

Routledge
Taylor & Francis Group

Journal of the British Society for Phenomenology

ISSN: 0007-1773 (Print) 2332-0486 (Online) Journal homepage: www.tandfonline.com/journals/rbsp20

Revisiting the Ontology of Waste: Compossibility and Compost-ability

Kristupas Sabolius

To cite this article: Kristupas Sabolius (15 Oct 2026): Revisiting the Ontology of Waste: Compossibility and Compost-ability, Journal of the British Society for Phenomenology, DOI: 10.1080/00071773.2026.2745640

To link to this article: https://doi.org/10.1080/00071773.2026.2745640

© 2026 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 15 Oct 2026.

Submit your article to this journal

Article views: 241

View related articles

View Crossmark data

Full Terms & Conditions of access and use can be found at
https://www.tandfonline.com/action/journalInformation?journalCode=rbsp20

THE JOURNAL OF THE BRITISH SOCIETY FOR PHENOMENOLOGY
https://doi.org/10.1080/00071773.2026.2745640

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Revisiting the Ontology of Waste: Compossibility and Compost-ability

Kristupas Sabolius

(Post)Authoritarian Landscapes Research Centre, Vilnius University, Vilnius, Lithuania

ABSTRACT

This article introduces the newly coined term *compost-ability* in order to propose a reconceptualization of the ontological domain of waste. Structured around two interrelated components —"compost" and "possibility"—compost-ability functions as both an ontological and an epistemological category. As such, it may be theorized in relation to the problem of imagination, understood in connection with cosmotechnics, a concept developed by Yuk Hui. Drawing upon Gilbert Simondon's notion of milieu, compost-ability is articulated as a technological operation governed by the principle of compossibility. From this perspective, waste can be interpreted as a task of technological reintegration into the human milieu. In this light, waste becomes a site where the terms of coexistence are contested, and the milieu emerges as an active domain in which limits and vital potentials are continuously renegotiated.

ARTICLE HISTORY
Received 3 June 2026
Accepted 1 October 2026

KEYWORDS
Waste; milieu; compossibility; compost-ability; cosmotechnics

Introduction. Waste and Wasteland

The ontology of waste is not self-evident. No object is inherently waste; it becomes so only according to the criteria of use, value, and agency. Waste, therefore, does not constitute a stable ontological category but emerges in relation to epistemological and axiological frameworks—that is, through assessments of what is perceived as valuable or legitimate. To what extent is a given object still legitimized to be part of our milieu? As John Scanlan notes, the etymology of the term *waste* in Old and Middle English does not originally refer to a specific object but to a condition of land or environment "that was unsuitable to sustain human habitation"[1]—or, I would like to add, a specific milieu that is conflictual with the conditions of human existence. Waste is not merely material excess or residue, but a concept intricately tied to the conditions that define what is inhabitable.

Organic waste, which easily accumulates in households, is, from a "natural" perspective, quite favorable to various forms of life—it functions as an excellent milieu for bacteria. Compost, for instance, gains the status of waste only because humans, in their

CONTACT Kristupas Sabolius kristupas.sabolius@fsf.vu.lt Universiteto Str. 9, LT-01131 Vilnius, Lithuania

[1] Scanlan, *On Garbage*, 22.

© 2026 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

environments, limit the proliferation of bacteria—essentially, they restrain this kind of "explosion of life." Contemporary studies even present optimized methodologies aimed at enhancing the oxygen dissolution capacity.[2] Sometimes waste indicates the fear of the overload of life. On the other hand, plastic waste is difficult to decompose. It marks the opposite pole in terms of life's conditions of existence—it is not a life-friendly milieu, it hardly becomes a source of nourishment, and its long-lasting presence prevents the flourishing of others. This is how waste becomes pollution. Greg Kennedy rightly observes, on the macro level, that waste does not exist in nature:

> If we take nature as a domain indifferent to value, one on which values can only supervene, waste will appear utterly foreign to it. Ecology teaches that on the macro level nature wastes nothing. There death gets absorbed into life through an incessant, all-encompassing cycle impenetrable to the micro level judgments of positive and negative. Now, when we deign to situate ourselves within this cycle, we would seem to lose the distinguishing marks of judgment in the vastness of cosmic indiscrimination.[3]

