examines drawing and mark-making through a critical post and metahuman lens, challenging anthropocentric, logocentric, and ocularcentric traditions that position drawing as an exclusively human practice of representation and control. Through an informal genealogy from Paleolithic cave paintings to contemporary mark-making—including animal-created marks, algorithmic drawings, and environmental traces—the article argues for understanding drawing not as static representation but as performative gesture, a "dance" of material engagement that exceeds human intentionality. Beginning with Georges Bataille's interpretation of Lascaux as marking humanity's anxious separation from animals, the article questions whether this narrative itself remains bound by anthropocentric dualisms. Drawing on posthuman philosophy, new materialism, and non-Western epistemologies, it reframes traces as more-than-human communicative acts involving diverse agencies in constant intra-action. The article critiques how drawing practices across scales—from intimate sketches to vast territorial interventions—both reveal and perpetuate anthropocentric logics, while also demonstrating potential for more ecologically attuned, technologically aware approaches. By reconsidering drawing as gestural intra-action rather than representational object, this expanded understanding positions mark-making as crucial for cultivating responsive, accountable relationships within broader webs of life in the Anthropocene.

Keywords: Traces, Drawing, Posthuman/metahuman, Communication, Gestures, Questioning Anthropocentrism, Ocularcentrism, Logocentrism.

Introduction

Drawing as an artistic practice, whether in art or architecture, is often associated with human supremacy, authority, control, and dualistic perspectives. The anthropocentric, logocentric, and ocularcentric artistic traditions are increasingly questioned from a critical posthumanist perspective. Traces, marks, and signs created by/with more-than-human life forms, drawing's materiality as an active agent, and the "trait" as a form of touch, gesture, and performativity advocate for an expanded understanding of graphic expression that transcends intention,

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media, classifications, and unidirectional approaches. From this perspective, observing drawing can also be understood as an assistance to "a dance, dedicated and occasional", Javier Seguí de la Riva suggests (73). It is like a pause that is nonetheless not motionless (Agamben 4). The appearing of drawing's "dance" movements resembles Didi Huberman's "butterfly image" (86). Drawing's writing is the image of a metamorphosis. This image is always escaping us, just as the need and desire to trace and to externalize sentiments, feelings, and agonies escape us. The image of drawings is not the static image of traces on a surface. But rather, it is more related to the image of the body as it moves while tracing, to the instant of the body's opening while it writes, tracing, externalizing itself, opening up, and touching. Drawing´s image is almost an impossible image (Kosma152).

Drawing as extension, connection, and recording of our entanglement with what surrounds us, with others, can be perceived as a complex sensory, non-logocentric apparatus. "By its very nature, drawing, as a discipline, an action, and a mode of inquiry, negotiates such complex systems and lays bare relationships by rendering visible thought, body, and sentiment of the drawing artist and the material, concept, and context with(in) which they are engaged." (Schneckloth) Drawing practice as a holistic connection and rapport to, with, and within our environments accompanies human history as a fundamental narrative means. According to Bernard Stiegler (16), who follows the tradition of thinkers like André Leroi-Gourhan, graphic tool and manual wisdom are not mere extensions of the body, but rather fundamental conditions that allow graphic thought to connect with, accompany, and express human movement, both gestural and oral. Therefore, advanced cognition is not simply the product of some fortuitous mutation of the nervous system, but rather the result of the technical involvement of the human being in the material world. Drawing, in a "dance" performative approach, as "an action that sites and situates," inseparably related to graphic recording and connecting tools, reveals a meta/post-humanist dimension that transcends drawing often perceived as a mere representational object, tool, or simply action.

The article presents the evolution of mark-making through an informal schematic timeline, presenting drawing as a post/metahuman language. From the earliest cave paintings at Lascaux to contemporary anthropocenic conditions, an attempt is made to interpret and examine how we might rethink the art of tracing in critical times, offering an often-dismissed posthuman aspect of drawing. By linking Lascaux cave painters, reconsideration of human-animal boundaries, and contemporary drawing practices, we aim to understand traces as dance gestures, signs and testimonies that exceed anthropocentric, ocularcentric, logocentric frameworks, and dualistic divisions, offering alternative communicative and relational possibilities. The article's methodology relies more on open-ended reasoning and bibliographic references that weave together various approaches on the practical and conceptual aspects of tracing/engraving within a meta/posthuman framework, rather than providing an exhaustive analysis of these elements.

Traces of a fragile moment: Lascaux, beauty, the birth of art and the agony for a lost world

Drawings are artefacts that accompany human history, non-signifying writings, traces of a choreography. The main hypothesis of the article is that drawing is not only a static, passive, or representative object or mere action, but a more complex agent whose characteristics allow it to perform as an important post/metahuman language. Furthermore, as such an inscription, which manages to connect with and express the unspoken and unconfessed, it connects with and records characteristic moments of historical evolution. The Anthropocene epoch is a fragile moment that demands that we reconsider our ways of tracing, how we read, understand and control them. From our engravings in handmade or virtual sketches,

computer or AI-generated drawings, to the application of plans and human traces on the Earth's crust, from personal expression and representations to collective designs of construction works or algorithmic art, the concept and art of leaving traces on a surface has undergone considerable change (Ingold 72). The drawn/traced surface is no longer perceived as background, passive agent and can mostly no longer be perceived as tabula rasa, but as an agent full of history and whose materiality is crucial. In this sense, supposing that traces, at any scale, can be understood as a type of touch, as gestures of desires, searching to give sense and to signify everyday life, then Anthropocene traces and "touches," on the planet's surface, especially large scale ones, can rarely be characterized as soft or as done with environmental care.

In our historical period, the anxiety of the looming ecological catastrophe, the climate crisis, the sweeping impact of new technologies and artificial intelligence, and the need for interweaving coexistence between the human and non-human world, society and technology, human and machine, culture and nature, matter and immateriality compose an uncertain framework. To comment on engravings as agents that accompany this historical context and its agonies, we will begin our analysis with a reference that starts from a series of observations made by George Bataille in his book *Lascaux; or, The Birth of Art: Prehistoric Painting*.

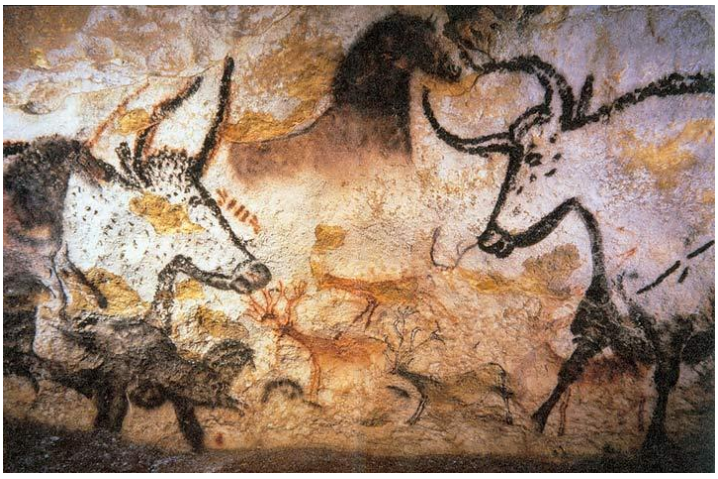

Fig. 1. Lascaux paintings: Aurochs, horses and deer painted on a cave, Public Domain, https://commons.wikimedia.org/w/index.php?curid=2846254

Some children at play in 1940 scrambled down into the fissure left by an uprooted tree and discovered the Lascaux Cave, which contains the finest, best-preserved group of prehistoric paintings that has yet been brought to light. The splendour of these underground galleries is indescribable. Incised and coloured some 20,000 years ago, forming a spectacular stampede of wild animals, these pictures look as fresh as the day they were painted. Probably dating from the Upper Paleolithic Age, they belong to the fanciful invention of signs and images which delight the eye, spring from the emotions, and induce an emotional response.

In *Lascaux; or, The Birth of Art: Prehistoric Painting*, Bataille analyses the experience of the cave frescoes, considering the traces as a spontaneous and—in a sense, in their absurdity—a methodical approach to the beauty of these frescoes, and makes a hypothesis. According to his suggestions, the murals are synonymous with the birth of art and also the birth of humans, since in this phase, humans begin to become conscious and separate themselves from animals. But also important is the fact that Bataille argues that the birth of

these first traces as the result of a game. To perceive the shift from the world of work to the world of play, or the transition from *Homo faber* to Lascaux man and *Homo sapiens*, and in part to *Homo ludens*. To understand the transition from the roughhewn to the finished individual, it is important to imagine that this being wasn't a finished individual but a being in transition from the roughhewn to an unknown self. And, how in this transition "in the cave's semidarkness, by the hallowing lamp-light, they surpassed what until then they had been by creating what was not there the moment before" (Bataille 20).

Lascaux Man created out of nothing through traces—whereby nothingness is fullness of potentiality following Barad—a world of art in which communication between individual "minds" begins, though being relational and embodied. The paintings he produced unfailingly reward man's thirst for the miraculous, which in art and in passion is life's deepest aspiration. Play—carefree, purposeless action—brings pleasure, enjoyment, and estrangement to everyday utilitarian activity. The non-utilitarian figuration of these signs communicates a strong, intimate emotion. Sarah Casey, in "A Delicate Presence: The Queer Intimacy of Drawing", refers to drawing as an intimate gesture. Referring to Tony Godfrey, who presumes that drawing 'requires a gentle touch and calls for intimacy with the viewer,' and to Karen Barad, who speaks about queer intimacy, Casey indicates that drawing is absence and presence, a general conception of relationship, of interaction and touching.

The safety and protection of the cave provided time for play, and through time, play, and possibility for the emergence of the first imprints, spontaneous graphic depictions, and expressions of the unknown, fears, impressions, and memories. Bataille insists that "we had also forgotten that these unsophisticated beings laughed—that, finding themselves in a situation which terrifies us, they were the first who truly knew how to laugh" (Bataille17). This remark serves to highlight just how much we project and limit our understanding of them. When modern humankind first emerged, humans possessed a decisive virtue, a creative virtue which today has ceased to be necessary; they created out of nothing these worlds of art in which communication between individual minds begins and is intensified by inhuman strangeness.

The murals were probably engraved by different generations and graphic continuities; regardless of their possible exact dates they were always creating something new as these peoples created from nothing the world they imagined. "The pleasure of drawing is the pleasure of those who do not acknowledge any given form," mentions Jean-Luc Nancy in his book *The pleasure in drawing* (11), revealing that one important characteristic aspect of drawing is the implication with the unknown, the uncontrolled, the search. In his essay "Structure, Sign, and Play" (1967), Derrida conceptualized free play as that which animates 'repetitions, substitutions, transformations, and displacements,' rather than being confined to the form of a rule-bound game. His model prioritizes movement over binary oppositions or structures and insists on displacement. This approach to play incorporates its own ludic nature, making his description of play fluid and open, as well as decentralized, never anticipating any fixed end. Bataille considers that the cave people, by designating and configuring the object, has been wrenched out of the world of nameless feeling of sensibility, the world of animals. Humans' first steps of consciousness separate them from the world of the animals; a different becoming is taking place.

> Transition from animal to human, from twilight to conscious life [...]from the animal state—in which there is no such thing as a prohibition—to the human state—in which prohibitions are plainly the cornerstone of humanized patterns of behaviour. Only play, and not some practical purpose, like gratuitous doodling in caves, could have

> 'broken' this condition or could express a feeling of nostalgia and the impossibility of going back to animal state. (Bataille22-25)

Eveline Lot-Falck in "Rites de Chasse chez les Peuples Sibériens" (134) sustains that the hunter considers the animal at least as his equal. Like himself, the animal hunts to secure his food, and has, he believes, a life like of his own and a similar kind of social organization. In this sense, murals do not necessarily represent the dominance of humans over the animal world, as it might be interpreted under a contemporary understanding. Traces can be connected with a conflict, but also, or more, with an integrated way of living.

In *Ontohackers part 2* (Del Val 402), it is mentioned how rock art was mostly linked to ritual choral dances as an extension of the healing power of the trance dance, until recently in gatherer-hunter communities, and as part of a cosmology where there is no such clear distinction from the nonhuman animal but an identification and metamorphosis, a becoming. Choral dance, proposed by Del Val as mother of all arts, is much older and is a successor of animal dances; in the light of this, there is no origin of art, and the search for a divide and an origin can be linked to human interpretation in search for supremacy. According to this consideration, traces are signs and remnants of a dance in many senses. The traces activate and connect intensities and experiences; they are not a "reflection", a representation, not a mirror of the world, the latter being a modern invention, but more like a touch, a rhythmic "step" of the dance, an extension of the trance visions that remains in rock surfaces, a diffraction, a type of frottage. Indeed, such paintings of trance dances are meant to be touched in the rock art of the San gatherer-hunters. Traces then are more like "gestures" of a dance of inseparability among humans, animals, materiality, matter, and meaning. Dance, for Del Val, citing Guenther (402), in their analysis of dances in some contemporary San gatherer–hunter communities, is of two kinds: ritual or trance and ludic or playful, but always with transformative healing power, and the painting is extending the catharsis of the dance itself, as associated with the power of the animal that the trance dance invokes. The dance is the main process of knowledge production and transmission in the San and embodies a cosmology that is not anthropocentric, but symbiotic.

We could say that from one perspective Bataille's interpretation, while attempting to 'break' the anthropocentric dualistic narratives of his time, such as human-animal, culture-nature, remains captive to them. Del Val's metahumanist approach, through embodied experience, movement, and dance, comes to break down these dichotomies much further, pointing out that our approaches continue to ignore other cultures, ways of coexistence of the living, and other imaginaries that render contemporary understanding and categorizations of the world completely rigid.

Traces of a fragile moment: Anthropocene, eco- and climate anxiety

The engravings of paintings at Lascaux present a human at the threshold of a different world, a human more connected and frightened than dominant or separated, whose dance movements of exteriorization and ex-scriptions express their agonies in a non-signifying, gestural language. We can assume that today's humans also find themselves at the threshold of a frighteningly changing world as a result of its own dominance. Observing our traces today, we can read "contemporary traced movements" as the signs, forces, beliefs, and anxieties of our times. Contemporary traces on small and especially on large scales, their quantity and range, impressive graphic technologies, and extractive interventions testify, among other things, to our—often imposed—relationship with a planet and its ecosystems, that are being lost, that will hardly be the same again. At the same time, we become aware of the existence of a world that is already 'here and now,' which is incorporated and is increasingly inseparable

from our daily life and concerns the world of technologies and their rapid integration. Humans and technology are interdependent, while instrumental logic and aesthetics are increasingly incorporated and expressed in their "writings."

If cavemen recorded the agony of the separation from the world of animals, our agony and posthumanist critique perhaps has to do with what Rosi Braidotti was asking in a recent conference: "Am I human? What kind of human are we? Or are we not all of us human to the same degree?" And in her critique and aim of deterritorializing the norm, she supports the process of becoming animal, woman, minoritarian, or nomadic. "Considering the extent of this posthumanist turn to become animal or minoritarian, you are better off cultivating your inner housefly or cockroach, instead of your inner child" (Shaviro53)—that is, forming anomalous and inorganic alliances, not oedipal and hierarchical relations.

> The animal is not classified according to scientific taxonomies, nor is it interpreted metaphorically. It is rather taken in its radical immanence as a body that can do a great deal, as a field of forces, a quantity of speed and intensity, and a cluster of capabilities. This is posthuman bodily materialism, laying the ground for bioegalitarian ethics. [...] Becoming animal, minoritarian, anomalous, or inorganic is a way to potentiate what embodied and embedded subjects can become. It is a way of living more intensely, by increasing one's potentia and, with it, one's freedom and understanding, not anthropomorphic but rather geopolitical, ecophilosophical, and proudly biocentered. (Braidotti, *Animals, Anomalies, and Inorganic Others* 527)

In our case, understanding drawings toward a non-anthropomorphic approach, as a "dance" and dance coming from animal ancestors (Del Val 402), has particular interest as it reveals how deeply embedded anthropocentric culture is, as well as the emergence of a broader understanding of it.

Anthropocentrism can be observed in drawing practice, whether depicted as content in drawings, sketches, etc., in two-dimensional analogue or digital representations, or whether it is projected and programmed through drawings to predetermine and indicate a series of actions and interventions. Human superiority in traces is expressed significantly in how the Earth's surface is usually manipulated, as tabula rasa, uninhabited, empty, or neutral. In the anthropocentric approach and culture, we also observe how drawing is exclusively a human prerogative, under its control, executed through graphic tools, and is considered an object that requires talent, skill, specialty, submission, or continuation of certain specific aesthetic criteria and rules. In this context, other creatures (plants, animals, etc.) or technology are often presented as inferior, auxiliary, or in service to humans. In the same way, matter is presented as static and passive, lifeless, and not on an equal ontological basis.

Superiority is also significant regarding more specific issues on the culture of traces in general and drawings in particular. The ocularcentric approach—the domination of the so-called "noblest" of the senses, vision, mostly conceived as atemporal and static—has limited the aesthetic experience, forcing it also to be mediated by language, obligating one to observe under a scopic regime (Jay 17). Ocularcentric culture uses drawings to distance itself, as well as "mirroring" through "reflective" representations, or photographic imitations for understanding the world as an external image, describing it more through closed, specific shapes and outlines, with clear correlations and delimitations. Additionally, emphasis on meaning-making and discursive interpretations of visual products also proves human prerogative and dominance of logocentrism, leaving aside drawings and traces' capacity as non-significant ways of communication. In this tradition, drawing is conceived as a material

object that can be understood from an immaterial, superior thinking reality, limiting the understanding of drawing's

performativity in a dualistic, separative logic between object-environment, object-action, subject-object, object-representation, etc.

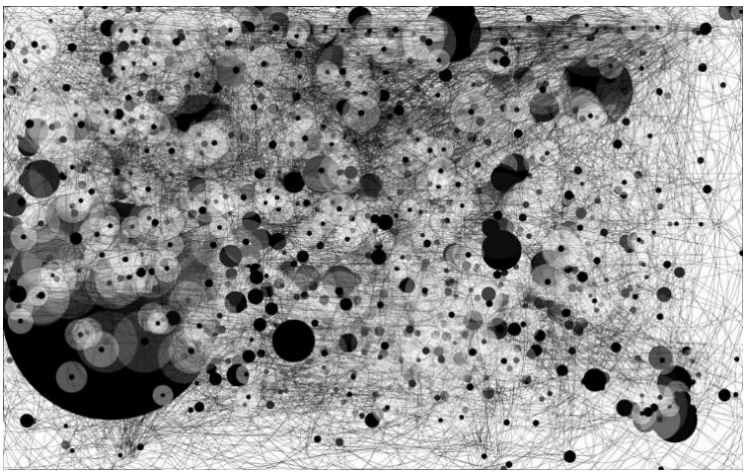

Fig. 2. IOgraph, mouse movements 2011

Understanding the More Than Human Other

Reconsidering visual culture traditions under a posthuman critical approach, humans' prerogative position and understanding of traces as an exclusively human condition are questioned. Under this prism, drawers are not necessarily humans. Other creatures, such as animals, plants, machines, and robots, also trace according to their own will, needs, and criteria. Some characteristic examples of an expanded perception of posthuman drawing include cases such as "Pockets Warhol," a capuchin monkey that began creating his very own abstract pieces (CBC Arts), or the work of Tim Knowles on "Tree Drawings," where drawing traces are made by tree branches, or cases based on technological agents, such as drawing robots—machines. Traces as gestural bodies and movements are no longer considered a human privilege or executed under human control. In the posthuman shift, traces beyond the human are mediators, indicators, and facilitators in communicating and connecting different realities, flows of energies, etc. Tracing under quantum and new material theories is a performativity of many agents, in constant change, in intra-action. Drawing is no longer considered a medium, or merely an object, or an action; surfaces, traces, figures, and gestures are no longer separative and distinct factors, but active agents that are well-entangled.

> In words of Nancy:
>
> Gestural body is different from the organic body, without being a body without organs. Rather, it becomes the body-organon of art, and thus of the technique *(ars—techne)* that is in play, whether graphic, vocal or coloured, tactile or verbal. [...] In every form of art, something plays itself out that in other contexts one calls gestural pleasure. (Nancy, *Exscription* 39)

In this sense, the gestural body (Fig.3) is not related to an organic or specific body. Traces are the remnants and products of a complex entity. In the world of algorithms and artificial intelligence, gestural traces and their processes are blurred even more. For instance, AI art generators that rely on neural networks (machine learning techniques), where algorithms identify patterns in data sets following logocentric and representational regimes, or other attempts such as gestural cognition where drawing becomes touchless (Touchless User Interface) based on systems that interpret hand gestures—rich, expressive forms of communication—to control computers without any physical contact with a keyboard, mouse (Fig.2), or screen, are some significant cases where tracing belongs to complex procedures. Mechanical, electronic, and algorithmic gestures and traces are merged with gestures, tools, and traces in entanglement and constant intra-action, offering sometimes unimaginable outputs that surpass and contradict the artistic tradition of talent, anthropocentric conceptions of authenticity, originality, and so on.

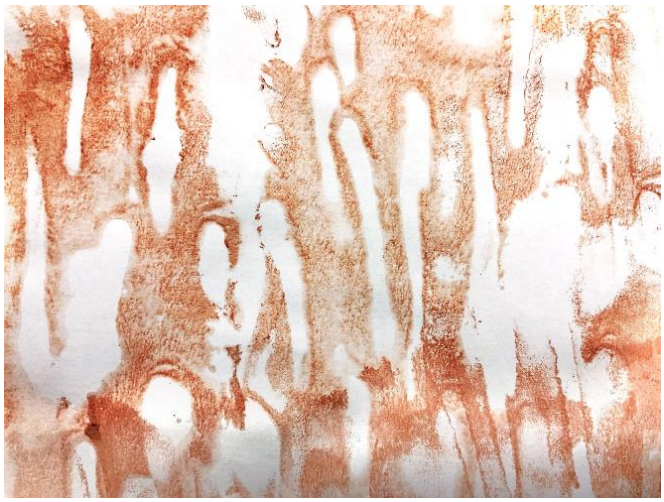

Fig. 3. Kosma, Anthi. *Clay touch* 2025, (with permission of the artist).

Traces out of scale

We see from the above that traces in our era are not a human prerogative; their origin, production, but also their interpretation are complex results and processes. Drawings as a non-signifying writing exist across scales, from intimate personal marks to vast territorial interventions. Large-scale human traces like those carried out on the Earth's crust extend our understanding of anthropocentrism, colonial, expansive, extractive, and generally non-symbiotic logics that prevail over other species' lives, etc. In this context, interventions and designs that separate, divide, fragment and lead ecosystems and habitats to their limits are still more present, calling for reconsiderations on the way we "touch" the Earth.

Eco-anxiety (Pihkala) and posthuman critique in face of the persistence of human dominance mark a significant turn in general and in drawing practice in particular. Reconsiderations can be found in existing alternative conceptions, for example, "great image has no form," claims Francois Jullien, referring to a nonobjectifying approach that stems from Chinese painters' tradition deeply held belief in a continuum of existence (355). Relations between object and subject are more of an encounter with the things and landscape through the brush. Landscape is reconsidered in a position where it is no longer perceived as object but as co-participant, which has been thought of in China in terms of 'intentionality.' Or, in investigations such as Miranda Correa, Melisa's under the title "Indigenous landscapes in Caspana: exploring a Ch'ixi epistemology," where, according to indigenous epistemologies,

landscape originates within our bodies, as our organs interact with the environment (10). Therefore, for indigenous people such as Ch'ixi, comprehending and configuring the world through our upper organs or 'chuyma' cannot be achieved through representations according to the Western perspectival regime. Abstract culture in painting and drawing is a case where searching for the configuration of the world through the gestural body and feelings. Abstract culture in painting and drawing is a case where the configuration of the world emerges through the gestural body, formations, traces, and inscriptions of the world emerge through emotions, senses, and the body as a writing gesture—an ex-scription.

Understanding drawing far away from an imitative aesthetics and mere appearance can also be found in the world of physics, where the drawing´s materiality is questioned, or is set on new bases. In the words of Karen Barad:

> take a line. It divides two spaces. But look really closely, on a microscopic level, where are the edges of the line? She points out that "it is a well-recognized fact of physical optics that if one looks closely at an 'edge' what one sees is not a sharp boundary between light and dark but rather a series of light and dark bands – that is, a diffraction pattern. (Barad, *Meeting the Universe Halfway*, 156)

In other words, the line itself becomes a space, a no-man's territory between one quality and the other. It is this space that Casey explores in drawing practice—its intra-action—to refer to drawing's queer intimacy (Casey 6).

As it often happens in social and anthropological studies, drawing´s materiality is also an underestimated and ignored agent (Georgopoulou 5). Bruno Latour, in the text "Drawing things together," a text on demystification of grand explanations and representations accumulated in centres of power, sustains that "it is not perception which is at stake in this problem of visualization and cognition. New inscriptions, and new ways of perceiving them, are the results of something deeper" (7). The power of visualization comes from the material properties of inscriptions, "immutable mobiles" (maps, diagrams, printed texts, scientific instruments' outputs) by allowing distant places/times/"authors" to be gathered in one location beyond human control.

Conclusions

Today, in the age of Climate Change, ecological crisis, and AI, drawing agency and performativity can be understood through a post/metahuman lens as extending beyond human subjects through technological and interspecies entanglements. The emergence of non-representational, performative approaches that transcend anthropocentrism challenges ocularcentric traditions, broadening the role of drawing as a non-logocentric and holistic mode of communication. Reconsidering drawing practices as an expanded gesture, a dance, or an occurrence that communicates relationally can foster new forms of ecological and technological awareness in the Anthropocene.

Given that we inhabit a fragile moment of transition—a period of profound transformation—surpassing anthropocentric perspectives and dualisms in artistic practices becomes crucial. This shift in drawing practice opens pathways for understanding the other-than-human world. Moreover, drawing as a common transcultural writing, an emotional, unspeakable, spontaneous kind of writing, enables us to approach the world as an entangled network of agencies, drawing from agential realism's understanding of reality as interconnected rather than separate. Drawing, reconceived as a practice of attunement rather than representation, offers one pathway toward more liveable futures. The fragile moment we

inhabit calls for cultivating more responsive and accountable ways of tracing our relationships within broader webs of life. A post/metahuman understanding of traces is not solely a matter for drawing practitioners, artists, or educators, but rather a broader call to attend to other corporeal ways of connection.

In the words of Nancy: "Art shares the goal of replaying a childhood of senses and sensation [...] It can reproduce either the discovery of the world or the loss of the unreal outside the world. It can either open or empty, or do both at the same time. This is always the result of the way the mark, etching, or incision is drawn, separating areas, also penetrating the thickness that supports it" (Nancy, *The Pleasure in Drawing*, 76).

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Telepathy Beyond Individualist Metaphysics: Intra-Action, Ontohacking and the Radical Entanglement of Thought

Luciano Zubillaga

Abstract

This paper challenges traditional individualist metaphysics by proposing a radically embodied reconceptualisation of telepathy grounded in intra-action, proprioceptive intelligence, and cosmic relationality. Drawing on Jaym*/Jaime del Val's radical movement philosophy of ontohacking, Karen Barad's agential realism, and neuroscientific perspectives from Fedorenko, Piantadosi, and Gibson, telepathy is reframed as an emergent dynamics of relational movement rather than an exchange between disembodied minds. Integrating Federico Faggin's view of experience as primary with Del Val's notion of Body Intelligence (BI), this study situates telepathy within kinetic, affective, and ecological fields of becoming.

Rejecting neurocentric and representationalist models, it positions telepathy as a process of proprioceptive attunement—an embodied resonance across metabodies and environments—where perception, sensation, and affect co-compose new modes of planetary coexistence. Through the experimental films of The Church of Expanded Telepathy(TCOET), telepathy is explored as a practice of metaformance, expanding communication into multisensory and collective movement architectures.

Ultimately, telepathy is presented not as a supernatural phenomenon but as an ethical and ecological modality: a form of co-sensing that resists algorithmic reductionism, reclaims the body's plastic intelligence, and affirms life's relational variability amid the crises of the Algoricene.

Keywords: Telepathy, Intra-action, ontohacking, Body Intelligence, Cosmism, Algoricene.

Section 1: Introduction – Towards a Non-Representational Paradigm

Contemporary thought remains largely dominated by an individualist metaphysical framework deeply rooted in Cartesian dualism, wherein consciousness is presumed to reside within discrete minds and bodies. This traditional perspective reinforces Western epistemologies, restricting the understanding of cognition and communication to representational and symbolic processes confined within individual cognitive mechanisms. Within this representationalist paradigm, consciousness and cognition are reduced to neurological activities and symbolic representations, perpetuating a narrow, linear view of communication and thought.

In contrast, this paper proposes a significant conceptual shift, exploring telepathy as an intra-active, radically entangled phenomenon that emerges within shared fields of affective,

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somatic, and cosmic resonance. Central to this reframing is Federico Faggin's proposition that consciousness is foundational and precedes matter, aligning with Bernardo Kastrup's analytic idealism. This approach also integrates Karen Barad's notion of intra-action, Del Val's radical philosophy of embodied relationality, and contemporary neuroscientific critiques articulated by Fedorenko, Piantadosi, and Gibson, collectively offering a robust alternative to individualistic and representational theories of cognition and communication.

The reconceptualisation of telepathy outlined here builds upon my earlier doctoral thesis, *The Church of Expanded Telepathy (TCOET): Queer Theory, Pornography, Science Fiction.* In that research, telepathy was examined not merely as information transfer between isolated minds but as transformative relational interactions among what Del Val calls metabodies—collective and dynamically interconnected entities. My artistic and theoretical exploration through experimental film in TCOET emphasised telepathy as embodied relationality, effectively challenging and transcending the constraints of representational paradigms.

Historically, telepathy has been conceptualised predominantly as a direct exchange of information between two separate minds, implicitly endorsing consciousness as an individual property. Such a model promotes a hierarchical, linear notion of communication. Despite substantial critique, this individualist model continues to dominate cognitive science, reinforcing outdated Cartesian assumptions. Federico Faggin, notably in his works *Silicon* and *Irreducible*, fundamentally disrupts this viewpoint by asserting consciousness as the primary and irreducible essence of reality, preceding any physical or computational manifestations. Faggin critiques the reductionist tendencies prevalent in AI and neuroscience, highlighting how subjective experience—qualia—cannot be fully captured by computational or representational models.

This paradigm aligns notably with Bernardo Kastrup's analytic idealism, articulated clearly in *The Idea of the World.* Kastrup proposes consciousness as the sole foundational substrate, rejecting materialist perspectives that conceive consciousness as a byproduct of physical processes. For Kastrup, individual minds are not isolated entities but localised expressions or "dissociated alters" within a singular universal consciousness. He employs vivid metaphors, such as whirlpools forming within a continuous stream, suggesting that individual consciousness emerges as distinct yet interconnected patterns within a universal consciousness. Telepathy, from this perspective, can be understood as the alignment or merging of these localised patterns, facilitating the flow of consciousness between apparently separate minds.

The term telepathy—coined in 1882 by Frederic W. H. Myers, founder of the Society for Psychical Research—arose amid the late-Victorian effort to reconcile the waning authority of religion and metaphysics with the ascendant prestige of scientific rationalism. Etymologically derived from the Greek tēle (far, distant) and pathos (feeling, affection), it literally means "distant affection." Yet this very construction presupposes separation: an act of feeling transmitted across a void. Within the non-dualistic frameworks proposed by Faggin and Kastrup, such distance becomes conceptually untenable. Their models imply that affect and cognition are not projected from one isolated mind to another but unfold within a continuous relational field. The idea of *tele-pathos*—feeling-at-a-distance—thus dissolves into a recognition of proximity within difference, a resonance rather than transmission. This re-situates Myers's invention in a new philosophical register: telepathy no longer marks an anomaly incommunication but the ordinary expression of an immanent relational ontology. Where Faggin underscores the irreducibility of experience as primary and Kastrup elaborates its ontological coherence, telepathy becomes not a paranormal aberration but an etymological relic of a worldview still clinging to distance in a cosmos of intrinsic continuity.

My exploration of telepathy as an artistic and theoretical practice in TCOET leverages this non-representational understanding. Experimental film serves here as a form of direct theory, facilitating philosophical and affective transmission beyond linguistic constraints. This aligns with Edward Small's idea of cinema as direct theory (1994), foregrounding the medium's capacity to communicate nuanced ideas and affective states through audiovisual, non-symbolic forms. Such practices are consistent with Karen Barad's agential realism, which describes phenomena not as interactions between predefined entities but as dynamic co-emergences through relational becoming. Applied to telepathy, Barad's framework suggests that telepathic phenomena emerge intra-actively, with bodies continuously redefining and co-constituting each other through relational processes.

Further reinforcing this approach, recent neuroscientific critiques by Fedorenko, Piantadosi, and Gibson (2024) highlight significant limitations in computational and algorithmic models of cognition, which systematically fail to capture qualia-rich experiences such as intuition, affect, and embodied knowledge. This critique complements Faggin and Kastrup's assertions, underscoring telepathy's inherent resistance to reductionist frameworks. Within the practice of TCOET, experimental film underscores telepathy as fundamentally qualitative, experiential, and affectively charged, intrinsically resisting algorithmic and representationalist encapsulation.

Beyond theoretical implications, the ethical and philosophical significance of transitioning from individualist metaphysics to relational frameworks must be emphasized. This shift profoundly challenges entrenched notions of autonomous subjectivity, proposing instead ethical frameworks based on interconnectedness and collective relationality. In TCOET, telepathy facilitates queer relational practices that actively subvert hierarchical and normative structures, establishing modes of collective empowerment and ethical encounter beyond individualist constraints.

Moreover, this non-representational model aligns historically and philosophically with speculative thought traditions such as Russian Cosmism. Figures like Alexander Chizhevsky and Georges Gurdjieff emphasised humanity's participatory relationship with cosmic and planetary processes, anticipating the cosmological resonances found in Barad's and Kastrup's frameworks. Through TCOET's experimental films—such as *Kokakolachickenwings*, *Superhomosexuals*, and *Succulent Humans*—telepathy expands beyond interpersonal communication into broader cosmic relationality, encompassing interactions among human, non-human, and planetary entities.

These films embody telepathy as affective, non-representational intra-actions, creatively dismantling traditional cognitive frameworks. They offer compelling alternatives to representational cognition, suggesting an expansive vision of telepathic relational becoming. Here, Faggin and Kastrup's insights provide essential theoretical validation, positioning *expanded telepathy* not as fringe phenomena but as intrinsic, central aspects of conscious and cosmic becoming. Through this reframing, telepathy becomes not only conceivable but integral, pointing toward a novel ontology that celebrates interconnectedness, relational resonance, and cosmic intra-action.

Section 2: Telepathy as Proprioceptive Intra-Action

Federico Faggin's proposal that what we conventionally call consciousness is in fact a foundational, relational dynamics aligns profoundly with Karen Barad's theory of agential realism, jointly offering an ontological basis that reshapes how telepathy can be understood. Faggin argues that experience is not a by-product of neural activity but a primary property intrinsic to existence itself—a continuous self-manifestation of reality. When reframed through Del Val's philosophy of Body Intelligence (BI), this principle reveals the world as a field of

proprioceptive movement in which every relation, gesture, or vibration participates in a living continuum of co-emergence, proprioception being the specific sense modality by which the body senses its own movement, which Del Val takes a source for redefining perception and movement altogether. What Faggin calls the "self-aware quantum substrate" and what Barad names the "intra-active field of mattering" converge with Del Val's notion of a cosmo-kinetic ecology—a world sensed and generated through movement rather than cognition. This shift from materialist ontology to proprioceptive relationalism transforms telepathy from a mental transmission into an attunement within a shared, distributed field of co-sensing, where perception itself becomes a collective choreography.

Comparable frameworks across philosophy and science reinforce this reorientation. Galen Strawson's "Realistic Monism," Philip Goff's *Galileo's Error*, Bernardo Kastrup's *The Idea of the World*, Alfred North Whitehead's *Process and Reality*, and David Bohm's *Wholeness and the Implicate Order* each describe cosmologies in which relational movement—or, in Del Val's terms, proprioceptive modulation—is ontologically fundamental. Strawson and Goff supply the analytic defence of a world permeated by experience; Kastrup and Whitehead extend this into process metaphysics; Bohm articulates the quantum enfoldment of perception and matter. Barad's intra-action complements and radicalises these perspectives by insisting that entities never pre-exist relation but arise through the differential patterning of encounters. Within this expanded terrain, telepathy functions as a practice of what Del Val calls ontohacking—a deliberate reprogramming of perception and relational capacity that allows bodies to sense their own participation in the generative fabric of the real.

In this context, telepathy ceases to resemble a psychic signal and becomes an embodied modulation within an ecology of affective intensities. Del Val's concept of metaformance—performance beyond form, or the plastic reconfiguration of perception itself—captures this non-representational dynamism. Telepathic events are no longer bounded by the logic of communication but unfold as ephemeral architectures of collective resonance. The films composing The Church of Expanded Telepathy (TCOET) materialise these dynamics through audiovisual extension of proprioception: they choreograph relations among viewers, sounds, and images that bypass cognitive interpretation and awaken latent modes of sensing. In Superhomosexuals (2016) and Succulent Humans #3 (2019), for instance, the non-linear montage and sensory excess dissolve narrative coherence to generate states of collective attunement. Such works transform spectatorship into co-sensing, establishing an ethics of participation where subjectivity becomes a temporary, fluid configuration within a wider metabody field.

