

Entropitarianism, or, *Merdafica Humanitas* (notes on *The Mattering Instinct*¹)

πάντες ἄνθρωποι τοῦ ἑαυτῶν ἀξιῶσαι ὀρέγονται φύσει²

*Das Dasein ist Seiendes, dem es in seinem Sein um dieses selbst geht.*³

the universe does not like order⁴/Nature abhors a gradient⁵

Rebecca Goldstein esteems her favorite philosopher⁶ Spinoza's concept of *conatus*.⁷ The first token of *conari/conare* appears in *Ethics*, Part 3 at Proposition VI (and 130 times thereafter in Part 3 alone); viz.: "Each thing, as far as it can by its own power [*quantum in se est*], strives to persevere in its being [*in suo esse perseverare conatur*]."⁸ This notion of *conatus*, "or individual self-maintenance," says Stuart Hampshire, "of which there is no equivalent in Descartes or in purely mechanical and atomistic cosmologies, is exactly the concept which biologists have often demanded as essential to the understanding of organic and living systems."⁹

So for Goldstein all living things have Spinozan *conatus*, which she glosses as 'self-mattering.' "Every living thing is organically driven by a mandate that ensures it matters to itself—which is to say that it prioritizes its own surviving and thriving . . . biology encodes the message of self-mattering."¹⁰

¹ Rebecca Newberger Goldstein, *The Mattering Instinct: How Our Deepest Longing Drives Us and Divides Us* (2026).

² *ps.*-Aristotle. Google translates as 'All people naturally crave for their own self-worth.' Cf. πάντες ἄνθρωποι τοῦ εἰδέναι ὀρέγονται φύσει. *Metaphysics* 980a.

³ Martin Heidegger, [Sein und Zeit 191](#) .

⁴ J. Scott Turner, *The Extended Organism: The Physiology of Animal-Built Structures* (2000) 17.

⁵ Eric D. Schneider and Dorion Sagan, *Into the Cool: Energy Flow, Thermodynamics, and Life* (2006) 72.

⁶ *The Mattering Instinct* xvii; "my most beloved of all philosophers" 274.

⁷ Meditation on *conatus*, *Wille*, and *Sorge* from Hermeneutic Feuilleton:

<https://somatichermeneutics.substack.com/p/what-carries-us> .

⁸ *A Spinoza Reader: The Ethics and Other Works* (ed. tr. Edwin Curley 1994) 159. Latin text:

<https://www.thelatinlibrary.com/spinoza.ethica3.html> .

⁹ *Spinoza and Spinozism* ([1951] 2005) 68.


¹⁰ *The Mattering Instinct* 1. Accord Heidegger: "A stone never finds itself [*befindet sich*] but is simply on hand [*vorhanden*]. A very primitive unicellular form of life, on the contrary, will already find itself, where this disposition [*Befindlichkeit*] can be the greatest and darkest dullness, but for all that it is in its structure of being essentially [*wesentlich der Seinsstruktur*] distinct from merely being on hand like a thing." *History of the Concept of Time: Prolegomena* (tr. Theodore Kisiel 1985) 255. <https://www.beyng.com/gaselis/?vol=20.00&pg=352> . "Questions about which kinds of 'end-for-which' [*Wozu*] actually and genetically come first (even a vegetable lives its not-too-bright life in terms of an end-for-which [*aus denen her auch schon Dumpfheit eines Vegetierens lebt*]) are entirely of secondary importance in comparison with the question of the essential structure of the end-for-which [*der Wesensstruktur selbst*]." *Logic: The Question of Truth* (tr. Thomas Sheehan 2010) 129. <https://www.beyng.com/gaselis/?vol=21.00&pg=154> .