As we see, the ontology of waste stands in contrast to the principle of the cycle, in which every death technically preconditions the very possibility of life. Degradation becomes an integral phase of further processes of survival. The ecology of the cycle displays a specific potentiality whose role becomes visible only once the scale is emancipated from human perspective and elevated to cosmic, i.e. when beginnings and endings are no longer measured by the life of the individual or even that of the species. Conversely, the loss of cosmic perspective may be interpreted—along the lines of Bruno Latour—as a deprival of agency from the Terrestrial.[4] It is precisely in this shift that the anthropological dimension of waste comes into view: the cosmic scale is suspended through the privileging of human life, while all other deaths are subordinated to a survival of one particular species. From this perspective, "Terrestrial", according Latour "is no longer the milieu or the background of human action".[5]

The loss of *Le terrestre* points to the alienation with milieu—especially if this concept is understood in terms of agency. This does not mean that human beings have lost their sense of environment, nor that any type of environment has disappeared. The crisis of the milieu primarily points to a paralysis of activity which, consequently, produces the zones where any action is suspended. In other words, the milieu is no longer a sphere in which processes of reciprocal action are possible. Alienated from the milieu, we are unable either to affect or to be affected. And this situation becomes the prerequisite of the emergence of the ontology of waste.

Waste emerges as a distinctive marker that delineates the human from the nonhuman, positioning the human subject as an agent whose productive activity disrupts, rather than sustains, the broader cycles of life, opposing itself against the condition of chaos of nature. In this sense, humans are not only characterized by their capacity for complex language and symbolic culture, but also by their exceptional role as producers of waste and emitters of pollution—traits that have come to define human existence within the Anthropocene. While all living beings leave behind traces of their activity, it is particular

[2] Wang et al., "Enhancing Oxygen-dissolving Capacity of Rotary Drum Food Waste Composting.".
[3] Kennedy, *An Ontology of Trash*, 2.
[4] Latour, *Down to Earth*, 40.
[5] Ibid., 41.

to the human species to cultivate a paradoxical relation to these traces: one that entails the systematic exclusion, externalization, and segregation of the byproducts of its own processes. This ambiguous dynamic underscores a fundamental disjunction between human productivity and ecological continuity. As it was outlined by Mintautas Gutauskas:

> In the Anthropocene, however, waste does not only appear but also changes the environment by means of high-scale pollution, and thus indirectly begins to reshape our view of the world, of others and of the self. Waste is not only a simple object of experience; it is a phenomenon that gains the power to form the horizon of our experience.[6]

When objects are still perceived as integral components of the human milieu, they are not yet considered waste. From the standpoint of lived experience, waste necessitates isolation: trash bins, containers, and landfills are designed to spatially displace and symbolically segregate discarded materials. These are environments in which waste enters into relations primarily with other waste, while interaction with the human sphere is deliberately minimized. It might be described as an ontology of disconnection: waste materializes at the moment when relationships with things are severed. It belongs to a state of displacement, defined by the collapse or withdrawal of relational ties.

The history of waste hence marks the exodus from the milieu, the migration outside of its integral part within the human environment. In this sense, the primary source of waste is so called "nature", seen as producing chaotic excess that must be brought into order through an anthropological systematization. Scanlan reminds us that, according to Locke, land that is entirely untouched by human cultivation—lacking pasture, farming, or planting, and "left wholly to nature"—is already to be considered "waste," as it yields virtually no benefit.[7] Moreover, this status carries legal implications: unused or unproductive enclosed land is not only regarded as "waste" but remains open to appropriation by others.[8] Scanlan notes that the conceptual coherence of the umbrella term "garbage" implies the categories of waste, imperfection, disorder, and ruin. What binds these notions is the ontological ambiguity inherent in waste itself: "its indeterminateness, the references to places or things that belong to neither one person nor another, its being the original condition of nature's chaos".[9]

One can agree with Maree Pardy that, although notions of properness and proper use have varied historical trajectories, Enlightenment-era associations between use and property rights laid the ideological foundation for nineteenth-century imperialism. Waste, therefore, occupies a central role in the imperialist imaginary. Since concepts of "proper use" are historically and culturally contingent, their analysis requires a prior understanding of how time is framed—specifically, as linear progress. Within this framework, imperial and colonial projects are cast as movements from disorder and lack toward reason, discipline, and control.[10]

In this sense, the kinship between *waste* and *wasteland* becomes particularly revealing. It is not an accident that wetlands—differently from other ecosystems, like forests,

[6] Mintautas Gutauskas, "Phenomenology of Waste in the Anthropocene," 71.
[7] Locke, *Political Writings*, 282.
[8] Ibid., 280.
[9] Scanlan, *On Garbage*, 25
[10] Pardy, "A Waste of Space: Bodies, Time and Urban Renewal", (accessed January 10, 2025).