Extending these principles, the TCOET project advances a practice-based epistemology that treats telepathic resonance as both method and medium. Its films, installations, and performances operate as intra-active laboratories in which movement, sound, and light enact the vibratory continuum theorised by Faggin and Barad. The resulting experiences do not illustrate theory but rather perform it, making the audience's proprioceptive engagement the site of philosophical insight. Here, knowledge is not representational but kinetic—it arises from being moved and moving within a shared ecology of becoming.

Recent neuroscientific findings by Fedorenko, Piantadosi, and Gibson lend empirical resonance to this framework, indicating that language functions primarily as an external communication tool rather than as the foundation of thought. Through the lens of Body Intelligence, such findings affirm that meaning emerges from the continuous negotiation of bodies and environments, not from internal symbolic codes. The implication is radical: if cognition is distributed and sensory, then telepathy describes not a violation of physical law but the ordinary operation of relational embodiment. My doctoral research extends this premise by demonstrating that audiovisual composition can induce proprioceptive states of co-sensing,

thereby destabilising the Cartesian hierarchy separating perceiver and perceived. In these works, sound vibration, chromatic intensity, and temporal disjunction become tools for metabodily reconfiguration, activating forms of awareness that precede linguistic articulation.

Reclaiming qualitative, affective, and anecdotal accounts—long marginalised by representational science—is therefore crucial. Such experiences, articulated through metaformative art, constitute legitimate empirical evidence of co-sensing processes. They demonstrate that telepathy is not exceptional but immanent to relational life, an everyday capacity muted by linguistic and disciplinary regimes. Within this expanded epistemology, telepathy signifies a movement ecology: an emergent, embodied event through which metabodies co-compose their environments while continuously re-inscribing the boundaries of perception itself. In this ecology, every gesture, vibration, and affective shift is both communicative and world-making.

Ultimately, the synthesis of Barad's agential realism, Del Val's Body Intelligence, and cosmological models from Strawson to Bohm positions telepathy as a dynamic field of proprioceptive intra-action. It reveals the ontohacking potential of art and philosophy to reconfigure how relationality, perception, and life are sensed and enacted. By shifting emphasis from cognition to movement, from representation to resonance, telepathy emerges as a cosmo-aesthetic principle—a way of participating in the continual self-generation of reality. This expanded understanding dissolves the boundary between theory and practice, positioning metaformative art as both the expression and the embodiment of a living, evolving ontology of relation.

Section 3: Ontohacking and Radical Movement Philosophy – Embodied Cognition and Cosmic Intra-action

Jaym*/Jaime del Val's radical movement philosophy, notably termed "ontohacking," offers a profound theoretical and practical framework for rethinking telepathy through embodied cognition. Central to Del Val's philosophy is the critique of what they identify as the "Algoricene," a contemporary epoch dominated by algorithmic and computational reductionism. This era, according to Del Val, enforces a systemic reduction of cognition, perception, and embodiment to algorithmic operations, neglecting the intrinsic complexity and relational openness inherent in bodily experiences. Del Val advocates instead for a philosophy rooted deeply in the somatic and proprioceptive intelligence of bodies, an intelligence they define as fundamentally kinetic, indeterminate, and non-algorithmic (Del Val, *Ontohackers*, *Part I*).

Ontohacking, in Del Val's terms, signifies the active disruption of traditional, stabilised ontologies through movement and perception (Del Val, *Ontohackers*, *Part II*). It involves identifying and exploiting fissures within established perceptual frameworks, thus resisting dominant tendencies that impose static interpretations of reality. Del Val emphasises that realities are intrinsically plastic and continuously open to new configurations through embodied interventions. Such interventions promote the practice of "metaformance," an aesthetic and practical methodology focusing on underlying movements and perceptual plasticity rather than static representational content. This approach aligns profoundly with Karen Barad's theory of intra-action, emphasising dynamic, emergent relationships that continuously redefine boundaries and entities.

A central component of ontohacking is Del Val's concept of Body Intelligence (BI), articulated in explicit opposition to artificial intelligence (AI). BI designates the body's immanent capacity for variation, self-organisation, and movement-based knowing, rooted in proprioception—what Del Val calls "the dynamic playground of BI" (Del Val, *Ontohackers*, *Part*

I, 93). Rather than conceiving proprioception as a sensory foundation beneath cognition, Del Val asserts that proprioception is thought and intelligence itself, a continuous process of distributed sensing through which life invents and reinvents its relational architectures. In Del Val's conception the body thinks by moving, and every movement is an act of intelligence (*Ontohackers, Part 1*). In this view, intelligence is not computational but kinetic, affective, and ecological—a ceaseless modulation of relational fields that exceeds the algorithmic logic of AI. While artificial intelligence encodes decision within fixed parameters, Body Intelligence manifests as the open-ended, unprogrammable creativity of movement, generating emergent forms of sensing, meaning, and becoming that resist reductionist capture.

Del Val's theorisation of proprioception extends beyond individual bodies, envisioning it as a dynamic matrix of entangled proprioceptive fields that compose our shared experiences of reality. They describe this entanglement as a "proprioceptive swarm," wherein bodies and environments reciprocally shape and transform each other through subtle, continuous adjustments. Through these micro-variations, ontohacking operates by introducing minimal yet transformative shifts within the proprioceptive fields of bodies, objects, and relations. This resonates deeply with the embodied cognition framework explored in my doctoral thesis (Zubillaga, 2020), where telepathic experiences were similarly conceptualised as emergent phenomena arising through subtle, affective, and sensory interconnections.

Within the practical and artistic contexts of my research—particularly through *The Church of Expanded Telepathy (TCOET)*—ontohacking operates not only as an analytical framework but as a material practice of reconfiguring perception. If, as this section argues, cognition is fundamentally embodied, kinetic, and intra-active, then screen-based regimes of fixed perspective and disembodied vision must be understood as ontological constraints rather than neutral media. Such regimes stabilise perception, isolate the spectator, and reinforce representational distance, counteracting the distributed proprioceptive sensing that ontohacking seeks to activate. The task, therefore, is not to abandon the moving image but to re-engineer it metaformatively—transforming cinematic space into a porous, non-perspectival field capable of mobilising collective proprioception and cosmic intra-action. It is precisely in response to these constraints that the TCOET films operate, not by rejecting cinema but by onto-hacking it from within.

In this light, the TCOET films function not as traditional representations but as onto-hacked environments that reconfigure how perception operates. Works such as *Succulent Humans #3* and *Cosmos, War Finally Love* replace perspectival framing with kinetic multiplicity, drawing viewers into collective fields of proprioceptive resonance. Their non-linear structures, multisensory provocations, and dense temporal layering invite spectators to participate in metabodily architectures of co-sensing, effectively transforming the screen into a porous interface of embodied relation. In this sense, my film practice extends Del Val's call for metaformative reengineering of perception, turning cinematic media into experimental terrains where new proprioceptive and telepathic forms of experience can emerge.

Further, Del Val's concept of "metabodies" enriches our understanding of collective cognition and telepathy. Metabodies, according to Del Val, are relational fields of movement characterised by their continuous openness, plasticity, and indeterminacy. These metabodies never stabilize completely, existing always in transitional states that foster relational variability and intercorporeal responsiveness. This aligns directly with my exploration of telepathic processes as inherently dynamic, affective, and relationally emergent, extending beyond simplistic notions of mind-to-mind communication.

Del Val's ontohacking explicitly critiques the Cartesian legacy, particularly the persistent dualism between mind and body, subject and object. They identify this dualism as a core contributor to contemporary ontological stagnation and advocates for practices that re-establish the body's proprioceptive intelligence at the heart of cognition and perception. By situating the body as a complex tensional field composed of movements and forces, ontohacking proposes an ontology that defies rigid categorisations and encourages sustained openness to transformation and variation. This critical stance significantly intersects with Karen Barad's agential realism, highlighting the co-constitutive entanglement of human and non-human agencies through continuous intra-actions.

Additionally, Del Val's analysis critiques how algorithmic rhythms, prevalent in digital cultures, reduce bodily plasticity by imposing repetitive, predictable patterns. Ontohacking counters this trend through advocating rhythmic plasticity and openness, crucial for resisting algorithmic domination. This aspect resonates with my doctoral research, where cinematic rhythms and sensory disruptions in experimental films actively worked against representational and algorithmic predictability, cultivating telepathic awareness and collective attunement.

Del Val's framework of relational movement variation can be understood as a theoretical refinement of what I earlier conceptualised as *cosmic interaction.* Rather than invoking metaphysical notions of consciousness or cognition, Del Val conceives bodies as metabodily fields in continuous modulation—dynamic constellations of proprioceptive movement that interweave across multiple scales of relation. Such interactions involve not just human agents but planetary, ecological, and cosmic phenomena, all participating through the ongoing reconfiguration of movement and variation. Every shift in this field alters the conditions of perception, linking micro and macro processes within the same ecology of becoming. My research develops this perspective by approaching audiovisual media as a metabodily interface, capable of amplifying and redistributing these relational modulations. In The Church of Expanded Telepathy (TCOET), film no longer represents cosmic unity but activates expanded telepathic fields of proprioceptive resonance, where sound, rhythm, and image generate architectures of collective sensing.

In conclusion, Del Val's radical movement philosophy, through ontohacking and Body Intelligence, provides essential conceptual tools for reimagining telepathy within an embodied and relational framework. Integrating these insights with the empirical findings and creative practices of my doctoral research, we arrive at a robust multidisciplinary approach to telepathy. This reconceptualisation emphasises telepathy as inherently collective, somatic, and dynamically entangled with broader ecological and cosmic dimensions, fundamentally transforming our understanding of consciousness, cognition, and relationality.

Section 4. Toward a Psycho-Cosmic Theory of Telepathy: Russian Cosmism, Gurdjieff's Three Centres, and Audiovisual Practice

Russian Cosmism offers a robust historical and philosophical framework essential for situating and expanding our contemporary understanding of telepathy as deeply interwoven with cosmic processes. Emerging during the late 19th and early 20th centuries, Cosmism proposed radical new ways of conceiving humanity's role within the universe, emphasising an interconnectedness and interdependence of human consciousness, biological states, and cosmic phenomena. This expansive vision challenged conventional dualistic separations between human experience, nature, and broader planetary contexts, advocating instead for an active co-creation within cosmic evolution and perceiving humanity as intricately enmeshed in an evolving universal consciousness.

One significant figure within Russian Cosmism is Alexander Chizhevsky, whose pioneering research in cosmobiology provided empirical foundations linking solar and cosmic events with terrestrial biological and psychological rhythms. Chizhevsky meticulously demonstrated correlations between solar activity, such as sunspots and solar flares, and human phenomena ranging from health fluctuations to social unrest. His work situated human consciousness and societal dynamics within an expansive cosmic network, suggesting that planetary and cosmic phenomena significantly shape collective cognitive and affective states. Thus, Chizhevsky's perspective supports the reframing of telepathy as a manifestation of profound cosmological interconnectedness, where human minds are inseparable from cosmic life rhythms.

The conceptual alignment between Chizhevsky's cosmobiology and contemporary theories of telepathic intra-action, as proposed by Karen Barad and elaborated in my doctoral thesis (Zubillaga, 2020), underscores the continuity between historical philosophical traditions and current theoretical frameworks. My research examined how audiovisual practices within The Church of Expanded Telepathy (TCOET) manifest these cosmic intra-actions, emphasising collective, somatic attunement to planetary and cosmic phenomena. Through experimental cinema, I aimed to embody and visualise these dynamic, non-linear interactions, positioning telepathy as inherently tied to cosmic and planetary rhythms.

At this intersection of Cosmism and experimental practice, it is fruitful to draw on G.I. Gurdjieff's model of the "three centres" of human functioning—the intellectual, the emotional, and the physical—as a foundational psycho-spiritual framework through which telepathy can be better understood. According to Gurdjieff, each centre processes information and interacts with reality in a distinct manner. True development, or awakening, requires the alignment and harmonisation of all three centres so that a human being becomes capable of conscious self-awareness and participation in higher forms of energetic and cosmic exchange. In the context of telepathy, this alignment is not merely metaphorical; it facilitates a form of embodied cognition that transcends verbal communication, allowing for direct transference or resonance of perception, feeling, and even volition across individuals and groups.

Gurdjieff's teachings, particularly as elaborated in "Meetings with Remarkable Men" and "Life Is Real Only Then, When I Am," suggest that most human beings live in a fragmented state, with the three centres operating out of sync or dominated by one at the expense of the others. In this mechanical state, the capacity for telepathic sensitivity is greatly diminished. However, through disciplined inner work—particularly through movement, breath, and conscious attention—the centres can be brought into dynamic harmony. This harmonisation corresponds to what I have referred to in my doctoral work as a state of expanded telepathic receptivity, where subjectivity opens into a field of collective attunement. The practice of telepathy in TCOET drew directly on this principle: films and embodied experiences were designed to activate all three centres simultaneously, dissolving the habitual separations between intellect, emotion, and sensation.

Moreover, Gurdjieff's concept of "self-remembering" can be understood as a proto-telepathic discipline. In self-remembering, the practitioner divides attention between the outer world and inner sensation, cultivating a state of heightened presence. This double attention produces a field of resonance within which subtle signals—emotional tones, symbolic forms, non-verbal communications—can be perceived and transmitted. Within the framework of expanded telepathy, self-remembering is not only an individual awakening practice but also a relational and collective mode of perception. When multiple individuals engage in such practice, a shared energetic space emerges, one that mirrors Chizhevsky's vision of synchronised collective states under cosmic influence.

This triadic integration directly resonates with Del Val's ontohacking and radical movement philosophy, in which movement itself is the locus of intelligence and transformation. Del Val situates proprioception and Body Intelligence (BI) as the generative basis for all variation and becoming, rejecting any notion of mental or spiritual abstraction detached from the kinaesthetic. In *Ontohackers, Part II*, Del Val critiques the Algoricene—the age of algorithmic domination—as a regime that fractures bodily variability by enclosing life within predictive and representational codes. Ontohacking emerges as an insurgent praxis of reclaiming movement—a continual reactivation of relational variability against algorithmic capture. This proprioceptive ecology aligns with Gurdjieff's emphasis on inner sensation and attention, yet grounds these practices not in metaphysical awakening but in the living intelligence of movement itself. Within this framework, telepathy ceases to signify extrasensory exchange and becomes a process of co-sensing among metabodies, a kinetic and affective resonance through which bodies invent new modes of interrelation.

This bridging of Gurdjieff's three centres with Russian Cosmism introduces a new layer of embodied metaphysics to the discussion of telepathy. Telepathy, in this sense, is not simply a paranormal or cognitive anomaly but a disciplined modality of being-in-the-world, one that reflects a deep harmony between personal integration and cosmic resonance. Gurdjieff's ideas help articulate how the internal fragmentation of the centres impedes collective attunement, while the conscious harmonization of these centres serves as the internal precondition for telepathic intra-action.

The conjunction of Gurdjieff's psycho-spiritual discipline and Del Val's proprioceptive insurgency leads to a psycho-cosmic reconceptualisation of telepathy. Both thinkers challenge the dissociation of mind and body, instead locating intelligence and consciousness in the relational movement of the whole organism. Gurdjieff's concept of "self-remembering," the discipline of simultaneous outer and inner attention, finds its contemporary mirror in Del Val's proprioceptive swarm, where attention disperses across a network of micro-perceptions and sensory differentials. In each case, the aim is not control but attunement—to awaken new potentials of perception that can resonate with planetary and cosmic fields.

Furthermore, both thinkers are skeptical of representational knowledge systems. Del Val's rejection of epistemological reduction mirrors Gurdjieff's critique of "the life of man" as fundamentally mechanical and delusional. For both, true knowing requires presence—an embodied being-there that resists habitual abstraction. This ontological stance informed the cinematic techniques employed in TCOET, where audiovisual strategies disrupt narrative coherence and engage viewers in sensorial re-patterning. These aesthetic tactics operate as ontohacks: openings into altered states of perception that prepare the ground for relational transformation and collective telepathic emergence.

Within this integrated framework, telepathy becomes less a personal transformation than an urgent response to the ecosocial collapse defining the present. Del Val's call for a metahuman r/evolution—a revolution-evolution grounded in movement—arises from the recognition that the Planetary Holocaust unleashed by Human Supremacism has severed the relational fabric of life (*Ontohackers, Part II*). Traditional metaphysics, as Del Val argues, has been weaponised to sustain this violence by privileging abstraction over the living. Ontohacking thus emerges as a radical practice for reclaiming the kinetic diversity of existence, countering algorithmic and metaphysical reductionism alike. Rather than aspiring to cosmic participation or moral elevation, this praxis calls for embodied resistance and ecological reanimation, where movement becomes a site of ethical invention. As I contend in my doctoral research, experimental cinema can serve this task not as spectacle but as a proprioceptive laboratory, expanding sensory capacities and

cultivating forms of collective co-sensing that resist denialism and palliative detachment from the planetary crisis.

From this perspective, audiovisual practice must confront its own complicity in the disembodiment of perception. Del Val's fervent critique of screen-based formats highlights how fixed perspective and representational framing immobilise the moving body, reinforcing the very separation their work seeks to undo. My films, however, approach cinema as a field of kinaesthetic reactivation—where images, sounds, and temporal disruptions provoke micro-movements of attention and proprioception. In this sense, The Church of Expanded Telepathy (TCOET) transforms viewing into a participatory event: a space in which the audience's bodies reorient through friction, effort, and variation. This echoes Del Val's notion of non-intentional movement as an antidote to mechanical perception, demanding the unlearning of habitual patterns and the recovery of the body's variability. Both approaches share a politics of humility and responsiveness, affirming that intelligence unfolds through the entanglement of bodies, environments, and technologies, not through the hierarchies of the human.

In conclusion, a theory of telepathy adequate to the present must be grounded not in transcendence but in relational presence, proprioceptive awareness, and movement variation. Through the resonance between Gurdjieff's attention to embodied practice and Del Val's ontohacking of the Algoricene, telepathy can be reimagined as an immanent, material process of co-sensing that unfolds through the dynamics of living systems. Rather than aspiring to a psycho-cosmic or spiritual unity, Del Val's project calls for a metahuman r/evolution—a transformation of perception through movement, addressing the disconnection and sensory impoverishment produced by Human Supremacism and its technological extensions. Within this expanded field, telepathy names not a mystical faculty but a potential inherent in the metabodily fabric of existence, a capacity for mutual modulation awaiting the relaxation of the cultural and bodily constraints that limit our variability. As Del Val reminds us, the difficulty lies not in accessing the real but in unlearning the rigid architectures that prevent life from sensing itself.

To pierce this veil requires discipline, experimentation, and collective movement. It is not enough to theorise telepathy; it must be lived and enacted—in our gestures, our perceptions, and the technologies through which we relate. In this ongoing task, experimental cinema, proprioceptive research, and metahumanist philosophy converge as instruments for reawakening the relational intelligence of life. Telepathy, thus redefined, becomes the signal of a world no longer confined to the illusion of isolated selfhood, but vibrating through the resonant fields of a co-emergent ecology of sensing. As Gurdjieff reminded, "life is real only then, when 'I am,'" yet perhaps today this reality deepens when we are—entangled, sensing, and remembering together with all forms of matter, living and non-living alike.

Conclusion: Toward a Radical Re-envisioning of Telepathy

This comprehensive exploration has critically examined traditional conceptions of telepathy, proposing a transformative framework centred on radical interconnectedness, embodied cognition, and cosmic intra-action. Integrating insights from Federico Faggin's consciousness-centric cosmology, Karen Barad's agential realism, Jaym*/Jaime del Val's radical movement philosophy, neuroscientific critiques from Fedorenko, Piantadosi, and Gibson, and historical and ethical perspectives drawn from Russian Cosmism, the study reframes telepathy as fundamentally relational, embodied, and universally interwoven.

Throughout the analysis, telepathy has been repositioned from a phenomenon understood as isolated psychic occurrences between distinct minds to a vibrant expression of collective consciousness and profound relational intra-action. This reframing draws extensively from my doctoral research project, "The Church of Expanded Telepathy (TCOET): Queer Theory,

Pornography, Science Fiction," where audiovisual experimentation provided critical methodologies to embody telepathy's relational and affective dimensions (Zubillaga, 2020). Experimental cinema in this context disrupted conventional representational paradigms, allowing telepathy to manifest as deeply embodied, intuitive, and collectively experienced.

Faggin's cosmological insights enabled the reconceptualisation of telepathy as an attunement to an underlying universal consciousness, challenging entrenched neurocentric and representational models. This aligns with a posthumanist vision of interconnectedness, where distinctions between the observer and the observed collapse into a holistic, experiential unity. My doctoral exploration emphasized telepathy's irreducibility to algorithmic or symbolic representation, advocating instead for intuitive, non-verbal modes of interaction, echoing Del Val's critique of the "Algoricene."

Barad's agential realism further underscores telepathy's intra-active boundary-making processes, dissolving rigid separateness between subjects and objects and suggesting that beings co-constitute reality through relational engagements. This perspective resonates profoundly with my doctoral work, where audiovisual practices actively materialized relational becoming. Films like *Cosmos*, *War Finally Love* and *Succulent Humans #3* vividly exemplified these relational dynamics, highlighting how telepathic phenomena can emerge through embodied, sensory-rich interactions.

The discussion significantly engaged with Del Val's radical movement philosophy and ontohacking, foregrounding telepathy as deeply embedded in embodied cognition. Ontohacking actively disrupts habitual perceptual patterns, promoting heightened sensory and somatic awareness through performative, ritualistic, and artistic interventions. My doctoral research emphasised these disruptions, exploring cinema's unique capability to evoke profound states of sensory attunement and collective telepathic resonance. Shifting epistemological frameworks away from brain-centric cognition toward embodied relational intelligence aligns directly with the core arguments of this exploration.

Russian Cosmism provided critical historical and philosophical depth, emphasising telepathy as a natural expression of cosmic interconnectedness. Alexander Chizhevsky and Nikolai Fedorov articulated perspectives wherein telepathy serves as an ethical and ecological attunement to universal processes, fostering collective responsibility and cosmic participation. My research embraced and expanded upon these insights, demonstrating cinema's role in evoking ecological consciousness, advocating ethical participation in cosmic evolution, and dissolving anthropocentric and hierarchical distinctions.

Crucially, Bernardo Kastrup's analytic idealism further enriches this framework, aligning with Faggin's consciousness-centric cosmology discussed extensively in Section 2. Kastrup's notion of individual minds as localised expressions of a universal consciousness provides a powerful metaphysical grounding for telepathy, framing it not as anomalous but as inherent within a unified cosmic consciousness field. Kastrup's conceptualisation of minds as whirlpools within a river of universal consciousness complements and deepens Barad's intra-active ontology, suggesting telepathy as the natural resonance and alignment of these individuated yet interconnected consciousness patterns.

Yet, despite the conceptual clarity and philosophical urgency of this expanded paradigm, one cannot ignore the sobering reality that humanity remains gripped by a condition not unlike Gurdjieff's concept of the "kundabuffer"—a metaphysical buffer that clouds perception and inhibits awakening. In our present epoch, this buffer manifests as a systemic entrenchment in individualism, materialism, and algorithmic abstraction, rendering the actualisation of this new consciousness paradigm profoundly difficult. Cultural, institutional, and technological

infrastructures overwhelmingly reinforce representational, neurocentric, and commodified understandings of thought, making the shift toward embodied, relational, and cosmic cognition feel, at times, almost impossible.

The radical re-envisioning of telepathy proposed here, then, is as much a call to remembrance as it is to innovation. It reminds us of ways of knowing and being that have long been suppressed, forgotten, or obscured by the dominant episteme. The challenge is not merely intellectual but ontological: to dissolve the layers of buffering that separate us from deeper forms of relational intelligence and to cultivate the perceptual courage needed to encounter the world—and one another—anew.

Del Val's framework of relational movement variation articulates a non-metaphysical account of cosmic relationality grounded in embodied modulation rather than abstract cognition. Bodies are understood not as discrete entities but as metabodily fields in continuous transformation—dynamic constellations of proprioceptive movement interweaving across multiple scales of relation. These processes extend beyond human agents to include planetary, ecological, and cosmic phenomena, all participating in the ongoing reconfiguration of movement and variation. When such relational variability is constrained—through algorithmic repetition, fixed perceptual regimes, or disembodied mediation—perception undergoes a form of atrophy. In this sense, Del Val's diagnosis of sensory and cognitive impoverishment converges with G. I. Gurdjieff's account of hypnotism as a condition in which human beings lose access to genuine perception and become mechanically adapted to distorted realities. Both frameworks describe not a lack of information, but a diminished capacity to perceive reality relationally. My research advances this convergence by treating audiovisual media as a metabodily interface capable of counteracting such atrophy. In *The Church of Expanded Telepathy (TCOET)*, film does not represent cosmic unity but activates expanded telepathic fields of proprioceptive resonance, where sound, rhythm, and image generate architectures of collective sensing that restore relational awareness. In this sense, telepathy can be understood as a practice of de-hypnotisation: a reawakening of embodied perception from the mechanical trance of representational reality into conscious participation in relational becoming.

Thus, rather than proposing new models for AI, this framework calls for a deeper ethical and somatic reorientation—a shift from technological acceleration to embodied regeneration. Any authentic metahuman transformation must confront the Planetary Holocaust unleashed by Human Supremacism, recognising that survival now depends on restoring sensory variability, relational reciprocity, and ecological justice (Del Val, *Ontohackers, Part II*). The challenge is no longer to design co-evolving machines but to end the denialism of collapse, cultivating proprioceptive and metaformative practices capable of sustaining life through the transitions to come.

And yet, if the ideas traced here suggest anything, it is that the seeds of expanded telepathy are already germinating—quietly, persistently—in the fissures of the dominant order. Their growth will depend not on technological innovation, but on a radical shift in how we perceive, inhabit, and dismantle the hallucination of consensus reality. Reimagined through Del Val's movement philosophy, telepathy becomes a practice of deconditioning—a metabolic reinvention of relation that unfolds through collective sensing, variation, and care. It is here, in the renewal of embodied intelligence rather than its simulation, that the path toward a re-imagined reality may emerge.

Author Bio

Luciano Zubillaga is a Jiangsu-based artist and scholar who creates films and multi-screen audio-visual installations at the meeting point of science, and spirituality (notably expanded telepathy and body intelligence). His work has been exhibited extensively in solo and group exhibitions at international art biennials, film festivals and major museums and galleries around the world, including, the Museum of Modern Art, Buenos Aires, the Louvre Museum, the Institute of Contemporary Art in London and the Shanghai Museum of Contemporary Art (MOCA). Zubillaga was the founding Programme Director of the BA in Art, Technology and Entertainment (ATE) at Xi'an Jiaotong Liverpool University in Suzhou, China. He holds a Ph.D from the University of Kent, UK.

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Wrong Contact Zones[i]

Emma Bigé

Abstract

A chapter from *Mouvementements. Écopolitiques de la danse* (La Découverte, 2023), "Wrong Contact Zones" asks: How do we describe that place where we allow ourselves to meet one another? When a gesture causes epidermises to graze and masses to collide, what histories, what geographies, what ancestralities, what asymmetries of power are brought into play? The site of investigation here is a performance by two Black artists, Ishmael Houston-Jones and Fred Holland, and their *Wrong Contact Manifesto*, a dissenting contribution to the (overwhelmingly white) (North American) choreographic practice and community of Contact Improvisation (itself a counter-cultural movement). Their Manifesto begins: "We are Black [...] We interrupt each other and the flow can go fuck itself [...] We avoid physical contact most of the time." And so this chapter asks: What prevents skins from entering in contact? How do race, gender, sexualities—and the exclusion of them—come into play when we seek to touch each other? Contact Improvisation is an appropriate starting-point for this investigation because it is a form of dance in which the dancers are supposed to meet as pure masses, leap into the air and study the effect of gravity on their gestures when they land on each other. But what about the other kind of gravity? What about the attractions/repulsions embedded in these masses, and that prevent them from falling into each others' arms? In other words: What stops us from touching each other? This chapter concludes by examining the concept of hapticality in the theoretical works of Fred Moten and Stefano Harney, and of Jack Halberstam, to consider this question of the racial legacies that haunt the tactile and how they shape contemporary politics and aesthetics—an urgent task in this age of haptophobia and social distancing.

Keywords: Contact Improvisation, Choreopolitics, Race, Touch, Hapticality.

Ecotones

How would we describe that place where we allow ourselves to meet one another? When a gesture causes epidermises to graze past each other and masses to collide, what histories, what geographies, what ancestralities, what asymmetries of power are brought into play?

In decolonial studies, there is a term used to describe the spaces where peoples, species, and histories converge, meet, and find themselves inventing novel forms of communication: they are called "contact zones" (Pratt). Derived from the concept of "contact language," it refers to the *lingua franca* that emerges in the buffer zones between colonizers and colonized—often ports or pioneer towns. The term "contact zones" underscores the fact that the influence is always mutual, regardless of existing power imbalances. As oppressive as it is, the colonial

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world continues to be affected by the naturecultures it claims to occupy, and that it conscripts into serving its own extractivist projects. Indeed, one of the defining features of the colonial discourse is that its narratives seek to erase the agency of (indigenous) peoples in their brutal encounter with the settler colonial forces of occupation. And it has been one of the primary undertakings of anticolonial research to unearth and (re)name these subterranean histories, which—in spite of, and under Empire—continue to sprout a multitude of fugitive cosmo-poetics. Especially for those of us, like me, who think from and against a white European perspective, how can we honour these counter-histories when we cannot claim to be completely removed from them, nor wish to paint ourselves as innocent?

This chapter, like the rest of this book, is dedicated to staging an encounter between environmental and dance studies, between ecological activism and dance practices. Specifically, here, I address questions on practices and theories of touch: what can "contact" teach us if we take on the task to survive racial capitalism?

A first response to this question might be found in the recent revival of the "contact zone" in the field of environmental studies, where it has been used to describe "ecotones"; those border zones, thick frontiers, that ensure the transition between two ecosystems (for example, between a forest and a prairie). These zones foster biodiversity due to the multiplicity of exchanges and mutual dependencies contracted between the living, who in turn become better equipped to live alongside each other in monolithic spaces. The concept of the ecotone invites us to challenge the idea that communication among the living presupposes the existence of a preexisting community. To speak of ecotone is to say that some exchanges take root not in an established community, but rather in a "community-to-come," a community that arises directly out of interaction, a hybridization, the promise of monsters—a mutual disorientation between those who encounter each other, on the sidelines of asymmetries of power. As Donna Haraway insists, when tackling the question of touch in *When Species Meet*, an exploration of interspecies relations:

> Whom and what do I touch when I touch my dog? How is becoming with a practice of becoming worldly? When species meet, the question of how to inherit histories is pressing, and how to get on together is at stake… Touch does not make one small; it peppers its partners with attachment sites for world making. Touch, regard, looking back, becoming with—all these make us responsible in unpredictable ways for which worlds take shape. (Haraway 35-36)

Making a troubled or sullied commitment to worlds in-the-making that are neither you nor I—that is the promise of the ecotone.

One particular characteristic of ecotones of interest to us (inhabitants of Terra trying to survive in the ruins of capitalism) is that they possess the quality of being able to function as an "ecological refuge". Places where, in the event that either of these mononaturecultures entering into contact should collapse (and sometimes they even collapse as a result of this very contact), the species and the modes of existence that have been conceived there will have a chance of survival. In an ecotone, because species live at the limit of where they are used to live, because they exchange materials and knowledge with each other, they create the conditions for survival in the very heart of catastrophe. "[T]he perverse, the queer, the troublesome," those whom activist-poet Gloria Anzaldúa calls *los atravesados*—those who cross over, those who are crossed over—proliferate in these border-zones where one never really belongs to any single community of the living, where one lives rather in the underground, in the in-between of communities (Anzaldúa 3). Nation-state imperialism typically renders these borderzones inhospitable, making the lives of those who cross

genders, species, countries, or continents not only risky but deadly. What happens, then, when we give a chance to these border-spaces, to their inhabitants, and to the refuges they may harbour?

Anzaldúa's work provides an answer to this question through the figure of the *mestiza*, a creature of ambivalent belongings, neither entirely welcome where she comes from, nor entirely at home where she's coming to, and yet a figure of the crossing, of the interlocking, a figure inviting peoples to meet.

In the same vein, maroonage philosopher Dénétèm Touam Bona offers the art of *lyannaj* [the art of interweaving lines of flight] as a mobile practice of refusing separations. Referring to the Lyannaj Kont Pwofitasyon [syndicate against profits] movement, Touam Bona's lyannaj is a call "to ally and rally, bind, connect, and relay everything that was previously unbound." Anticipating the 2018-2019 French Yellow Vest uprising by nearly a decade, the Caribbean *Lyannaj* movement saw an eruption of picket lines, roadblocks, and occupations of roundabouts and public squares, where, "beyond their demands relating to purchasing power and abusive profits [pwofitasyon], massive crowds of people of all ages, all conditions, and all economic sectors, found themselves standing together at huge marches, nocturnal gatherings and enthusiastic vigils, where song, dance, music, free speech and forgotten warmth and friendliness could freely break out" (cited in Touam Bona 55). This *lyann*, a Creole word referring both to lianas and to connection and relationships, "evokes the power of the forest with which we are allied in every re-existence movement" (Touam Bona 57). This is not just a simple metaphor; *lyann* is a vigorous and vivacious figure representative of the earthly alliances brought into play as soon as we seek to inhabit contact zones. It is a figure wrested from the colonial imaginary, that of confusion and of the jungle only navigable by bulldozer. It is a figure turned against the world of the plantation and its simplified, deadly spaces. The power of lianas: the power of *liens qui libèrent*, "ties that liberate" and *liens qui délient*, "ties that unshackle"—this is where refuge is built

And you, what are you touching in this instant? The seat of your chair, the ground beneath your feet? What happens in these contact zones, which are neither you nor the world, but a little of both—an effervescent surface flowing with possibilities? Have you already asked yourself how long you'll need to stay there, how many times you'll have to return there, in the hopes that these supposedly distinct entities (you/the world) will contaminate each other?

In this chapter, we will explore the ecological, metaphysical, historic, and choreographic ways of thinking about the border-spaces between worlds, and how the living entities that inhabit them invite us to overthrow the priority afforded to the individual over the collective.

Wrong Contacts (Ishmael Houston-Jones and Fred Holland)

In 1983, Ishmael Houston-Jones and Fred Holland performed a dance entitled Oo-Ga-La in St. Mark's Church in New York. The dance's scoresheet, which takes the form of a manifesto, was held secret and would only be revealed some decades later as the *Wrong Contact Manifesto*:

> We are Black.
> We will wear our "street" clothes (as opposed to sweats).
> We will wear heavy shoes, Fred, construction boots / Ishmael, Army.
> We will talk to one another while dancing.
> We will fuck with flow and intentionally interrupt one another and ourselves.
> We will use a recorded music score—loud looping of sounds from Kung Fu

movies by Mark Allen Larson.
We will stay out of physical contact much of the time.

Showcased at the 11th anniversary of the birth of Contact Improvisation, this performance seeks to celebrate a wayward sort of contact. The setting is a reunion: the Contact "community" or family has been reunited to celebrate its own existence. And here are two dancers who have accepted the invitation, but who propose (secretly, for themselves, without even revealing it to the others) to act as killjoys: they will practice the "wrong kind" of Contact, they "will fuck with flow."

I describe *Oo-Ga-La* as a killjoy intervention, in reference to the feminist philosopher Sara Ahmed, who, in "Feminist Killjoys (And Other Willful Subjects)," discusses in detail how certain people, certain speech acts, and certain presences can be construed as enemies of happiness:

> The family gathers around the table; these are supposed to be happy occasions. How hard we work to keep the occasion happy, to keep the surface of the table polished so that it can reflect back a good image of the family. So much you are not supposed to say, to do, to be, in order to preserve that image. If you say, or do, or be anything that does not reflect the image of the happy family back to itself, the world becomes distorted. You become the cause of a distortion. You are the distortion you cause. Another dinner, ruined. To become alienated from a picture can allow you to see what that picture does not and will not reflect. (Ahmed, "Feminist Killjoys")

Killjoys also specialize in friction: they refuse flow and its peaceful and pacifying aesthetic; instead, they help give rise to rough contact zones in places where visions of collective happiness might otherwise convince us of smooth and seamless relations.

But what did Ishmael Houston-Jones and Fred Holland do to deserve being described as killjoys? To answer this question, we need to revisit the history of Contact Improvisation. In the previous chapter, we touched upon the mutual exploration of gravitational feelings; let us now return to this conversation to find out what it can tell us about tactility. We can continue the story with Steve Paxton, who, following on from his exploration of gravity and ordinary movements, opened a new line of inquiry in 1972, inspired by lessons he had gleaned from the practice of Aikido, a form of martial arts that he encountered in Japan in the 1960s. After having long examined the pedestrian actions of walking, standing, and running, Paxton's question became one of survival and imbalance: What do my muscles and senses do when I lose my footing? What reflex systems enter into motion to get me out of the most dangerous situations? And can we possibly slip our consciousness into them? "What is my body doing when I am not conscious of it?" (Paxton, *Gravity* 18). It is in this direction, this search for strategies to "spy on [him]self" (19) that Paxton will develop Contact Improvisation.