Moreover, Goldstein explains, “Biology’s response to the supreme law of physics is what makes self-mattering deeper than any instinct, making it, rather, the organizing principle behind all instincts.”¹¹ ‘The supreme law of physics’ refers to the second law of thermodynamics, $\Delta S \geq 0$ (and ‘=’ is “hard to do”¹²). “It’s the law of entropy that necessitates the self-mattering of all living systems, from bacteria to us. All living systems must devote available energy to *locally* resisting the law of entropy.”¹³ Goldstein is well aware that the processes resisting ‘thermodynamic assault’¹⁴ themselves increase by that very resistance the net quantity of entropy: “Living things are actively self-organizing and self-maintaining, taking in free energy from food, sunlight, or dissolved minerals that is put to work in metabolism, which generates high-entropy wastes expelled into the surroundings, thus increasing the overall entropy. (Life makes a mess, some lives more than others.)”¹⁵

By Goldstein’s account only human beings have *epi-conatus* (not her term). This *epi-conatus* is the specifically human ‘mattering instinct.’ “The mattering instinct marks an entirely different dimension [of *conatus*] that characterizes our lives, carrying us beyond the Darwinian imperatives.”¹⁶ Goldstein names this “our existential dimension,”¹⁷ and formulates our distinctive way of being as “matter longing to matter,” “dust that does justification.”¹⁸ “Longing to matter—that is, the mattering instinct—is what happens when our cognitive processes try to rationalize our [biophysically conative] self-mattering.”¹⁹

“Just as our self-mattering is implicit in our being alive, so our demanding of ourselves a *reason* for our self-mattering is implicit in our being human,” she says. That additional self-imposed demand is the mattering instinct. “It demands not only the struggle against entropy but also the struggle to convince ourselves that we are *deserving* of the struggle.”²⁰ “What we are after in our longing to matter isn’t to feel that we matter but to be assured that we actually do—that the lives we are choosing to live are lives that actually matter;”²¹ “what intrinsic mattering comes down to is being deserving of attention.”²² “Do I truly and objectively matter?”²³ “The

¹¹ *Id.* 61.

¹²  Alan Guth, Infinite Phase Space and the Two-Headed Arrow of Time | Natural Philosophy Symposium 2025 at 5:15.

¹³ *The Mattering Instinct* 50; Goldstein’s italics throughout.

¹⁴ *The Extended Organism* 18.

¹⁵ *The Mattering Instinct* 58-59.

¹⁶ *Id.* 12.

¹⁷ *Id.* 42.

¹⁸ *Id.* 84, 102.

¹⁹ *Id.* 90.

²⁰ *Id.* 71.

²¹ *Id.* 42.

²² *Id.* 24.

²³ *Id.* 28.

matterer projects that we undertake . . . in channeling our longing to matter, propel us into our future, giving us a reason to live.”²⁴ By way of our mattering projects “We set about trying to close the gap between how much we feel that we matter and how much we actually matter.”²⁵

The middle section of the book sorts mattering projects into a fourfold typology of self-matterers: Transcenders, Socializers, Heroic Strivers, and Competitors, with various subtypes of each. But Goldstein’s unique (to my knowledge) thesis is that entropy is somehow inversely related to eudaimonia.

“I think much more can be gotten out of the law of entropy. We can use it to help us decide the normative questions, involving *ought* and *ought-not*, that our mattering instinct forces on us.”²⁶ “If we’re to agree on some objective standards of what it is to lead a good life, then we must find the right level of universalizing—restrictive enough to distinguish between better and worse ways of meeting the longing to matter but expansive enough to accommodate us in all our diversity.”²⁷ “I suggest that the scientific law that occupies ‘the supreme position among the laws of Nature’ can provide the objective ground for distinguishing between better and worse ways because, like it or not, we all inhabit a reality governed by the law of entropy . . . the law of entropy can provide objective grounds for distinguishing between better and worse ways of pursuing meaningful lives.”²⁸ “The best of our mattering projects are counter-entropic. Everything worth living for must be hard-won local reprieves from the law of entropy.”²⁹

These words might lead us to expect a worked example of how to use entropy—in watts per Kelvin or some other metric—to decide a normative question. Yet the claim of objective grounds gets only so far as a homily on the polarities:

“we can seek to matter by resisting entropy in ways as expansive as possible, allying ourselves with life and not with death, with happiness and not with sorrow, with creativity and not with destruction, with knowledge and not with ignorance, with care and not with cruelty, with clarity and not with confusion, with peace and not with turmoil, with beauty and not with ugliness.”³⁰

Anyhow, what about the mattering instinct *in se*, its ‘absolute value’? What is the mattering instinct for; what’s its *Wozu*? Goldstein contends that our mattering instinct “is not, in itself, an adaptation, that is, a distinct psychological faculty with an evolutionary function;” but rather a spandrel, a feature “that was not directly selected for its adaptive value but arose as a

²⁴ *Id.* 21.