grasslands, or even deserts—were conceived as the most distant and even hostile environment for civilization. In the Western imagination, wetlands have historically been construed as worthless or marginal spaces. As Di Palma notes in her analysis of the Early Modern concept of wasteland, "although other kinds of landscapes, such as mountains, forests, and commons, were routinely included in the category of wasteland, swamps were in many ways archetypal."[11]

However, the transformation in the status of swamps also took place through an imaginary revision of what might be called a "natural history of wetlands," initiated when the German botanist Carl Albert Weber conducted the world's first scientific study of wetlands in the Aukštumala moor and, in 1902, published the first monograph devoted to a single swamp: *Über die Vegetation und Entstehung des Hochmoors von Augstumal im Memeldelta, mit vergleichenden Ausblicken auf andere Hochmoore der Erde*. [12] Although the primary aim of Weber's work was tied to the project of land reclamation, as Di Palma notes, he nevertheless succeeded in "portray[ing] the swamp as a dynamic entity, one that experienced climatically influenced cycles of growth, development, and decay."[13] From this point onward, the former negative reputation of wetlands was reconfigured within an imaginary that positioned them as pivotal ecosystems—ones that have now become objects of restoration.[14] However, the restoration of swamps, bogs and peatlands undergoes the process of ecological engineering which is conceived as the technique developed by opening to the possibilities that are offered by so called natural ecosystems.[15] Once regarded as loci of uninhabitability, wetlands have come to serve as models of cohabitation, offering new ways of thinking coexistence.

Compost-ability

Scanlan has also shown that garbage—whether in its premodern or modern articulations—fundamentally signifies a condition of imbalance.[16] In contemporary contexts, this imbalance is made visible through our relationships to places, objects, and everyday practices. It is particularly pronounced in the perceived excesses of consumption, where domestic waste, junk, and accumulated clutter forcefully reveal the profligacy of modern life. These material excesses not only reflect social and ecological disjunctions but also puncture the illusion of order, drawing attention to the latent disorder that accompanies consumer-driven modernity.

At this point, I would like to introduce the concept of *compost-ability*. It is structured around two interrelated components: "compost" and "possibility." Compost refers to a mixture of organic materials used to fertilize plants and to enhance the physical, chemical, and biological properties of soil. It is typically produced through the decomposition of plant matter, food waste, and manure, thereby recycling organic residues into a nutrient-rich substrate. Possibility, in turn, is understood here as a predisposition toward

[11] Palma, di "Swampland Elegy."
[12] Weber, *Über die Vegetation und Entstehung des Hochmoors von Augstumal*.
[13] Palma, di "Swampland Elegy".
[14] See Povilaitis et al., *Lietuvos šlapynės ir jų vandensauginė reikšmė*. For the analysis of the possibilities of restoration of Lithuanian wetlands and creation new ones for water protective purposes. It also includes descriptions of the methods and examples of re-naturalisation of wetlands and regulated rivers in Lithuania.
[15] Mitsch and Jørgensen, *Ecological Engineering and Ecosystem Restoration*.
[16] Scanlan, *On Garbage*, 22.

coming into existence—a form of potentiality that sustains the ongoing adventure of life. It functions as both an ontological and an epistemological category—one that may be theorized in relation to the problem of imagination, understood in connection with cosmotechnics, a concept developed by Yuk Hui.

Although the concept of compost-ability may appear to privilege organic life—a so-called natural perspective—compost has increasingly been understood in technological terms, as an integral component of agricultural industry and ecological practice. It is exactly in this sense, that it operates beyond the distinction of nature and culture: as a technique for coordinating natural cycles, one oriented toward the invention and proliferation of life-supporting conditions. This is why compost may be viewed as not simply natural, but also as technico-ecological process.

Let's take several cases. In agriculture, compost increases soil quality and fertility by returning organic matter and essential nutrients to cultivated land, thereby improving productivity. It can also regulate pH in acidic soils, mitigate salinity, and strengthen soil structure.[17] However, agriculture itself appears as the cultured domain that stands in contra-position with the ecosystems beyond human domain. Multiple studies consistently demonstrate that compost amendments increase soil organic matter, improve nutrient availability, alleviate salt stress, and enhance soil physical and biological properties, even under adverse conditions.[18] Composting procedures can transform organic waste into a life-supporting milieu by reactivating nutrient cycles and fostering biodiversity in soils.[19] As we see, the tendency to sustain biodiversity defines the potentializing agency of compost, which is precisely understood as its ecological meaning—the creation of possibilities for multiple forms of life. In this sense, rather than constituting inert residue, compost functions as a dynamic substrate that promotes complex microbial communities essential for ecosystem functioning.[20]