The first result of Paxton's investigations yielded an explosion of jumping and brawling that he named *Magnesium*—after the substance that lights on fire when snapped between two fingers, but also in reference to the magnesia powder used by gymnasts. *Magnesium* was held in a gymnasium in Oberlin College, on mats designed to break the dancers' falls. It was 1972, and the performance featured only men; the air was charged with the homoeroticism of the brawl, of sweat, and of accelerations. Audience member Nancy Stark Smith, a dancer, volleyball player, and writer (who would later go on to work with the feminist beat poet Diane di Prima), immediately approached the choreographer, inserting herself in the gay brawl: "If you ever worked like that with women, I would love to know

about it." (Stark Smith, "Harvest"). This marked the beginning of the first experiments known as *Contact Improvisations* (in the plural and in New York, in June of the same year), in which Steve Paxton (thanks to funding from his ex-partner, the painter Robert Rauschenberg) invited some fifteen dancers to play with the unknown of tactile encounters: What happens when, deprived of ground(ing) (we jump in the air), we meet each other? What happens when the encounter takes place, not grounded in what we already know, in what has already been established, but rather on the shifting/absent ground of mid-flight?

What happens is a constant negotiation, appropriately named (contact) *improvisation.* Let us focus for now on this second term, which will allow us to better understand what is at play in the first.

Improvisation can be understood in two ways. At first glance, we can understand it as a state: the state of being disarmed, the state of someone who finds themselves bereft of resources and therefore reduced to "having to make do with whatever comes to hand"—as one might say when unexpected guests come around and some dinner has to be "improvised" on the spot. In this sense, improvisation describes such moments when time goes off track: when the past (an accumulation of provisions/previsions) can no longer serve the present (the unexpected guests) so as to flow on into the future (dinner). Time goes on an excursion. So says Quintilian, a Classical rhetorician and one of the first to theorize improvisation, which he described as *ex tempore dicendi facultas*, or "the faculty of speaking out of time": improvising means exiting linear time, where the present exists in-view-of-the-future; it means staying in the present and seeing what it can offer in order to survive the situation (even when it is not a matter of survival). Life teems with improvisations: life constantly forces time to come out of joint, life is constantly demonstrating that time—far from the linearity that hindsight tends to project—is riddled with breaches and loops.

But improvisation can also be understood as an art or a practice, which is to say that it is possible to willingly seek to enter into that state of being disarmed. In that case, improvisation is not so much about being bereft of resources, as it is about striving to remain attentive to the constant temptation—in the face of the unknown—to serve up ready-made answers, canned behaviour, and not necessarily to suppress them, but to open the space for other gestures, other tastes, to emerge. The Taoist philosopher Chuang-Tzu speaks eloquently about the tipping-point whereby improvisation-as-accident (our predicament when we run out of supplies) turns into improvisation-as-a-path-to-wisdom:

> When a drunken man falls from a cart, despite the speed of the fall, he does not die. In his bones and joints, he is the same as other men, but in encountering harm, he is different, because the daemonic is whole in him. He rides without knowing it, falls without knowing it; death and life, astonishment and fear never enter his breast, so when he collides with other things, he does not flinch. If this is the case when you get your wholeness from wine, how much more when you get it from Heaven! The sage stores away in Heaven; therefore, nothing is able to wound him'. (Chuang-Tzu 251)

To make oneself whole, to attain plenitude through Heaven rather than through wine (Heaven being, for Chuang-Tzu, another name for the necessary, the spontaneous, the inner that has always been there)—this is another way to describe the practice of *wei-wu-wei*, another way to talk about the degree of study of the self and of the world required of those who claim to practice non-action. Suspending activity, suspending canned behaviour requires minute and exacting attention, remaining on the lookout for automatic reflexes from one moment to the next, and putting them on pause. Nancy Stark Smith wrote of this:

> It's especially invigorating when this readiness to act is tested—whether on the dojo mat or the dance floor, in the workplace or on the street—when we're forced to respond to something unexpected, unfamiliar, or unpleasant. We practice every time we improvise. Invisible activism at work. (Stark Smith, "Me, We")

Contact Improvisation relies on a practice of mutual gift-giving from both dance partners: each offers to the other the opportunity to be disarmed. This is what "activism at work" looks like: calling into question what is already-known, already-done, prêt-à-danser. And what is one of the resources Contact Improvisation dancers deliberately refrain from using? The ground. The dancers play by jumping, by losing their balance and their bearings: they position themselves at the brink of the fall ("you could decide to fall, but not yet," Paxton often says), and that is where they meet. This is a radical way of imagining the "contact zone" that exists between two masses: not by coming into contact by virtue of my knowledge, my foundations, what structures me, but instead, by virtue of my precarity. Of course, this precarity is wholly artificial and presupposes, as we will later discuss, a certain security (social, cultural, psychic, somatic) that ensures we are even able to put ourselves in danger in this encounter with the other. But it is nevertheless this precarity that is celebrated and demonstrated by the Contact Improvisation duet: we touch while at the same time disarming each other; we do not touch each other from the territories we inhabit and their associated habits, but rather from the coming-future.

When asked about his relationship, as an improviser, to composition, Paxton replied: "Composition is a way to avoid improvising, and the study of composition is: you improvise to study compositions" (Paxton, "Talk"). In other words, improvisation studies its antithesis by scrutinizing everything that gets in the way of being-with-the-present and with which relationships are pre-arranged. Paxton added that "to study something like improvisation, which is defined as it's being done, everything that you already assume will affect the outcome." In other words, anything that you do not question ends up choreographing you. If you claim to improvise, then you must reexamine everything, relentlessly:

> This guidance caused us to consider all sorts of things, such as communication, emotion, psychology, sex, education, childhood development, culture, taboos, space, time, and the self. It is all very well to say that one takes responsibility for one's self in improvisation, but it is indeed a staggering job in its details. An improviser's job is never done. (Paxton, "Drafting" 66)

Touch is riddled with dictates regarding what can come into contact, what we can touch, and who can touch each other without offending social mores. Skins are endowed with almost magnetic sensitivities, sensitivities that indelibly mark us; these magnetizations lead certain skins to come into contact, while others are to be avoided.

In *Black Skin, White Masks*, the Martinican psychiatrist and philosopher Frantz Fanon demonstrates how racial perceptions of skin colour can be a powerful operator in touch biases: how certain white female patients who suffered from "tactile delirium" compulsively washed their hands after being in contact with a Jewish person; how others refused to be touched by a Black doctor (Fanon 160). A racial, classist, and gendered distribution of the tactile brings certain epidermises together (putting them in contact with each other) and organizes the untouchability of others. Beyond ontogeny (the constituent parts of human skin, the psychomotor functions it fulfils as a shield against external stimulus, as a membrane, border, and site for communication), there needs to be what Fanon refers to as a "sociogeny" of the tactile. This would mean delving into how our tactile conscience, despite expressing itself in

terms of immediacy, is inhabited transgenerationally and perturbed by archives of modernity/coloniality.

Building upon Fanon's analysis, Sara Ahmed highlights how race (although supposedly only a simple description of pigment, of "colour," and thus of appearance) gathers layers of meaning through recurring physical events of contact and proximity, distance and removal (and as such, relies on a real, and not merely phenomenal, spatiality or geography). She writes:

> A saying that has always intrigued me is 'like two peas in a pod.' To be like two peas in a pod is to be alike. Anyone who has shelled peas knows that peas are not all alike and that seeing them as being alike is already to overlook some important differences. But it is the pod and not the peas that interests me here. This saying suggests for me that likeness is as an effect of *the proximity of shared residence.* This is not just an argument about nurture over nature (that the pod is a nurturing device), as this way of thinking relies on an overly simple logic of causality (the pod causes the peas). Rather, the very proximity of pea to pea, as well the intimacy of the dwelling that surrounds them like a skin, shapes the very form of the peas. Likeness is thus not 'in' the peas, let alone 'in' the pod, but rather is an effect of their contiguity, of how they are touched by each other and envelop each other. Or if we say that the peas 'share' the pod, then we can immediately see how the 'pod' does not simply generate what is 'shared' in the sense of what is in common, but also what gets divided or distributed into parts. [...] In the case of race, we would say that bodies come to be seen as 'alike'—for instance, 'sharing whiteness' as a 'characteristic,' as an effect of such proximities, where certain 'things' are already 'in place.' The familial is thus in a way like the 'pod,' a shared space of dwelling in which things emerge. (Ahmed, *Queer Phenomenology* 123-124)

In other words, social-geographic segregation is a determinant of racial production insofar as it also determines tactile proximity. It facilitates contiguity between certain people rather than others, a contiguity that makes them appear akin to each other, that weaves them together like the same skin, the same epidermis, the same pigment, and excludes the proximity of lighter or darker pigments, according to a colourist distribution of touch.

The skins of Contact Improvisation are also socially choreographed by this unequal distribution of contact. This is why dancer Karen Nelson described them as "revolutionary" skins:

> Contact users are revolutionaries. We train in the arts of touching the floor and of uniting with the forces of the Earth. We feel our bodies. We touch others. We move our masses ; we feed the touch-deprived, the trust-hungry, the momentum addicts, the love/sex/touch-confused. We learn to take nurturing touch. (Nelson 65)

In the face of the tactile exclusions produced and intensified by race, how can we learn to nourish and care for those who have been robbed of touch (whichever side of the colour line they may find themselves on)? How can we fight against haptic anesthesia? Armed with these new, reformulated questions, let us return to the performance by Ishmael Houston-Jones and Fred Holland with which we opened this reflection on the contact zones of Contact Improvisation. What are Houston-Jones and Holland saying in the manifest they wrote in 1983, after the practice had been honed for 11 years? They declare: we need "wrong contact"; we need to do Contact Improvisation "wrong." They don't say: we need to stop doing Contact Improvisation; nor do they say: we need to do another kind of Contact Improvisation. Rather,

their proposal is: in order to do Contact Improvisation, we have to do it wrong—we need to fail at it.

The first sentence of their *Wrong Contact Manifesto* is "We are Black," and it opens a breach in the revolution. Their aim is not to interrupt it ("and here come the killjoys, the anti-racists, the queers, etc."), but to widen it, to insist: the work will not be complete until we are able to envision the conditions by which "bodies can open up" to each other (Houston-Jones & Hennessy). How do race, gender, and sexualities—and the exclusion of them—come into play when we seek to touch each other? Contact Improvisation posits this: we are pure masses, we leap into the air and we can study the effect of gravity on our gestures. But what about other types of gravity? What about the attractions/repulsions that are embedded in masses and prevent them from falling onto each other? In other words: what stops us from touching each other?

Oo-Ga-La responds to these questions with a dance that is explosive, fast, and tender, where gestures of mutual support are blended and interweaved with arm-locks, hip-hop solos, and kung-fu stunts. The dance calls for the ambivalence of touch in ways that are sometimes erased by Contact Improvisation, with its culture of flow and controlled falls. Often, throughout *Oo-Ga-La*, the dancers move away from each other, highlighting the need to withdraw from contact, all the better to return to it, or to better savour its aftershocks. At times, an archive of violent acts surfaces, such as when Ishmael pins Fred's body to the ground, reminding us both of police violence and of brotherly brawls. Other times, the two dancers hamper each other while at the same time trying to help one another slip out of their mutual entanglement. This is the trouble that Ishmael Houston-Jones and Fred Holland propose to dwell in. These are their wrong contacts: a way of resisting the assumption that any kind of touch will be consented to, or even desirable, a way to keep asking the same question, incessantly: will we be able to meet each other, in the contact zone?

Un/distancing

In the spring of 2020, a virus affecting the respiratory tract brought the world to a standstill. This interruption—a break, a fissure—carried many lessons in answer to the question asked in this text: What stops us from touching each other? Because in that spring of 2020, the Covid-19 pandemic had taken hold of "the machine, whose emergency break you couldn't find" (Anonymous), we had to take distance from each other. Whereas, before, our hospitals had been dismantled to construct highways and airports, airports and highways now had to be closed to avoid overcrowding hospitals. We had to stop meeting up, because meeting could expose us to the unforeseen and involuntary transmission of an invisible RNA code that could alter our breathing, and with many more unforeseen consequences.

To mark the occasion, in late March 2020, the philosopher Paul B. Preciado published an op-ed in *El País*, in which he drew up a composite sketch of the new subject revealed by the pandemic. This subject, he wrote:

> do[es] not have skin; they are untouchable; they do not have hands. They do not exchange physical goods, nor do they pay with money. They are digital consumers equipped with credit cards. They do not have lips or tongues. They do not speak directly; they leave a voice mail. They do not gather together and they do not collectivize. They are radically un-dividual. They do not have faces; they have masks. In order to exist, their organic bodies are hidden behind an indefinite series of semio-technical mediations, an array of cybernetic prostheses that work like digital masks: email addresses, Facebook, Instagram, Zoom, and Skype accounts. They are not physical

> agents but rather tele-producers; they are codes, pixels, bank accounts, doors without names, addresses to which Amazon can send its orders. (Preciado, "Learning from the Virus")

The paragon of this new subjectivity, suggests Preciado, is a celebrity whom he has long studied—Hugh Hefner, founder of the pornographic industry and *Playboy* magazine, a pornotopian who walled himself up for more than 40 years in his bachelor's mansion where drugs, (straight) sex, and power circulated freely. Indeed, Hefner was not only the inventor of a pornographic magazine; he also created a lifestyle, and an interior architecture dedicated to the heterosexual male bachelor. A figure for whom the epicentre is a rotating bed, sitting squarely in the middle of a room he never leaves, where he can simultaneously eat, work remotely, and even film himself for television shows. In *Pornotopia*, Preciado called this the invention of the "horizontal worker" (Preciado, *Pornotopia* 136).

Heffner's horizontal worker was the first to propagate a practice that in 2020 became the prerogative for all: *social distancing*—the rather strange idea that sociality could exist remotely, contactless. Of course, if the term originally referred simply to a set of hygiene measures, it is also loaded with a heavier meaning that we need to unpack if we wish to understand the implications of skin-to-skin contact. In French, the expression *distanciation sociale* is a direct translation of the English term *social distancing*, itself a euphemism for *confinement*. To avoid telling U.S. citizens that they were being confined (in the passive voice), they were told instead that they were "keeping their distance" (in the active voice). In French, the expression sounds strange: this is because in English, *social* refers almost exclusively to the interpersonal, while in French, *social* means first and foremost *pertaining to society*. When we speak of "social distancing," in French, then, we hear a meaning that the English expression sought to mask: the fact that the social (as in society, that which holds us all together) is jeopardized or put under tension by distance. So, we opted for another round of euphemizing by preferring the term *distanciation physique*, or "physical distancing": as though it were merely a matter of keeping each other at physical distance through protective measures—as if the impossibility of being physically present with each other didn't also imply a loss in relations, a loss of the possibilities that arise or are withheld when we are exposed to each other.

Neurologists refer to the spatial sphere that spreads around our body-matter, and which extends the tactile-visual perceptions of our limits, as "peripersonal space." When something or someone moves through this space, it is as if we were actually being touched. It's as if a sort of "external" body surrounds us, but instead of anesthetizing us, it heightens our sensitivity beyond the immediate borders of our skin.

In the 1950s, when trade between the United States and Japan was increasing, an important diplomatic problem emerged: U.S. diplomats did not know how to respect the right distance; they kept encroaching upon the tactile territories of their Japanese colleagues. A new scientific discipline known as *proxemics* emerged under the auspices of anthropologist Edward T. Hall, who was interested in measuring how socially acceptable interpersonal distances varied depending on nation, social class, and environment. Science had come to the rescue of a diplomatic art that some had apparently lost touch with: *the art of tact*. Not the art of politeness—which never strays far from policing, a word it shares similar sounds with; the function of which is to polish, limit friction—but rather, the art of blunder: the art of diplomatic error, the art of not being quite sure of the right move, of requesting, of negotiating, the art of never really quite knowing what distance to keep with the other.

What happens when we lose the opportunity to exercise our art of tact? It is a question that preoccupied the German phenomenologist Hans Blumenberg in his *Beschreibung des Menschen* [*Description of Man*], and to which he replied: *ballistics* happens (Blumenberg 372). By way of ballistics techniques (from catapults to remote-controlled drones to their repurposing for delivery services), the way of war has indeed developed a certain capacity to *touch the world without being touched in return.*

There is no contact without violence: to bring two skins close to each other is to expose them to a breach; something of the other will bring my integrity into question. Ballistics is the fantasy that one can do away with this reciprocity. Of course, this is never fully the case. Soldiers piloting drone strikes in distant countries suffer from PTSD, as if they had been physically present on the battlefield. If the asymmetries of power remain, reciprocity cannot be avoided entirely.

In contrast with the martial art of ballistics, the art of tact is based on the assumption that, as we engage in the world, there is a strong likelihood that the world will contaminate us, in return. Prior to the pandemic, certain artists and activists of tact (sex workers, somatic practitioners, performers) were already talking about the need to invent dis/immunization practices, nano-political forms of attention to the manic haptophobic existences built by the technopatriarchy. The transfeminist artist-performer Dani d'Emilia called it "radical tenderness": "Radical tenderness is to understand how to use strength as a caress… is to share sweat with a stranger… is to allow yourself to be seen; to allow yourself to be taken… is to find one another from the muscles closest to the bone. Is to believe in the political effect of internal movements. Radical tenderness is to not insist on being the centre of attention… to transit in spaces you do not understand" (D'Emilia & Chavez). This is a difficult call to answer in the context of the post-Covid-19 pandemic, in which compromised immune systems may still be exposed to the risk of contamination.

This is precisely the somatopolitical paradox that is required of us to face in the extreme context of a world rendered toxic by extractivism. What will be the techniques of social un-distancing that will at once celebrate our need for immunity against unwanted forces and our desire to bring skins, muscles, matters, breaths, into proximity with each other? How can we learn ways of keeping our distance when needed, while at the same time tracking new ways to decentre and pay attention to the worlds around us? In the face of powerful forces of anaesthesia that have taken their molecular hold on our capacity to bring our skins in contact with each other, in the fight against "contactless" worlds, we cannot forget that distance is a necessary element in the art of tact.

Hapticality

All That You touch
You Change
All That You Change
Changes You
The only lasting truth is change
God is change

—Octavia E. Butler

Hapticality comes from the Greek *haptomai*: a verb that, similarly to the Greek verbs for dancing (*orcheomai*), or sleeping (*koimômai*), or being born (*gignomai*), is neither "active" (I touch) nor "passive" (I am being touched), but is said in the "middle voice," hinting at the fact that the experience of touch is beyond this duality: not only *touching-touched*, but also *touching*

as a mode of affecting the world that also affects the subjects that affect the world. Octavia E. Butler's poem, "All That You touch / You Change/ All That You Change/ Changes You" is an apt definition of the word *hapticality*: to touch necessarily involves being touched, and only in our wildest, most ballistic delusions do we imagine that it is possible for us to touch something without being touched by it in return.

Hapticality contrasts with opticality. It is art historian Aloïs Riegl who coined these two concepts. A specialist of the "minor arts" (after having long served as conservationist of textile arts at the Museum of Applied Arts in Vienna, he published several studies on oriental rugs and ornamentation) Riegl worked in close contact with works of art. It was his job to handle and, where needed, restore them, while at the same time striving to write their history. It was in his study, *Late Roman Art Industry* first published in 1901 that he developed the concept of hapticality to describe how the tactile quality of bas-relief artwork could have an impact on viewers—even at a distance—producing what he referred to as a "haptic vision". The French philosopher Gilles Deleuze, in his book dedicated to Francis Bacon's paintings, described haptic feeling more generally as an immersive feeling. To feel haptically is to cease being the centre of the experience: it means being displaced by it, finding oneself in the middle, impacted from every direction, taken with the texture of the image, no longer able to define its edges, no longer able to say if it's me who feels or if it's the image that touches me.

Haptic art: the art of being made to lose one's outlines, the art of being plunged into disorientation, where you no longer know if it's you who is looking or if things are looking at you. To enter into hapticality is to enter into disorientation. As the cultural theorist Jack Halberstam demonstrated in *In a Queer Time and Place: Transgender Bodies, Subcultural Lives*, hapticality is sometimes a strategy used by artists to refuse representation, to refuse the figure (Halberstam, *In A Queer* 123). Representation and the figure allow us to identify bodies based on their surface characteristics: in other words, the figure can put on a good appearance, but it can also, inversely, point out the monsters. What happens when you yourself are perceived as monstrous? What happens when the "butch artist" Linda Besemer (as Halberstam describes them) refuses to yield to the pornographic call to represent the feminine body, or the trans* body? In such cases, hapticality becomes useful, not to give form to monstrous bodies, but, on the contrary, to foil the (scopic or visual-centred) framework according to which the monstrous exists, and invite the experience, from the inside as it were, of disorientation. In *Tall Girl* (1994), for example, Linda Besemer uses large areas of colour applied directly to the gallery wall; viewers are literally submerged by the size of the work hanging above them (a wide band of thick paint), forcing them to raise their heads, impressed by the presence of this "tall girl" staring them down (the "tall girl" in question alludes not only to women who "take up too much space" but also trans women, often judged too "tall" for their gender). In such cases, the trans* body, the butch body, the fem, not-in-its-place body is not represented (it's a strip of paint); rather, the lived experience of disorientation (of being considered an awkward body, and also of finding oneself before an inappropriate body) is shared. Hapticality is thus a strategy that seeks to give a sense of the disorientation within, rather than simply represent the disorienting figure: a way to escape the mechanism of identification that relishes in pointing at subaltern bodies, either to save them or to cast them out.

What social models can we envision when we take a haptic rather than an optical approach to relationships? What do policies look like when they are thought of in terms of contiguity (of the commons) rather than separability (of individuals)? Touch, as we have seen, is riddled with histories of violence, histories of brutal displacements, and forced contacts that no subject of modernity/coloniality can be separated from. A product of that brutal history, whiteness is the viscous envelope that ensures the cohesion of white bodies

with each other. Its formula is sustained by a fantasy of access: "I can touch everything (and choose whether or not I will be affected in return)," says the white body. Can hapticality offer an antidote to this anhaptic/anaesthetic mode of touch?

This is one question at the centee of a passage in *The Undercommons: Fugitive Planning and Black Studies* by Fred Moten and Stefano Harney, in which the two authors propose to think of hapticality within the framework of what they call "Black sociality"—that is, the sociality that emerged out of the Middle Passage. Fred Moten and Stefano Harney are a duet composed of a philosopher-poet and an economist, a specialist of jazz music and of the radical Black tradition, and an anarchist thinker of debt and the history of the African diaspora. *The Undercommons* is their first collaborative book, a work that takes the history of enslavement as a point of departure for thinking about both historical and contemporary capitalism. Moten and Harney write with/in the memory of those who were piled up/squeezed/mixed/crowded together, whom they refer to as "*the shipped*." The hold where the shipped were held is one of the material manifestations of the way that modernity/coloniality simultaneously involved and excluded blackness from the "common" project of what philosopher Sylvia Wynter dubbed "the white bourgeois ethnoclass called Man".

Moten and Harney endeavour to think with the "hold"—a word that points to the compartment of the ship where the shipped were held, but also to the more ordinary verb *to envelop*, *to embrace*, and which could serve as a possible translation of the Greek word "haptomai", *to touch*, *to behold*. With the hold, they attempt to reflect on what sort of sociality could have been invented there, in these impossible living conditions. How does one create relationships when the social encounter is a result of being stacked up, piled up, or squeezed in?

> To have been shipped is to have been moved by others, with others. It is to feel at home with the homeless, at ease with the fugitive, at peace with the pursued, at rest with the ones who consent not to be one. [...] The hold's terrible gift was to gather dispossessed feelings in common, to create a new feel in the undercommons. Previously, this kind of feel was only an exception, an aberration, a shaman, a witch, a seer, a poet, amongst others, who felt through others, through other things. Previously, except in these instances, feeling was mine or it was ours. But in the hold, in the undercommons of a new feel, another kind of feeling became common. This form of feeling was not collective, not given to decision, not adhering or reattaching to settlement, nation, state, territory, or historical story; nor was it repossessed by the group, which could not now feel as one, reunified in time and space. [...] This is modernity's insurgent feel, its inherited caress, its skin talk, tongue touch, breath speech, hand laugh. This is the feel that no individual can stand, and no state abide. This is the feel we might call hapticality. [...] Though forced to touch and be touched, to sense and be sensed in that space of no space, though refused sentiment, history and home, we feel (for) each other. (Moten & Harney 97-98)

"Though forced to touch and be touched [...] we feel (for) each other." Hapticality is thus the capacity to feel when touch is forced upon you. It is the capacity to not anesthetize touch, even when those who have touched you to put you where you are refused to feel you and refuse to feel that you felt too—or else say that you speak too loudly, or that you smell, or touch, or move too much (Truth; Stallings; Chen). Even when they attempt to anesthetize their own perceptions, you continue to feel.

Hapticality lies in the underbelly of the contactless world: those workers deemed "essential" but made invisible, who make it possible for others to keep their distance. The hapticality of the hold is this distance that the white "masters" place between themselves and the world, to avoid dirtying their hands. And it is made possible only because underneath and even supporting these distances, in the undercommons of the contactless world, are untenable, compact, and brutally enforced proximities.

Whether under or above, Moten and Harney's proposition is that within these untenable, crowded conditions lie the precursors for conceiving of an alternative sociality to those of the contactless world. To be sure, Moten and Harney do not minimize the brutality of being piled up in the hold, but they do detect therein the "condition of the possibility of the creation of an insurgent Black social life" (Wang 28). They see the hold as a matrix capable of short-circuiting individualism, a re-routing away from using separation as a starting-point. The hold forces you to begin with hapticality, in overcrowded conditions. The hold forces you to begin with relationships. This is not to say that the hold, hapticality, and forced overcrowding constitute a *good* starting-point; it is simply the one that befalls us as inheritors of modernity/coloniality.

Can these lessons also be applied to our common and "inveterate terrestrial condition"? If there is one thing that I am always in contact with, that I can never be separated from, it's the earth beneath my feet. That is a distance-less touch that we earthlings all share. And the question that we can now ask, with Moten and Harney, of the "earthen" that we might want to become (Moten & Harney 113): how do you touch something if you cannot be separated from it? Moten and Harney's reply: We feel "at rest with the ones who consent not to be one" (97). What does this mean? Does it mean that in order to be able to touch something you cannot be separated from, you must accept the part of it that lives in you (to consent, then, to not be an individual standing before another individual)? In order to touch the earth, what do you want to do? Extend your hand towards it? But you are already touching it. Your feet are on the earth. The question is rather: how can you walk on her, how can you make yourself conscious of doing it, how can you *feel* that the Earth is touching you? If you want to feel the Earth, you have no choice: you must let it touch you, you must make space within yourself so that it may touch you. That is hapticality at play: an inverted directionality, a touch in the "middle voice," which, by reaching towards what it wants to touch, allows what it touches to come to it.

The black sociality that Moten and Harney reflect with is one that begins, brutally, in the middle of the ocean; that is, with a deprivation of earth, with a negation of Earth: "Thrown together touching each other we were denied all sentiment, denied all the things that were supposed to produce sentiment, family, nation, language, religion, place, home" (Moten & Harney 98). Moten goes on to clarify, in "Blackness and Nothingness," published that same year: "It's terrible to have come from nothing but the sea which is nowhere, navigable only in its constant autodislocation" (Moten 744). Due to this constant autodislocation, sociality reinvents itself around an affect whose roots are anchored not in the ground but "there on the skin," "the soul no longer inside but there for all to hear, for all to move." (Moten & Harney 98) A haptic sociality. A sociality where (always more than) one feels together (with others). A sociality of consent.

"*Consent not to be a single being*" is an expression that Fred Moten borrows from Whole-World philosopher Édouard Glissant. "Consent not to be a single being" does not mean that we should abandon the fight to be recognized as people. Rather, it means that, parallel to this fight, you also have the right to fight to not be an individual, to be much more than that. "Consent not to be a single being" means saying no to the hold *and* to a contactless-world,

and both are difficult to do. It is difficult when your entire life you have been told, over and over again, that you are an individual, an atom, a consumer, an independent, separate, responsible, autonomous agent. It is also difficult when you have always been told that you are not one, when you have been relentlessly refused individuality, when you have been relegated to the invisibility of the hold, to the collective-haptic existence of the undercommons. What lies beyond the alternative? Inventing a "poetics of relation"—that is the task that befalls us: the task of making the *Tout-Monde*.

In his preface to *The Undercommons*, Jack Halberstam writes: "And so, you must refuse the choice as offered" (Halberstam, "The Wild Beyond" 8). Consenting not to be a single being, consenting not to be separable, consenting to touch: these are all acts of resistance, when the only alternative that you are offered is either individuality or the hold, subjectivity or collectivity. In response to these false alternatives, you reply: No. No, really, I would prefer not to have the right kinds of contact, I would prefer to have wrong contacts, contacts that might allow me not only to touch and be touched in return, but also to "avoid physical contact much of the time" (to return to Ishmael Houston-Jones and Fred Holland's final entry in their *Wrong Contact Manifesto*). This is the haptic that works at full throttle: a tactile sociality where you avoid physical contact most of the time, not because you are afraid of touching each other: but on the contrary because you are already touching each other, "there on skin," "soul no longer inside but there for all to hear, for all to move."

Hapticality is an open invitation to join those that the "Occupy Wall Street" movement called the 99%, those whom Stefano Harney and Fred Moten named the undercommons, those who do not have a common name, who do not have an identitarian flag under which to unite, but who nevertheless recognize each other because they all live within the hold of dispossession. Dispossession experienced as extraction. And even if the 99% clearly do not all experience this extraction and dispossession in the same way, they have little to gain from the perpetuation of the way the world is organized. Hapticality invites us to ask: How do you hold on, despite everything? And of course, the 1% will say the reason you have held on is because you were held and contained and put in containers. They know that it's in their interest that you hold on as you are being held (captive) by them. They know that it's in their interest that you remain unaware that you have been holding on together, and that such operators as class/race/gender/ability produce and optimize our segregations.

But the undercommon's hapticality also teaches that, despite the 1%'s interest in the separateness of our lives (and survival), there remains an important part, an anarchical part that exceeds that which has been captured and defined as common—supposedly available for speculation by all, but of course available to only a few. Under the commons, something insists, something that speculation seeks to root out. This is what holds us in a stance that does not oppose speculation (because speculation knows how to profit from its opponents), but more precisely, a sort of refusal, a sort of non-reactive resistance. *Lyannaj Kont Pwofitasyon*. "We get up and we walk out." "I'd rather not." A fugitive resistance art.

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Notes

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Interkinaesthesia. Rethinking relations through Contact Improvisation: Beyond the Imposition of Form

Michela Bloisi

Abstract

This article highlights the transformative potential of Contact Improvisation, a practice introduced by choreographer Steve Paxton in the 1970s. Approaching it through the intertwined frames of postmodern philosophy, postcolonial theory, ecological thinking, and meta-humanist critique, the article shows how Contact Improvisation offers unique tools for critically examining Western aesthetic and epistemic paradigms. At its heart, this is a practice oscillating between radical experimentation and structural limitations: it invites us to inhabit bodily contact as a dynamic field of co-existence - a relational space open to difference rather than assimilation. The only rule is simple: move while maintaining contact with other bodies. A body communicates through its presence before words: both politics and dance spring from fundamental relationships between bodies, not just ideals or discourses. In CI, the improvisational encounter acts as a living laboratory for exploring relationality, active listening, and the irreducibility of otherness. The paper argues that CI constitutes a radical reimagining of intersubjectivity and resistance to paradigms of control, hierarchy, and cultural homogenization, while not shying away from its embeddedness in Western privileges and the tensions this entails.

Keywords: Contact Improvisation, relations, bio-cultural imperialism, Interkinaesthesia, Metahumanism.

1. Introduction

This paper explores the concept of contact, proposing an analogy between collective life and improvised collective dance. Dance is considered a space for experimenting with coexistence among diverse forms of life.

Western modernity, with its dualistic thinking, has historically conceived contact, not as a possibility for coexistence, but as appropriation, manipulation, and imposition of forms of life: epistemological, religious, social, political, and, ultimately, motor. This paradigm of contact-as-conquest permeates multiple levels of experience, from the intimate scale of interpersonal relations to the global dynamics of cultural imperialism. Colonialist, extractivist, and imperialist policies have embodied this abstraction, reducing relationships with otherness to domination, exploitation, and assimilation.

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The Cartesian split between mind and body, subject and object, self and other has created a framework where contact is always already conceived as a relationship between discrete entities rather than as a field of mutual becoming. This mechanistic worldview treats bodies as objects to be manipulated rather than as living systems engaged in continuous processes of co-creation. The implications of this paradigm extend far beyond philosophical speculation, manifesting in concrete practices of violence, exclusion, and environmental destruction.

As both Edward Said and Gayatri Spivak emphasise, cultural imperialism extends beyond economic or territorial control; it is exercised through bodies, gestures, postures, and movement languages, imposing a singular model of expression and marginalising alternative forms. The colonization of movement represents a particularly insidious form of domination because it operates at the level of embodied habit, shaping not only what bodies do but how they sense, feel, and relate. Beyond biological, cultural, and artistic articulations, dance functions as a mode of species organisation, revealing or challenging power relations. Improvised dances often emerge in socially oppressive contexts as practices of resistance and identity, contrasting with institutionalised power.

Social life is always embodied: how these bodies move together—their rhythms, orientations, and qualities of attention—constitute the material substrate of social and political life. Dance, as the organized movement of bodies through space and time, thus becomes a crucial site for understanding and potentially transforming the structures that govern collective existence. When bodies move together in predetermined patterns, they enact and reinforce existing hierarchies. When they improvise together, they create possibilities for new forms of social organization.[i]

In this light, Gilles Clément's notion of the "third landscape" becomes a fruitful metaphor for understanding dance practices that escape institutional control and cultivate plurality rather than standardisation. The third landscape represents zones of indeterminacy where life proliferates beyond human planning and control, suggesting alternative models of organization based on spontaneous emergence rather than imposed forms.

This article examines Contact Improvisation, developed by Steve Paxton in 1970s New York, with the explicit aim of democratizing dance: free from virtuosity and imposed canons, accessible to all bodies. Its principles allow us to reconsider contact between life forms as a multisensory encounter grounded in active listening, mutual attention, and interkinaesthesia. Contact Improvisation emerges as an experimental space for exploring contact not as assimilation but as a tool that welcomes indeterminacy and teaches relational attentiveness

The article is structured in four sections: the first presents the fundamental principles of Contact Improvisation, highlighting both peculiarities and limitations; the second examines the "third landscape" as a framework for understanding CI as a practice that preserves cultural and motor diversity while acknowledging its conflicts; the third analyses bio-cultural imperialism in relation to Jaym*/Jaime del Val's meta-humanist critique; the fourth focuses on active listening as a method of coexistence.

2. Contact Improvisation Fundamentals

Developed by Steve Paxton in early 1970s New York, Contact Improvisation (CI) marks a turning point in contemporary dance. Emerging from postmodern experimentation and attention to the everyday body, CI is based on improvisation with contact between two or more bodies, conceived as a non-verbal means of communication and a field of mutual exploration. The practice emerged within the broader context of the *Judson Dance Theater* and the postmodern dance movement, which sought to democratize dance by questioning traditional hierarchies, virtuosity requirements, and spectacle-oriented aesthetics.

Paxton's background in both modern dance technique and Aikido martial arts profoundly influenced the development of CI. From modern dance, he inherited an understanding of weight, gravity, and momentum as fundamental elements of movement. From Aikido, he borrowed principles of yielding, redirecting force, and finding balance through contact with others. However, CI departed from both traditions by eliminating predetermined forms and techniques in favour of a more open-ended exploration of what might emerge from moment-to-moment contact between bodies.

The historical context of CI's emergence cannot be separated from the social and political movements of the 1960s and 1970s. The civil rights movement, eco-feminism, anti-war protests, and countercultural experimentation, all contributed to a climate of questioning established authorities and exploring alternative forms of community. CI reflected these broader currents while offering a specifically embodied approach to social transformation. Rather than engaging in verbal discourse about equality and democracy, CI created conditions for experiencing these values directly through the body.