²⁵ *Id.* 96.

²⁶ *Id.* 50.

²⁷ *Id.* 279.

²⁸ *Id.* 280.

²⁹ *Id.* 281.

³⁰ *Id.* 292. Cf. Nietzsche, *Hüten wir uns, zu sagen, dass Tod dem Leben entgegengesetzt sei.*

by-product of other features.” She supposes that the human mattering instinct arose as a by-product of the interaction of survival-self-mattering with “the cognitive capacity to reflect and analyze on all things, including the self.”³¹ This capacity for self-reflection we may recognize as the brain’s default mode network.³²

Yet even if our mattering instinct carries us beyond all Darwinian imperatives, the Second Law remains, as Goldstein says, the organizing principle behind **all** instincts. If we all inhabit a reality governed by the law of entropy then that fact prompts the guess that much more can be got out of the law of entropy to account for the mattering instinct; that the specifically human mattering instinct in some way serves, functions for the sake of, the Second Law. Trivially, all energetic processes net out to an increase of entropy.³³ What then, if anything, is distinctive about the mattering instinct’s production of net entropy? Conjecture: Human self-mattering is the most powerful mechanism devised for the **acceleration** of entropy-generation since life invented the proton pump.³⁴ I.e., all lives make a mess, the human variety fastest of all.

In *The Question Concerning Technology* Heidegger asks “What is the instrumental itself? Within what do such things as means and end belong?”³⁵ He proceeds to sketch Aristotle’s notion of the four *aitia*. **Not** ‘causes,’ Heidegger insists: “What we call cause [*Ursache*] and the Romans call *causa* is called *aition* by the Greeks, that to which something else is indebted [*das, was ein anderes verschuldet*]. The four causes are the ways, all belonging at once to each other, of being responsible for something else [*des Verschuldens*].”³⁶ Taking a silver chalice as example, he glosses *causa finalis* as “That which gives bounds, that which completes, in this sense is called in Greek *telos*, which is all too often translated as ‘aim’ and ‘purpose,’ and so misinterpreted. The *telos* is responsible for [*verschuldet*] what as matter [*Stoff*] and what as aspect [*Aussehen*] are together co-responsible for [*mitverschuldet*] the sacrificial vessel.”³⁷

The mattering instinct’s nearest analog in *Being and Time* is *der Gewissensruf*, ‘the call of conscience’: “The call of conscience has the character of *summoning* being-there [*Dasein*] to its ownmost ability-to-be-itself [*Selbstseinkönnen*]—by summoning it to its ownmost being-guilty

³¹ *Id.* 90.

³² [The Journey of the Default Mode Network: Development, Function, and Impact on Mental Health - PMC ; 20 years of the default mode network: A review and synthesis](#) .

³³ So Michael Russell: “If people use the phrase ‘origin of life’ then they don’t know what they’re talking about. Nothing in the universe that’s dynamic originates, it’s all just one entropy generator after another.” Peter Brannen, *The Story of CO₂ Is the Story of Everything: How Carbon Dioxide Made Our World* (2025) 24.

³⁴ How the proton concentration gradient is established and maintained: [Electron transport chain](#) ; how the continuously dissipating gradient drives a rotor: [ATP synthase in action](#) .

³⁵ [The Question Concerning Technology 2](#) . <https://www.beyng.com/gaselis/?vol=7&pg=9> .

³⁶ *Ibid.* <https://www.beyng.com/gaselis/?vol=7&pg=10> .

³⁷ *Ibid.* <https://www.beyng.com/gaselis/?vol=7&pg=11> .

[*Schuldigsein*].”³⁸ Summoning ex-sistence to that to which its being is indebted, is responsible; that capacity for the sake of which Dasein’s being is, its *telos*. Again we ask what is **this telos** for? What is the reason, what is responsible, for our specifically human self-responsibility to self-matter?