Contemporary research has further refined composting methodologies, optimizing oxygenation processes in order to enhance aerobic microbial activity and accelerate the stabilization of organic matter.[21] Such interventions have been shown to improve soil water retention and increase resilience to drought, particularly in degraded or nutrient-poor environments.[22] Moreover, by stimulating beneficial microbial activity, compost contributes to the suppression of soil-borne pathogens, thereby supporting more robust and resilient crop systems.[23]

We encounter a paradox here: as in the process of the "restoration of wetlands," nature appears to be reduplicated by "natural engineering"; its processes are reconfigured through technical intervention. What emerges as the operative gesture is the conception of compost as a form of natural technology—one that intervenes in and coordinates ecosystematic processes by modulating the dynamics of cycles. In this sense, compostability may be understood as a pharmacological project of imagination,[24] operating as a technology of nature that rests within the ambiguity of cure and poison.

[17] Kim Ho et al., "Compost to Improve Sustainable Soil Cultivation and Crop Productivity," 100211.
[18] Lhaj et al., "Sustainable Agriculture Through Agricultural Waste Management," 2356.
[19] Epstein, *Industrial Composting*.
[20] Wang et al., "Enhancing Oxygen-dissolving Capacity."
[21] Ibid.
[22] Brown and Cotton, "Changes in Soil Properties Following Compost Application," 88–97.
[23] Kebede et al., "Effect of Organic Solid Waste Compost."
[24] Stiegler, *What Makes Life Worth Living*.

On the other hand, the domain of plastic waste marks the opposite pole in relation to life's conditions of existence. It is precisely the impossibility of decomposition that paradoxically sustains the system's longevity by foreclosing the possibilities of coexistence. However, it is frequently overlooked, that historically plastic emerges through the processes of experimentation with natural components, as a version of indigenous cosmotechnics. As early as 1600 B.C., ancient Mesoamerican people discovered a form of vulcanization of natural latex from *Castilla elastica* by mixing it with extracts from *Ipomoea alba*. This technological discovery helped them producing a more durable and elastic rubber. Pre-Hispanic Aztecs observed and documented a range of properties in these plants, which were widely employed for medicinal and practical purposes.[25] This chemical process enhanced the material's properties by strengthening interactions within the polymer. Their mastery of rubber technology enabled the creation of various objects, including ritual ball game equipment, which became central to Mesoamerican culture.[26]

Moreover, as demonstrated by Alice Iacobone,[27] the scientific literature on the *plastisphere*[28] suggests that not all species are adversely affected by plastic waste from synthetic polymers. A frequent example is rel the "sea skater." For this pelagic insect (*Halobates*), plastic debris has effectively become a fully fledged new habitat.[29] Certain bacterial species exhibit similar adaptive dynamics, prompting a rethinking of plastic in relation to the future. A very well-known microorganism *Ideonella sakaiensis* has evolved the capacity to metabolize synthetic polymers—particularly polyethylene terephthalate (PET)—as a carbon and energy source. Through the action of specialized enzymes, notably PETase and MHETase, these bacteria break down plastic into simpler, reusable molecular components.[30] Drawing on the assumptions, Iacobone suggests that "plastic waste will most certainly play a role in the evolution of animals to come," giving rise to entanglements of life and plastic that present us with speculative forms of existence emerging from a diffracted, feral future.

Cosmotechnics and the Problem of Milieu

Yuk Hui conceptualizes cosmotechnics as "the unification of the moral and the cosmic through technical activities" as well as "as an Urtechnik, it challenges our current understanding of technology and therefore also its future".[31] Conceived as a version of cosmotechnics, compost-ability also exploits the domain of waste as a coordination of possibilities that may be converted into compossibilities. I will return to this point soon. Here I would like remind you that Hui draws upon Gilbert Simondon's idea of inverted dynamics between figure and the ground.