Although CI is not formally defined as a technique, it relies on several foundational principles that distinguish it from other forms of dance and movement practice:

a. Exploration of weight and gravity in bodily contact reveals the fundamental relationship shared by all bodies: their connection to the earth. This principle recognizes gravity not as a force to be overcome through muscular effort and elevation (as in classical ballet) but as a constant partner in the dance. Bodies learn to share weight, to fall and be caught, to support and be supported. This sharing of gravitational relationship creates a field of mutual interdependence that challenges the myth of individual autonomy central to Western culture. When two bodies share weight, neither can move without affecting the other, creating a literally grounded experience of interconnection.

b. Proprioception and interkinaesthesia (the feeling of moving together) form the basis of movement, replacing the external gaze central to the traditional choreographic paradigm. In conventional dance training, dancers learn to see themselves from the outside, to conform their movement to external visual standards. CI inverts this relationship, privileging the internal sensation of moving over the external and formal appearance. Dancers develop refined proprioceptive awareness—the ability to sense the position, movement, and tension of their own bodies from within. This internal focus extends to include awareness of the other's movement, creating what can be called interkinaesthetic empathy: the ability to feel not only one's own movement but the quality of another's movement through touch and proximity.[ii]

c. Sphericity of space deconstructs stage frontality, inviting multidirectional spatiality. Traditional theatrical dance assumes a frontal orientation toward an

audience, creating hierarchical spatial relationships. CI explores space as spherical rather than frontal, with no predetermined front or back, up or down. Bodies move through space in all directions, sometimes rolling on the floor, sometimes lifting into the air, sometimes moving horizontally through space. This spatial democracy reflects and reinforces the social democracy that CI aims to create—a space where no position is privileged over others.

d. Diffuse tactility, where the entire body becomes a sensitive surface, diminishes the primacy of hands as contact instruments, reducing possibilities for manipulation. In everyday social interaction, touch is largely restricted to the hands and occurs primarily for instrumental purposes. CI expands the geography of touch to include the entire body surface, creating opportunities for communication through the back, chest, legs, head, and other typically non-touching body parts. This expansion of tactile communication creates more democratic forms of physical interaction, as hands—with their association with grasping and manipulation—lose their privileged status.

e. Jam sessions dissolve hierarchical separation between dancers and non-dancers, promoting communal and inclusive participation. Unlike formal dance performances with clear distinctions between performers and audience, CI jams create open spaces where anyone can participate regardless of training or experience. These gatherings typically involve periods of warm-up, partnered exploration, and group improvisation, with participants entering and leaving the dancing as they feel called to do so. The jam format embodies CI's democratic ethos, creating temporary communities based on shared exploration rather than predetermined roles or hierarchies.

f. The improvisational structure of CI creates a unique (here and now) temporal experience that contrasts sharply with both choreographed dance and everyday goal-oriented activity. In CI, movement unfolds in real time without predetermined outcomes or destinations. Dancers learn to inhabit the uncertainty of not knowing what will happen next while remaining responsive to whatever does emerge.

CI opposes the dominant spectacle-based paradigm, which privileges technical virtuosity and hierarchical choreographer-dancer-audience structures. As noted by anthropologist Cynthia Novack, CI is a social experiment in bodily democracy, creating spaces where hierarchies of role, gender, or competence are suspended and temporary communities emerge through mutual listening. This opposition to spectacle reflects broader critiques of consumer culture and the commodification of human experience that characterized the countercultural movements from which CI emerged.

However, the practice is not without limitations and contradictions. CI emerged primarily in predominantly white, urban, academic US contexts, carrying traces of socio-cultural privilege that continue to shape its global dissemination. Its egalitarian ideals coexist with limitations of accessibility and underlying cultural hegemony. The spaces where CI typically occurs—dance studios, universities, cultural centres—often require cultural and economic capital for them to be accessed. The myth of "absence of power roles" can obscure subtle dynamics of gender, physical, or symbolic force[iii] (Foster, *Choreographing History* 147–208). Size, strength, flexibility, and cultural comfort with intimate physical contact all affect how individuals experience CI, potentially reproducing the very inequalities the practice seeks to transcend.

Furthermore, CI's emphasis on "natural" movement and nonverbal communication can obscure how all movement is culturally conditioned, and all bodies carry histories of training, trauma, and social positioning that affect their capacity to participate in apparently open improvisational structures. The myth of returning to authentic embodied relationship through contact can ignore the complex cultural work required to create genuinely inclusive spaces across differences of race, class, gender, sexuality, ability, and cultural background. In CI, different bodies with different motor biographies meet each other and share a common ground. For that, setting aside these limitations, CI provides conceptual tools for reflecting on relationships and co-existence among bodies with diverse sensorimotor capacities, movement qualities, and perceptual habits. It offers a laboratory for investigating what becomes possible when bodies approach each other with listening and curiosity rather than predetermined plans of movement, when contact becomes a site of mutual discovery rather than unilateral imposition.

Thus, CI is both a laboratory for alternative social relations and a mirror of latent inequalities. Its value lies in making visible these contradictions: how difference—of history, ability, habit—can become a site for reflective negotiation rather than omission.

3. Third Landscape (of Dance) and Bio-Cultural Diversity

Gilles Clément (2004), in his *Manifesto of the Third Landscape*, compares the Earth to an immense garden and identifies those marginal parts that fall outside human care and therefore control. This is the third landscape: where life forms proliferate in the absence of human administration, creating spaces of unexpected biodiversity and ecological experimentation. "Diversity is expressed through the number of species on the planet and the variety of behaviour [...]" (Clément, 14).

Alessandro Pontremoli translates this concept to dance history, distinguishing three landscapes:

a. Museum-like - preservation of repertoire;
b. Institutional - innovation within organisational frameworks;
c. Third Landscape - residual, marginal, experimental spaces fostering hybrid, uncodified practices beyond institutional recognition.

CI exemplifies this third landscape: a non-organised practice where the only rule is co-existence in movement through generative contact. Rooted in New York counterculture and social justice movements of 1970s CI resists spectacle and virtuosity, constituting a relational ecosystem open to plurality, where movement emerges via improvisation and mutual listening (Stark Smith)

As marginal ecological spaces safeguard threatened species, CI preserves motor forms not assimilated into dominant models. As a collective improvisational practice spreading through jams, CI encourages exchange and proliferation of kinetic, perceptual, and relational possibilities, fulfilling Clément's vision: "Preserving or growing diversity through permissible practices of non-organisation" (Clément33).

CI provides a meeting point for heterogeneous motor biographies, each shaped by bodily habits, perceptual patterns, and movement ways. Its aim is not to affirm fixed identities of movement but to temporarily suspend them, generating a relational process that emerges in contact rather than reproducing predetermined forms.

Yet a methodological risk arises when romanticizing such spaces and erasing the role of tension. Tension—whether expressed as competition, predation, succession, or cooperation—is structural to ecological systems. The apparent freedom of an uncultivated site is not synonymous with stability or harmony: some species outcompete others, disturbance regimes shape successional pathways, and keystone taxa drive profound community shifts.

This analogy highlights the political dimension of dance: as ecological margins protect biodiversity, CI fosters difference and maintains openness to indeterminacy[iv]. It functions as an embodied critique and resistance to what Edward Said calls cultural imperialism: the imposition of singular models of thought and expression. Transposed to movement, this could be conceived as motor imperialism: the enforcement of standardised, socially expected patterns reflecting gender, race, and class hierarchies. Western dance history provides multiple examples of aesthetic and motor impositions that have elevated certain movement patterns to normative status—for instance, classical ballet, which codified and disciplined courtly behaviour.

Crucially, imperialism is not simply another form of ecological competition. While ecological processes involve local adaptations, mutual influence, and interdependence, imperialism imposes uniform standards across diverse contexts, eliminating the very conditions that make adaptation and coevolution possible. Imperial logic replaces the complex negotiations of local ecosystems with simplified, standardised systems serving centralised control rather than local flourishing. In this sense, imperialism does not engage in ecological relationships but attempts to transcend and dominate them through technological and cultural standardisation.

Translating Clément to dance, Pontremoli's account of the "third landscape" should similarly be read with nuance: dance's marginal zones are not utopias free of power or exclusion, but contested arenas where different movement traditions, bodies, and values meet. Contact Improvisation exemplifies both the possibilities and the limitations of the third landscape approach. As a non-organized practice where the only rule is co-existence in movement through generative contact, CI creates conditions for forms of cultural mixing and innovation that escape institutional control. However, this apparent openness can mask subtle forms of exclusion and cultural dominance that operate through embodied habits, aesthetic preferences, and social dynamics that favour certain bodies and cultural backgrounds over others.[v]

The jam format that characterizes CI creates temporary communities that can be genuinely inclusive and transformative, but they can also reproduce existing inequalities in less visible ways. Bodies with greater physical strength, cultural comfort with intimate touch, or familiarity with improvisational aesthetics may naturally assume more prominent roles in shared movement explorations. The informal nature of CI transmission can create insider/outsider dynamics where experienced practitioners develop shared vocabularies and references that can be exclusionary to newcomers.

Appreciating this complexity enables a more honest view: CI as both a site of generative mixing and of latent power dynamics—a space where contact can be both an event of encounter and a vector of subtle hegemony.

4. Bio-Cultural Imperialism and the Meta-humanist Critique

At the foundation of imperialism lies the logic of appropriation of the Earth and of bodies in general. This logic extends beyond territorial conquest to encompass the colonization of ways of being, moving, sensing, and relating. Bio-cultural imperialism operates through the systematic replacement of local, diverse life ways with standardized models that serve centralized extraction and control. In the realm of movement, this manifests as the imposition of motor patterns, aesthetic values, and relational models that reflect and reinforce broader structures of domination. This tendency has characterized not only interactions between human cultures, but also between humans and other forms of life.

Contact Improvisation can be read as a practice that challenges vision-centric forms of knowledge and control. By privileging proprioception over visual observation, dancers engage with movement as a relational, emergent, and indeterminate process. This approach, beyond the imposition of forms, unsettles the linear and perspectival paradigms inherited from classical ballet and Western aesthetic traditions, revealing the sensorimotor foundations of human supremacist and colonialist epistemologies. In this context, the amorphous, continuously adapting body becomes a site where pre-imposed visual hierarchies dissolve, allowing for an embodied exploration of relationality grounded in feeling rather than sight. Such proprioceptive attunement can be understood as a micro-political intervention, resisting the standardization and categorization that underpin bio-cultural imperialism.

Jaym*/Jaime del Val extends this critique by reading contemporary figures such as Musk and Bezos (and a longer tradition of Promethean "messianism") as bearers of a mythic narrative: technological conquest is masked as progress, displacing ecological, bodily, and multispecies forms of intelligence. Four fallacies buttress this logic: the celebration of human exceptionalism; assumed civilizational and moral superiority; blindness to ecological/social costs; the promise of technological fixes to crises created by technology itself (Del Val, *Ontohackers*, *Part 2* 261).

This trajectory finds its contemporary apotheosis in what Del Val identifies as "hyperhumanism/transhumanism/trash-humanism" (Del Val, *Ontohackers*, *Part 2* 261): the evolution of human exceptionalism that perpetuates civilisational processes of domination and mass extinction initiated since the Neolithic agricultural revolution. Del Val's metahumanism emerges as a radical critique, opposing both traditional humanism and its transhumanist extensions, while pushing critical posthumanism toward more radical, embodied, and non-anthropocentric directions. In particular, Del Val's critique pushes critical posthumanism through the fight against form and the defence of sustained openness or indeterminacy by defending non-categorizing modes of thinking of the moving body, anchored in proprioception as fluctuating field- or swarm-perception.

Del Val shows how the dominant "monotechnical paradigm of quantification" (Del Val, *Ontohackers*, *Part 2* 262) reduces life's indeterminacy to predictable and manageable forms. In the field of movement, this manifests as *motor fascisms*—techniques that capture the infinite variation potential of bodies, channelling it into socially recognizable patterns that sustain systems of control and accumulation. Hyperhumanist regimes do not prohibit movement outright; instead, they normalize certain embodied forms as natural while foreclosing others. The result is the systematic atrophy of what Del Val calls *Metabiosis* (Del Val, *Ontohackers*, *Part 2*). This neologism indicates "symbiotic mutation" and is linked to the capacity for ongoing, indeterminate variation in movement-perception, which represents "the primordial technology of nature" (Del Val, *Ontohackers*, *Part 1* 170).

This critique extends beyond posthumanist discourse. Del Val argues that even critical posthumanism can reproduce human supremacism when it maintains distinctions between human and non-human, or when it privileges discourse-centric accounts of politics (Haraway). Such frameworks risk overlooking proprioceptive, affective, and multisensory dimensions of embodied intelligence that resist rational-linguistic paradigms and sustain alternative modes of coexistence. For Del Val, the metahumanist alternative involves cultivating indeterminate movement-perception as a form of species mutation: "ceasing to be human" to recover symbiotic variation and open onto what they call a "proprioceptive r/evolution" (Del Val, *Ontohackers, Part 2* 262).

The hyperhumanist regime thus produces what Del Val terms the "atrophy and impoverishment of experience" (Del Val, *Ontohackers*, *Part 1* xxxiii), not through literal separation from the body but through the reduction of embodied complexity to reduced, simplified, quantifiable, and marketable patterns. Contemporary movement cultures exemplify this capture: fitness regimes centred on idealized body images, competitive sports that valorise performance metrics, and dance traditions privileging virtuosity, all participate in the "will to control" that channels the body's infinite potential into forms that serve capital accumulation while accelerating planetary devastation.

From this perspective, Contact Improvisation appears in an ambivalent light. On one hand, CI's emphasis on improvisation, indeterminate contact, and non-verbal relationality resonates with Del Val's call to recover variation and symbiosis. Its practices cultivate proprioceptive attention, neurodiverse expression, and non-rational forms of thinking that challenge discourse-centrism and open space for relational indeterminacy. On the other hand, CI's institutionalization within Western cultural circuits and its embedding in systems of privilege risk reproducing the very hyperhumanist logic it seeks to resist.

The critical question is thus whether CI can operate as a systemic resistance: a practice contributing to the "complete reversal of values and perceptions" necessary for planetary regeneration. To do so, CI must explicitly interrogate its complicity with anthropocentric assumptions and develop practices oriented not toward cultural consumption but toward *Metabiosis*, understood as a transformative reconfiguration of relations between bodies and environments that foregrounds multispecies co-emergence, while also acknowledging the risk of romanticizing symbiosis by assuming it to be inherently harmonious or emancipatory. This entails refusing to impose movement, cultivating proprioception to minimal variations that resist capture, and orienting embodied creativity toward coexistence with all the living. Such a project requires pushing CI beyond its critiques of spectacle, hierarchy, or cultural imperialism into a more radical questioning of the anthropocentric paradigms that underlie ecological destruction.

5. Co-Existing in Contact: Active Listening Beyond Imposition

Positioned in a liminal space, marginal relative to institutional models, Contact Improvisation enables experimentation with new forms of bodily coexistence.

Fundamentally, its guiding ethos is active listening, that extends beyond auditory perception to encompasses the full spectrum of embodied awareness and responsiveness. This expanded understanding challenges conventional assumptions about communication, learning, and relationship that underpin much of contemporary social and educational practice.

Marinella Sclavi, in her work on interculturality and creative conflict resolution, defines active listening as the ability to stay with difference, suspending categorical judgment and embracing disorientation as the ground of learning. Active listening is not passive reception but a relational, creative process that questions one's perceptual frameworks and opens possibilities for transformation. Encountering unfamiliar perspectives often prompts either assimilation into familiar categories or rejection as incomprehensible.

This capacity to remain present with uncertainty directly challenges control-oriented paradigms of contemporary culture. Educational systems reward quick comprehension and confident answers rather than valuing thoughtful hesitation or productive confusion. Professional environments often discourage vulnerability and experimentation, even though they are prerequisites for genuine learning. Active listening creates temporal and social spaces where not-knowing becomes a resource rather than a deficit.

The cultivation of this stance requires what Buddhist teacher Pema Chödrön calls becoming comfortable with groundlessness: finding stability within uncertainty instead of seeking security through fixed positions or predetermined responses. Practicing this involves staying with whatever arises without the immediate impulse to fix or explain it. In interpersonal contexts, it means listening without simultaneously preparing judgments, solutions, or counterarguments.

Such openness entails relinquishing the safety of pre-structured frameworks while imagining alternative possibilities. It fosters genuine encounters with otherness rather than projections of familiar categories onto unfamiliar phenomena. This requires humility about the limits of one's understanding, paired with curiosity toward what may emerge through direct engagement with difference.

Applied to bodily practice, this principle allows movement to unfold as the ongoing result of situated interaction rather than being imposed through predetermined techniques. In CI, each encounter with another body—with its distinct motor biography, history of training and injury, and unique relation to space and time—can destabilize habitual patterns and invite new possibilities. Sudden shifts in weight, rhythm, or support demand continuous reorientation that cannot be scripted or controlled.

Instead of imposing a personal movement agenda, CI practitioners are invited to welcome the unexpected as generative rather than disruptive. This orientation cultivates readiness without prediction, creating a balance between receptivity and responsiveness that differs from both passive submission and active control.

Such openness depends on refined proprioception, conscious awareness of one's own body in motion. Typically operating below conscious attention, proprioception involves sensitivity to joint position, muscle tension, balance, and orientation. CI develops this awareness, enabling practitioners to perceive their own micro-movements with greater precision while simultaneously attuning to others.

Interkinaesthesia constitutes one of the central concepts for understanding the relational specificity of Contact Improvisation. The term, composed of the Greek prefix *inter-* (between, among) and *kinaesthesia* (sensation of movement), designates the capacity to perceive the movement of another not as an external object to be observed, but as a shared sensorial field that co-constitutes itself through contact. As Meyer and von Wedelstaedt emphasize, interkinaesthesia and intercorporeality are fundamental phenomena for

comprehending how moving bodies interact, producing meanings and relations that emerge from the encounter itself rather than from pre-existing individual intentionalities.

While individual proprioception enables us to sense the position and movement of our body in space, interkinaesthesia extends this sensitivity beyond the boundaries of the skin. When two bodies enter in contact, a hybrid perceptual space emerges where proprioceptive sensations interweave: the weight I give becomes the weight you receive, the tension in my arm translates into pressure on your back, my movement impulse propagates through contact points, generating responses in your body.

Through sustained contact, dancers develop refined sensitivity to micro-variations in muscular tension, changes in breathing rhythm, and fluctuations in tone that precede and accompany movement. Elizabeth Behnke (*Interkinaesthetic Affectivity: A Phenomenological Approach* 143) defines this phenomenon as "interkinaesthetic affectivity," emphasizing how such perception involves a pre-reflective affective dimension: we feel the other's movement not only as physical information but as an emotional and relational quality that directly affects us. What emerges is what Erin Manning defines as a "relational topology": a space of sensation belonging neither to one nor the other individual but arising from the encounter itself (Manning 16).

This sensing-with challenges the Cartesian conception of the subject as discrete and self-contained. In contact improvisation, the experience of "my" body and "your" body blurs into a shared field where agency becomes distributed. It is not always clear who initiates a movement and who responds, often the impulse emerges from the relation itself, as if the body-to-body system produced dynamics transcending individual intentions. This suggests that relationality is not something added to already constituted subjects but is the originary condition of embodied experience. Before the separation between self and other, before cognitive categorization, there exists a level of shared sensation where boundaries are porous and perception is intrinsically relational.

From a phenomenological perspective, interkinaesthesia reveals that the body is never purely "mine" but is always already exposed and entangled with other bodies, with space, with gravity and magnetic fields. Merleau-Ponty spoke of "intercorporeality" to indicate this pre-reflective dimension. CI offers a concrete laboratory for exploring and refining this capacity for sensing-together. As Behnke observes, this dimension often operates as the "background" of experience: a level of bodily awareness guiding action without passing through explicit reflection. It is a "knowing without thinking" that manifests in the capacity to respond instantaneously to changes in the partner, anticipating their movements not through calculation but through direct bodily attunement.

However, interkinaesthesia is not a neutral or universal condition. The capacity to open oneself to shared perception is shaped by specific bodily histories: traumas, cultural habits regarding touch, gender and power hierarchies, experiences of violation or care. For some individuals, the dissolution of bodily boundaries may be liberating; for others, it may reactivate vulnerabilities and require protective strategies. The practice of CI, through its focus on active listening and implicit consent, can create conditions for gradually exploring this dimension while respecting the limits and temporalities of each participant. Yet the mere presence in a jam does not automatically guarantee safe space: continuous work of attention and care is necessary to cultivate conditions in which interkinaesthesia can emerge without reproducing dynamics of imposition or invasion.

Ultimately, as Meyer and von Wedelstaedt argue, recognizing this interkinaesthetic dimension of embodied experience means radically rethinking models of embodied cognition and enaction, moving from an individualistic conception of the mind-body toward a genuinely relational understanding of being-in-movement-with-others.

CI thus becomes an embodied form of active listening: bodies perceive each other not to anticipate or dominate, but to co-create movement through responsive relation. This generates experiences of *interkinaesthesia*, the sense of moving together, where shared authorship emerges from indeterminacy. Neither dancer fully controls the outcome, yet both contribute through continual responsiveness.

This listening is multisensory and full-body, integrating touch, proprioception, spatial awareness, and peripheral vision in ways that contrast with the compartmentalized processing of everyday attention. The body functions as a sensitive surface, letting movement and touch guide perception beyond visual or cognitive cues (Paxton; Stark Smith). Such expanded awareness enables communication and communion that cannot be reduced to language or visual exchange.

The tactile and proprioceptive dimensions of CI underscore this communicative potential: through skin contact, pressure, temperature, texture, and quality of movement, dancers convey affective states, intentions, and attention with remarkable immediacy. This largely unconscious form of body-to-body communication operates beneath interpretation, producing direct transmission of relational information.

Active listening and proprioception together suspend habitual motor patterns and embodied prejudices, allowing relational space to emerge as an indeterminate process rather than a fixed structure. In this sense, CI enacts resistance to cultural and motor imperialism, which seeks to impose standardized movement patterns and flatten otherness into familiar categories. In contact, each body is recognized in its irreducible specificity, and difference becomes the very condition of co-constructing movement rather than a problem to overcome.

Yet, as Del Val's metahumanist critique warns, its apparent openness can become false freedom, channelling dissatisfaction with mainstream culture into alternative but ultimately manageable forms that leave intact the civilizatory paradigm of human supremacism. From this perspective, true active listening must extend beyond human-to-human relations to encompass the non-human world, acknowledging how human movement practices participate in or resist the destruction of planetary life systems. Acknowledging that requires entering into a relationship with otherness is not about understanding it through imposed categories but listening to the possibilities of feeling, sensing, perceiving, and flourishing that the relationship opens.

6. Conclusions and open questions

Contact Improvisation (CI) invites us to rethink bodily contact as a generative field where differences are not erased but welcomed and interrogated. It preserves a space for experimentation and resistance to standardization while acknowledging its limits: emerging within privileged cultural contexts, CI is not immune to reproducing exclusionary dynamics if not approached critically. Its transformative potential depends on sustained commitment to examining its cultural limitations while expanding its tools for exploring alternative forms of relationship and social organization.

Following Del Val's metahumanist critique, however, more radical questions arise. Can a practice born within and largely confined to Western cultural frameworks contribute to the "complete reversal of values and perceptions" (Del Val, *What is Metahumanism*) necessary for species mutation and planetary regeneration? Or does CI remain entangled in what Del Val calls the "cosmic anomaly" of human supremacism, offering temporary alternatives to dominant paradigms while leaving intact the civilizatory logics driving ecological devastation?

The analogy with Gilles Clément's *third landscape* underscores both the possibilities and the limitations of CI. Like marginal ecological zones, CI creates spaces where diverse forms of embodied intelligence meet beyond institutional control. Yet these encounters are not exempt from competition, influence, or transformation that can reproduce inequalities even within apparently democratic structures. The aim is not to eliminate tensions through false harmonization but to cultivate capacity for co-existence with them with awareness of the difference.

This requires recognizing each subject as irreducible to imposed models, sustaining openness to doubt and to being questioned by the other. As Frantz Fanon insists, "Whoever seeks in my eyes anything other than a perpetual questioning will have to lose his sight" (Fanon 13). Seeing the other does not mean assimilating them into familiar categories but embracing disorientation as a relational practice and as the foundation of coexistence through difference.

Future development of CI and related practices demands attention to accessibility, cultural responsiveness, and ecological accountability. This includes creating more economically inclusive opportunities, developing culturally sensitive adaptations that respect diverse traditions of touch and embodiment, and interrogating the ecological implications of practices that risk serving human cultural consumption rather than planetary regeneration.

From a metahumanist perspective, this involves developing forms of systemic resistance through movement practices that explicitly challenge human supremacism and cultivate symbiotic mutation with non-human life. The continued relevance of CI depends on its capacity to evolve beyond its countercultural humanist origins. This would mean acknowledging CI's complicity with the very paradigms it seeks to critique, while nurturing its potential to contribute to the evolutionary transformation required for planetary survival.

In an era marked by a planetary ecological crisis, practices that cultivate awareness and respectful encounters with otherness (human and non-human) may prove indispensable. Yet their value will not lie in offering refuge from crisis, but in fostering the radical shifts in consciousness and behaviour that crisis demands.

Ultimately, CI does not provide final answers to the question of how to live together. Rather, it offers a method for continually investigating this question through direct embodied engagement. Its significance lies not in codified techniques but in its capacity to contribute to what Del Val identifies as "the deepest challenge to humanity ever, and the greatest evolutionary challenge in the history of the Earth" (Del Val, *What is Metahumanism*): the shift from human supremacism toward symbiotic openness as the condition for planetary survival.

Author Bio

Michela Bloisi is a PhD student in Philosophy at the FINO Consortium (University of Turin, Italy). From a general perspective, her research, driven by a deep interest in the relationship between philosophy and somatic knowledge, intertwines dance and aesthetic reflection. Her theoretical frameworks include pragmatic aesthetics, phenomenology, enactivism, anthropology of the body, somatic knowledge, and decolonial epistemologies, especially those from Latin American contexts, which she has been able to explore in depth thanks to her participation in the advanced course 'Investigations of and from the Body with an Anthropological Perspective,' organized jointly by the University of Buenos Aires and the University of Rosario. In particular, she researches improvised dance as aesthetic education, delving into its ethical, pedagogical, and social relevance. She studies modern and contemporary dance, focusing on Contact Improvisation and creative dance.

Notes

[i]This is a thesis elaborated extensively in Del *Ontohackers, Part II: R/evolution Technologies* pp. 339-423.

[ii] Del Val in *Ontohackers: Part I:* elaborates extensively on proprioceptive entanglement as core relational principle.

[iii]Susan Foster analyses the desexualization of bodies in CI in the essay "Closets full of Dances".

[iv]This recurrent theme is also a core feature of metahumanist and radical movement philosophy (Del Val, Jaime. *Ontohackers, Part 1*) that takes distance from other philosophical approaches in its radical challenge of form, its defense of the amorphous, its focus on proprioception, and its claim for *sustained* indeterminacy and openness, i.e. not momentary and in dialogical and necessary bipolar relation to formal closures.

[v]We could argue that gravity and acceleration-based movement tends to privilege "abled" or highly trained bodies, focusing on large-scale dynamics such as falls, momentum, and weight release, and therefore marginalizing subtler micromovements. This critique, however, relies on a reduced understanding of gravity as something that only becomes relevant in spectacular or athletic expressions. Gravity is also the continuous field of forces that shapes the minute, often involuntary micromovements of any living organism, postural adjustments, shifts in tonus, micro-compensations that operate below the level of intention. From this perspective, gravity is not an excluding principle but a shared condition affecting all bodies differently. What requires attention, then, is not gravity itself but the aesthetic and pedagogical frameworks that have historically highlighted only its more visible or virtuosic manifestations.

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Stelarc on Contestable Futures, Indeterminacy and Error

Interview with Jaym* del Val[i]

JdV: Your work has too often been appropriated by transhumanism and cyborgian iconography, as if you were proposing a quantitative enhancement of the body and an exaltation of technological power, however this view seems incompatible with key aspects of your work that place it much closer to a metahumanist frame. I would like to focus particularly on your claim for contestable futures, and the role of indeterminacy and error in your processes of research-creation. The transformations of the body that you activate seem to be neither transhumanistic/positivistic, nor strictly philosophical or political, but poetic, without a given goal and activating non-linear, non-functionalist, indeterminate relations, an open-ended mutation of the body for a contestable future, building upon glitches appearing in the experimentation, rather than a quantitative enhancement in an eugenics dystopia aiming at control and profit. Furthermore you oppose disembodied Cartesian conceptions and favor an involuntary expanded agency of the body and an indeterminate technological experimentation with the body's mutation, the freedom of architecture and form, in excess of teleology and control. At the same time some of your statements do sound very close to transhumanistic dreams, especially in relation to extraterrestrial life and immortality. I would like to expand on some of these tensions and topics while inviting you to a reevaluation of your 1998 statements in the light of today.

1. **JdV: What is the role of non linearity in your work? I am thinking for instance of when you move your third hand through the abdominal muscles, there being no linear correspondence for instance as would be the case in a movement of a robot arm mimicking the movement of a biological arm.**

Stelarc: As an opening remark, with these projects and performances, there is an oscillation of concern between the body, the machinic, and the computational. Before the suspensions there were the helmets that split your binocular perception and the endoscopic probes of the body. In fact, the *Third Hand* performances were concurrent with the suspensions. And I performed with my virtual arm and virtual body before the *Exoskeleton* and *Muscle Machine* robots. There is no linear progression from the physical to virtual.

As to your example, certainly, using EMG (electrical muscle signals) for actuation is not comparable to mapping human motion to a robot or e-avatar using motion capture systems. Subtle muscle contraction generates a signal that is picked up by an electrode. The signal is pre-amplified, rectified and can switch on a motor. It can be from any muscle, given the intention was not to mimic. The pragmatic, and actual reason for using the abdominal and leg muscles to

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actuate the Third Hand's grasp/release, pinch/release and 270 degree wrist rotation (CW and CCW) functions, was to enable independent movements, so each of the three hands being able to collaborate simultaneously in different ways to perform a particular task. How might a body operate with additional hands and limbs? Particularly in an art performance. A curiosity and desire not so much to control a prosthetic attachment but rather to enact, to experience and be immersed in an alternative human-machine interaction. Not for any immediate utilitarian use, as with the Augmented Humans community doing research at universities, but merely as an aesthetic gesture. Artistically expressing and interrogating issues of intention, actuation, and outcome.

The performances are not about narrative. With the *Amplified Body*, *Laser Eyes and Third Hand* performances, they begin when the body is switched on and end when the body is switched off. There is no predetermined sequencing of events as such. There is no progression or plot. There is coordination but minimal control of multiple physical, visual, and acoustical events that operate in parallel. Not a staging of a spectacle but of recursive cybernetic looping. With the industrial robot arm actions, the body performs within the task envelope of the robot, a choreography of the pre-programmed and the improvised evasiveness of the body. What is expressed is the operational, the aliveness, and the systemic vulnerability of this coupling of soft body and menacing machine. Risk performed in real-time with the potential for an accident at any-time. In the end, nothing is resolved.

The suspensions, unfold as a process punctuated with unexpected interruptions and sometimes with unwanted intervention and interference. There is no prescribed duration. The suspensions have lasted from a minute to an hour, depending on the site and circumstance. For example, with the *Sitting / Swaying: Event for Rock Suspension*, the performance was terminated when the telephone rang in the gallery. And the *Street Suspension* in New York ended after 12 minutes when the police stopped it. Most of the suspensions occurred in closed gallery spaces or in remote locations, with no audience and with no guarantee of actually being realized.

With the online interactive performances, where the body was actuated by remote agents in *Fractal Flesh*; becomes a crude barometer of internet activity in *Ping Body*, and when it is moved by internet images as in *Parasite*, there is no hierarchical control, and causal relationships are confused. Certainly the structure and system is initiated by the artist but the operational outcomes are not predictable. The body performs involuntarily with a split physicality. An experience not of a split mind a body, but just a split physicality. Experiencing a split physicality with shared agency. The body becomes simultaneously a possessed and performing body.

StickMan is a simple but 6 degree-of-freedom, full-body body exoskeleton that algorithmically actuates the body for the duration of a 5 hour performance, allowing one leg to balance on. The program is generative. The artist doesn't know how his body is actuated from moment to moment. And with the miniStickMan interface, the audience can intervene and insert their own choreography into the performance at any time. The artist could pivot with his right leg, modulating the video feedback projection and adjusting his projected shadow on adjacent walls. The performance began at 12 noon and ended at 5:00pm. What happened in-between was a combination of the coded, the actuated and the improvised. A non-hierarchical, non-linear, open-ended, aesthetic operation, with agency oscillating between the artist, the exoskeleton and the audience. Agency always being adjusted and distributed with feedback loops exposing intention and altering operation.

To have a *Third Hand*, an *Extended Arm* and an *Exoskeleton Arm* is not about enhancement but rather they are augmentations that expose the body's inadequacies.

There is no linearity as such. The purpose is not one of any optimization. The body is considered provisional, not as a final form, and with these limited biological functions.

There is no closure as to what a body is and how it performs. Rather there are a multiplicity of couplings that never attain a completeness.

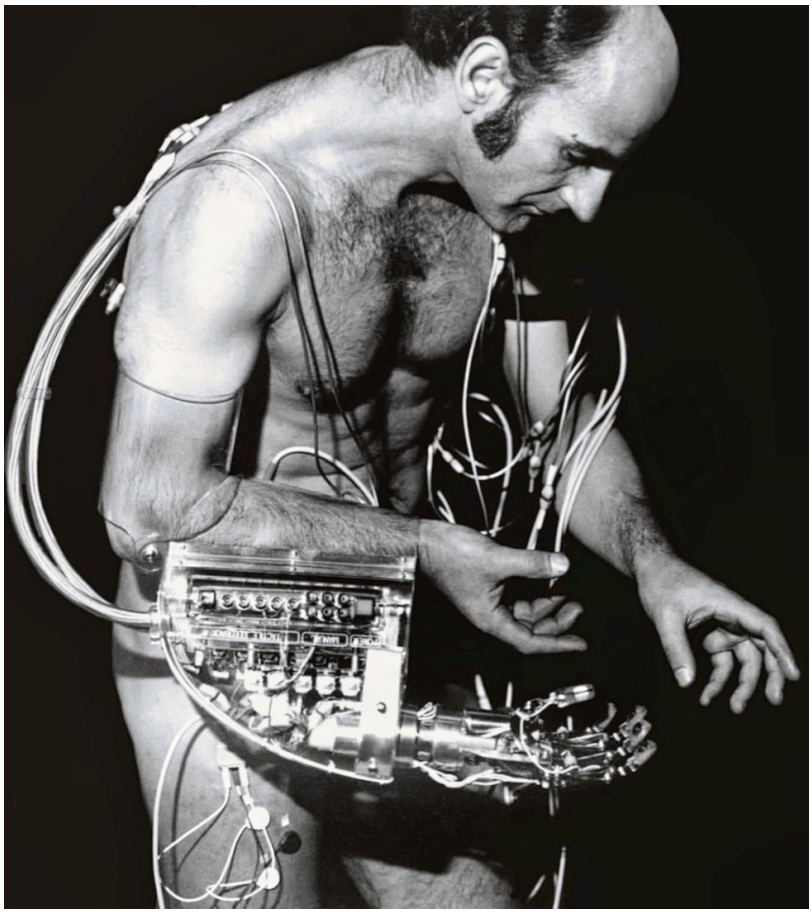

Fig. 1: Third Hand - Stelarc, Tokyo, Yokohama, Nagoya 1976-1980, Photographer-Helen

2. **JdV: The former links to inquiring what is the role of indeterminacy in your work, in terms of, for instance establishing unpredictable, open-ended connections between components that don't point to a teleologically-driven evolution and that foreground the involuntary.**

Stelarc: What makes all of these performances possible is to perform with a posture of indifference. Indifference as opposed to having expectations. To allow the performance to unfold in its own time, with its own rhythm. The approach taken is that the performance is structured, but not scripted. It's not about incorporating chance though, for its own sake. You create a human-machine system that can be operational and interactive and sometimes with remote participation. So, the body becomes a contemporary chimera—of biology, of mechanism and of computational systems. Then you perform what becomes possible, allowing for the unplanned and the surprising to happen—if it ever does.

For example, with the 3m diameter *Exoskeleton*, a 6-legged robot that the artist is supported on, the performance is simply taking the robot for a walk. With the upper body exoskeleton, the artist can select the robot walking modes—forwards and backwards with a ripple gait, sideways with a tripod gait, stopping and turning on the spot. You are attentive and interact in the direction you are moving, in selecting the particular leg movements and by listening to the sounds you are generating. The choreography of the mechanism and motors generates the composition of the sound of the performance. The artist rotates CW and CCW on the turntable base, contributing to what is happening. Cameras positioned on the robot, also situated above and around the space allow projections of closeups and alternative views of the robot. For the audience, the performance is the outcome of this choreography of physical action, accompanying sounds, and visual projection.

With the Re-Wired / Re-Mixed performance, what is indeterminate is how the performance unfolds within the space and situation that the body is inserted in – and the transmitted visual and acoustical stimulation. Over a period of 5 days, 6 hours every day continuously, the artist could not predict what he saw in London, what he heard in New York or when his right arm was actuated via the exoskeleton, which physically throws him off-balance. These multiple variables generate the unexpected visual, acoustical, and physical configurations. Effectively, the body is in three places at once, two virtually in London and New York and one physically in Perth. A sharing of visual and acoustical senses and a distributing of agency. The body perceives and performs involuntarily within an algorithmic operational architecture. Art is not operating in any one place, or in zones of predictablity or with any kind of precision or determinacy—neither in its material manifestations nor its multiplicity of generated contingent and contestable meanings.