Being and Time tries to settle the question of *aition* ‘beyond’ human being:—there’s not one. In Thomas Sheehan’s paraphrase, “Means-end relations are oriented to a purpose. . . . The set of means-end relations is ultimately ordered to my ex-sistence, which is not some *thing* but is intrinsically ‘worldly,’ involved in the world of meaning. Moreover, ex-sistence is not a means to a further end that lies beyond itself [*Dieses primäre Wozu ist kein Dazu als mögliches Wobei einer Bewandnis*]. It is the ultimate purpose of *all* human activity [*Das primäre »Wozu« ist ein Worum-willen*]. My ex-sistence is what I am always concerned about, and all my actions are ultimately for the sake of ex-sisting [*Das »Um-willen« betrifft aber immer das Sein des Daseins, dem es in seinem Sein wesenhaft um dieses Sein selbst geht*].”³⁹

Human actions are for the sake of building and sustaining the *Welt* of being-in-the-world:

“World as a wholeness ‘is’ not a being, but that from out of which Dasein *gives itself the signification* of whatever beings it is *able* to comport itself toward in whatever way. . . . in the being of this being [Dasein, ex-sistence] *what is at issue is its potentiality for being*. Dasein is in such a way that it exists *for the sake of itself*. If, however, it is a surpassing in the direction of world that first gives rise to selfhood, then world shows itself to be that for the sake of which Dasein exists. World has the fundamental character of the ‘for the sake of . . .’ [*des Umwillen von ...*], and indeed in the originary sense that it first provides the intrinsic possibility for every factually self-determining ‘for your sake,’ ‘for his sake,’ ‘for the sake of that,’ etc. Yet that for the sake of which Dasein exists is it itself. To selfhood there belongs world; world is essentially related to Dasein.”⁴⁰

World—*Bedeutsamkeit/Bewandnisganzheit*—is the uniquely human variety of extended organism. When Goldstein writes, “Not only our health and happiness but our very survival demands that we are constantly required to pit ourselves against the laws of probability and resist the entropic transformation **from within** [my emphasis],”⁴¹ she is talking about metabolism, physiology as an affair internal to the organism. “Physiology inside an organism,” says Turner, “is fundamentally a problem of thermodynamics. . . . To demonstrate that physiology extends outside the organism, all one needs to do is broaden the perspective a bit

³⁸ *Being and Time: An Annotated Translation* (Cyril Welch 2026) 349.

<https://www.beyng.com/pages/de/SeinUndZeit/SeinUndZeit.269.html> .

³⁹ *Heidegger’s Being and Time Paraphrased and Annotated, Vol. I* (2025) 109, 406. [Sein und Zeit 84](#) .

⁴⁰ “On the Essence of Ground” in *Pathmarks* (ed. William McNeill 1998) 121-122. H.’s emphasis.

<https://www.beyng.com/gaselis/?vol=9&pg=157> .

⁴¹ *The Mattering Instinct* 58.

and show that the principles of thermodynamics don't stop at the organism's skin."⁴² In other words show that "If animals use energy to do work on the 'external' environment, their activity is as much physiology as when they use energy to do work on the 'internal' environment."⁴³ Why should animals bother to do external work? "[M]uch of the [internal] physiological work is fairly prosaic—maintaining gradients of temperature, pressure, solute concentration. Thermodynamically, there seems to be no fundamental reason the metabolic energy stream must do all this work. Indeed, if some other source of energy could be used to power physiological work, even more of the metabolic energy stream might be diverted to reproductive work. Even if this diversion is small, its evolutionary consequences could be large."⁴⁴