In this sense, the notion of *milieu* acquires particular significance. As elaborated in the work of Georges Canguilhem[32] and Gilbert Simondon,[33] the milieu emerges as a site of

[25] Tarkanian and Hosler, "Prehistoric Polymers," 1988–91.
[26] Ibid.
[27] Iacobone, "The Feral Life of Plastic Waste"; Iacobone "Anthropocene or Plasticene?."
[28] Zettler et al., "Life in the Plastisphere"; Amaral-Zettler et al., "Biogeography of the Plastisphere"; Eriksen, "Plastisphere"; Rodineliussen, *Underwater Worlds*, 97–124.
[29] Goldstein et al., "Increased Oceanic Microplastic Debris."
[30] Swamy et al., "Efficient Biodegradation of Polyethylene Terephthalate (PET) Plastic," 116635.
[31] Hui, "Machine and Ecology," 54–66.
[32] Canguilhem, "Experimentation in Animal Biology."; Canguilhem, #x201C;The Living and Its Milieu.#x201D;
[33] Simondon, *Individuation in Light of Notions of Form and Information*.

intersection between identity and alterity: a space of continual requalification of what is homogeneous and what is heterogeneous. The careful calibration of these dynamics enables various species to articulate their own survival trajectories—living within a modality of relations where possibilities are both contested and shared. As I have shown elsewhere, the idea of 'environment" primarily points to the distinction from the individual and operates on the basis of isolationist approach., whereas the concept of "milieu" displays the features of interconnectedness, entanglement and mediation. In this regard, attentiveness to the interplay between one's own and others' vital interests may be considered a guiding principle of coexistence.[34]

Simondon, in juxtaposing adaptation with Bergson's *élan vital*, suggests that their apparent incompatibility may be reconciled through the introduction of a principle of collective interaction that incorporates antagonism.[35] Accordingly, in living beings, the process of becoming cannot be adequately accounted for solely in terms of adaptation or vital impulse; rather, it emerges through the dynamic interplay of these oppositional forces, a process that is expressed in the individuation of over-saturated systems. From this perspective, the dimension of potentiality is affirmed in the process of actualization, which gives rise to the trajectories of becoming—of evolution and disappearance alike. Crucially, this insight displaces any conception of reality that would rely on the ideal of equilibrium. As Simondon states:

> This hypothesis, however, is not limited to the affirmation that man and the world form a vital system, comprising the living thing and its milieu; evolution could indeed be considered an adaptation, i.e. a quest for a stable equilibrium of the system through a reduction of the gap between the living thing and the milieu. The notion of adaptation, however, together with the notion of function and of functional finality to which it is linked, would lead us to see the coming-into-being of the relation between man and the world as tending toward a state of stable equilibrium, which does not appear to be correct in man's case, perhaps no more than it is for any living being.[36]

Nonetheless, it is useful to recognize a certain positive aspect in the concept of adaptation —one that often fails to receive proper attention. Adaptation can be understood as a "coming closer to the milieu." It operates as a regulative idea that enables humans or other organisms to become linked with the world in ways that allow us to see them as part of a vital system that includes both the beings themselves and their environments. From this perspective, evolution could indeed be seen as adaptation, in which balance functions as a kind of purposiveness—"i.e. a quest for a stable equilibrium of the system through a reduction of the gap between the living thing and the milieu."[37]

In his analysis of technical objects, Simondon also elaborates the concept of the *associated milieu* (*le milieu associé*), which is also described as a *mixed milieu*. As he argues, "this milieu is not fabricated, or at least not fabricated in its totality",[38] hence the term designates a milieu that links the object's internal technical milieu with its external geographical, or "natural," milieu. The core of the concept thus rests on the establishment and ongoing maintenance of a relational interaction between nature and technics,

[34] See Sabolius, "Forget the Environment"; Sabolius, "Kaip mokytis iš terpių?."
[35] Simondon, *On the Mode of Existence of Technical Objects*, 168.
[36] Ibid.
[37] Ibid.
[38] Simondon, *On the Mode of Existence of Technical Objects*, 59.

sustained through the principle of recurrent, iterative, and mutually interacting causality (*la récurrence de causalité*):

> There is a recurrence of causality between the associated milieu and the structures, but this recurrence is not symmetrical. The milieu plays the role of information; it is the seat of self-regulations, the vehicle of information or of energy that is already governed by information.[39]

Milieu is displayed as the domain of information functioning under the logic of recursivity. However, it is necessary to highlight another, no less crucial moment. Having examined the relation between technical objects and the associated milieu, Simondon turns directly to the problem of imagination, approaching it right after he passes through the question of alienation. "It is the milieu associated with a systematics of forms", he argues "that institutes relations of recurrent causality between these forms and that which causes recastings of the system of forms taken as an ensemble".[40] Alienation, accordingly, is described as "the break between ground and forms in psychic life: the associated milieu no longer regulates the dynamism of forms."[41] The milieu thus emerges as the "site" in which alienation can be located—namely, when it is transformed into an abstract environment severed from recursive relations.