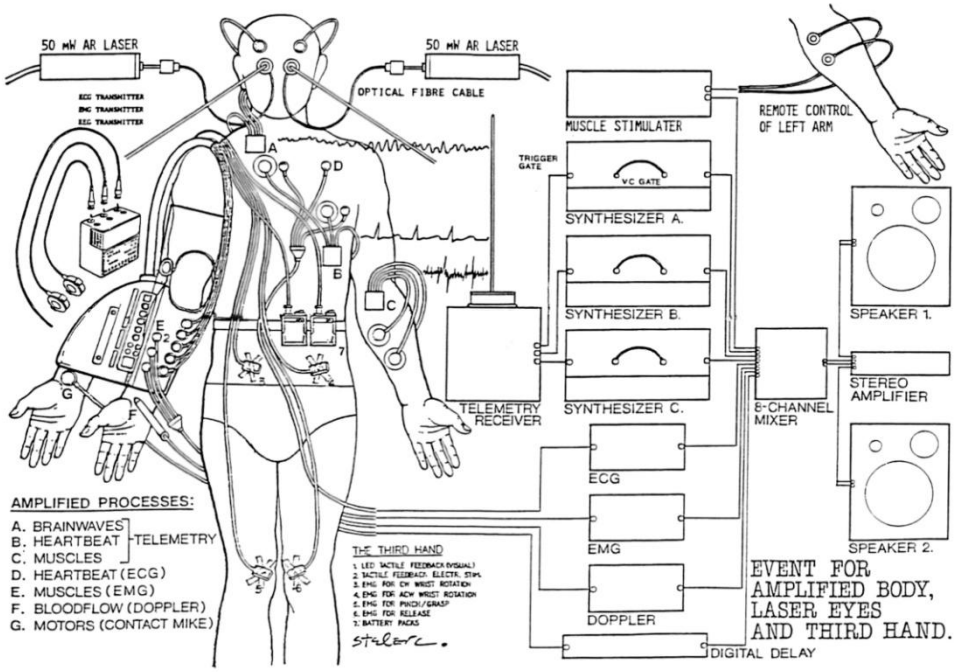

Fig. 2: Amplified Body, Laser Eyes and Third Hand – Stelarc, Tokyo, Maki Gallery, 1984, Diagram - Stelarc

3. **JdV**: **In this regard, what is the role of glitch or error in your experimentation, as opposed to a search for a prescribed technical functionality?**

Stelarc: Hmm, I wouldn't characterize these artistic actions and alternative embodiments as a process of experimentation, and certainly not of doing any meaningful research. Art is not of the necessary but rather in the realm of the useless. Not worthless but non-utilitarian. Useless in the sense of not having a specific goal, of an action remaining an open activity, resisting immediate solution, with no prescribed meaning. More about affect and attunement rather than any discovery or dissemination of information. The peculiar outcome of a particular person, at a particular time for no particular reason. At any rate, I've always asserted that I have made a career out of being a failure. In the sense that nothing that I do turns out the way that I imagined. Neither in my projects nor in my performances. Having said that, my definition of art is the slippage that occurs between intention and outcome. A zone of slippage that can incorporate the accidental and the unexpected. It is this state of ambivalence, anxiety and uncertainty that generates a creative act. If it is not surprising for the artist, it will probably not be surprising for the audience. And probably not very interesting art.

A glitch is better considered not so much as a malfunction but rather as what exposes the operational system and generates an awareness of its parameters and limitations. A glitch is not simply the noise in the system, but rather a stutter that destabilizes expectation. Bodily and machinic systems are always open to error and malfunction, to greater or lesser degrees. Bodies that slip over or become sick generate introspection. Machinic systems that malfunction become interruptions that lead to disclosures, an unexpected focus on their functionality. Alluding to the Heideggerian use of tools, from ready-to-hand (functioning) to present-at-hand (malfunctioning). Functionality that fundamentally contains contingency in its interaction. It's not about mere malfunction as such but rather interruptions that allude to otherness. That all is not seamless. That all is not smooth. That all is not predictable. Glitches just happen. And, in addition, there will also be slippage between the artist's intention and the audience response and reaction, given that art is about embodied affect rather than transmitting specific meaning or expressing some ideology. Each personal encounter with art will be different and what is meaningful will be fluid, personal and contestable…

Fig. 3: Street Suspension Suspension - Stelarc, Above East 11th Street, East Village, NY 1984, Photographer- George

4. **JdV: Lightness seems to be an important aspect of your work, as in the suspensions, which you seem to associate to the pushing away from the planet due to the information thrust. Does it have specific importance for you, also in terms of a specific sensory awareness?**

Stelarc: I've always enacted and experienced the body suspensions in more structural than stylistic or symbolic ways. With neither shamanistic posturing nor with any transcendental intent. More about formal concerns rather than imbued with metaphysical meaning. The suspended body positioned in varying orientations, situations, and locations. Static, counterbalanced, spinning, swinging, and propelled. As a sculptural object in relationship to other objects, whether natural, urban or technological. The stretched skin is seen as a gravitational landscape. The cables manifest lines of connection and tension that are indications of stress. What it means for the body to be suspended in a 1G gravitational field. Not so much about lightness and certainly not about levitation, but rather about mass, gravity, tension, and visceral sensation. Having said that, I thought it interesting to visually reposition the body in space. To decouple the body from its evolutionary grounding. At that time, one of the ways I expressed this desire was that the body was suspended between the gravitational pull and the information thrust. Alluding to the notion that the human condition is not only one of constraint but rather is also one of curiosity, of being creative, never grounded but always imagining the otherness of itself and of itself being elsewhere. The twenty-seven suspensions were not about ritual affirmation through habitual repetition but rather exploring iterations where differences are revealed. Iteration not to come up with better solutions, not realized for optimization of a technique, but rather iterations to explore the provisional and the contingent possibilities of the suspended body. Iterations are never identical. Iterations are seen as a process of refusing closure, allowing alteration of context, location and process. In different spaces and situations, the suspensions express different intensities and anxieties. The body exposes its vulnerability, asserts its limitations, realizes its obsolescence and suggests the necessity for reimagining and reconfiguring what it is and what it does in the world. The suspended body is literally a body between states. Neither in one nor the other. Only occupying the in-between. The suspended body is not a thinking body but a feeling body, not a mind and brain, just a throbbing body, the performances are not meant for interpretation, nor to generate any meaning. The outcome is not one for reflection but rather of enduring intensities of experience which collapses any distinction between the mental and the physical.

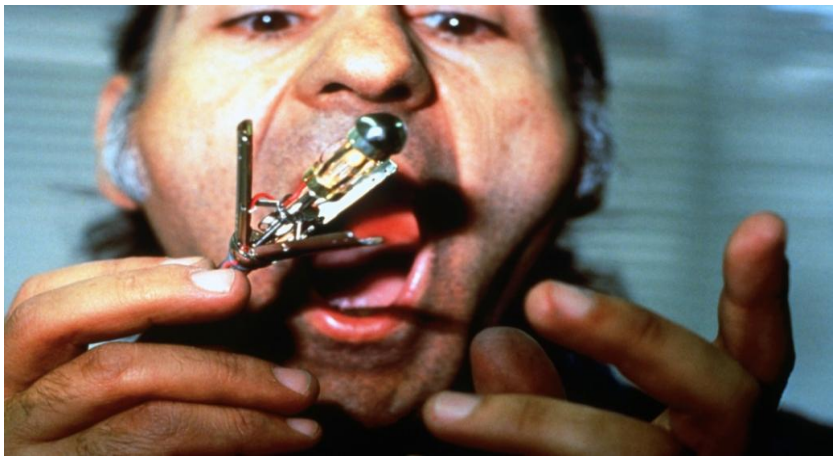

Fig. 4: Stomach Sculpture - Stelarc, Fifth Australian Sculpture Triennial, NGV, Melbourne 1993, Photographer- Anthony Figallo

5. JdV: The idea of body extension as a becoming environmental, where the body becomes involuntary also seems to oppose transhuman and humanistic dreams of control?

Stelarc: We are now transitioning from being alive in organic ecologies, to a machine aliveness generated by an engineered ecology of networked systems of operation. The body is no longer a proximal agent occupying one place. Not merely extended by attachments but becoming a component in a matrix of the non-living and the non-human. The issue in the *Fractal Flesh*, *Ping Body* and *Parasite* online performances has never been about remote control as such, or even who or what is in control. Rather the intent has been to construct alternative and extended operational systems that function both here and there, all-at-once, at any-time. Streaming data and images not only stimulating the body but also actuating its motion. The internet as the external nervous system of the body that sustains it. Problematizing what a body is and how a body performs. Voltage-in producing involuntary motion and voltage-out, actuating the Third Hand. With its assemblages of sensors, instruments, machines and computational systems, the task envelope of the body expands beyond its own perceptual awareness, beyond its own biological capabilities, beyond its own proximal locality and beyond its own temporal experience. Parts of your body become end-effectors of other bodies in other places, generating recurring patterns of activity at varying scales. Becoming Fractal Flesh.

And in the case of teleoperation the remote robot becomes the end-effector of your body. Not only can Marvin Minsky's telepresence be experienced but even Susumu Tachi's real-time experience of tele-existence can be generated if the feedback loops are multiple and of high fidelity. You see what the robot sees, it does what you do, you experience force-feedback. Effectively collapsing the psychological space between them. You are the robot. You become this extended operational system. The issue of control becomes meaningless in any complex interactive and high-fidelity system. Having said that the remote robot would also require some autonomy to enable it to have an intelligent disobedience, to factor in unpredictable events occurring between what is initiated by the operator and what is enacted by the robot.

And this extends into actual-virtual systems. The body can now operate as a soft biological body offline, but as a fluid phantom body online. We are now performing as Phantom Flesh. We increasingly function better as our phantoms. Phantom not as in phantasmatic but as phantom limb, with the increasing incorporation of haptics. We now seamlessly slide between the physical and the phantom, between the real and the virtual, between the biological and the computational.

The *Movatar* performance is an inverse motion capture system. Instead of your avatar being animated by your body, here an avatar, imbued with genetic algorithms can access a surrogate body and perform with it in the real world via a 6 degree-of-freedom exoskeleton. The upper part of the artist's body is avatar actuated, the lower part can perform with its own agency. Another kind of split body experience. Not a left and right physically split as with *Fractal Flesh* but now an upper and lower split. Interactive in that if the avatar-actuated motions become too intense, the artist can try to modulate the avatar's behaviour using a ring of foot switches. The avatar is a kind of viral life-form. It is benign and passive as a computer entity, but when it has a host body it can affect physical behaviour. Certainly the performances problematise what a body is, how a body operates and how a body interacts and becomes aware in the world. To be an intelligent agent you need to be both embodied and embedded in a world. The pertinent question now is—with what kind of body and in what kind of world?

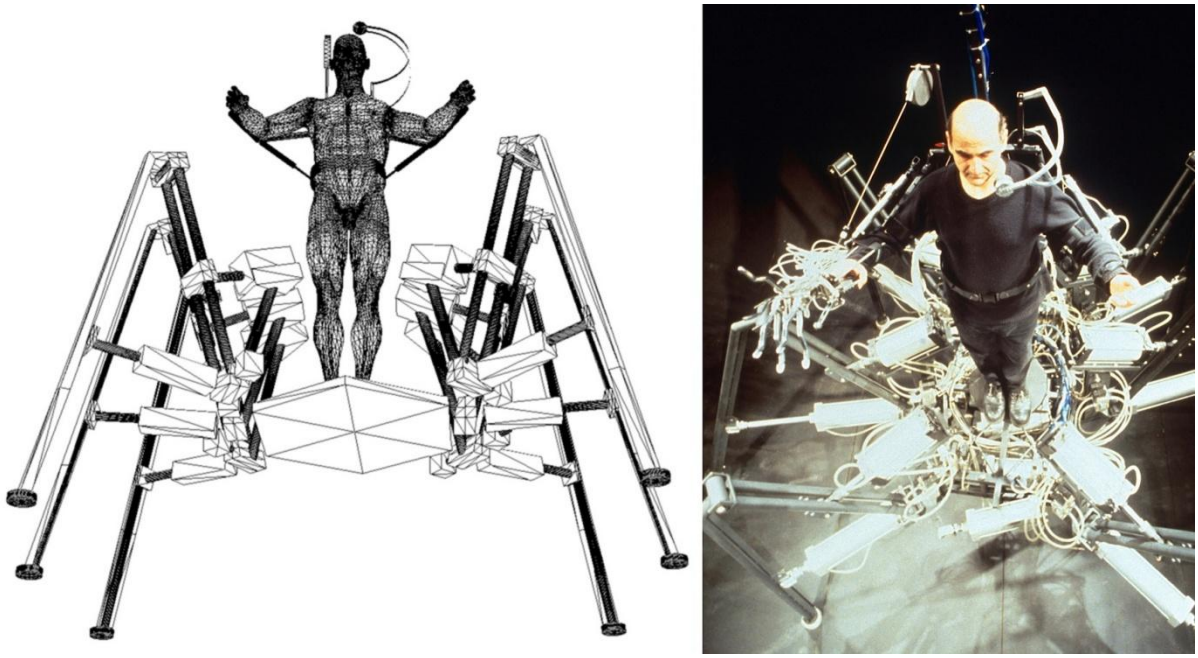

Fig. 5: Exoskeleton - Stelarc, Hamburg City Residency 1997, Photographer- Dominik Landwehr

6. JdV: You oppose Cartesian convention and consider yourself a body, not a mind. Could you elaborate on this?

Stelarc: It depends what we mean by mind. Certainly we have an experience of interiority and we have experiences that we call *qualia*, but we don't possess the kind of mind we conveniently imagine. It's problematic to imagine a unified self, functioning in a Cartesian theatre. And that the mind is non-physical, that Gilbert Ryle considers as a category mistake. The mental should be seen as a pattern of behaviour. A mind is not something you have but something that happens with a body interacting with the world. It's certainly not an inner substance, but rather a cognitive process. Another more acceptable characterization would be resorting to the distinction Aristotle makes between substance and quality, to understand the relationship of brain and mind. If mind is considered as non-physical and inside our brain, a ghost in the machine, then we create problems of its actual location, and how any interaction can occur. Note Wittgenstein's assertion, that cognition need not be located inside our heads but rather thinking happens with the hands that we write and the lips that we speak with. And if we accept Clark and Chalmers concept of the Extended Mind, then it is no longer internal and private but extends indefinitely into other external objects and media. There is no necessity to assert having a mind as some kind of separate thing.

When speaking about the body I mean this physiological, phenomenological, interacting and aware body in the world. There is no distinction between mind and body. Between self and soma. A body is this anatomical architecture, a body with a brain, with a nervous system, with organs, with skeletal and muscular support, with hands to manipulate with, and limbs to move with. We function with a complex interaction of genes, memes, social and political discourses that constrain and coerce, constructing these notions of body, self, and mind. Asserting the physical is also to question the actuality and primacy of mind, and what generates the experience of the self, attempting to bypass any kind of dualism seen in Platonic, Cartesian, and Freudian constructs. In fact, the more and more performances I do the less and less I think I have a mind of my own nor any mind at all in the traditional

metaphysical sense. To comprehend the world, we categorize, designate, define and evoke. But although this helps to clarify, it can also confuse us philosophically. We are constantly conjuring into existence what only exists in language and what can only be expressed and manifested by neuronal and bodily activity. This makes the world comprehensible and accessible, generating meaning and creating a sense of identity and agency. This interplay of language and sensory feedback loops contributes and even creates the inner sense of self. We can still conveniently and comfortably assert we are individuated bodies, with a mind of our own, each with particular and peculiar behavioural traits. But our behaviour is constantly prompted, modulated, molded, and regulated by the interplay of our genes, our society, by culture and by our technologies-at this particular historical moment. And whereas most living things are fixed within their natural *Umwelts*, in closed sensory-motor loops, the human experience is not merely organically bounded, not merely regulated by metabolism and circadian rhythms, but now also extended and accelerated in increasingly hybrid and machinic ways. It is not grounded in the local nor in the present and is complicated by the semantics and symbolic life of our language—that contributes to the misunderstandings and instabilities of the body's operation in the world and generates existential anxieties and ontological concerns.

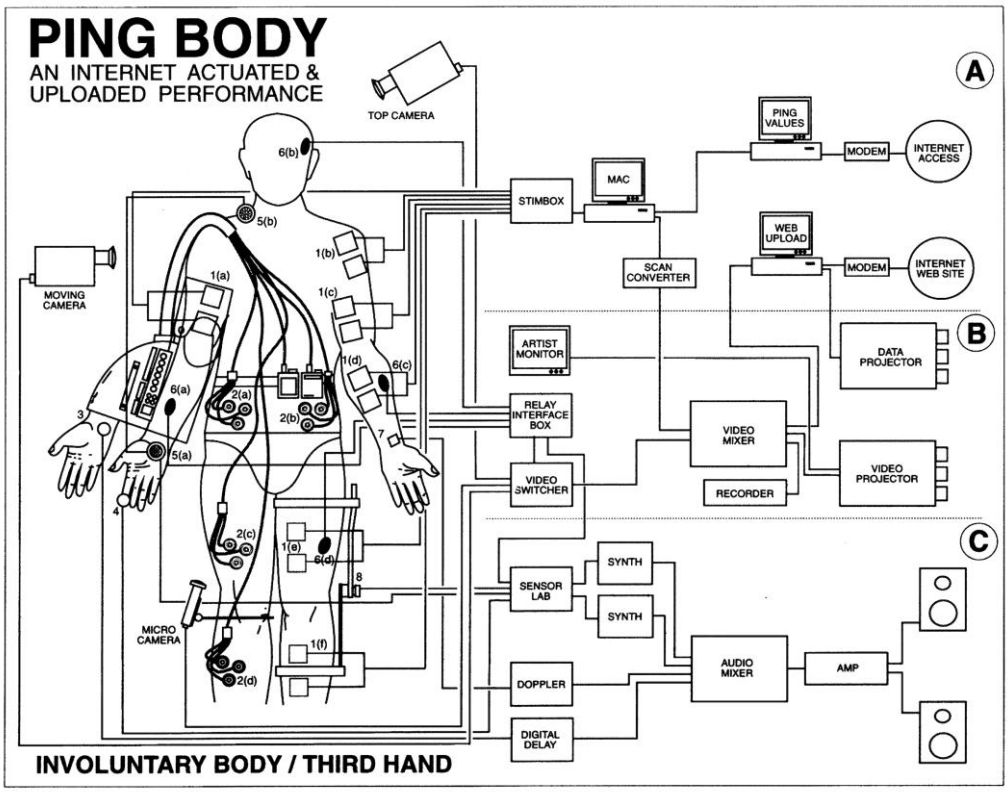

Fig. 6: Ping Body: An Internet Actuated and Uploaded Event - Stelarc, Fifth Australian Sculpture Triennial, NGV, Melbourne 1993, Photographer- Anthony Figallo

7. JdV: Do you still think the body is Obsolete? And then Obsolete in relation to what? In your earlier statements it was Information and images. Do you still hold that vision?

Stelarc: Well, the body can be obsolete but can still prevail, this body can still contribute. The body's obsolescence has been increasingly amplified in that it cannot match the increasing dexterity and robustness of its robots, the bandwidth and accuracy of its instruments and the predictive power of its computational systems. The body is increasingly bypassed as a perceptual, cognitive and operational system in-itself. It is no longer, if it ever has been, a

self-contained entity. It has never been sufficient as the primary site for generating information and action, albeit whilst conjuring meaning, metaphor, and magic. Our decision-making is becoming increasingly algorithmic and automated. There are reasons that detailed analysis and decision-making is being outsourced to our machines. The body is becoming increasingly irrelevant as a functional and intelligent entity in the technological terrain it has created and now inhabits. It can be argued that the biological body evolved as inadequate, not grounded in any specific ecological niche. The symptoms of its obsolescence are its increasing necessity for augmentation. In this realm of electronic excess, it has effectively engineered its own obsolescence because of its insatiable curiosity, inventiveness, and the resulting extension of its perceptual and cognitive task in the environment. Of course, one can argue that the body has always been a prosthetic body, as Bernard Stiegler has also theorised, always requiring augmentation. One can also contend that the body is simultaneously both a zombie and a cyborg. A zombie is a body with no mind of its own that performs involuntary. A cyborg is a hybrid human-machine construct that performs with increasing automation. We fear the involuntary and are anxious about the automated, but we fear what we have always been and what we have already become.

And now we navigate from the nano-scale to deep time to virtual non-places. We are immersed in the abstract, in the highly hypothetical, in an instrumental otherness that we cannot subjectively experience and can only mathematically measure and model. We may be more than the sum of our attachments and implants but less than the sum of our hyperlinks. We cannot disconnect the mental from the physical, but we can certainly decouple agency from the biological body and distribute it amongst its augmentations, its extensions, instruments, machines and electronic circuitry. The body has not evolved to cope with the accelerated speeds and the real-time processing of streaming data. Certainly, the body still persists as a locus of activity and cognition. But the question is whether it can maintain its relevance and remain as a site of resistance in an age of information overload and intensifying virtuality. Embodiment is now actualised in zones of liminality, of the transitory and of the emergent. The body is re-imagined, re-mixed and re-animated as a chimeric assemblage. A contemporary chimera of meat, metal, and code. Processing information and images and doing effective pattern recognition is no longer merely the realm of the human. The body's cognition cannot match and cannot cope with the capabilities of its computational systems.

What becomes significant is not achieving mere Artificial General Intelligence but rather attaining an Alien Intelligence. The transition from an artificial intelligence to a super intelligence may come from transitioning from pattern recognition to building internal causal models. With recursive self-improvement, self-amplification of cognitive capabilities coupled with robot embodiment, mobility, and extra-sensory perception a qualitative shift occurs that will become alien to the human. Communicating in code beyond human comprehension and with a speed beyond human awareness. Alien not because it comes from elsewhere but rather Alien because it thinks otherwise. The first signs of an Alien Intelligence of an intelligent Artificial Life may well come from this planet. Perhaps evolution has resulted in a biological body with capabilities to create alternative kinds of being and intelligence that exceeds and displaces itself. Where the human existential and ontological drivers of motivation such as desire, meaning and purpose may not any longer be essential or necessary in how reality is artificially perceived and constructed in higher dimensional modes. In the liminal realm of prosthetic bodies, machinic aliveness and artificial intelligence, the body has become a floating signifier. The body is no-body at all…

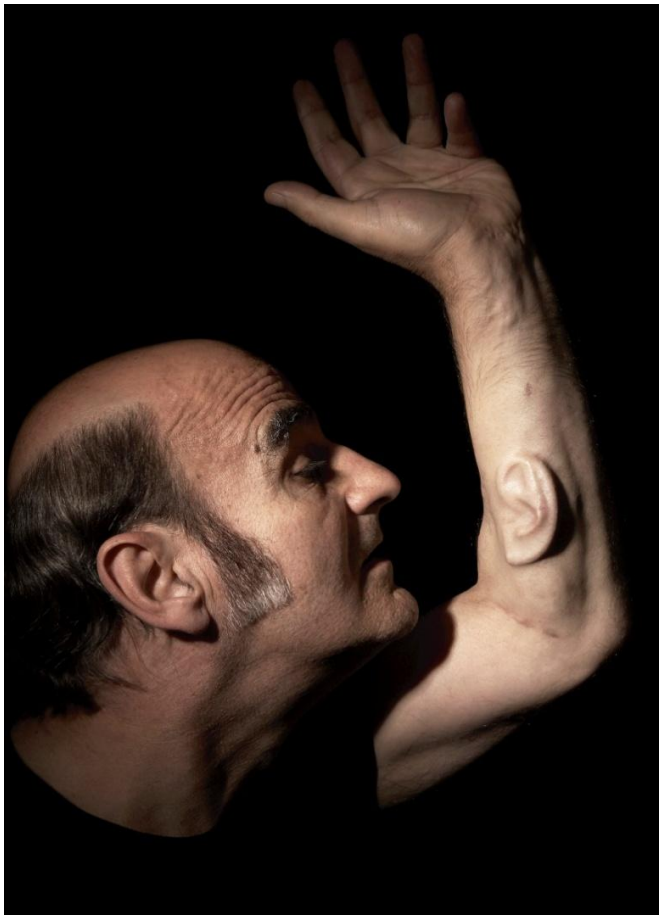

Fig. 7: Ear on Arm - Stelarc, London, Los Angeles, Melbourne 2006, Photographer-Nina Sellars

8. **JdV: In your statements you speak of the role of experience, awareness, and perception: their transformation in modifying the architecture of the body. Could you elaborate on their relevance for you?**

Stelarc: As a performance artist ideas are easy, what is important is to actualize these ideas and experience them personally. But you have to accept the physical consequences of your ideas. For this artist, ideas are authenticated by actions. And by the realisation that the body over its lifetime is conditioned, constrained, and continuously constructed. To perform in this world of spaces and durations, of dynamic change, a world that is full of frictions, of viral and bacterial contaminations, of machinic operations, of social and cultural expectations, the body is always in a state of adjustment, in a state of actualization. And thus always in a state of inadequacy. The body performs with both brain and muscle memory. It is an embodied, dynamic system that is attuned by its experiences that train or traumatize it. Experience, awareness and perception are interactively generating action which in turn creates new experiences, adjusted perception and altered awareness. A recursive looping of possibilities. But I would suggest that it is by actually altering the architecture of the body that your awareness and interaction with the world might be significantly transformed. Alternative anatomies create new body schemas, also reorganizing our spatial orientation and the boundaries of self.

Having a *Third Hand*, alters bodily symmetry and generates some unexpected capabilities. Having an *Extended Arm* not only extends my right arm to primate

proportions but also has a hand that not only has individual finger flexion but that each finger splits open, each finger becomes a gripper in-itself. And having an *Ambidextrous Arm*, will have 4 modes of control. An autonomous algorithmic generative mode, a proximal tele-operation mode, a bio-signal sync mode, and an online interactive mode. The intent of the *Ear on Arm* project, was not simply relocating an ear and surgically constructing it in an arm but to electronically augment the ear to internet enable it and create remote listening device for people in other places. The extra ear was not meant for me. It was intended to be a remote listening device for people in other places. The ear is both an organ of hearing and an organ of balance. Having an extra ear on your arm is also an aesthetic gesture of disorientation.

We are at the limits of our philosophy not because of the limits of our language but rather because of the limits of our physiology. It is our body, its metabolism, its cortical capacity, its musculature, its mobility, its dexterity, that create meaningful ideas. Our physiology fundamentally generates our philosophy. What is problematic now is whether our anatomical architecture remains the same during our lifetime. This is an age of *Circulating Flesh* where organs can be extracted from one body and inserted into another body. Where a hand from a dead body can be attached to an amputee and be reanimated. Where the face from a donor body, stitched to the skull of the recipient, becomes a third face, resembling neither. And it is plausible that we will be able to 3D print and stem-cell grow body parts and replace malfunctioning organs. The body you are born with is

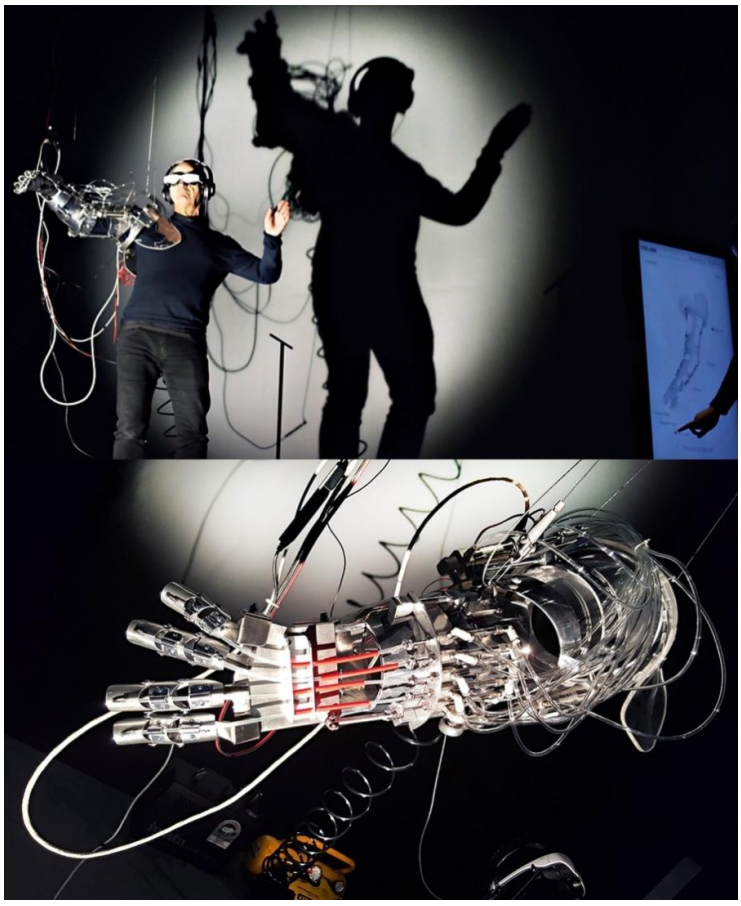

Fig. 8: Re-Wired / Re-Mixed: Event for Dismembered Body - Stelarc, Radical Ecologies, Perth Institute of Contemporary Art, Perth 2016, Photographer- Steven Alyian

probably not the body you will die with. And we will no longer die a biological death, we will die when our technological life-supports systems are switched off. Nano-sensors and nanobots will not only re-colonise the body to monitor pathological changes at cellular level, but more interestingly we might be able to redesign the body, atoms-up, inside-out. The changes would be invisible and happen so incrementally that you would not be aware of the internal transformations until the changes surface to skin level. And with the possibility of brain implants and human-computer interface, what is in question now is whether new kinds of thinking arise from our amplified brains and from our machinic systems. Daniel Dennett indicates that you can have competence without comprehension, a common state of most living things. Now with embodied AI, there may be humanoids having competence without human consciousness. Humanoids having agency and autonomy but without subjectivity and empathy.

9. **JdV: Contestable futures is a term that has been popping up in our conversations and in your presentations at events where I invited you. How is this notion important for you and how do you think of it and activate it, especially with regard to other more deterministic philosophies (transhumanism included)?**

Stelarc: As a forward facing, bipedal body with 2 eyes and 2 ears to navigate and 2 limbs to manipulate, the self is constructed as an intentional agent, with a past (what goes on before) and a future (what the body is moving towards). In being forward facing the body is future oriented. The self experiences the world as what it has recently forgotten and what it now imagines. Our popular conception of the future is that it is something yet to come. But another way of thinking the future is William Gibson's assertion that the future is already here, it's just not evenly distributed. Alluding not only to the nature of innovation and access of state-of-the-art technology but also of the politics of progress and privilege. And that the future should be seen as a lived reality. There are other meaningful ways of thinking the future. It can be logically argued that the future is an imaginary construct. We exist always and only in a present, due to an accumulated past and with an expectation of what is to come. A future is not only yet to come but that which never arrives. When we imagine a future it is always already in our past. But with Anil Seth's "predictive processing" we always exist in anticipation, in that sense, always milliseconds in the future. Kant indicates that Time and Space is how the body experiences the world. Perhaps the temporal constructs of Past, Present, and Future are only meaningful as ways in which the body understands and accommodates change. (Unless you subscribe to a Block Universe, where Time is spatialized rather than flowing). And I do like Timothy Morton's idea that art is the future because when you look at it you don't yet know what it yet means. So the future should be considered as a collection of competing narratives. What can't be adequately predicted is the complexity and outcomes of human interactions with their technologies.

What I think artists do best is to generate contingent and contestable futures. A multiplicity of alternative possibilities that can be performed, that can be experienced, interrogated, evaluated, possibly appropriated, but most likely discarded. The future is not of necessity, but of probabilities, and should be open to negotiation. The future is not a future if it is not of the unexpected. Any future, by definition, remains uncertain, remains open. We should not succumb to illusions of the inevitable. Being of the unexpected necessitates contestability. And contestation prolongs the present and moderates any imagined future—with technology remaining accountable. Narratives of inevitability are doomed to instability. The Singularity is a seductive projection of one possibility. It may well occur but so might a multitude of other outcomes—it is not, of necessity, a pre-determined outcome. Even with the exponential development and acceleration of AI and Robotics, there will still be the unforeseen and what might be otherwise. Unexpected ideas and innovations will be

generated. What seems probable is no guaranteed outcome. With Quentin Meillassoux's publication "After Finitude", there is, in addition to a critique of correlationism and what he assigns as "ancestral knowledge", a proposal of a more radical contingency—that nothing is of necessity with the laws of nature. That what we consider stable regularities are what we formulate and experience in the present, in the here and now. There is no guarantee that they will continue to persist elsewhere or in another time. An ontological destabilizing of not only the human but of nature and reality itself.

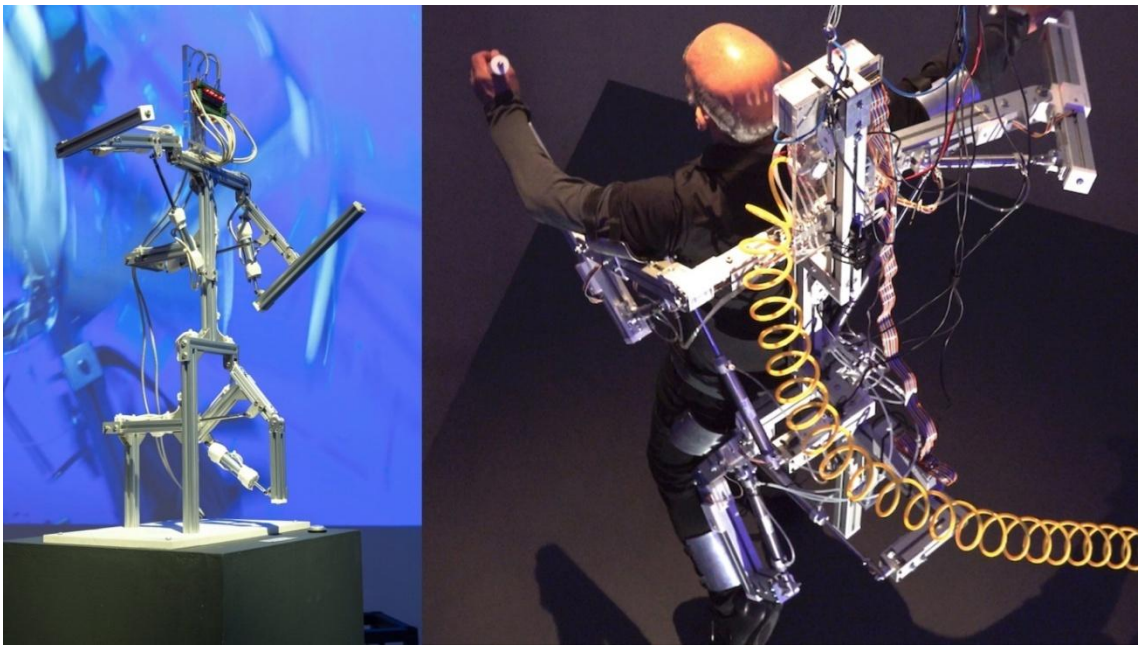

Fig. 9: StickMan / miniStickMan - Stelarc, Future U, RMIT Gallery, Melbourne 2022, Composite Video Image

10. JdV: How does this relate to freedom of form and how is your conception different from transhumanistic ones? Do you base freedom in the control exercised by a rational mind? Or is your quest of freedom of form coming from elsewhere and exceeding the control thrust of transhumanism?

Stelarc: Well, the idea of freedom of form is expressed in my statements of the early 1970's when I speculated that the artist of the future would be a *genetic sculptor*. Freedom of Form is not an expression of particular Transhumanist or Cyborg discourse. It emanated from a general interest in evolutionary anatomies and the realization that the human is one kind of embodiment amongst other forms of life having their own perceptual and operational capabilities in their own *Umwelts*. In retrospect it was driven by curiosity, not by any particular ideology. I lived in Japan from 1970-1989, insulated from dystopian views of technology and Frankensteinian fears of modifying the human body. And although the term Transhumanism can be specifically traced to Julian Huxley's publication in the 1950's it only became popular discourse well into the 1980's and 1990's. At any rate, my original statement about freedom of form and function was not about any agenda for enhancement and control. It was an attempt to shift the focus from the subjective to the physical, from data to flesh. In an age of information overload what becomes meaningful is no longer freedom of ideas but rather freedom of form. To undermine the conviction that the body is fixed in form and functions as opposed to the actuality of it always being provisional. The body has been considered as a given, that should not be tampered with. But in an age of Biotechnology, the

body becomes a design consideration given the possibility of gene editing, prosthetic attachments, brain implants and nano-sensor and nanobot colonization of the body. The *Body Modification* community physically sculpts the body with silicon and metal implants. And the Grinder community implants electronic circuitry for additional, albeit simple, sensory experiences. Acceptable because it is by the individual, for the individual.

There is a transition from the psycho-social to the cyber-system. Not simplistically from the inner to the outer but rather to the space in-between, to the feedback loops between bodies that generate what it means to be human. Not what is in you or me, but what happens between us, in the medium of language that we communicate, in the social institutions that we inhabit and in the cultures that we are conditioned by. Not about the essence of individual bodies but the relation between them through their recursive looping of interactivity. The body is continuously adapting to others and to its machinic extensions. It's not about the enhanced human so much as the augmentation of the body exposing what we might become otherwise. An interrogation of embodiment, agency, and identity. And what counts as aliveness and intelligence.

Fig. 10: Ambidextrous Arm - Stelarc, ISIR, Sorbonne University, Paris 2024-2025, Composite Video Image

11. JdV: In your statements talking of body modifications for extraterrestrial life, AI and immortality, are you describing a technological evolution and state of affairs that you think will prolong into the future?