Even larger are its consequences for entropy production; more exactly, for accelerating the rate of entropy production. "It appears that living communities serve **to augment the rate** of entropy production over what it would be in the absence of biota."⁴⁵ "A system will select the path or assembly of paths out of available paths that minimizes the potential or maximizes the entropy at **the fastest rate** given the constraints."⁴⁶ "The proposed Maximum Entropy Production (MEP) principle states that sufficiently complex systems are characterized by a non-equilibrium thermodynamic state in which **the rate** of thermodynamic entropy production **is maximized**."⁴⁷ (boldface mine) The more a species lives 'outside itself,' that is, the more it entropicizes (Bradley Layton's term⁴⁸) the environment through its built structures, the more 'macroscopically ordered' it must be to sustain the increased energy flow: "[Systemic] responses always involve kinetic pathways of some kind. As thermodynamic gradients are increased, uncoupled (random) microscopic motions typically prove inadequate kinetic pathways for mediating flows, and systems make discontinuous transitions to more macroscopically ordered kinetic regimes (e.g., from conduction to convection)."⁴⁹ E.g., from the regime of *der Wirbel* that is average everydayness across cultures to the 'expansive as possible' *Weltstrudel* of global capitalism.⁵⁰ The biological mattering instinct serves to augment the rate of entropy production

⁴² *The Extended Organism* 11.

⁴³ *Id.* 25.

⁴⁴ *Id.* 35.

⁴⁵ R. E. Ulanowicz and B. M. Hannon, "Life and the production of entropy," 232 *Phil. Trans. R. Soc. B* 181 (1987).

⁴⁶ Rod Swenson, "The Fourth Law of Thermodynamics or the Law of Maximum Entropy Production (LMEP)," 18 *Chemistry* 333, 334 (2009).

⁴⁷ James Dyke and Axel Kleidon, "The Maximum Entropy Production Principle: Its Theoretical Foundations and Applications to the Earth System," 12 *Entropy* 613 (2010).

⁴⁸ <https://par.nsf.gov/servlets/purl/10039440> .

⁴⁹ Jeffrey S. Wicken, "Entropy and Evolution: Ground Rules for Discourse," 35 *Systematic Zoology* 22, 27 (1986).

⁵⁰ In Trevor Jackson's historical account "capitalism is conceived as a kind of machine." The Industrial Revolution "was a 'metabolic rift,' drawing down a finite stock of incredibly dense energy in the form of fossil fuels, and marshaling it to mechanized production that could produce vastly more output than anything ever had before. That output raised human living standards, but at the cost of carbon emissions, deforestation, biodiversity loss, and the construction of an energy regime that has proved both destructive and difficult to transcend."

over what it would be in the absence of self-mattering biota. The ontological mattering instinct serves to augment the rate of entropy production beyond that; far beyond.⁵¹

When Goldstein writes of our “trying to close the gap between how much we feel that we matter and how much we actually matter” she is pointing to a gradient we are compelled to eliminate. Heidegger also points to a gradient with the statement *Höher als die Wirklichkeit steht die Möglichkeit*.⁵² These two gradients are the same.

As soon as *Being and Time* was published Heidegger found himself trying to explain what he had written. For instance, Division II contains an opaque passage on ‘nothingness,’ *Nichtigkeit*. There he says, “In the structure of thrownness, as well as in that of projection, there essentially lies a nothingness. . . . *Care itself is in its essence thoroughly permeated with nothingness*. Accordingly, care—as the being of being-there—means, as thrown projection: being the (null) ground of a nothingness.” *Nichtigkeit*, he seems to say, is in fact the *prius*: “Existential nothingness by no means has the character of a privation, of a lack as compared with an ideal set up but not attained in being-there; rather, *as projection*, the being of this being is already null *before* anything it can project and even attain.”⁵³

Now in lectures he gave the next year, 1928, Heidegger sets out eleven theses to pin down ‘the problem of transcendence’ in *Being and Time*, and (I surmise) depicts *Nichtigkeit* in a more accessible register. He deploys an unprivative term for *Unbestimmtheit*:—*Neutralität*:

“2. The peculiar *neutrality* of the term ‘Dasein’ is essential, because the interpretation of this being must be carried out prior to every factual concretion. . . . In its neutrality Dasein is not the indifferent nobody and anybody, but the primordial positivity and potency of the essence [*die ursprüngliche Positivität und Mächtigkeit des Wesens*]. 3. Neutrality is not the voidness [*die Nichtigkeit*] of an abstraction, but precisely the potency of the *origin* [*des Ursprunges*], which bears in itself [*in sich trägt*] the intrinsic possibility [*die innere Möglichkeit*] of every concrete factual humanity. 4. Neutral Dasein is never what exists; Dasein exists in each case only in factual concretion. But neutral

“Industrialization remade everything;” but “Like all machines, [capitalism] was made by people.” Trevor Jackson, *The Insatiable Machine: How Capitalism Conquered the World* (2026) 14-15. Under Turner’s conceptualization capitalism is extended organism; physiology outside our skins. Problem: techno-capitalism is the catastrophe; through it *der Zweite Hauptsatz hat uns kaputt gemacht*.