It might be counterintuitive, but it is not the forms; it is, namely, the background, i.e. the milieu that is granted the dynamic character. In critically revising the Gestalt model, Simondon inverts its logic: it is the milieu that initiates the creative processes of formation, without coinciding with the final determination of forms. Nevertheless, perceptual descriptions informed by Gestalt principles tend to privilege forms—emerging schemas, figures, and operations—thereby obscuring the dynamic background in which these schemas encounter one another, combine, and participate:

> The living matter in question is far from being pure indeterminacy and pure passivity; nor is it blind aspiration: it is the vehicle of informed energy. In the same way, thought comprises clear, separate structures, such as representations, images, certain memories, and certain perceptions. All these elements, however, participate in a ground that gives them a direction, a homeostatic unity, and which acts as a vehicle for informed energy from one to the other and among all of them. One could say that the ground is the implicit axiomatic; in it new systems of forms are elaborated.[42]

This is how the trajectories of imagination and milieu are interwoven: alienation is both the estrangement of associated milieu and the crisis of imagination. As Hui puts it, "the problem of alienation comes from a misunderstanding or lack of understanding of technologies, hence the misconstruction of a technical ensemble. And this misunderstanding leads to the rupture between ground and forms".[43] If alienation happens when the associated milieu can no longer regulate forms, it does not mean, I would like to argue, that imagination as such stops functioning. However, it, so to speak, changes the regime, functioning without "informed energy". Dissociation leads to alienation, which, in turn, becomes the self-sufficient activity of forms and their subsequent augmentation,

[39] Ibid. 61.
[40] Ibid. 61-2.
[41] Ibid. 61-2.
[42] Ibid., 62.
[43] Hui, *On the Existence of Digital Objects*, 35.

the precondition of every illusion. Illusion is the imagination deprived of energy that grants information.

In fact, cosmotechnics necessitates imagination, which can be described as a technology of the milieu. Insofar as it opens space for its own agency, this technology of imagination may function as a prerequisite of cosmotechnics, as we read in Yuk Hui's passage:

> Simondon holds a similar view on the relation between human being and the outer world as figure and ground—a functioning model of cosmotechnics, since the ground is limited by the figure, and the figure is empowered by the ground. Owing to their detachment, in religion the ground is no longer limited by the figure, and therefore the unlimited ground is conceived as a godlike power; whereas inversely, in technics, the figure overtakes the ground and leads to the subversion of their relation. Simondon therefore proposes a task for philosophical thinking: to produce a convergence that reaffirms the unity of figure and ground, something that could be understood as the search for a cosmotechnics. For example, in considering Polynesian navigation—the ability to navigate among a thousand islands without any modern apparatus—as a cosmotechnics, we might focus not on this ability as a skill, but rather on the figure-ground relation that prefigures this skill.[44]

If waste becomes an active agent, imagination does not disqualify it as an inexistent background, but opens it up to its impact as "informed energy." In fact, its milieu never presents itself as an obvious system; its full articulation results in reduction. As a background, it is constantly doomed to the domain of simplification and passivity, embedded in the trajectory of a so-called inert manner. Imagination conveys here a technical reorientation towards the milieu as the domain of the potentiality that is always operant. Hence, it must be disclosed through a technology of zooming in and opening to possibilities. Waste is a possibility only insofar as it is compost-ability.

Compost-ability and Compossibillity

From this perspective, waste—as a philosophical problem—opens up the question of coexistence. Every life form, as well as inorganic matter and technical objects, presents itself as a domain of contrasting potentialities. Here, balance remains a persistent challenge: beings compete for possibilities, yet at the same time, they actively generate and share them. Thus, coexistence among different beings can be understood as a negotiation within a shared field of possibilities. I propose to interpret this operation as a technology of compossibilities.

It can be remembered that in Leibniz's thought the idea of compossibility foregrounds the concept of the best possible world, which can only be conceived through the compatibility and interrelation of all created things; it is impossible to think such a world without the network of relations that constitutes it. Possibilities, while free and unconstrained in divine reason, enter into processes of mutual determination in the actual world. As Leibniz writes, "this reason can only be found in the fittingness, or in the degrees of perfection, which these worlds contain,"[45] meaning that each possible world claims existence according to its degree of perfection. The metaphysical grounding of this order lies in God's grace, which stabilizes relations and ensures harmonious coexistence, preventing substances from overwhelming one another. Thus, the best possible world is fundamentally relational: "this interconnection" also "means that each simple substance has

[44] Hui, *The Question Concerning Technology in China*. Urbanomic, 26.
[45] Leibniz, "Monadology," 25.