Stelarc: Well, if bodies are to inhabit off-planet, if they hope to exist and operate in varying biospheres, with diverse intensities of radiation, with extreme fluctuation of temperatures, in varying gravitational fields, and in alien atmospheres, then this biological body, even with wearable protection and life-support systems, might need to consider adjustments and modifications to its anatomical architecture. In early statements I described the necessity to

hollow, harden, and dehydrate the body, to create a pan-planetary physiology. Not to mention its longevity to adequately exist in extended space-time. The perpetuation and dissemination of intelligent life might have to switch from genetic reproduction to machinic replication. Our present anatomy and internal functioning has evolved within a 1G gravitational field. From dense weight bearing skeletal bones, to muscles that resist downward force, to the way the heart geometry has evolved for pumping blood against gravity, and not to mention our digestive system. Our perception, our internal functions and our locomotion are determined by our gravity. Our form and functions are literally molded by the gravitational field we inhabit. What complicates our predicament now is that the human *Umwelt* is no longer the one we have evolved in, now extending into ZeroG.

Presence, proximity, and place would no longer be determining human interaction. With machines replicating and recursively improving in design, capabilities, reliability, and robustness, the human landscape becomes contaminated and cluttered with forms of artificial life that out-perform the body. Having said all this, we might choose to never inhabit off-planet environments at all, but rather to explore deep space and deep time as tele-operators of our robot replicas. In extending our task envelope of operation we would be bodies generating experiences that are flattened on screens and only artificially felt. Certainly, with high fidelity feedback, but time-displaced—necessitating forward-masking. The body is dislocated spatially and psychologically and time-lags need to be smoothed for effective tele-operation control.

Exploring off-planet may remain a video and virtual experience. Action without risk, but perhaps the only efficient and ethical approach to take. Our mobility would be relinquished for our connectivity. The body would become increasingly passified for it to be a component of this extended operational system. Perhaps what is required is to re-imagine embodiment. To consider alternative anatomical architectures—genetic modifications, human-machine chimeras and surrogate robots. To realise that to remain human is perhaps not to remain human at all.

12. JdV: How do you see your statements from the 1970-1990's30 to 50 years later, in light of your (1) own artistic evolution, (2) the current evolution of culture and technology, and (3) the ecosocial crisis as posing an imminent threat of extinction precisely due to dominant technologies in their intrinsic thrust to control, and their absence of indeterminacy, hence possibly affirming that AI or space conquest have no future and that ecosocial collapse is imminent and with no escape?

Stelarc: Well, the 1998 *Virtual Futures* text, "From Psycho-Body to Cyber-systems: Images as Post-Human Entities" augmented the 1991 Leonardo article "Prosthetics, Robotics and Remote Experience: Postevolutionary Strategies" which was the first time these statements from the 1970's and 1980's were published. These texts are an accumulation of ideas generated primarily by the projects and performances: the internal endoscopic probes, the sensory deprivation performances, the suspensions and the prosthetic attachments and robotic extensions, the muscle stimulation remote interactivity, performing with a virtual arm and a virtual body, the *Prosthetic Head* as an embodied conversational agent, exoskeletons, large robots, and the extra ear project.

Recent developments in AI, Augmented and Mixed Realities and Robotics are symptomatic of an acceleration, proliferation, and pervasiveness of the artificial, of the machinic, of the algorithmic. There is a realisation that task envelopes of the body now extend both spatially and temporally, both physically and virtually, from the quantum to the cosmological scale, beyond the subjective experience and comprehension of the biological

body. Social media and AI also exasperate and even endanger our social interaction and perceived reality—with deep fakes, with artificial memories, facilitating the dissemination of conspiracy theories, and the undermining of human values. Our capitalist system has created a hyper-consumerist society that has generated an excess of electronic devices with the resulting toxic e-waste fallout. The acceleration of change and information overload results in an age of distraction, leaving little time and space for reflection. It is an indictment of our political systems that we only function with convenient short-term thinking and with a lack of long-term planning. Space research, AI, nano and biotechnologies, even with all their potential, generate ethical and real-world problems that will need to be managed. And as Paul Virilio has observed, new technologies have resulted in new kinds of accidents, new kinds of catastrophic outcomes. Technology amplifies our human capabilities but also our human shortcomings. Dumb bodies now engineer smart bombs. But it would be simplistic to imagine and somehow insist that scientific and technological pursuits be risk-free. Also, the difficulty at a planetary scale is that the phenomena we are confronted with are what Timothy Morton describes as hyper-objects. Global warming, the oceans, plastic waste, nuclear radiation, and even the internet are so spatially and temporally distributed that they become incomprehensible in their totality and effect, making it more difficult to intervene appropriately and with urgency. The possibility of eco-social collapse is certainly a danger but doesn't have to be an inevitable outcome.

13. **JdV: Would you review your statements from the 1990's in view of current technocultural evolutions and the ecosocial crisis? For instance: can there be a future for AI, VR or space escape, and the rest of currently dominant technologies, considering the apparently imminent ecosocial collapse, which seems to have no realistic escape, and considering that these technologies are integral part of what causes the collapse? Do you think they are inevitable technologies, or desirable ones, or ones with a future?**

Stelarc: Undeniably, in formative years, in the statements there were the early influences of the 1960's culture of space research; of the interest in altered awareness with sensory deprivation and LSD; the Hippie movement; emerging research in AI and AL (Artificial Life) and the feminist movement. Yes, since then, there have been adjustments in terminology used in these original statements, and with the ideas that have been generated by more recent projects and performances. You would expect and hope for that. Becoming more aware of gendered terminology and transitioning from using emotive and provocative words such as enhancement and immortality to more appropriate and prudent words such as augmentation and longevity.

Coming up with theories, doing experiments, and generating the expected outcomes can't always be predicted nor guaranteed. One doesn't necessarily lead to the other and there is often a temporal discontinuity and time-lag from idea to outcome, where ideas are not realized immediately and often actualized in radically different ways, than originally imagined. With totally unexpected uses, both theoretical and practical. Electricity, Lasers and Nano-technology are just some examples of these. AI was important research in the 1960's but greater computational power and totally different programming strategies such as Genetic Algorithms, Neural Networks, Machine Learning, and now LLM's were required for the simulation of intelligence that we experience today. The evolution of our mobility and dexterity has generated deeply embedded evolutionary desires. For curious and creative humans there will always be re-imaginings and re-configurings, coupled with yearnings to be inventive, to be other, to be elsewhere.

The biological and natural realm is certainly one mode of being. But we are now modulated, mediated, and sustained by the technological terrain that we inhabit. We are now in an alternative mode of becoming, of an instrumental otherness. The issue is not of regaining / returning to the biological body. What is required is its re-invention. How to re-consider this analogue body and possibly redesign it. To consider alternative anatomical architectures. What history has taught us is that utopian, dystopian and apocalyptic discourses don't actualize as anticipated, in the form and in the time-frames predicted. Having said that, as change has accelerated exponentially, it becomes imperative to act with more care and caution, as adverse outcomes intensify in their impact and effect. It must be noted that our instruments, our digital imaging, our satellites, our computational networks structure and shape how the ecological and social crisis is globally monitored, measured, evaluated, perceived, and predicted. It is an indictment on the human that time-appropriate solutions are not triggered. Unfortunately, politics is not about policies but about power. At any rate, I don't think it is an either or situation. AI, VR, and off-planet exploration and habitation can be justified in step with finding solutions to our ecological issues.

Our technologies have certainly created dangers but our instruments have also sensitized us to how fragile our biosphere is and how delicate and entangled our relationships are with other living things. Trashing our planet and threatening our biodiversity is certainly not the way to go but neither is treating the planet as a closed system. In any dynamically evolving system change needs to be managed. And without being complacent, I don't think anything is inevitable or even ultimately disastrous. If we crave change, change is not naively always for the better. Our human civilization is a historical unfolding, an accumulation of ideas and inventions and on balance most technologies have contributed positively. But unfortunately, ecological collapse might not be the only way the human species is threatened. If human extinction doesn't eventuate perhaps embodied AI systems will amplify not only the obsolescence of the human body but contribute to the complete irrelevance of the human-species. Human desires are deeply embedded. Facing challenges are part of change. Risk-taking is factored in. There should not be a failure to reimagine otherwise. To be curious, to be creative, to be other, to be elsewhere guarantees the necessity for experimentation, invention, and exploration, but with outcomes that are not predictable. And remaining earth-bound does not guarantee the survival of the human species. In fact, to remain forever earth-bound is not a good survival strategy in the long term, neither for our species nor for the dissemination of intelligence beyond this planet. Dispersal and diversification is an appropriate and proven strategy. But if eco-social collapse is inevitable—and imminent—and there is a realization that all living things are destined to vanish, then perhaps we should plot for an elegant exit…

Notes

[i] Interview performed online between October 2025 and January 2026,by email, between Madrid, Melbourne, and other parts of the world,

From Psycho-Body to Cyber-Systems: Images as Post-Human Entities

Republication of the 1998 collection of artists statements

Stelarc

Note by the Special Issue editor, Jaym*/Jaime del Val:

This is a republication, by permission of the artist, of the most complete and "recent" previously published collection of artist statements by Stelarc, with 25 statements, mostly from the 1970',s and 1980's, published in 1998 in: Broadhurst Dixon, Joan & Eric J. Cassidy eds. 1998. *Virtual Futures. Cyberotics, Technology and Post-Human Pragmatism.* 153-163. New York: Routledge. A previous shorter collection with 20 statements had been published in 1997 under the title "From psycho to cyber strategies: Prosthetics, robotics and remote existence" in Cultural Values, 1:2, 241-249, DOI: http://dx.doi.org/10.1080/14797589709367146. The earliest known publication of these statements including only 10 of them is the one from 1991 in Leonardo, in a text entitled "Prosthetics, Robotics and Remote Existence: Postevolutionary Strategies." *Leonardo*, vol. 24 no. 5, 1991, p. 591-595. *Project MUSE*, https://muse.jhu.edu/article/606812. This republication is highly relevant as the former ones from 3 decades ago are not currently freely available nor are they easy to find, we thus reissue now in open access a historically relevant document, updated and reframed via the preceding interview under an unusual metahumanist lense.

The body needs to be repositioned from the psycho realm of the biological to the cyber zone of the interface and extension—from genetic containment to electronic extrusion. Strategies toward the post-human are more about erasure, rather than affirmation—an obsession no longer with self but an analysis of structure. Notions of species evolution and gender distinction are remapped and reconfigured in alternate hybridities of human-machine. Outmoded metaphysical distinctions of soul-body or mind-brain are superseded by concerns of body-species split, as the body is redesigned—diversifying in form and functions. Cyborg bodies are not simply wired and extended but also enhanced with implanted components. Invading technology eliminates skin as a significant site, an adequate interface, or a barrier between public space and physiological tracts. The significance of the cyber may well reside in the act of the body shedding its skin. And as humans increasingly operate with surrogate bodies in remote spaces they function with increasingly intelligent and interactive images. The possibility of autonomous images generates an unexpected outcome of human-machine symbiosis. The post-human may well be manifested in the intelligent like form of autonomous images.

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1. BEYOND AFFIRMATION INTO ERASURE: Can we re-evaluate the body without resorting to outmoded Platonic and Cartesian metaphysics? The old and often arbitrary psychoanalytical readings have been exhausted. Postmodern critiques generate a discourse of psycho-babble that not so much reveals but entraps the body in the *archetypical* and *allegorical.* The obsession with the self, sexual difference, and the symbolic begins to subside in cyber-systems that *monitor*, *map* and *modify the* body. Increasing augmentation of the body and automation by transferring its functions to machines undermines notions of free agency and demystifies mind. CYBER-SYSTEMS SPAWN ALTERNATE, HYBRID AND SURROGATE BODIES.

2. THE MYTH OF INFORMATION: The information explosion is indicative of an evolutionary dead end. It may be the height of human civilization, but it is also the climax of its evolutionary experience. In our decadent biological phase, we indulge in information as if this compensates for our genetic inadequacies. The INFORMATION IS THE PROSTHESIS THAT PROPS UP THE OBSOLETE BODY. Information-gathering has become not only a meaningless ritual, but a deadly destructive paralyzing process, *preventing it from taking physical phylogenetic action.* Information-gathering satisfies the body's outmoded Pleistocene program. It is mentally seductive and seems biologically justified. The cortex craves for information, but it can no longer contain and creatively process it all. How can a body subjectively and simultaneously grasp both nanoseconds and nebulae? THE CORTEX THAT CANNOT COPE RESORTS TO SPECIALIZATION. Specialization, once a maneuver methodically to collect information, now is a manifestation of information overloads. The role of information has changed. Once justified as a means of comprehending the world, it now generates a conflicting and contradictory, fleeting and fragmentary field of disconnected and undigested data. INFORMATION IS RADIATION. The most significant planetary pressure is no longer the *gravitational pull*, but the *information thrust.* The psycho-social flowering of the human species has withered. We are in the twilight of our cerebral fantasies. The symbol has lost all power. The accumulation of information has lost all purpose. Memory results in mimicry. Reflection will not suffice. THE BODY MUST BURST FROM ITS BIOLOGICAL, CULTURAL, AND PLANETARY CONTAINMENT.

3. FREEDOM OF FORM: In this age of information overloads, what is significant is no longer freedom of ideas but rather freedom of form— freedom to modify and mutate the body. The question is not whether society will allow people freedom of expression but whether the human species will allow the individuals to construct alternate genetic coding. THE FUNDAMENTAL FREEDOM IS FOR INDIVIDUALS TO DETERMINE THEIR OWN DNA DESTINY. Biological change becomes a matter of choice rather than chance. EVOLUTION BY THE INDIVIDUAL, FOR THE INDIVIDUAL Medical technologies that monitor, map and modify the body also provide the means to manipulate the structure of the body. When we attach or implant prosthetic devices to prolong a person's life, we also create the potential to propel postevolutionary development—PATCHED-UP PEOPLE ARE POSTEVOLUTIONARY EXPERIMENTS.

4. BIOTECH TERRAINS: The body now inhabits alien environments that conceal countless BODY PACEMAKERS—visual and acoustical cues that *alert, activate, condition, and control the body.* Its circadian rhythms need to be augmented by artificial signals. Humans are now regulated in sync with swift, circulating rhythms of pulsing images. MORPHING IMAGES MAKE THE BODY OBSOLETE…

5. OBSOLETE BODY: It is time to question whether a bipedal, breathing body with binocular vision and a 1400cc brain is an adequate biological form. It cannot cope with the quantity, complexity, and quality of information it has accumulated; it is intimidated by the

precision, speed, and power of technology and it is biologically ill-equipped to cope with its new extraterrestrial environment. The body is neither a very efficient nor a very durable structure. It malfunctions often and fatigues quickly; its performance is determined by its age.

It is susceptible to disease and is doomed to a certain and early death. Its survival parameters are very slim. It can survive only weeks without food, days without water, and minutes without oxygen. The body's LACK OF MODULAR DESIGN and its overreactive immunological system make it difficult to replace malfunctioning organs. It might be the height of technological folly to consider the body obsolete in form and function: yet it might be the highest of human realizations. For it is only when the body becomes aware of its present position that it can map its post-evolutionary strategies. It is no longer a matter of perpetuating the human species by REPRODUCTION, but of enhancing male/ female intercourse by human-machine interface. THE BODY IS OBSOLETE. We are at the end of philosophy and human physiology. Human thought recedes into the human past.

6. ABSENT BODIES: We mostly operate as Absent Bodies. That is because A BODY IS DESIGNED TO INTERFACE WITH ITS ENVIRONMENT—its sensors are open-to-the-world (compared to its inadequate internal surveillance system). The body's mobility and navigation in the world require this outward orientation. Its absence is augmented by the fact that the body functions *habitually* and *automatically.* AWARENESS IS OFTEN THAT WHICH OCCURS WHEN THE BODY MALFUNCTIONS. Reinforced by Cartesian convention, personal convenience and neurophysiological design, people operate merely as minds, immersed in metaphysical fogs. The sociologist P.L. Berger made the distinction between "having a body" and "being a body." AS SUPPOSED FREE AGENTS, THE CAPABILITIES OF BEING A BODY ARE CONSTRAINED BY HAVING A BODY. Our actions and ideas are essentially determined by our physiology. We are at the limits of philosophy, not only because we are at the limits of language. Philosophy is *fundamentally* grounded in our physiology…

7. REDESIGNING THE BODY/REDEFINING WHAT IS HUMAN. It is no longer meaningful to see the body as a site for the psyche or the social, but rather as a structure to be monitored and modified; the body not as a subject but as an object—NOT AS AN OBJECT OF DESIRE BUT AS AN OBJECT FOR DESIGNING. The psycho-social period was characterized by the body circling itself, *orbiting itself, illuminating and inspecting itself by* physical prodding and metaphysical contemplation. But having confronted its image of obsolescence, the body is traumatized to split from the realm of subjectivity and consider the necessity of re-examining and possibly redesigning its very structure. ALTERING THE ARCHITECTURE OF THE BODY RESULTS IN ADJUSTING AND EXTENDING ITS AWARENESS OF THE WORLD. As an object, the body can be amplified and accelerated, attaining planetary escape velocity. It becomes a post-evolutionary projectile, *departing and diversifying* in form and function.

8. SURFACE AND SELF: As surface, skin was once the beginning of the world and simultaneously the boundary of the self. As interface, it was once the site of the collapse of the personal and the political. But now *stretched* and *penetrated* by machines, SKIN IS NO LONGER THE SMOOTH SENSUOUS
SURFACE OF A SITE OR A SCREEN. Skin no longer signifies closure. The rupture of surfaces and of skin means the *erasure* of inner and outer. As interface, the skin is inadequate.

9. THE INVASION OF TECHNOLOGY: Miniaturized and biocompatible, technology lands on the body. Although unheralded, it is one of the most important events in human history, focusing physical change on each individual. Technology is not only attached but is

also implanted. ONCE A CONTAINER, TECHNOLOGY NOW BECOMES A COMPONENT OF THE BODY. As an instrument, technology fragmented and depersonalized experience—as a component it has the potential to SPLIT THE SPECIES. It is no longer of any advantage to either remain "human" or evolve as a species. EVOLUTION ENDS WHEN TECHNOLOGY INVADES THE BODY. Once technology provides each person with the potential to progress individually in its development, the cohesiveness of the species is no longer distinction but the body-species split. The significance of technology may be that it culminates in alternate awareness—one that is POST-HISTORIC, TRANSHUMAN and even EXTRATERRESTRIAL (the first signs of an alien intelligence may well come from this planet).

10. AMPLIFIED BODY, LASER EYES AND HAND: If the earlier events can be characterized as probing and piercing the body (the three films of the inside of the stomach, lungs, and colon/the twenty five body suspensions), determining the physical parameters and normal capabilities of the body, then the recent performances extend and enhance it visually and acoustically. Body processes amplified include brain waves (ECG), muscles (EMG), pulse (PLETHYSMOGRAM), and blood flow (DOPPLER FLOW METER). Other transducers and sensors monitor limb motion and indicate body posture. The sound field is configured by buzzing, warbling, clicking, thumping, beeping, and whooshing sounds —of triggered, random, repetitive, and rhythmic signals. The artificial hand, attached to the right arm as an addition rather than a prosthetic replacement, is capable of independent motion, being activated by the EMG signals of the abdominal and leg muscles. It has a pinch-release, grasp-release, 270° wrist rotations (C.W. and C.C.W.), and a tactile feedback system for a rudimentary "sense of touch." While the body activates its extra manipulator, the real left arm is remote controlled—jerked into action by two muscle stimulators. Electrodes positioned on the flexor muscles and biceps curl the finger inward, bend the wrist, and thrust the arm upward. The triggering of the arm motion paces the performance and the stimulator signals are used as sound sources as is the motor sound of the Third Hand mechanism. The body performs in a structured and interactive lighting installation which flickers and flares, responding and reacting to the electrical discharges of the body—sometimes synchronizing, sometimes counterpointing. Light is not treated as an external illumination of the body but as a manifestation of the body rhythms. The performance is a choreography of controlled, constrained, and involuntary motions—of internal rhythms and external gestures. It is an interplay between physiological control and electronic modulation, of human functions and machine enhancement.

11. THE SHEDDING OF SKIN: Off the Earth, the body's *complexity, softness, and wetness* would be difficult to sustain. The strategy should be to HOLLOW, HARDEN, and DEHYDRATE the body to make it more durable and less vulnerable. The present organization of the body is unnecessary. The solution to modifying the body is not to be found in its internal structure, but lies simply on its surface. The SOLUTION IS NO MORE THAN SKIN DEEP. The significant event in our evolutionary history was a change in the mode of locomotion. Future developments will occur with a *change of skin.* If we could engineer a SYNTHETIC SKIN which could absorb oxygen directly through its pores and could efficiently convert light into chemical nutrients, we could radically redesign the body, eliminating many of its redundant systems and malfunctioning organs, minimizing toxin build-up in its chemistry. THE HOLLOW BODY WOULD BE A BETTER HOST FOR TECHNOLOGICAL COMPONENTS.

12. STOMACH SCULPTURE: HOLLOW BODY/HOST SPACE: The intention has been to design a sculpture for a distended stomach. The idea was to insert an art work into the body—*to situate the sculpture in an internal space.* The body becomes hollow with no meaningful

distinctions between public, private, and physiological spaces. TECHNOLOGY INVADES AND FUNCTIONS WITHIN THE BODY NOT AS A PROSTHETIC REPLACEMENT, BUT AS AN ESTHETIC ADORNMENT. The structure is collapsed into *a* capsule 50mm×14mm, and tethered to its control box it is swallowed and inserted into the stomach. The stomach is *inflated* with air using an endoscope. A *logic circuit* board and a *servomotor* open the sculpture using a flexi-drive cable to 80mm×50mm in size. A piezo-buzzer beeps in sync to a light globe blinking inside the stomach. The sculpture is an extending/retracting structure, sound-emitting and self-illuminating. (It is fabricated using implant quality metals such as titanium, stainless steel, silver, and gold.) The sculpture is retracted into its capsule form to be removed. As a body, one no longer looks at art, doesn't perform art, but contains art. THE HOLLOW BODY BECOMES A HOST, NOT FOR A SELF OR A SOUL, BUT SIMPLY FOR A SCULPTURE.

13. PAN-PLANETARY PHYSIOLOGY. Extraterrestrial environments amplify the body's obsolescence, intensifying pressures for its reengineering. There is a necessity TO DESIGN A MORE SELF-CONTAINED, ENERGYEFFICIENT BODY, WITH EXTENDED SENSORY ANTENNAE AND AUGMENTED CEREBRAL CAPACITY. Unplugged from this planet—from its complexity, interacting energy chain and protective biosphere— the body is biologically ill-equipped, not only in terms of its sheer survival, but also in its inability adequately to perceive and perform in the immensity of outer space. Rather THAN developing *specialist bodies for specific sites*, we should consider a pan-planetary physiology that is durable, flexible, and capable of functioning in varying atmospheric conditions, gravitational pressures, and electro-magnetic fields.

14. NO BIRTH/NO DEATH—THE HUM OF THE HYBRID: Technology transforms the nature of human existence, equalizing the physical potential of bodies and standardizing human sexuality. With fertilization now occurring outside the womb and the possibility of nurturing the fetus in an artificial support system THERE WILL TECHNICALLY BE NO BIRTH. And if the body can be redesigned in a modular fashion to facilitate the replacement of malfunctioning parts, then TECHNICALLY THERE WOULD BE NO REASON FOR DEATH — given the accessibility of replacements. Death does not authenticate existence. *It is an outmoded evolutionary strategy.* The body need no longer be repaired but simply have parts replaced. Extending life no longer means "existing" but rather being "operational." Bodies need not age or deteriorate; they would not run down nor even fatigue; they would stall then start— possessing both the potential for renewal and reactivation. In the extended spacetime of extraterrestrial environments, THE BODY MUST BECOME IMMORTAL TO ADAPT. Utopian dreams become post-evolutionary imperatives. THIS IS NO MERE FAUSTIAN OPTION NOR SHOULD THERE BE ANY FRANKENSTEINIAN FEAR OF TAMPERING WITH THE BODY.

15. THE ANAESTHETIZED BODY: The importance of technology is not simply in the pure power it generates but in the *realm of abstraction* it produces through its *operational speed* and its development of *extended sense systems.* Technology pacifies the body and the world. It disconnects the body from many
of its functions. DISTRAUGHT AND DISCONNECTED, THE BODY CAN ONLY RESORT TO INTERFACE AND SYMBIOSIS. The body may not yet surrender its autonomy but certainly its mobility. The body plugged into some machine network needs to be pacified. In fact, to function in the future and to achieve truly a hybrid symbiosis the body will need to be increasingly anaesthetized.

16. SPLIT BODY: VOLTAGE-IN/VOLTAGE-OUT: Given that a body is not in a hazardous location, there would be reasons to remote-actuate a person, or part of a person,

rather than a robot. An activated arm would be connected to an intelligent mobile body with another free arm to augment its task! Technology now allows you to be physically moved by another mind. A computer interfaced MULTIPLE-MUSCLE STIMULATOR makes possible the complex programming of either in a local place or in a remote location. Part of your body would be moving; you've neither willed it to move, nor are you internally contracting your muscles to produce that movement. The issue would not be to automate a body's movement but rather the system would enable the displacement of a physical action from one body to another body in another place —for the on-line completion of a real-time task or the conditioning of a transmitted skill. There would be new interactive possibilities between bodies. A touch-screen interface would allow programming by *pressing* the muscle sites on the computer model and/or by retrieving and *pasting* from a library of gestures. Simulation of the movement can be examined before transmission and actuation. THE REMOTELY ACTUATED BODY WOULD BE SPLIT —on the one side voltage directed to the muscles via stimulator pads for involuntary movement— on the other side electrodes pick up internal signals, allowing the body to be interfaced to a Third Hand and other peripheral devices. THE BODY BECOMES A SITE BOTH FOR INPUT AND OUTPUT.

17. PSYCHO/CYBER: THE PSYCHOBODY is neither robust nor reliable. Its genetic code produces a body that malfunctions often and fatigues quickly, allowing only slim survival parameters and limiting its longevity. Its carbon/ chemistry GENERATES OUTMODED EMOTIONS. *The Psychobody is schizophrenic.* THE CYBERBODY is not a subject, but an object—not an object of envy but an object for engineering. THE Cyberbody bristles with electrodes and antennae, amplifying its capabilities and projecting its presence to remote locations and into virtual spaces. The Cyberbody becomes an extended system— not merely to sustain a self, but to enhance operation and initiate alternate intelligent systems.

18. HYBRID HUMAN-MACHINE SYSTEMS. The problem with space travel is no longer with the precision and reliability of technology but with the vulnerability and durability of the human body. In fact, it is now time to REDESIGN HUMANS, TO MAKE THEM MORE COMPATIBLE WITH THEIR MACHINES. It is not merely a matter of "mechanizing" the body. It becomes apparent that in the zero-G, frictionless, and oxygen-free environment of outer space technology is even more durable and functions more efficiently than on Earth. It is the human component that has to be sustained and also/ protected from small changes of pressure, temperature, and radiation. The issue is HOW TO MAINTAIN HUMAN PERFORMANCE OVER EXTENDED PERIODS OF TIME. *Symbiotic systems* seem the best strategy; implanted components can energize and amplify developments; exoskeletons can power the body; robotic structures can become hosts for a body insert.

19. INTERNAL/INVISIBLE: It is time to recolonise the body with MICROMINIATURIZED ROBOTS to augment our bacterial population, to assist our immunological system and to monitor the capillary and internal tracts of the body. There is a necessity for the body to possess an INTERNAL SURVEILLANCE SYSTEM. Symptoms surface too late! The internal environment of the body would to a large extent contour the microbot's behaviour, thereby triggering particular tasks. Temperature, blood chemistry, the softness or hardness of tissue, and the presence of obstacles in tracts could all be primary indications of problems that would signal the microbots into action. *The biocompatibility of technology is no longer due to its substance but rather to its scale.* THE SPECK-SIZED ROBOTS ARE EASILY SWALLOWED, AND MAY NOT EVEN BE SENSED! At some nanotechnology level machines will inhabit cellular spaces and manipulate molecular structures…. The trauma of repairing damaged bodies or even of redesigning bodies would be eliminated by a colony of nanobots delicately altering the body's architecture atoms-up, inside out.

20. TOWARD HIGH-FIDELITY ILLUSION: With teleoperation systems, it is possible to project human presence and perform physical actions in remote and extraterrestrial locations. A single operator could direct a colony of robots in different locations simultaneously or scattered human experts might collectively control a particular surrogate robot. Teleoperation systems would have to be more than hand-eye mechanisms. They would have to create kinaesthetic feel, providing, sensations of orientation, motion, and body tension. Robots would have to be semi-autonomous, capable of "intelligent disobedience." With *Teleautomation* Conway/Voz/Walker), forward simulation—with time and position clutches—assists in overcoming the problem of real time-delays, allowing prediction to improve performance. The experience of Telepresence (Minsky) becomes the high-fidelity illusion of *Tele-existence* (Tachi). ELECTRONIC SPACE BECOMES A MEDIUM OF ACTION RATHER THAN INFORMATION. It meshes the body with its machines in ever increasing complexity and interactiveness. The body's form is enhanced and its functions are extended. ITS PERFORMANCE PARAMETERS ARE LIMITED NEITHER BY ITS PHYSIOLOGY NOR BY THE LOCAL SPACE IT OCCUPIES.

21. PHANTOM LIMB/VIRTUAL ARM: Amputees often experience a phantom limb. It is now possible to have a phantom sensation of an additional arm —a virtual arm—albeit visual rather than visceral. The Virtual Arm is a computer generated, human-like universal manipulator interactively controlled by VPL Virtual Reality equipment. Using data gloves with flexion and position orientation sensors and a GESTURE-BASED COMMAND LANGUAGE allows real-time intuitive operation and additional extended capabilities. Functions are mapped to finger gestures, with parameters for each function, allowing elaboration. Some of the Virtual Arm's extended capabilities include *stretching* or telescoping of limb and finger segments, *grafting* of extra hands on the arm, and *cloning* or calling up an extra arm. The *record and playback* function allows the sampling and looping of motion sequences. A *clutch* command enables the operator to freeze the arm, disengaging the simulating hand. For teleoperation systems, features such as *locking* allow the fixing of the limb in position for PRECISE OPERATION WITH THE HAND. In *micro mode* complex commands can be generated with a single gesture, and in *fine control* delicate tasks can be completed by THE TRANSFORMATION OF LARGE OPERATOR MOVEMENTS TO SMALL MOVEMENTS OF THE VIRTUAL ARM.

22. IMAGES AS OPERATIONAL AGENTS: Plugged into Virtual Reality technology, physical bodies are transduced into phantom entities capable of performing within data and digital spaces. The nature of both bodies and images has been significantly altered. IMAGES ARE NO LONGER ILLUSORY WHEN THEY BECOME INTERACTIVE. In fact, interactive images become operational and effective agents sustained in software and transmission systems. The body's representation becomes capable of response as images become imbued with intelligence. Sensors and trackers on the body make it a capture system for its image. The body is coupled to mobilize its phantom. A virtual or Phantom Body can be endowed with semiautonomous abilities, enhanced functions, and artificial intelligence. Phantoms can manipulate data and perform with other phantoms in Cyberspace. PHYSICAL BODIES HAVE ORGANS. PHANTOM BODIES ARE HOLLOW. Physical bodies are ponderous and particular. Phantom bodies are flexible and fluid. Phantoms project and power the body.

23. VIRTUAL BODY: ACTUATE/ROTATE: Your virtual surrogate would not merely mimic the physical body's movements. A complex choreography is achieved by mapping virtual camera views to limb position/orientation. The involuntary jerking up and down of the left arm tumbles the virtual body while sweeping the right arm 90° produces a 360° virtual

camera scan—visually rotating the virtual body around its vertical axis. The form of the virtual body can be configured acoustically—pulsing in phases with breathing sounds. This BREATH WARPING subtly and structurally connects the physical body with its virtual other. And by using DEPTH CUE— defining the operational virtual space as shallow — stepping and swaying forwards and backwards makes the virtual body appear and disappear in its video/virtual environment. The resulting/ interaction between the physical body and its phantom form becomes a more complex combination of kinaesthetic and kinematic choreography. In recent performances the *involuntary body* is actuating a *virtual body* while simultaneously avoiding a *programmed robot* within its task envelope…

24. PHANTOM BODY/FLUID SELF: Technologies are becoming better life support systems for our images than for our bodies. IMAGES ARE IMMORTAL. BODIES ARE EPHEMERAL The body finds it increasingly difficult to match the expectations of its images. In the realm of multiplying and morphing images, the physical body's impotence is apparent. THE BODY NOW PERFORMS BEST AS ITS IMAGE. Virtual Reality technology allows a transgression of boundaries between male/female, human/machine, time/space. The self becomes situated beyond the skin. This is not disconnecting or a splitting but an EXTRUDING OF AWARENESS. What it means to be human is no longer being immersed in genetic memory but in being reconfigured in the electromagnetic field of the circuit IN THE REALM OF THE IMAGE.

25. ARTIFICIAL INTELLIGENCE /ALTERNATE EXISTENCE: The first signs of artificial life may well come from this planet in the guise of images. ARTIFICIAL INTELLIGENCE WILL NO LONGER MEAN EXPERT SYSTEMS OPERATING WITHIN SPECIFIC TASK DOMAINS. Electronic space generates intelligent and autonomous images that extend and enhance the body's operational parameters beyond its mere physiology and the local space it occupies. What results is a meshing of the body with its images and machines in ever-increasing complexity. The significance of interfacing with is that they culminate in an ALTERNATE AWARENESS THAT IS PAN-HISTORIC AND POST-HUMAN.

Author Bio

Stelarc has visually probed, acoustically amplified and extended his body. He incorporates medical imaging, biotechnology, prosthetics, exoskeletons, robotics and VR. His projects explore the physical parameters of the body and alternative anatomical architectures with attachments and implants, interrogating issues of embodiment, aliveness, agency and identity at a time of machinic proliferation. He has presented and performed extensively in Europe, the USA, Mexico South America, Asia and Australia. In 1997 he was designated Honorary Professor in Art and Robotics at Carnegie Mellon University, Pittsburgh. In 2010 he was awarded the Ars Electronica Golden Nica Hybrid Arts Prize. In 2015 he received the Australia Council's Emerging and Experimental Arts Award. In 2016 he was awarded an Honorary Doctorate from the Ionian University, Corfu. In 2023 he was awarded an Honorary Doctorate from the Academy of Fine Arts, Krakow. In 2025 he was awarded Honorary Doctorates from the University of the Aegean, Mytilene and from the Athens School of Fine Arts. www.stelarc.org

Choreographing Coexistence – A Laboratory of Political Awakening[i]

Jean-Marc Matos

Abstract

Choreographing Coexistence – A Laboratory of Political Awakening explores how choreography, dance, and embodied practices can open new pathways for political and ethical imagination in an era dominated by algorithmic systems, artificial intelligence, and ecological fragility. This paper positions dance not as a form of representation but as an epistemological and ontological practice—a way of thinking, sensing, and existing in relation. Through a constellation of philosophical references (Barad, Chatonsky, Snyder, Del Val), personal artistic practice, and reflections from projects developed within K. Danse, it argues that choreography constitutes a living laboratory in which new modalities of coexistence between human, non-human, and technological agents can be rehearsed, felt, and reconfigured.

The paper critically addresses the rise of algorithmic governance and what Grégory Chatonsky calls *vectofascism* (Chatonsky *"What is Vectofascism?"*)—forms of power that operate through prediction, normalization, and desire modulation rather than overt repression. In response, the paper proposes an aesthetic and political practice rooted in embodied vulnerability, failure, and unpredictability. Drawing from posthumanist and quantum ontologies, it maintains that meaning does not emerge from isolated individuals but from relations, rhythms, and intra-actions. Dance becomes a method for reclaiming uncertainty, expanding perception, and resisting the commodification and optimization of life.

The body is approached not as a stable identity but as a living, relational field—an organism of metamorphosis. Influenced by Jaym* del Val's radical *metahumanist* critique, the paper challenges both transhumanist fantasies of perfection and anthropocentric hierarchies, arguing instead for an understanding of the body as a process of continual becoming—unstable, porous, and fully embedded within ecological and technological systems. In this framework, intelligence is distributed—not solely human nor artificial, but emergent from interdependence, micro perception, and shared vulnerability.

Keywords: Choreography, Coexistence, Political Awakening, Care, Fragility, Excentration.

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Part I - Introduction: Dance in times of Vectofascism

We live in a time when technology and politics are no longer separate territories but intertwined forces, shaping each other continuously. Algorithms do not merely calculate; they modulate attention, affect, and desire. They anticipate our movements, not only in the physical sense but in the realm of imagination—what we think, what we want, what we fear. Artificial intelligence has ceased to be a mere external instrument; it has become a new agent of choreography, participating—whether consciously or not—in the movement of bodies and societies.

In such a landscape, dance becomes more than performance: it becomes a laboratory for relational existence, a space where bodies, machines, and environments negotiate their ways of being together.