⁵¹ “on a volumetric basis, humans entropicize their environment at a rate $1.80 \cdot 10^{23}$ times greater than the ‘background’ entropy generation rate of the universe.” <https://par.nsf.gov/servlets/purl/10039440> at 315.

⁵² [Sein und Zeit \(Niemeyer\) 38](#) .

⁵³ *Being and Time: An Annotated Translation* 366-367.

<https://www.beyng.com/pages/de/SeinUndZeit/SeinUndZeit.285.html> .

Dasein is indeed the primal source of intrinsic possibility [*der Urquell der inneren Möglichkeit*] that springs up in every existence and makes it intrinsically possible.”⁵⁴

These descriptors suggest that *neutrale Dasein*, just as *existenziale Nichtigkeit*, has the character of low Shannon entropy.⁵⁵ This impression is strengthened when Heidegger continues, “6. . . . Dasein harbors the intrinsic possibility [*die innere Möglichkeit*] for being factually dispersed [*Zerstreuung*] into bodiliness and thus into sexuality. The metaphysical neutrality of the human being, inmost isolated as Dasein, is not an empty [*leere*] abstraction from the ontic, a neither-nor; it is rather the authentic concreteness of the origin [*des Ursprunges*], the not-yet of factual dispersion [*das Noch-nicht der faktischen Zerstreuung*].”⁵⁶

Carcassi, Aidala, and Barbour explain that the general concept of Shannon entropy is “the idea of variability of the elements within a distribution, how diverse the objects are from each other within the collection.” (How dense with ‘surprisals’ in the term Sean Carroll favors “because it’s a very cool word.”) The authors point out that “Thermodynamic entropy is defined on the notions of heat and work while the Shannon entropy is defined on the notion of a distribution.”⁵⁷ Heidegger characterizes the factual *Verwandlung* of *Neutralität/Nichtigkeit* as *Zersplitterung* (splintering, fragmentation) and *Zerspaltung* (splitting, disunity). The aggregate result is of differences and distinctions, of *Mannigfaltigung* and diversity and *Zerstreuung*; a distribution of very high Shannon entropy:—“It seems, after all, that there are no non-peculiar people.”⁵⁸

Thus πάντα κατὰ φύσιν ῥεῖ. Dasein goes from low to high Shannon entropy by way of its self-mattering projects, its *um dieses Seinkönnen gehen*; and the consequent *Ungeheuer* of waste (from ‘using itself up’⁵⁹) serves to accelerate locally the cosmic flow from lower to ever higher thermodynamic entropy.

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⁵⁴ *The Metaphysical Foundations of Logic* (tr. Michael Heim 1984) 136-137.

<https://www.beyng.com/gaselis/?vol=26.00&pg=171> - 172.

⁵⁵ Sean Carroll’s concise derivation of Shannon entropy here:

▶ The Biggest Ideas in the Universe | 20. Entropy and Information , starting at 1:16:40.

⁵⁶ *The Metaphysical Foundations of Logic* 137. <https://www.beyng.com/gaselis/?vol=26.00&pg=173> .

⁵⁷ <https://arxiv.org/pdf/1912.02012> fn. 1. They continue, “The contexts are different and relating them goes beyond the scope of this work.” Carcassi has made a series of explaineos:

▶ Understanding Shannon entropy: (1) variability within a distribution

⁵⁸ Saul Bellow, *Humboldt’s Gift* (1975) 429.

⁵⁹ *Umwillen seiner selbst sich verwendend, »verbraucht« sich das Dasein.* [Sein und Zeit 333](#) .