relations which express all the others, and that consequently it is a perpetual living mirror of the universe."[46]

Simondon develops a different account of the idea of compossibility. Within the processes of perception, he notes, imagination may disclose itself as a differential factor, as if analyzing and integrating the existence of beings through the display of their variable possibilities. In this sense, it functions as a capacity to aggregate and to sustain the richness of sensorial data in its various states when attributed to a given object. Thus, imagination can be understood as a technique for grasping a wide range of contrasting possibilities that constitute a subtle and responsive interrelation: "What we designate as "intuition" or "foreboding," like that of a mother who knows before the doctor that her child is sick, that "something is the matter," may be attributed to the richness of the image of compossible states of the child that only the mother possesses"[47] That is, it does not so much aim to grasp the essence of the individual directly, but rather perceives—within the surrounding milieu—the amplitude of variation that other forms of existence might assume. In this sense, he speaks of a differential perception that "appears in technics and, more generally, in the intuition of a knower sufficiently familiar with an organized reality to know concretely the compossibility of all its states."[48]

Whereas in Gottfried Wilhelm Leibniz compossibility refers to the principle of non-contradiction that must be respected for beings to coexist, Gilbert Simondon locates contradiction at the very centre of compossibility. Within perception, there is an element of imagination that enables it to assume the role of making alternative experiences possible by critically testing patterns of pre-programmed behaviour. This is how learning occurs among all living beings—as if initiating a dialogue in which "triggers" are questioned through their exposure to a "system of compossibility." In this sense, compossibility denotes the capacity to sustain a multiplicity of contradictory possibilities and can be defined as the "broad compatibility of images that does not entail the logic of the excluded middle."[49]

Conclusions

The ontology of waste may be understood as a regionalization of existence produced by locating the figure of waste outside the human world. Consequently, waste appears as a form of dissociation from the human milieu. Yet there can be no existence of waste that is not instituted through procedures of imaginary demarcation that define the boundaries of habitability. In this sense, waste emerges as an interruption of ecological cycles and a displacement from the cosmological domain. As a response, the concept of compost-ability becomes operative as a technological process. Conceived in terms of cosmotechnics, compost-ability mobilizes procedures of compossibility in the Gilbert Simondonian sense. Accordingly, waste constitutes a field of negotiation in which the possibilities of life are either diminished or, under certain conditions, reabsorbed into generative cycles. This perspective further underscores that the milieu is not a neutral backdrop, but an active domain of interplay in which both potentialities and ecological limits are continuously renegotiated.

[46] Ibid.
[47] Simondon, *Imagination and Invention*, 77.
[48] Ibid., 77.
[49] Ibid., 72.

In my view, compost-ability may be understood as a technique of compost-ability that performs a differential operation in order to expands the margin of tolerance and the amplitude of variation across contrasting—or even incompatible—domains of existence. If we agree that waste constitutes one such domain, its reintegration into the ecosocial—human and more-than-human—milieu can be approached as a project that requires the cultivation of cosmotechnics: an opening toward forms of informed energy that have not yet become operative. Such work can be understood as a technical procedure that potentializes waste, repositioning it as a moment of compossible interrelation by cultivating a disposition toward its alternative states—states that exceed its initial meaning.

Acknowledgements

I am grateful to Dominykas Barusevičius for revising this text.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

Publication is funded by Research Council of Lithuania under the Programme "University Excellence Initiatives" of the Ministry of Education, Science and Sports of the Republic of Lithuania (Measure No. 12-001-01-01-01 "Improving the Research and Study Environment"). Project No.: S-A-UEI-23-12.

ORCID

Kristupas Sabolius https://orcid.org/0000-0002-2714-6208

References

Brown, Sally, and Mary Cotton. "Changes in Soil Properties Following Compost Application." *Compost Science & Utilization* 19, no. 2 (2011): 88–97.

Canguilhem, Georges. "Experimentation in Animal Biology." In *Knowledge of Life*, edited by Paola Marrati and Todd Meyers. Translated by Stefanos Geroulanos and Daniela Ginsburg, 3–24. New York: Fordham University Press, 2008.

Canguilhem, Georges. "The Living and Its Milieu." In *Knowledge of Life*, edited by Paola Marrati and Todd Meyers. Translated by Stefanos Geroulanos and Daniela Ginsburg, 98–120. New York: Fordham University Press, 2008.

Epstein, Eliot. *Industrial Composting: Environmental Engineering and Facilities Management*. Boca Raton: CRC Press, 2011.