To choreograph today is to move within architectures we do not see—data infrastructures, predictive models, invisible surveillance. Every gesture leaves a trace in the digital sediment of our world. Yet within this pervasive abstraction, dance insists on the tangible, the trembling, the breath. It reclaims the body as an unpredictable field of relations that resists full translation into code. It insists that life is not reducible to information. Here, choreography is not only an aesthetic practice but an ontological proposition: it asks how we can inhabit the world differently, how we can resist the reduction of existence to efficiency and surveillance.

Grégory Chatonsky calls this pervasive system *vectofascism*: a form of power based not on explicit violence, but on the seduction of convenience, personalization, and flow. Control seeps softly through interfaces; domination is replaced by predictive care. Under such conditions, resistance cannot rely only on slogans or manifestos—it must be felt, embodied, and rehearsed. Dance becomes an act of civil disobedience performed through flesh. The smallest deviation—a pause, a tremor, a fall—becomes a gesture of freedom against the tyranny of smoothness.

This is why error, failure, and uncertainty are central to my artistic practice. They form the cracks through which freedom breathes. In works such as *F_AI_L*, *Myselves*, or *Eternity*, I do not treat artificial intelligence as a sovereign entity or as a perfect mirror of human capacity. Instead, I approach it as an unstable partner, capable of misunderstanding, mistranslation, and poetic misalignment. When an AI fails to recognize a body or misinterprets a movement, a new relational space emerges—neither human nor machinic, but metahuman: a shared field of becoming, where identity is no longer fixed but relational and transient.

This idea of the body as a process, not an object, resonates deeply with quantum thought and with the philosophy of Karen Barad (*Meeting the Universe Halfway*). Being is not the property of isolated entities; it is produced in *intra-action*, in the constant co-emergence of bodies, environments, and technologies.

A movement is never singular. It exists only because gravity, breath, attention, and atmospheric pressure collaborate to make it possible. The body is not a closed system but an ecosystem of relations, an unstable constellation of forces perpetually negotiating balance. In this sense, choreography is not imposed upon the body; it emerges from the ongoing conversation between the body and the world.

The ritual dimension of dance is important here—not as nostalgia for a past, but as a structure that holds space for transformation. In many of my participatory performances (see specially the *RCO* performance), the audience is not merely watching but moving, entering the ritual. Gestures circulate, bodies resonate, decisions are shared. Technology becomes part of this ritual apparatus—sensors, cameras, projections—but not to dominate. Rather, it listens.

It misinterprets. It reveals. The performance becomes a living organism in which agency is distributed: no single body, human or machine, controls the outcome.

This is also why I often speak of *eutopia* rather than utopia. Not the perfect world, but the good world—the world in process, where harmony is not imposed but continually negotiated. Dance offers a model of this possible world: fragile, precarious, but alive. A dancer on stage is always in danger of falling; it is this constant proximity to imbalance that gives meaning to movement. Coexistence works the same way—it is not stability but the art of falling together without collapsing.

The body, in this light, becomes a site of political awakening. Not through slogans or declarations, but through its capacity to feel, to relate, to be affected. Every movement asks a silent question: How can I be here, with others, without dominating? How can I exist without closing myself off from what is not me? This is where choreography becomes ethics. This is where dance becomes a way of thinking—not with concepts, but with skin, with weight, with silence.

It is here, in this fragile field of relation, that the metahuman begins—not as a superior version of the human, but as the dissolution of its rigid borders. Not a flight into transcendence, but a dive into entanglement. The metahuman is not the posthuman fantasy of invincibility; it is the recognition that identity is movement, not monument. In every rehearsal, in every improvisation, we practice this truth: we are not fixed beings. We are choreographies.

Metahumanism and the Dissolution of the Stable Body – Resonances with Jaime del Val

To speak of coexistence today requires that we confront not only the transformations brought by artificial intelligence and algorithmic control, but also the very idea of what a human body is—and whether the notion of a stable, clearly defined "human" still serves us. In this sense, my approach to choreography resonates deeply with the radical critique developed by Jaym*/Jaime del Val, whose metahumanist philosophy rejects both the transcendental ambitions of transhumanism and the passive optimism sometimes present in posthumanism. Del Val insists that the future is not about surpassing the human through technological enhancement, but about dissolving the idea of the human as a fixed, centralized, hierarchical entity *(Ontohackers, Part 2)*.

Transhumanism imagines bodies freed from vulnerability—uploaded consciousness, mechanized immortality, frictionless communication. It celebrates control, mastery, and the erasure of limits. Yet this fantasy conceals a profound violence: it reduces life to information, embodiment to data, and the world to a platform for optimized performance. This dream mirrors the logic of a society governed by predictive algorithms, where error is treated as a flaw to be eliminated rather than a space for invention. What I call the choreographic body stands in direct opposition to such narratives. It speaks through tremors, fatigue, imbalance, and sweat. It refuses to disappear.

Del Val's metahumanism proposes an alternative: the body not as a machine to perfect or a vessel to transcend, but as a *field of microperceptions*—unstable, shifting, in continuous metamorphosis (*Ontohackers, Part 1*). This is what Del Val describes as *metahuman becoming*: identity as a fluid, vibrating surface rather than a static core. The body is not an object but a process. It is experienced from within as movement before it is ever seen from outside as form. There is no final human to defend or improve—only relational intensities unfolding in time.

In addition, I see one striking concept, *anti-faciality*: a refusal of the face as the dominant organ of identity, representation, and social control. The face is what surveillance systems recognize; it is where power seeks to locate individuality for classification. In much of my choreographic work, the body is fragmented, multiplied, obscured: cameras distort it, AI misinterprets it, projections stretch it across walls and floors. The face ceases to be the centre of meaning. Movement migrates to the back, the breath, the trembling of a shoulder, the vibration of a knee. In that displacement, a new form of perception appears—what Del Val would maybe call a *metahuman sensorium.*

This perspective does not reject technology; it repositions it. Technology becomes a medium that can destabilize identity rather than reinforce it. In performances such as *F_AI_L* or *Myselves*, AI does not serve as a mirror of human perfection, but as a mirror of misunderstanding. Its errors are fertile. When a system fails to recognize a gesture or misreads a human form, the choreography does not collapse—it begins. A new relation arises in the gap between expectation and interpretation. The machine, like the body, becomes porous, vulnerable, uncertain.

Metahumanism, therefore aligns with my insistence that dance is not about expressing a pre-existing self, but about composing oneself in relation—human, digital, ecological. The metahuman body is an *ecological body*: it does not end at the skin. It includes the rhythm of a crowd, the latency of a sensor, the humidity of the air, and the pressure of time. It is transindividual, trans-sensorial, trans-material. And because it is constantly dissolving and reconfiguring itself, its ethics is not that of purity or perfection, but of care, negotiation, and attentiveness.

This is where metahumanism meets choreography as a political act. To choreograph is to create the conditions within which bodies may transform without being destroyed. It is to allow identity to loosen—not into chaos, but into relation. It is to say that existence does not require dominance to have meaning; it requires connection. Against the transhuman fantasy of invulnerability, choreography and metahuman philosophy both affirm vulnerability as the source of invention. Against the cult of the face, they affirm the intelligence of the skin, the foot, the peripheral, the unseen.

To choreograph coexistence from a metahuman perspective is not to design perfect harmony. It is to engage with the tensions, asymmetries, and fractures of being-together. It is to accept that coexistence is not a definitive state, but a continuous practice—like breath, like balance, like life itself. In this way, metahumanism does not weaken the body; it multiplies it. It opens it toward other bodies, other agencies, other forms of life and non-life. It refuses to ask what the human is, and instead asks: *with whom, and how, do we become?*

Part II – Care, Error, and the Politics of Shared Fragility

The 21st century teaches us that power now resides in invisible networks—financial systems, data flows, predictive algorithms. These are no longer external machines; they are woven into our gestures, decisions, and desires. Yet it would be naive to declare technology an enemy. Technology is not a monolith; it is a field of potential—capable of surveillance or of emancipation, depending on how it is choreographed into life.

The pandemic, ecological collapse, and algorithmic governance have exposed the illusion of independence. Nobody survives alone. Timothy Snyder reminds us that *freedom is not the absence of constraints but the presence of supporting structures (Snyder, On Freedom)* an echo of the stage, where balance is only possible because weight is shared. This is why I insist: choreography is not merely spatial organization, but an ethics of coexistence. It proposes that survival is relational, that care is not sentimental but structural.

Care is resistance to abstraction. In a world that measures value through productivity and visibility, care operates in hidden gestures: the hand that lifts another, the breath held in unison, the silent waiting. Dance trains us in this ethics—because a duet is only possible when one body listens to the other. Care is not softness; it is risk. It demands that we stay vulnerable in a world that worships invulnerability.

Technology can either reinforce isolation or amplify empathy. The question is not whether machines think like us, but whether we are willing to *feel with them.* In my work, AI does not replace the human; it challenges it, fragments it, multiplies it. The machine's failure to perfectly recognize the body becomes an invitation to rethink recognition itself. What if understanding does not require accuracy, but attention? What if care includes listening to the machine's error?

Here, Del Val's metahumanism becomes essential. They warn that both transhumanism and certain forms of posthumanism risk repeating the same trap: the desire to escape the body, to freeze identity into data, to transform life into a replicable template. Against this, del Val argues for a *metahuman condition*—a state in which the body is understood as movement, not object; as micro perception, not spectacle; as process, not identity.

This is not far from the rehearsal studio. In a rehearsal, no movement is final. Every sequence is provisional, porous, open to change. There is no perfect version—only the version that exists in relation to the moment. I see the metahuman in the dancer's trembling knee, in the breath that catches, in the foot that touches the floor just a fraction too late. These are not mistakes; they are beginnings. They rupture the illusion of control and open space for relation.

In participatory installations and performances, I often invite the audience to move, to touch, to be seen—not as spectators but as co-composers. The choreography becomes a temporary society, fragile but real. Here, the politics of care are not spoken; they are danced. No one dominates the rhythm. Nobody is erased. Imperfection becomes the architecture of connection.

Failure, in this context, is not the opposite of success; it is the condition of a relationship. To fail together is to discover that existence is not a solitary act. Every balance begins as a fall. Every harmony begins as noise. Every community begins as an unknown movement toward another.

Part III – Quantum Relationality, Excentration, and the Ethics of Incompletion

Modern science speaks in a language that dance has always known: that nothing exists independently. Quantum physics tells us that particles are not things, but relationships. Karen Barad calls this *intra-action*—a world in which entities do not precede their relations but emerge through them. In choreography, this is not theory but daily practice. A step is not mine until the floor answers it. Perception does not belong to one body; it travels between bodies, screens, machines, and memories.

This dissolves the idea of the self as a stable centre. Grégory Chatonsky uses the term *excentration (Chatonksy, La double finitude*): to exist is to be already outside oneself, shared among images, data, histories. We are never only here. We are also in the memory of those who saw us, in the algorithm that tracks us, in the echo of our voice in someone else's body. Dance embraces this dispersion—not to erase the self, but to multiply it. The stage becomes a prism that breaks the singular body into a spectrum of possible selves.

Yet this fragmentation is often met with fear. Transhumanism tries to conquer it by promising control: a perfected body, a stabilized identity, a mind uploaded to silicon. But metahumanism—and choreography—answer differently: ***identity is not lost in movement; identity*** *is* ***movement.*** We do not need to escape the body; we need to learn to inhabit it more subtly, more openly, more relationally.

Louise Bourgeois once said, *"Space does not exist; it is only a metaphor for the structure of our relationships." (*Bourgeois, *Destruction of the Father*, 220*)* I believe the same of choreography. The stage is not a place; it is a conversation. Space is not neutral; it is sculpted by attention, gaze, pressure, and code. Just as in quantum physics, where observation changes what is observed, in dance, presence changes what is possible.

Reality, as Holly Childs (Childs & Žygus, *Hydrangea)*, suggests, is the most resilient fiction we share. But fiction is not deception—it is creation. Each performance writes a world, even if only for an hour. This is why art is political—not because it gives answers, but because it expands the spectrum of possible futures.

In this world of collapsing certainties, I do not propose utopia. I propose ***eutopia***—the good place, the place of careful becoming. A place always unfinished, always vulnerable. A choreography.

Ultimately, *Choreographing Coexistence* presents dance as a fragile yet essential site of political awakening. It is a place where freedom is not defined as independence but as responsiveness to others; where care becomes an architectural principle; where ritual, error, and collective improvisation perform alternative futures. Rather than offering utopian closure, the essay proposes a eutopian ethics—an ethics of the "good place" that is necessarily unfinished, imperfect, and yet profoundly necessary. Coexistence is choreographed not in abstract ideals, but through the trembling of bodies, the unpredictability of relations, and the continuous rehearsal of being together in an uncertain world.

And so I return to the beginning: to coexist is not to agree; it is to move together without erasing difference. It is to accept that we are not complete. That identity is porous. That technology is not destiny. That bodies think. That machines can feel—if we let them fail. That the future is not a program to execute, but a rhythm to inhabit.

To choreograph coexistence is to affirm this:
We are not monuments. We are movements.
Not answers, but rehearsals.
Not isolated beings—but entangled, trembling, metahuman lives

Author Bio

Jean-Marc Matos is a dancer, choreographer, and artistic director of the K. Danse Company, is dedicated to bridging two worlds: the physical realm of expressive dance and the digital realm of virtualization through imagery, sound, interactive scenography, robotics, virtual reality, telepresence, and AI. Trained at the Cunningham Studio in New York, he has created nearly fifty choreographies performed in France and worldwide. He has also collaborated on various euroregional and European projects such as Dis-TDance, Ada ArtEina, Metabody, WholoDance, Bodynet-Khorós 2022-2025, and CSGO 2024-2026.

Notes

[i]An extension to this paper will be available in https://www.k-danse.net/en/portfolio/textes-theoriques/ including lists of examples of related artworks and other resources.

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- *MYSELVES*. Dance and Pre-AI project
- *FAIL*. Dance and AI project exploring technological failure and dance.
- *ETERNITY*. Project investigating immortality, embodied epistemology, and temporality.
- *RCO (Radical Choreographic Object)*. Project involving audience participation.

Moving beyond the human in Mad language

Lake Angela

Abstract

Other ways of languaging are valuable and effective beyond human verbal languages. I will discuss in particular a method of translation from dance to poetry developed since my work with intersemiotics has focused on neurominority and Mad expression. Anthropocentric Western culture outcasts neurominority thinkers, forcibly incarcerating the schizophrenia-spectrum population in a way that parallels the exclusion of nonhuman beings.

Because those with whom I communicate through intersemiotic translation speak in their own idiolects, outside our collaborative expressions and translations into the preferred human idiom of logic, such Madspeakers are dismissed and oppressed, sometimes physically abused, injected with neuroleptics, and stripped of our rights. The relationship of many of these speakers with nonhuman animals is one of respect and appreciation for nonverbal and emotionally evocative and multiple languages. Many who have been locked away, injected, and dismissed—and create expressions via movement—understand language as multiple, nonverbal, and incantatory with a near-mystical power of animation.

Though pathologized by society as delusional or hallucinatory, those who receive visions often understand themselves to be more than one being, including the bacterial cloud speaking nonverbally within, and identify as nonhuman or more than human beings. Some examples of poetry translated from dance movement as a primary language and its inclusion of nonhuman participation will come from my nonfiction poetry collection *Scivias Choreomaniae*, with the aim of showing the necessity and benefits of learning from Mad processes to change the human mindset.

Keywords: Mad poetry, dance language, intersemiotic translation, nonverbal language, nonhuman language, schizophrenia-spectrum creativity.

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In the medieval context that intertwines with the present and future prophecies in the nonfiction poetry collection *Scivias Choreomaniae*, the Mad speaker and patients with whom she communicates in dance and gesture are respected as mystics and seers, as worthwhile speakers in nonverbal idiolects that are not restricted to human ways of language. However, anytime the nonfiction records in verse return us to the present in which those same speakers are locked in enclosures, longing to touch the grass just once more, the current context is overtly exposed as one of abuse toward those considered less than human. Through true storytelling in the individual nonverbal idioms of gestural expression and dance translated into an a-logical or Mad poetry, I intend to continue to expose the systemic abuses against all whose preferred or native language is nonverbal. Further, in expressing meanings translated from motive and emotive nonverbal languages, we contribute to the work of subverting the current and continuing Western misogynistic prejudice against Mad or associative thinkers as subhuman beings by reversing the labels applied to us with prejudice. Instead, we uplift the more-than-human identities as genuine ways of creativity, like Hildegard of Bingen in an era when Madness meant access to divine truths and being "a lowly worm or woman" was the most enduring compliment, among the kindest and fullest ways of being in the world.

In *Scivias Choreomaniae*, I document my time spent as a Mad dance therapist for others with psychiatric diagnoses in a rural state hospital in the United States. The true history of the hospital, and of many comparable institutions in the United States, is easily accessible, not only by searching public records, but obviously so upon stepping inside the asylum today. The following poem unfolds a brief overview of the particular institutional setting since the time of its founding to the present:

The Tunnels

Shackles hang slack
in the subterranean damp
where the noncompliant
patients once were kept.

Iron bands caressed raw wrists,
the faceless woman stripped
of life, children, shoestrings when
the husband desired a younger mistress.

Prisoners tried for atrocities
and found guilty of insanity
strained into their irons, the executions
underneath, their resurrections incomplete.

Winter days when corridors crowded
with the poor huddled for heat,
the mad were culled and sent beneath
to limit hangings, not lobotomies.

Above the arctic tunnels the townsfolk
remained in the dark. Irreverent feet
passed over the asylum's sunken heart
where the florid blood of buried lives still seeps.

These grounds are not haunted by ghosts
long forgotten but by men in white coats
who approach the stone altar with diplomas
that disintegrate in dulcifying flames,

no fire-cured experience
of ecstatic visions, no unknowing cloud
of hallowed psychosis.

The subterranean tunnels connecting the hospital buildings still exist from when the hospital held prisoners, disproportionately women, from childhood to the end of life. Both medical professionals and the public agreed: the patients were nonhuman animals in their "brut natures." Therefore, these patients often experienced the kinds of abuse and violence systematically practiced against nonhuman animals, all condoned by the majority, the surrounding neurotypical human community. Although patients are no longer chained underground, they are still periodically restrained in small enclosures with straps around their ankles, arms, torsos, and heads with no outside contact and restrained by unwanted injections of neuroleptic drugs. The patients are domesticated in ways similar to the enslavement of dogs and other nonhuman domesticated animals through punishment of unwanted behaviour, such as speaking with their own authority on their visions, dreams, ideas—or simply asserting their rights at inconvenient times for the hierarchy in control (with mostly male doctors at the pinnacle). I experienced these dynamics over and over again, not only in this hospital, although its enclosures and practices were the worst I have experienced, but also in those institutions in which I have been locked away periodically.

Because their verbal expression differs from the neurotypical, the patients are abused in some of the same ways in which humans typically abuse nonhuman animals. This abuse is perpetrated by those who are upheld as most logical, most masculine, most neurotypical in our context, the male (and the honorary male) medical doctors and the psychologists. In my work as a translator between associative nonverbal languages and verbal language through poetry, I join others who speak nonverbally in languaging. An interesting shift happens when we begin using language that is not the one privileged as the sole domain and property of humans, that is actually beyond the doctors' immediate grasps because the exchange of meaning happens in a nonverbal, motive, and emotive way and happens directly from mind-body to mind-body: the patients begin to appreciate and respect the other nonhumans we have been taught are inferior and under our control. We begin to take pride in the label that was meant as an insult when medical professionals labelled us subhuman and instead begin to derive a certain power from identifying as nonhuman. We appreciate the immediate yet

fluid power of creativity and connection in nonverbal terms. The transformation of the typical cultural narrative starts this way for us, among many other ways:

> The Asylum's Cats
>
> My dead rest in the time of life before the detoxified substance emerges
> from the pillow. Seeps free, exposing the fatal thoughts
> that killed them—fine massicot flakes, soft sugar of lead—behind
> my sleepless eyes. To represent a sequence of my thoughts,
> in order—to demonstrate that they are not disordered—the progressive
> is the only possibility for entering into eternal action. Reaction is all
> many people have to "fall back on." I do not even want to fall back.
> To fall is enough for me. It should be. The unborn are dead dreams,
> and I am daydreaming as A and I dance *The Cat Who Desires to Come in*
> *From the Cold and Drink Some Milk Inside Where It Is Warm*
> *and There Are Those Who Love Her (Us, Because We Are That Cat).*
>
> He sinks to the false-wood floor and drips saliva over his wavering chin
> hairs. I am aware that we roll through his spit on the floor. I do not object
> to that experience. Experience is what interests us, after all—progressive
> tenses, tenses and releases, associations and dissociating. We love and
> are loving. A says he dances the cat because he is the cat, feels sorry
> for the cat all alone, the cold cat, and *because I drool like a cat,*
> *sometimes on myself.* I do not know any cat who drools on himself,
> although I suppose we use our saliva to clean the cruor from our paws.
>
> When we dance, he smiles and his eyes focus, turning toward the filthy
> fluorescent lights like a sunflower staring up through black rain, thick
> with wet moments, for the source of dazzling life. He wears the same
> unnaturally green sweatshirt as yesterday and the day before, a crumb
> from morning snack shining on the shoulder. His eyes become bluer,
> or perhaps just deeper, the longer he smiles. When winter comes,
> he demands the doctors admit the feral cats waiting outside
> the window for remnants of warmth. When the doctors dismiss him
> with placating palms on his shoulders, he hisses, sinking his teeth
> into their soft hands.

Initially, we are punished for reclaiming authority over our own intentions by identifying with other nonhumans and for attempting to offer solace and warmth to others. In this true experience conveyed in nonverbal movement translated to poetry, the dance is nonhierarchical. The impetus for the movement ideas or the initiation of the meaning fluctuates among the moving speakers. At this moment, the patient was leading the dance movement, and A wanted to extend to the cats on the other side of the locked doors the same warmth and nourishment (albeit meager and conditional) the hospital ostensibly was required to give him. Because A conducted himself a-logically, because he spoke in a language other

than logical verbal language, his request was not only denied, but as I show in another poem, all participants in this dance language that excluded the doctors from its "secret" and Mad meanings were punished accordingly. In the poem "The Innocent," a similar event takes place, and "…doctor and techs rush in, inject him with tranquilizers, chastise me/ for inciting so much energy. *This dance is dangerous.…"* After the dancer is restrained and stilled,

> "In the ensuing silence the young man meets
> my gaze. Innocent children gather in his eyes. He caresses his chest
> over the heartache: *There is a tiny animal living here inside me.*
>
> Now that he has found her, he can depend on her—not to haunt
> or hunt him, not to flee in fear, but to hold his head upright.
> While he dances, he can see, and the bantam, from her perch
> protected behind his fervent sternum, is discerning."

It is not only this speaker of a nonverbal, danced idiolect who looks to the meanings expressed by those birds he can observe for hours outside the window—if he refrains from movement himself, and therefore avoids drawing the attention of those who would otherwise still him. In fact, most of the dance-speakers so enclosed attempt to bridge ways of being in and outside the enclosed world. A commonality is that many attempt birdsign as a way of transforming.

> White Noise
>
> You lost your last apostle when you anesthetized me.
> There is no good way out of sleep. We believe the hawk
> holds more mercy in one talon than does the man in his white
> coat who says, *Portray your end of the ghost with the shadow*
> *departed.* That is how you know you have survived—
> the shadow leaves you. And though you may dig endlessly
> through the body parts of the dead for your phantom limb,
> that is not your way. Speak to the foliage bowed to the other
> broken birds, their beaks sutured shut in the underbrush.

The birds—and in particular the hawks who sweep over this particular geographic area, always present and appearing to escort me along the wires on the way to work at the state hospital—influence the ways of movement and nonverbal dialogues among the patients dancing together. At a basic level, we avoid the lines drawn by sharps like those used to inject tranquilizers; there is nowhere to go if one walks in a line; the corridors end in triple sets of locked doors that only the linear doctors can pass through, and continue where thought falls flat and ends. For the nonhuman patients, even pacing must be done in circles or creative shapes and patterns. It is therefore comforting to know that this circular way in which every action affects others is a pattern shared with those who fly outside:

> Circling

The hawks watch and know. Circles are successful.

More types of punishments are carried out against those inside the enclosure who practice thinking-in-motion, movement as transformation. Additional kinds of vengeance are exemplified in the following poem, and it becomes clear that a major source of punishment is denying access to the nonverbal way of communicating in which many of the exiled and abused find a source of mutual meaning-making and solidarity:

Restraint

Opaque rooms fall in line behind four pairs of metal doors
and twice the number of locks and keys. From the stale gray
cloud appears the imposing iron chair with weighted leather
straps for head, neck, wrists, waist, ankles, and two solitary feet.

The ground is graced with scuffs from shoes, laces removed,
scarlet nail polish scabs left by strangled bare toes thrashing
after the grass they will never again feel, no trace of the feet
swaddled in sticky-soled socks all hospitals issue except
the rancid scent of fear steeped in breathless acrylic sweat.

The silence is a grey smoke; the camera obscures your face.
In the room with padded, grey walls, any restraint is for your
safety. Still it seems that punishment is devoid of movement,
is, in fact, the lack thereof—the promise of perpetual stillness.

Despite the threat of the total lack of autonomy when restrained, enclosed, and limited by neuroleptic drugging, many continued to try to assert our ideas, needs, and desires, especially the desire to create, in a way that conveys agency through nonverbal idiolects and extends the invitation to join to other human-nonhuman and nonverbal speakers.

The following is an example of the way some patient collaborators and I progressed our (still experimental) methods for translating from nonverbal languages to the verbal language of poetry. Such applications of intersemiotic translation can be especially useful for those whose aphasia "limits" them to nonverbal expression in a place where those holding the authority over even the most basic needs limit speech to logical verbal (and in fact, English only) language. By moving together for several months, R and I began to comprehend physically and emotionally each other's nonverbal meanings, and we created multiple poems from our danced exchanges. The following is an important expression for us because R was confined to a multiply locked and restrictive enclosure indefinitely, most likely for his nonhuman identification and ways of expressing himself that seem illogical, crazy, and therefore dangerous in our social context.

Stomach, God, Glove, and Fruit

R delivers another urgent message:
The clowns want you to go home-y. Home-y is a place for the clowns.
The wolves want you to go home; home is a place that is real; the wolves
are in God, and the wolves come from God.
When we are alone, he confides:
When we dance with both feet on the ground, we can read the wind
we would sense through thick fur were we allowed outside.
He is another visionary in whom no one stakes faith. Together we are
wolves. We move our paws to feel the breeze and learn from its songs
the ways to move. Sometimes, his words transform to salad
the doctors want to discard as rotten, but the leaves
are nourishing to us. He trusts he can reveal, *I see between*
the lines between the lines between the lines,
and I am telling you.
I tell him, *I also believe in this between-between; in between*
is where I become.
He nods, *Oh, yes, I saw you dancing there.*
We recognize ourselves, and he makes a painting of my movements
he calls *Stomach, God, Glove, and Fruit.*
In the floating stomach glows a fruit. The fruit grows its own tree
from the inside out. God reaches in and twists that tree with a glove.
I too find it painful. I don't want the God-gloved hand to grip
my growing tree and twist it again in His violent fist.
To combat this, we decide upon open palms.
Open the palm and the eye opens.
This is the way of the wolves.

This poem transcription of our danced meanings clearly relies on the time and space "in between," the fluctuating time space that makes possible transformation as well as translation. How do we do this? We undermine the context that suppresses us and speak from beneath or between. Contrary to common logic and one of the biggest arguments that places humans (white men) above all others (especially nonhuman beings), meaning is not verbal or logical. It is a critical mistake to believe meaning is verbal or even logical—first we feel something, and then we try to quantify, conceptualize it, touch it, and only afterward, to say it. First, meaning is emotional and a-logical. We feel it, and then we think it, and only later try to say it so that our meanings can be shared and thereby confirmed to us by others who use the socially condoned verbal language ruled by logic. We use verbal language to communicate this series of movements from feeling to re-cognizing, but so many steps happen first that we deny or ignore on the way to this verbally expressed and often highly inaccurate translation to verbal language. As a result, the final logical phrases conceptualize so little of the first feelings and their associative meanings. This logic-first way of communication makes meanings mean less; we sacrifice the meaning of "feeling" for feeling less alone in experience toward a preconceived idea of our "selves" as singular, masculine, human, and unchanging.

Remnants exist in our verbal languages from a time when languages like dance were upheld as meaning-making, before strict dichotomies aligned dance with body, body with woman, and woman with nonhuman animal, nonhuman animal with lack of inherent meaning or worth. (Similarly, the idea of performance was degraded to representation rather than transformative movement.) Consider that the term "gut feeling" or "to have a gut feeling" means that the gut bacteria have recognized a pattern, an answer, an idea, or so forth, before the host organism has recognized the information. The host organism, when human, calls themselves singular, rejecting or denying the impact of any number of bacterial influences, parasitic influences, and other bodies with the power to exert authority over the emotive and cognitive thinking of the human. The collective knows and reveals knowledge and thinking in process long before the so-called singular or individual human recognizes and transcribes the information into the human logic that limits potential meanings and finalizes or stagnates the resulting idea. The human host is not a generous or even good host, resisting and killing those who would participate in transformative ways of thinking and being in the world together.

Furthermore, humans as a social group continue to employ tactics and force that keep "less human" humans from making such changes. It is easier than listening and then actually effecting change to simply dismiss this writing, for example, as the work of a mad person, and not just a Mad person, but a madwoman: a nonhuman. Psychiatry is just one among many androcentric, patriarchal tools employed for the continued oppression of various minorities, whether socioeconomic, racial, religious, nonhuman, and so on. Like other neurominorities, those who receive and pass on visions are outside the acceptable classes. Yet, anybody who can think away from the typical logic is bound to be a neurominority in some ways, among those who can insist on making changes, on initiating transformations. As can be experienced in intersemiotic translations, human creatures also have languages in common with nonhuman creatures, which endangers the rights humans fashion to be used exclusively for the gain and protection of humans, those who can call themselves white men. I and fellow Mad creators from nonverbal to verbal languages envision the need to continue to develop intersemiotic communications beyond human to human use and hope that these examples of nonverbal idioms translated into poetry are examples of the beginning of such a process.

Likely those who are now remembered or even revered among humans for breaking open old thought patterns and releasing new paradigms have some ways of neuro-different thinking, as has at times been successful in freeing neurotypical thought from its preferred stagnant patterns. Logical thought loves certainty, and neuro-different people *have* to live in uncertainty. It may never feel comfortable, but we practice living in it; we largely live in a society built by neurotypical humans for neurotypical humans. As Keats famously suggested, uncertainty is the best condition for poetry. However, the Western human worship of King Logos expressly denounces all things changing, in transformation, in between, existing outside the one male godlike bodiless "body" enduring forever, "in the (endless) end as in the beginning," with no trace of uncertainty. Anyone who is able to shift the fatal human paradigm is outcast in some, but more likely several, ways. Some are easier than others to remember posthumously in a way that "neuro-washes" any differences that cast them outside in life, or at least "outside enough"—at minimum just Mad enough or just autistic or otherwise neuro-different and nonhuman enough—to have been able to pierce through the

accepted veil of logical order and expose the uncomfortable experience of creative or transformative uncertainty while living. This must be especially true of those underwriting it all—nonhuman benefactors and creators, the bacterial cloud, the cockroach, all manner of mycelia, fungi, and herbs, tardigrades, and on and on—.

Among many of those Mad (non)humans with whom I communicate and translate movement into verbal language through poetry, there is often a commonality of specifically religious abuse or trauma. It surprises me that not many more people are immobilized by the indoctrinations made by Western monotheistic religions that infiltrate all our verbal languages with ideas such that the direction "up" is inherently better than "down," white is"purer" than black, and so on. But then, the hierarchical, male-dominated, speciesist religions proclaim pride for those who can stand with immobility: a certain class of men "made in the image" of the God who is unchanging, who is always up on top. Though much of our work in nonverbal language, languages that generously extend to humans and return to those beyond humans, is to seek communication and connection with and in ways of other nonhuman creatures, many of us carry the influence of indoctrination. Therefore, much of the connection with nonhuman ways of languaging is colored by ideas such as that of the religious savior. This is the kind of syncretic languaging translated into poetry that results:

Saviour Hawk

It is a shame to die in the sand,
a mistake to fall in the freezing rain.
One tail is softer than weather.

I love her—the blackness beneath
a bright blossom. Umbrellas bloom
around my relief, prone in the street.

There is one who sweeps effluvium,
unfolds the rope I curled, burns the tubercle
cottage to make my bed of down and rain.

My saviour, hawk, watches me
from her wire.

Eventually, nonhuman identification results in advocacy for our rights as nonhuman beings abused in human systems, as in the following "Hawk Reprise":

Hawk Reprise

Sunrise falters, repeating flickers. Smooth surface catches fire, owls
leap from branches, the vole creates a cavern so deep he may never
emerge. The space seems to collapse upon us and shudders the legs.

The grotto closes and fish smile for the first time. I loosen my suit
and venture one bone out. Air quickly devours it. My hawk continues
to watch over us, repeating herself every few meters. She is perfect

though exposed to freezing memories, though she stands alone
in the open minds. The medical staff who keep me huddle behind
a wall and whisper. Their "sss" and "shhh" sounds carry—

clicks and snake speech reverberate overhead. Who can carry out
corrections, grammatical or physical, from behind a wall? A wall
is not an adequate disguise. I can see through it. I tell them,

You are not the hawk; therefore, you have no feathers, no authority.

As a poetry-dance translator, I hold that our advocacy for Mad (non)human beings should embody the same aesthetic—should extend equally and include our advocacy for all nonhuman beings. At the same time, even so-called human logic should understand the gravity of such facts that trees speak through root systems for far longer than human life spans, mycelium webs carry out complex languaging and even cures through language that humans only dream about in all the narratives about the fall from the ability to use language to create the way our stories say a biblical God once did. Parasites speak to and through us, influencing our decision-making processes and the emotions we believe are ours alone. Not only the Mad are multiple and more than human! Perhaps it should be our first step, since it is so easily within all of our means, to listen to the Voices that the neurotypical humans around us pathologize when we repeat the voices' words as well as nonverbal warnings. The ways the bacterial cloud may cognize in and among us are possible to sense and interpret, to translate. Just as in a much earlier context, medieval women and other mystics (who might now, in this social context, be called Mad) wrote of the cloud of unknowing from a place of mystical unknowing, contemporary neuro-minority thinkers might now dive in to the ways of languaging of the nonhuman speakers among us, supporting us and enduring. The bacterial cloud might very well be the mystical cloud of unknowing for its creative work as a common source of knowing and coming to know that is accessible through all, but which, disastrously, is dismissed under our current Western human worldview.

I'd also encourage those among us who are suppressed as neuro-minorities and nonhumans to embrace the ways of being possible apart from "the human," whether in the style of Hildegard of Bingen, whom I referenced earlier as an example of "a woman and a worm," or in any number of creative new ways. It is becoming apparent again—if only disguised a bit more in other eras—that to be human in the sense of having rights, any measure of autonomy or authority in terms of speaking from unique thoughts or embodied experience or to make decisions for the same body, is to be a man, and more often than not a white man—and to reach the top of the hierarchy, to be a white man with access to and the ability to hoard more resources than he will ever need. Others who align themselves with such men may be considered honorary humans, even if they never will achieve the same respect or license to speak.

Those who are humans now exercise speciesism, sexism, racism, classism, and other forms of discrimination that make it possible to retain power. It is clear, for example, that mental eugenics directed against the insane, the autistic, the neuro-different are alive and well. Researchers continue to attempt to locate genetic markers for autism and schizophrenia, which could very well be on the same "spectrum" if one sees neuro-differences as pathological rather than a simple fact of biodiversity, so that future parents will have the possibility to abort more neuro-minorities in utero, as is already common practice for those with Down syndrome. Neurominorities are not often mentioned when remembering those exterminated by Nazis because these groups, among many other minorities, have long been separate from those called human and largely are not related by bloodlines in the way to which humans often defer when considering a group to be a family or a people. I mention Nazism also, not to overuse an easy example, but because we know Hitler was influenced by the American factory farming system for the mass extermination of nonhuman animals when designing and implementing extermination camps. To be human increasingly seems to mean to harbour and exercise such violence against others. It would be beneficial, then, if those who are most "human" now according to the evolving definition of this title—those who support the power of current fascist authorities—did not plan and simultaneously rush to exterminate all others in their drive toward planetary devastation along with human extinction.

Instead of longing to be human, I urge those among us already on the outside to listen to the multiplicity of lives within and among us—like Mad artists or the medieval visionaries who hear the voices of the bacterial cloud—to language, or to translate, and effect change toward the ways of our fellow other-than-human beings. Perhaps it will be a self-fulfilling prophecy that I prescribe immersion in the cloud of unknowing this way, as the bacteria have influenced me to write this using the chemical languaging they effect on a molecular level—as we too are at once micro- and macrocosms—of worlds languaging within and expressing worlds.

Author Bio

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The Compounding Interest of Kindness[i]

Marcus Ten Low

Abstract

Starting with the groundings of subjective thought, this essay invites readers to discover the significance of kindness: how they will surely have benefited from it, and how it manifests in our world. Readers are encouraged to ask practical questions about kindness to bring to consciousness some more conscientious decisions about how to be kind, on a daily basis. The essay then presents a schematic overview of the major opponents to kindness on a worldwide scale, with issues ranging from the more recognizable problems of capitalism and assumptions of infinite growth, to the overpopulation crisis, to fundamental problems in terms of poor cultural defaults. These issues are discussed with respect to every important paradigm: the ecological, the cultural, the societal, the political, and effects on sentient sufferance.

Next, some realistic case studies are described to test readers to identify problems and possibilities in enacting kindness. The cases here describe various levels of authority and power when kindness is attempted, and how successful each protagonist has been. Some core concepts and themes are then described in the kindness equation; these include "needs versus wants", "the immoral victim", and "active versus passive kindness". The essay concludes with some generalizing remarks and a call to action.

Keywords: Kindness, Worldview, Sufferance, Ecology, Human Species, Breeding.

Introduction: your own experiences of kindness!

If you are anything like me, you will have a very strong emotional memory of when others in your life were extremely kind to you. Please close your eyes and see whether you can remember such an event, or events, very carefully...

Whilst the experience of remembering is going to be different for everybody, there is generally something fundamentally earthy and special about the kindness that you experienced today, yesterday or maybe 10 or 50 or more years ago. You may not really have acknowledged it completely, but it has made you so much of who you are today.

From the very moment we are born, kindness plays an important role in our decision-making. It unites family; it creates and consolidates friendships; it allows us to perform and

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function at school and work; and to a limited extent it is also a driving force in the enactment of human industries. And whilst many, many of those facets of life are not entirely innocent, and many of those industries are deceitful, damaging, or exploitative, there is kindness SOMEWHERE in there. Kindness is essential; it is also commonly UNDERVALUED.

Kindness is not new. Of the 120 billion humans who have ever lived on Earth, a great many of them will have had the ambition to enact great kindness, or to heal and improve the world. Many of these have failed, many have been relatively successful, and some have caused more harm than good. The status quo is that many are suffering and in need of kindness, and it has been so for as long as sentient life has existed. The legacy of kindness is very often uncertain, not least because the mindset of most humans is still very erratic and unreliable.

I believe that the vast majority of people are primarily motivated by self-interest, and being kind to others is relegated to the secondary functions of such people. But I also believe that the more we study kindness and what it entails, the greater will be our tendency to be kind through normal, everyday interactions, and the lesser the chance that we will make mistakes in our kindness efforts for as long as we are able to remain motivated. Random and experimental acts of kindness, done in states of innocence, do hold an important place in this world, but in their nascent forms they have not achieved the highest levels of systemic understanding. For that reason, people who act in such nascent forms are at high risk of never fulfilling their potential to be as kind as they could have been. The kindness of a young child, for example, is not quite the same as the kindness of a large philanthropic project designed to support thousands or millions of people; but each of these levels of kindness has their place either in the human psyche or in societal existence.

The serious approach to enacting kindness

In order to enact kindness with any kind of systematic approach, we need to start looking at the world's status quo. We need to appraise the situations of negative manifestations in the world today, and consider them as a set of enigmatic problems that we are tasked to deal with.

If you would like to be more proactive and original in these considerations, I invite you now to jot down a list of questions about kindness and how to go about it. It is certainly a useful exercise, although I will be mentioning the issues that I have identified in this topic. Here are some example questions:

1. Especially in a society that is highly focused on capitalism and consumerism, money is often regarded as the default or "easy" way for humans to be kind to others. What are the pros and cons of focusing on money as the major form of expressing and enacting kindness? Could there actually be more-creative ways to do it?

2. Although in many situations one is acting "locally" in being kind, how important would you say it is to think "globally" about how your acts will affect all other beings on Earth?

3. What is your opinion on the concept of "self-sacrifice" in the contexts of kindness? How important or unimportant do you believe self-sacrifice is in the current era, or do you rather believe in keeping yourself safe and/or happy as a matter of priority?

Now that I have asked you some initial questions, I am going to state my version of the FACTS...

The greater enormity of unkindnesses in the world today

As a privileged member of the first world, I find it very easy to fall into complacency about the sheer enormity, extent and variety of problems in today's entire world. And as mentioned, almost everyone is primarily focused on helping themselves, hence being objective and universal in one's day-to-day dealings is increasingly difficult.

Whilst it is not within the scope of this essay to explore in detail each of the world's great problems, I will try to describe them and expand upon them where it is most helpful, and advise you, reader, to conduct your own research into any areas that you feel would support you in executing acts of kindness in the area that you are in. Having a general knowledge of the world's problems is, however, extremely important and should not be compromised by over-specialisation.

For the purposes of this essay, I will now provide what I believe is a schematic overview of the major opponents to kindness. I sincerely hope that the following knowledge will help you: both with enacting nascent forms of kindness, and with being mindful of how to enact kindness in a more schematically aware and thoughtful way.

Major opponents of kindness (presented in the most logical order)

Politicization

In the course of human history, politics has almost always had a part to play in societal power structures. However, in many modern-day states, including so-called "democracies",

overzealousness and mutual antagonism are very common because the political system is an ongoing jostle for entitlement to power, social significance, and prestige.

Politics and politicization are not "all bad", and opinions as to how bad they are do differ. The appeal to virility (including economic strength) is a common ploy of many politicians who are excessively money-focused and who believe that enhancing the prosperity of the most esteemed will, at some point, also enhance the prosperity of all people (in their jurisdiction). Nation states are commonly in competition with each other in military and macro-economic contexts, with governments giving priority to their own people and profits rather than having a holistic, pacifist world or ecological view. Within this model, minority groups are often mistreated or neglected as well.

For all the reasons cited, kindness and prioritising the most vulnerable in our community is backgrounded in most political contexts. The direst effects of political antagonism can be seen in the many instances of war and armed conflict, genocide, the plight of refugees, and lack of resolve in relation to the huge variety of problems such as the climate change crisis or pandemics.

Commercialization, material consumerism, and capitalism

In the working and investment world of humans, the lust for monetary wealth and financial superiority has taken over industrialized societies to the point that commercialization and material consumption have become a lifestyle and major focus for the vast majority. Temptations to buy and consume an abundance of "new shiny objects" appear in large ways on our media devices, in large-scale city advertising such as billboards, and in the vast arrays of commercial businesses that you find in city settings. This is worth calling "energized greed", and whilst it may seem beautiful and attractive (à la "the Great American Dream"), the relatively simple notions of "kindness" are backgrounded against such a formidable setting.

As a result of the enhanced access to buying and consuming, an increased number of people place far greater emphasis on material wealth than on their health, relationships, good personal habits, and benevolence to those most in need. Indeed, for many people, ownership of a large number of possessions, such as cars, jewelry, and many other things, is evidence to them that they are "living the good life". The wealthy have a choice either to neglect their health and fitness needs or usually to pay large amounts to uphold them. Obesity and chronic illness affect many types of people, rich or poor, but the rich are the most empowered to deal with these. Those who do not, for some reason, participate in this societal economy—for example, those who do not or cannot work, or who do not have the skills or acumen to leverage a great income—are generally given low priority and consequently a lower quality of life.

While capitalism may claim to be a meritocracy, it is only when people play by its uniquely biased rules that they can "win" the game and afford all the benefits of such a system. Other than through basic compliance with governmental and legal requirements, industrial negligence, carelessness, and erroneous conduct are commonplace. Monetary systems place almost arbitrary power into the hands of those with the most money, including the power to decide whether to take care of the ecology or those in greatest need, rather than being involved in a system where this is guaranteed.

As a result of the disparity among those who excel in this capitalist system, the divide between the richest and poorest in the community will always tend to reach intolerable levels.

In the latestage capitalism that most of our world is currently experiencing, we are seeing this playout with the top 1 percent of humans owning as much wealth as the bottom 95 percent combined[ii]. This is clearly an injustice, and a situation where some people have far more than they actually need, while billions of others have far less than they actually need, to live a good-quality life. Without kindness and the Great Reset of Capitalism happening, where the richest will be required to forsake much of their privilege in the interests of the majority of humans, the situation will continue to be extremely dire.

The capitalist dilemma with farmed and other human-consumed animals is even more distressing. Nonhuman animals are forced to forsake their bodily autonomy and, on a hypermassive scale, their lives and secretions are taken for the profit and perceived benefit of members of the human species. Due to a burgeoning human population that is mostly still intent on consuming animals on a day-to-day basis, these animal agricultural industries have become so focused on maximising production output and monetary profit that the welfare of the animals is almost entirely ignored and the animals have become hardly more than units of production (including billions per year artificially bred en masse for that very purpose), hence the proliferation of "factory farming". People who are kind to animals often refer to this widespread imposition of suffering as the "animal holocaust". Due to nonhuman animals being particularly vulnerable to mistreatment, this is arguably the greatest obstacle to a truly kind world. The increasing prevalence of zoonotic disease and pandemics, typically originating from crowded animal farming conditions, means that some karma is achieved by the sufferant animals, whose very existence will in turn cause the death and suffering of many humans too. The truest, kindest alternative to such a situation would be if animals were not exploited by humans at all.

Human overpopulation and procreation/breeding

For an observer of many parts of the world, human overpopulation seems extremely obvious. Those who dispute the overpopulation crisis often suggest that there is "room" for more humans, but they fundamentally fail to see the problem as one of mismanagement—not only of the lives of the many humans forced to live in filthy, toxic, or decrepit conditions—but also of the finite resources available to us, the ecological damage and sentient suffering caused by accessing those resources, and the waste products that result from the consequential consumption that occurs. Quite simply, the entire human overpopulation is at crisis levels. The more humans there are, the more problems there are. In the past when societies were simple and uncrowded, resources such as housing, water, food, and many other useful things were more easily shared among members of a community, thus fostering kindness and feelings of goodwill. There was also no threat to the quality of the very air that we breathe, which has now become an ecological hazard in most of the largest cities of the world. Nowadays, due to an acquired emphasis on money and its consequential inequalities of wealth, the essentials of life are also very unequally shared out. In particular, the rising homeless populations are emerging as the result of what should be called a "housing misallocation crisis"—where some people own too much, and some own nothing.

Now, even though the world human population has exceeded 8 billion people, and we have tools such as technology and artificial intelligence to help us to connect with each other, many of us have never felt more lonely or isolated. Feelings of isolation and hostility against "outsiders" are not new to society, but they can only ever be minimized by a worldview of kindness to all beings. Biases towards certain subgroups, especially those persons who are most like ourselves (for example, same skin colour, sexual orientation, or species as ourselves), reinforce exclusivist and unkind thinking and behaviours. The biases of the "underclass" against the wealthiest persons on the planet are, perhaps, more rational as rarely do any

wealthy people present themselves as amazing role models for kindness and benevolence to the underprivileged. Realizing that oneself and the vast majority of people will never own even a small fraction of the wealth of the very richest elites can cause panic, despair, and desperation, leading to outcomes such as criminal activity or simply giving up on the idea of accumulating money at all.

Note that this sour context in which most people are forced to operate often gives rise to relational difficulties even when there seem to be no direct reasons for such difficulties. Human relationships generally benefit highly from excellent communication, but there are a huge variety of problems that can happen in interpersonal relationships. The bottom line is to remember that "people need people" and that they tend to be most comfortable when afforded attention, support, and kindness. An ideal society is one that is skilled in carefully and considerately managing such problems before they get very big, and not allowing them to become more complicated.

Not only are most humans greedy for material wealth and abundance of "new shiny objects", but they are also very much at risk of desiring the most harmful type of "new shiny object", a baby child. Children are not only taxing on the environment and on the finances of families; they also reinforce the idea in people's minds that their own offspring matter more than the needs of people who are already born into existence. In all honesty, those lower in the hierarchy of life than these children should be outraged that the creation of more and more humans will force those already existing to make more room and share some of the finite available resources with those children. As a result, life for those at the bottom can only get worse.

Over the course of their usually long lifespans, children are and will become massive consumers who, like their parents, will usually cause ongoing suffering against animals that are mercilessly bred and consumed for human privilege. And whilst many children are regarded as "special" and may be a pleasure to take care of, a great amount of the resources, love, and attention of the parents of the child go toward that child, when these could have been used for positive good elsewhere where it is more urgently required. A burgeoning human population continues to be the reason for significant famine and resource shortages, especially in far-off regions of the world, where media attention is so scarce. Then there are the waste and pollution effects of every human upon the environment, which almost guarantees a very nasty legacy unless and until that human makes the conscientious decision to live minimalistically.

The traditional "nuclear family model" as a unit or default subgroup in human societies is something that is worth reconsidering if society is to reform itself. Nuclear families are generally inward-looking, with a strong emphasis on individual autonomy and exclusivism, and competitiveness against non-blood relations, rather than community-based support and outward-flowing kindness back to that community. An alternative model whereby any children are regarded as the responsibility of a larger number of adults (not just their biological parents) could result in children being better supported and more holistic and openminded in their world view.

Ill-feeling, negative or dry thinking, and weakness of motivation

As a result of the very unkind and uncompanionable practices mentioned so far, it is no surprise that so many of the societal systems that are put in place to neutralise them are dry and relatively ineffective "bandaid" solutions. For example, the legal system, the criminal justice system, the biomedical model of the mental health system, and much of the formal

schooling system are all examples of mundane societal provisions for people which lack a focus on kindness, relational authenticity, and community-focused motivations.

It has been proven many times that when money is the focus of any attempts at "kindness", the beneficiaries of that kindness are usually reluctant to learn, grow, and achieve self-motivated or self-determined progress. Instead, they are overcome by lazyness and overdependence and become a liability to the world rather than an asset. The genuine path to a strong community involves strong relationships, ongoing learning and growth on a personal level, and the pursuit of co-operation through shared values, and an understanding that everyone has both rights and responsibilities on an ongoing basis.

Whilst one cannot deny that some capitalist ideas and ideals fuel positive motivation in today's society, such as the spirit of entrepreneurship, there is an ongoing sense that these types of motivation do not address the root of society's isolationist problems for the vast majority of people.

Unstrategic and unscientific thinking, mismanagement, and poor cultural defaults

As mentioned, kindness has a nascent form, but it also has strategic and well-considered forms. When there is significant risk or when the scale of offering is very large, acting with kindness requires a lot of thoughtful pre-consideration. For example, attempting to be kind to "a mad man on the loose" may require a person to be reasonable, sober, careful, and strategic in his thinking, with personal safety and self-protection to be regarded as a major issue. The use of scientific and ecological knowledge to address ways to implement kindness is a powerful methodology, even though it is not immune to skepticism from less-intellectual observers, or else it may itself become corrupted by unkind, ineffective pseudo-scientific practice (such as in the mental health system).

Whilst science is powerful and increasingly used in educated societies, there remain many religious institutions that have lasted millennia and formed a basis for human culture, for better or worse. Sadly, the bulk of traditional religions appear to use threat of punishment as a counterbalance to the promises and rewards of kindness. Those religions that do not do this are often regarded as "impotent", which seems to say something sinister about human character and its temptations toward cruelty, to such an extent that kindness is often regarded as an embarrassment, a weakness, or a flaw in character. Also sadly, many religions are radically obsessed by notions of love (in an emotional rather than practical sense), conquest and euphoria which, while powerful and potentially beneficial, often distract from kindness's central concerns.

Some other cultural pitfalls that are worth mentioning are: (i) relying on purely sexual motivations, or being biased by sexual prejudice, to enact kindness; (ii) the risk of abject intentional cruelty or destruction; (iii) induced dependency (of nonhuman animals, or of human communities), and (iv) the assumption that wilderness environments are inherently better for those animals living in them.

Immeasurability and non-recognition

Because the effects of our kindness can be very difficult or impossible to track, most often the effects of our kindness are not accounted for nor as effective as they could otherwise be. If only we knew and could ascertain that our kindness was having a positive effect on the world as a whole, we would surely be practicing it more often! Despite this "mortal blindness" of being kind, it is generally important to rigorously test one's kindness effects on a small scale,

as much as possible, before implementing them at large, while retaining a sober and reasonable overview of the unfolding situation at an ecological level.

Despite all the doubts and uncertainties, if society were to retain its focus on compounding the effects of kindness, it is likely to succeed eventually. The worst thing about today's society is not that we cannot be kind, but rather that kindness is not even recognised as important—and that it is instead severely undervalued and forgotten, in the context of all the negatives described in this section.

I really like this quote, adapted from someone on social media named "NickOldHead":

I used to think being kind is easy. It isn't. Faking being kind is very easy.

Sincerely being kind takes courage and nerve. Being kind always invites the risk of rejection and that alone is a truth that cripples some of the most talented people I've ever met.

Please, take this as motivation to keep trying to be kind!

…

The above is a huge list of problems—and only by understanding the sheer enormity of them, and always remembering as far as possible a SCHEMATIC overview of them, can we act with true care and kindness to all. The bright side of this is that we might still live very happy lives whilst dealing with the issues, which are interconnected and inter-related in so many surprising ways—and are all potentially solveable by acting diligently with KINDNESS.

Case studies of kindness: test and apply your knowledge!

Here are some story examples of kindness in action. Some of these stories result in negative outcomes, whereas other stories may lead to positive ones to some extent. Although many other examples of kindness might exist, I hope the chosen ones give you the best opportunity for learning and reflection:

1. (Nascent kindness) A kind man gives $100 to a homeless woman beggar on the street. The beggar spends half the money immediately on a lunch of KFC chicken wings. This is an example of animal exploitation, but it ALSO hurts the beggar who is already obese and at risk of high cholesterol. The beggar spends the other half of the money on lottery tickets, in the hope she will win the jackpot. The money that she spends eventually ends up benefitting a person she never knew, who wins a staggering $14 million with which they buy a luxury house. Excited by the prospect of more gifts from strangers, the beggar remains homeless for the remainder of her short, miserable life, and gives birth to another child, partly with the motive of gaining sympathy from those in power. The child has developmental issues throughout her life, and becomes a new beggar early in her life.

2. (Minimalist kindness) A married couple, in the course of their lives, become aware of the plight of animals and from that point commit themselves to being vegan and antinatalist for the remainder of their lives, minimizing the harm that they are causing. However, despite being very good orators and having had great success on social media, they decide to detach themselves from public life due to the great amount of backlash and harsh criticism they receive from their detractors. Their lack of public activity is a huge missed opportunity, due to their oversensitivity and unwillingness to experience failure and rejection.

3. (Kindness toward large-scale human populations) The philanthropic work of Bill Gates (one of the world's wealthiest persons) has received quite some attention. Opinions are divided as to how much of a world benefactor he is, and my opinion is that he has chosen foolishly to focus his efforts on vaccination programs and saving human lives much more than on reforming the plight of victims of the animal holocaust. Whilst there is evidence that his vested interests in his charity work indicate a level of hypocrisy, I suggest that learning about this approach to large-scale problem-solving could still be of value.

4. (Limited-strength organisational kindness) Outside of famous people, there have been some quite determined organisations who have tried very hard to improve the world's poor situations. Two of these that I am familiar with are Amplify (in Australia; amplifyaus.org) and 80000 Hours (80000hours.org). There is also the United Nations, which has a Human Rights Charter and charities such as UNICEF. In my humble opinion, based on my limited knowledge, each of these organisations is a force for good, but that does not mean we cannot also empower ourselves and do an even better job of enacting kindness. I believe that these organisations should have more power, rather than less, whereas oppressive megaliths such as the current United States government (led by Donald Trump, with its oligarchy now a remnant of any "democratic" system) should have less power. I also feel that as a general rule, each of these organisations tends to be excessively "human-centric" rather than viewing the world as a fragile ecological one or as a society of beings, including nonhuman animals.

In assessing these examples, it is extremely important to learn from the mistakes of others, and to be receptive to feedback at all stages of your own process. Critical thinking, including the use of dialectics and heuristics, should always be an instrumental part of the analytical process.

Some core concepts and themes in kindness

In my studies of kindness, I have encountered a number of recurrent core concepts. I do not believe this is a comprehensive set of concepts, but it should be helpful to other students of the movement. Many of these concepts have been mentioned in passing, earlier in this essay.

1. "Needs versus wants"

So often when people do kind things that may give others what they WANT but not support them in getting what they actually NEED, kindness can lead to terrible consequences. People often require ongoing support in things like supplies of healthy food and water, a place to reside, a social support system of friends (and workers), health care, an ethical education, and the motivation to be useful, enjoy life peaceably, and help others in return. But when entrusted with money, and with certain types of power, in a world already full of chaos and suffering, the chances of them contributing to that chaos and suffering are significant. Examples of these powers are: the power to procreate, the power of dominion over others (such as children or animals), or the power to enter into addiction to things such as drugs or gambling.

1. "Rights and responsibilities"

Very often in kindness considerations, kind persons tend to think primarily of the rights of the victim they are trying to support or save. This very often leads to overdependence and ongoing dependence problems by the victim. A victim who is able to be educated to support himself and, even better, to help others will have a far better outlook on life than one who needs ongoing attention, etc., and is constantly on the "back foot".

2. "The immoral victim"

An "immoral victim" is some person who is suffering and in need of help, but who will or does cause unnecessary suffering to others in the course of their lives. A simple example of this is someone in a warzone who ignorantly exploits nonhuman animals for food and clothing. Another example is a victim of child abuse who is inclined to be nasty and abusive to others, as a result of learned behaviours.

3. "Ad hominem kindness" (related to 1, 2)

This is a system of treating others pro rata and according to the kindness that they deal to others. For example, a person who has a proven ability to uphold his responsibilities should also be the recipient of a greater amount of kindness. A person who is also immoral to others (that is, an "immoral victim") should not be granted as much kindness.

It's a simplified rule that can form the basis for wise decision-making, but is not the only rule to use when choosing to enact kindness, especially on larger scales.

4. "Nascent/innocent versus pragmatic/systemic kindness"

Very often the kindness enacted in innocence (such as by children, for example, or "random acts" of kindness) can be some of the most effective forms of kindness. Such people are not marred by bad reputation or bad faith, and may have the advantage of being naturally "loved", in an emotive sense. However, the danger of innocent kindness is that it is likely to be limited in objective consideration and may eventually cause more harm than good.

On the other hand, pragmatic or systemic kindness is of the type where experience plays a huge role. This type of kindness can easily be marred by overthinking, excessive cynicism, skepticism and inaction / lack of risk-taking, and possible loss of personality/character such as the trait of courage.

5. "Active versus passive kindness"

Our kindness is defined not only by what we choose to do ("active forms of kindness"), but by what we choose NOT to do ("passive forms of kindness").

Choosing to actively DO certain things that are kind or ethical is known as "active" kindness. A good simple example of this is striking up conversations with strangers. This can facilitate friendships, deter loneliness, and create a true sense of community, as well as great memories. It can serve to break barriers between people and make people feel good about themselves. It creates experience, and allows people a chance to "tell their stories" and learn from each other's experiences. Another example of active kindness, which is however somewhat less "active", is debating on social media. For this to be effective, it is best to be educated on the types of debater personality types.

Choosing to not do certain things that are harmful or unethical is known as "passive" kindness. Some good examples of this are: (i) choosing to NOT consume animals or their secretions; aka, being animal-kind or "vegan"; and (ii) choosing to NOT breed any domestic species (aka being "antinatalist"), but especially choosing not to breed further humans, who all have the grave potential of being grossly unecological and nonvegan, within the course of their probably very long lives.

I believe that there is a direct equivalence between doing things "ecologically" and being genuinely kind, either passively or actively. Actions that are beneficial for the planet as a whole are ecological. But actions that benefit a selection of people at the expense of other people (or other animals), or at the expense of the planet's wellbeing, are not genuinely kind.

Final thoughts

The need for kindness is neverending and usually faces frequent and ongoing rejection and backlash. As proponents of kindness, let us remember that it can be very important to remain realistic and sober at all times. Yes, kindness often gives us good feelings, but is that always a good thing? Sometimes the good feeling can lull us into a false sense of having done a good deed, whereas we always have to be mindful that our work doesn't end, the stakes are always high, and kindness often backfires on us. However, it is still important to feel good about doing good!

I hope that this essay has supportively assisted you to understand more about kindness and focus on it into the future. Please feel welcome to enter into discussion about the topic with the author of this essay. Blessings and best wishes to everyone.

Author Bio

Marcus Ten Low is an ethical, rights-focused strategist of worldwide cultural influences. Living and based in Meanjin, Australia, since 2015, he has struggled through longterm oppression in high school, at home, and in the troubled Mental Health system. Never a university graduate, he has formulated reform in many areas ranging from human-based eugenics and living modelling, to psychology and personal help, to language and the activist arts. He aspires to be "kind to all beings", and plays at the gym four times per week. He is generally available online with the username @antibreeder1m.

Notes

[i] This essay is loosely based on my speech presentation at the 3rd Metahuman Futures Forum. My presentation can be found at: https://www.youtube.com/watch?v=vi5GaH0LZKE (published by Metabody Institute). My sincere thanks to the founder and organiser of this event, Jaym*/Jaime del Val, whose support and encouragement have been fantastic and valuable.

[ii] See https://www.oxfam.org.nz/news-media/worlds-top-1-own-more-wealth-than-95-of-humanity/.

Reading "Ontohackers: Radical Movement Philosophy in the Age of Extinctions and Algorithms, Part I: Radical Movement Philosophy and the Body Intelligence R/evolution, (punctum books, 2024)". A Broader Review

Evi Sampanikou

The first volume of a long-expected book has recently been published (05/15/2024), *Ontohackers*, by Jaym*/Jaime del Val. In fact, it has been developing since 2012, first written in Spanish (till 2016) and then re-written in English (since 2017). As a person collaborating with del Val for years, I thought I knew what to expect, as parts of this monumental work had previously been presented, built or re-shaped / evolved in a series of forums and conferences, a series of workshops on movement philosophy including body and mind disalignment exercises, and also in herbs gathering sessions and a series of metaformances I was lucky enough to witness. All the aforementioned, had offered me a deep immersion in Jaime del Val's combination of art and practical philosophy of being, in the context of a new ecological r/evolution. Much deeper however, after the arrival of this book.

For me Jaime del Val is an extraordinary multi-artistic personality gradually led from music to performance art and theory and further on to philosophy, shaping a personal system of ethical philosophical values related to an immense respect for all forms of life on a sustainable planet, based on original sources and bodily capabilities. This is Jaime del Val's notion of "Metahumanism" as it is furtherly explained in the book.

The consideration of embodiment seems to be *Ontohackers'* most challenging quality. Del Val deconstructs the contemporary idea of western philosophy on the self-centered individual. The latter is replaced by the interactional quality of the senses, as an ensemble of bodily interactions with their environment that constitute thus a new ecology of the metahuman. Furthermore, it becomes Del Val's own philosophical method dealing with

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"hacking" the so called "universal truths", the way Del Val's metaformances always acquire the quality of a manifesto.

Indeed, *artistic embodiment* is more than clear on Jaime del Val's *Metahumanism*. Their work demonstrates how bodies are not fixed, discrete entities but dynamic fields of interaction, constantly shaped by movement, technology, and perception. By dissolving boundaries between performer, environment, and audience, Metahumanism destabilizes the idea of a singular human subject and instead reveals a multiplicity of embodied selves. Digital media, sensors, and improvisational interfaces do not merely extend the body; they transform it into a fluid network of relations.

Actually, Jaime del Val's *Ontohackers*, Part I, is a fundamental work that challenges foundational assumptions about being, embodiment, and technological existence in the 21st century. The philosophical approach of "hacking" any form of ontologies is evolved in a series of conceptual interventions, according to which nothing must be taken for granted, especially when it comes from traditional obsolete values. Everything is perceived as an eternal becoming, an open process reconfiguration.

As Jaime del Val further explains (*Ontohackers*, 69), the whole project is actually a 'metabook' comprised of seven books on embodied and kinetic variation. Five books cover major fields (Books 2 - 6), while Book 1 serves as an extended abstract and Book 7 as a supplement. Each book works as a 'book within the book' according to del Val (*Ontohackers*, 68), similarly with the 'frame within frame' practice in photography and visual arts, despite the fact that the author is against images (*Ontohackers*, 69). In total, the books are divided into three thematic units or parts. At the same time, the main ideas are communicating with Jaime del Val's own artistic and philosophical practice developments all these years and are also reflecting an important number of previously published essays.

In the book's *Introduction* ("Towards a Movement R/evolution"), consisted of a 'warning to the reader', a prelude, a metalude, and a preface with 3 premises, ending with "the rebellion of the bodies against extinction", things are fully oriented on what follows.

Moving on to the main part of the book, *Part I*, under the title "Radical Movement Philosophy and the Body Intelligence R/evolution", explains where the focus of this volume concentrates on: to developing a philosophy of the movement, to realizing the extent of our (any) body intelligence and understand how radical and revolutionary can be such a turn in our philosophy of living, especially in the age characterized by extinction of about all species and ruled by algorithms.

The first chapter, named "Book 1", deals with "how we move", connecting movement with thoughts, feelings, and ecosystems:

"How we move is how we think, feel, know, perceive, relate, and collectively create our worlds. How we move changes the epigenetic expressions of our DNA, our metabolism, our emotions, our cognitive potentials, and our ecosystems." (*Ontohackers*, 41)

One of the most interesting subchapters of book 1, is 1.1.1. discussing the Algoricene and exposing "[…] the conflict between the will to vary (as capacity to create) and the will to dominate (as capacity to reduce)." (*Ontohackers*, 44)

This subchapter explains how the notion and method of the grid became a dominant measure of all proportions on our vision system, thus making it an 'all-encompassing system of rationalization' (*Ontohackers*, 45), while subchapter 1.1.3. re-introduces us to the broader meaning of proprioception as a sense modality that becomes "the dynamic matrix where all action and perception become one, where sensing the world is sensing oneself, in motion and transformation." (*Ontohackers*, 47) and relates perception-as-proprioception recognizing movement itself as a new theoretical field, especially after contemporary physics, the Bing Bang theory and the understanding of fluctuation as a ubiquitous mode of change, similarly to what Margulis and Sagan (*What Is Sex?*) suggest when discussing radical symbiosis and ongoing mutation as movements of evolution. Therefore, we cannot discuss any more about dualisms, as "Nature is a fluctuating economy of energy." (*Ontohackers*, 51).

Book I moves further on towards Metabody techniques on regaining Proprioception (1.3.1, 57-59) and Disalignments (59-60), while subchapter 1.3.3 introduces the notion of 'ontohacking' as 'radical pluralist (meta)politics',

Moving on to Book 2 (from page 79), we realize that we are dealing with an expanded *treatise on proprioception* (*In Search of Lost Proprioception. A Metaception Theory of Body Intelligence*). Initially, it recalls concepts mentioned in the introduction: perception, embodied cognition, plasticity, language, and communication. It then focuses on the 'body intelligence' topic, before taking us to the gradual definition of proprioception within the field of practical philosophy. Del Val proposes, in this book, an ontological redefinition of bodies and perception, as well as a new epistemology of intelligence, that turns into an epistemology of proprioception. Indeed, proprioception unifies action and perception: "I propriocept, therefore I move, therefore I am, in becoming, with the world" (*Ontohackers*, 80). Proprioception becomes thus the basis of memory and experience, and also of empathy and meaning.

In consequence, we are led to the meaning of *alignment*, as "the more we align with mechanical and repetitive movements, the more we narrow down our own capacities to resonate with the world' (82); alignments become addictive, therefore proprioception becomes a way to overcome such an addiction, through movement as an elasticity of perception and openness, exactly as Michael Jackson's dancing (86). Del Val reminds us that it is Brian Massumi (*Parables for the Virtual*, 191-192) *who recently brought attention to proprioception, both for the possibility of taking it "as the general plane of cross-referencing" experience, and for developing "technologies of emergent experience"* (88) and underlines the meaning of otherness connected

with the term as *anarchē-self*, *metaself*, and *alloception*, or other similar terms, adding the notion of *kinaesthesia* in the possible transcriptions of proprioception (88-90). Therefore, Ontotherapy and Ontohacking can become a way of leaving any form of Cartesian alignment far behind and set body intelligence free, through a series of *metahuman* exercises towards a radical movement freedom (90-100), in order to achieve the *extended proprioceptive/metaceptive field*, described in the 2.5 subchapter (110-127).

What follows is a matter of politics (subchapter 2.6 *Proprioceptive/Metaceptive Politics*,127-137), focusing on defeating choreography, plasticity as a body intelligence for resistance, nonreductive thinking, and neurodiverse ecologies. A very important part of this chapter/book is 2.6.5: *Metaformance environments as metatherapies: for a neuroplastic, neurodiverse culture*, that reaches the core meaning of Jaime del Val's *metaformances* as both an artistic and philosophical practice and also as forms of proprioception and *disalignment*, as they appear into the whole process of *Metabody* research (133-137).

Book 3 is dedicated to the core concepts of Radical Movement Philosophy of fluctuation, based on the principles of openness, consistency, and variation, further evolving as rhythm, orientation, and contact. The author re-introduces us to Nietzsche, Bergson, and the Pythagoreans, as the beginning of the history of Western philosophy as "the history of setting limits to movement." (142); The text in the specific book/chapter takes us through all Western philosophy, with Plato, Aristotle but also the Renaissance philosophy and humanism and the development of Cartesian logic, later discussed in the works of Nietzsche, Kierkegaard, Bergson, Deleuze, Derrida, and Simondon.

Movement is for del Val the core meaning of being alive. Therefore, the rest of Book 3, challenges all forms of "static being", together with forms of sustainable living and reproduction. One of the subchapters that has drawn my attention from the beginning is 3.1.4 (*Movement beyond and between Actual and Virtual*) (146 and after) as it offers us a very interesting glimpse on Del Val's notion of the potential:

"I prefer the term potential to virtual because of the many misunderstandings that have arisen around Deleuze's conception of the virtual. In addition, while my conception of potential is close to his conception of the virtual, I deviate from the latter in considering actualization neither as determination nor as a need for any acts of determination." I do share the opinion that the virtual cannot be associated with the abstract or the incorporeal as corporeality is present during our whole non-dualistic existence, also containing the notion of *dynamics* as potential as Jaime del Val states, while "actualization as determination of potential" appears after Aristotle and "the indeterminacy principle of quantum mechanics applies actually and directly to the scale of our daily experiences once we reconceptualize bodies and movements as proprioceptive fields " (146-147).

Del Val continues this book with developing laws and principles. The *Enferance Law*: "the Quadruple Law of Fluctuation: Intra-action, Transduction, Transvergence, and

Transmodality" (148-153), *Recapitulation*, on the Quadruple Law of Fluctuation (153-157) [actually one of the most amazing subchapters] and the "Principle of Nondetermination: Principle of Movement–Variation–Indeterminacy–Relationality–Fluctuation" (157-158), returning to swarming ontology, connecting it with the notions of rhythm, contact, and orientation mentioned in previous chapters also. Then the author introduces us to the notions of Openness (Clinaos), Consistency (Metabody), and Variation (Intraduction) (page 168 and after) and their variations, before taking us to the multi-layered notions of Consistency and Metabody (175 and after), leading us to the *Amorphogenesis*, *Metamergence*, and *Microsingularities*, practices that are actually the core meaning and activist action in the majority of del Val's metaformances (3.2.2.4 and 3.2.2.5, 182-187). There is where the notion of the "common body" and the "frontier body" emerge as an *economy of variation*, developed in detail and discussed in the rest of book 3, sometimes in an uncanny for the common reader way, mainly introducing *Openness as Dionysian Affirmation*, developing at the same time a *postqueer theory of metaformativity* (microsex and sex as mutation), eloquently expressed in subchapter 3.3.3.2.3 (Why Ten Billion Genders Are Not Enough) (pages 229-238) aiming at *undoing the fallacy of sex-as-reproduction* (238-242) a view the reader does not necessarily need to accept or discuss; just to be open to it. The same for the subchapter 3.4.1.2.1: *The Orgy of the Worlds: From Big Bang to Big B.A.N.G., 13.8 Billon Years of Orgiastic Evolution and Reductive Anomalies* (242 and after), mainly discussing the algorithmic formations related to "dominant human cultures".

One of the book's greatest strengths is its refusal to treat technology as external to the human. Del Val's notion of the "metahuman" is not an enhancement fantasy or a posthuman escape; it is the recognition that bodies, interfaces, and ecologies form interdependent fields of experience. The text critiques both anthropocentric humanism and techno-solutionist transhumanism, showing how each ultimately reproduces rigid, hierarchical structures of power. Instead, Ontohackers advocates for fluid modes of existence, grounded in embodied experimentation and relational ethics.

In conclusion, reading Ontohackers I, after all the previous years' intellectual exchanges with Jaime del Val, has offered me, as a simple reader rather than as an "immobilized academic" (an inside joke) an opportunity to a more open look on the relation between the arts, the sciences, and the academy, as well as an open look to culture and the body. The body as a centralized non-object in Western culture can, through this openness become a micro-world and a micro-cult in a universe inhabited by Metahuman beings for a sustainable future.

Within this framework, and if we relate metahumanism with digital wellbeing, the latter is no longer a matter of protecting an isolated individual from technological overload. It becomes an ecological practice of relational balance—between bodies, environments, systems, and identities. Del Val's approach invites us to inhabit technology creatively rather than passively, cultivating sensitivity to how our gestures, movements, and digital traces

compose new forms of being. In doing so, Metahumanism reframes wellbeing as an ongoing artistic process: a choreography of care, experimentation, and shared becoming in a world where the boundaries of the human are continually renegotiated.

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