Goldstein, Miriam C., Marci Rosenberg, and Lanna Cheng. "Increased Oceanic Microplastic Debris Enhances Oviposition in an Endemic Pelagic Insect." *Biology Letters* 8, no. 5 (2012): 817–20.

Gutauskas, Mintautas. "Phenomenology of Waste in the Anthropocene." In *Life in the Posthuman Condition: Critical Responses to the Anthropocene*, edited by S. E. Wilmer, and Audronė Žukauskaitė, 71–88. Edinburgh: Edinburgh University Press, 2023.

Hui, Yuk. "Machine and Ecology." *Angelaki* 25, no. 4 (2020): 54–66.

Hui, Yuk. *On the Existence of Digital Objects*. Minneapolis: University of Minnesota Press, 2016.

Hui, Yuk. *The Question Concerning Technology in China*. Falmouth: Urbanomic, 2016.

Iacobone, Alice. "Anthropocene or Plasticene? Material Agents of a Plasticized Planet." *Athena: Philosophical Studies* 20 (2025): 175–194.
Iacobone, Alice. "The Feral Life of Plastic Waste: Third Nature and Speculative Aesthetics." *Journal of the British Society for Phenomenology* (forthcoming, 2026).
Kebede, T., D. Diriba, and A. Boki. "Effect of Organic Solid Waste Compost on Soil Properties, Growth, and Yield of Swiss Chard Crop (*Beta vulgaris* L.)." *Scientific World Journal* 2023 Oct 23 (2023): 1–10.
Kennedy, Greg. *An Ontology of Trash: The Disposable and Its Problematic Nature*. Albany: State University of New York Press, 2007.
Latour, Bruno. *Down to Earth: Politics in the New Climatic Regime*. Cambridge: Polity Press, 2018.
Leibniz, Gottfried Wilhelm. "Monadology." In *Leibniz's Monadology: A New Translation and Guide*, edited and translated by Lloyd Strickland, 14–33. Edinburgh: Edinburgh University Press, 2014.
Locke, John. *Political Writings*. Ed. and intro. David Wootton. Indianapolis: Hackett, 2003.
Mitsch, William J., and Sven Erik Jørgensen. *Ecological Engineering and Ecosystem Restoration*. Hoboken, NJ: Wiley, 2004.
Oueld Lhaj, M., et al. "Sustainable Agriculture Through Agricultural Waste Management: A Comprehensive Review of Composting's Impact on Soil Health in Moroccan Agricultural Ecosystems." *Agriculture* 14 (2024): 2356.
Pardy, Maree. "A Waste of Space: Bodies, Time and Urban Renewal." *M/C Journal* 13, no. 4 (2010).
Povilaitis, Andrius, et al. *Lietuvos šlapynės ir jų vandensauginė reikšmė*. Vilnius: Apyaušris, 2011.
Sabolius, Kristupas. "Forget the Environment, Imagine with Milieu." *Rivista di Estetica* 87 (2024): 228–242.
Sabolius, Kristupas. "Kaip mokytis iš terpių?" *Acta Paedagogica Vilnensia* 53 (2025): 8–18.
Scanlan, John. *On Garbage*. London: Reaktion Books, 2005.
Simondon, Gilbert. *Imagination and Invention*. Minneapolis: University of Minnesota Press, 2023.
Simondon, Gilbert. *Individuation in Light of Notions of Form and Information*. Minneapolis: University of Minnesota Press, 2020.
Simondon, Gilbert. *On the Mode of Existence of Technical Objects*. Minneapolis: Univocal, 2017.
Stiegler, Bernard. *What Makes Life Worth Living: On Pharmacology*. Cambridge: Polity Press, 2013.
Swamy, Chandramouli, T. M,, et al. "Efficient Biodegradation of PET Plastic." *Ecotoxicology and Environmental Safety* 281 (2024): 116635.
Tarkanian, Michael J., and Dorothy Hosler. "Prehistoric Polymers: Rubber Processing in Ancient Mesoamerica." *Science* 284, no. 5419 (1999): 1988–1991.
Wang, Jufei, Xueru Zhu, Zhenming Zhu, Chao Li, Xuesong Peng, Shilong Qiu, Jinbo Ren, et al. "Enhancing Oxygen-Dissolving Capacity of Rotary Drum Food Waste Composting: Tumbling Process Optimization and Experimental Validation with Discrete and Finite Element Methods." *Agronomy* 14 (2024): 2641.
Weber, Carl Albert. *Über die Vegetation und Entstehung des Hochmoors von Augstumal*. Bremen: M. Heinsius, 1902.