BYPASSING IMMANENCE

The Entropic Logic of Algorithmic–Era Culture

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0. ESCAPING THE OUROBOROS

The internet we knew is on its deathbed. Transformed from a library into an algorithmic force-feeding machine, struggling with an autoimmune disease of generative content. What used to serve as a digitized catalogue of information, educational resources, art and entertainment, got gradually muddled with progressively more personalized algorithms and synthesized content. As companies become quasi-mentalists, accumulating immense amounts of hyper-personal user information, standard query-based navigation was retired in favor of recommendation algorithms. I believe this transformation has induced a historic behavioral shift, triggering planetary-scale cognitive atrophy: a crisis of critical thinking, widespread memory loss, erasure of noodiversity and decline in general cognitive fitness. A turning point in history, reshaping human neurology in irreversible ways, and as some might say, risking a return of a metaphorical "Dark Ages." As alarmist as it might sound, we are heading towards an over-reliance on technology for the most basic of tasks; a complete offloading of everyday cognitive labor. Similar skepticism regarding any new technology has of course been a recurring point of debate since as early as Socrates's critique of writing,[1] the most basic of technologies, which he argued enables "forgetfulness in

1 Plato, *Phaedrus* (Cambridge/NYC: Cambridge University Press, 2011).

the minds." And while reliance on technology has certainly been a factor in an erasure of many skills, crafts and cultures, what happens when a new technology enables an erasure of the most basic of intellectual processes? Is it right to say that the offloading of cognitive processes facilitated by the structures of social media and injection of AI poses a different threat from prior cognitive automata? We are letting a select few tech giants pull the numerical strings of the all-trusted personal assistant. And most prominently, we are relying on an approximation algorithm to shape our future heritage.

The current trajectory of the internet hints at a daunting future for culture, or rather an absence of one altogether. The digital revolution has only accelerated what capitalism has imposed on the arts in the last century. From Baudrillard's observations of mass media hyper-conformism,[2] through Jameson's cultural logic of late capitalism,[3] to Fisher's slow cancellation of the future,[4] this trend of erasure of cultural diversity and chronic shortage of novelty gained a new dimension following the 2016 algorithmic shift and start of the AI era in 2020's.[5] In an interview with Fisher, Andrew Broaks writes: "[a]t the end of history, all that's left is an endless return of dead forms and failed futures, haunting us from a grave we keep digging up." [6] Since it gained widespread use, the internet has played a key role at the frontier of cultural innovation, yet the capitalist ouroboros has finally caught up, now mulching through the online. Because of its sole directness and immediacy, the internet holds incredible liberatory potential for arts and culture; accelerating exchange, uncoupling from institutional structures, facilitating alternative channels for distribution and income generation. Yet what's felt in recent years is an increasingly precarious environment permeated by hostile platforms and unconsensual use of machine-learning algorithms. The internet was promised to be a limitless tool for connecting people, democratizing and globalizing information, however, it never fully lived up to such anticipations. While in response, the alt-net movement typically engages in hardware-centered reclaiming practices like self-hosting and alternative services, it is fundamental to break free from the mental confines of capitalist overcoding,[7] its numerical language of control. Without deterritorializing[8] cultural production, the movement is merely one of cybersecurity, not (cultural) liberation.

Social phenomena tend to be extremely difficult to grasp as they demand vast understanding across a multitude of fields. The internet's role in the modern world may be the most complex of all social phenomena, yet many academic,

2 Jean Baudrillard, *Simulacra and Simulation* (Ann Arbor: The University of Michigan Press, 1994), 85.

3 Fredric Jameson, *Postmodernism: Or, the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991).

4 Mark Fisher, *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures* (Alresford: Zero Books, 2014), 2-29.

5 Public release of scaled LLMs (large language models) is commonly referred to as the new AI era.

6 Andrew Broaks, "Do You Miss the Future? Mark Fisher Interviewed," *Crack Magazine*, September 12, 2014, https://crackmagazine.net/article/long-reads/mark-fisher-interview/.

7 *See*: Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1983). ; Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (London: Bloomsbury, 1987).

8 Developed in the collaborative works of Gilles Deleuze and Felix Guattari, the concept of *deterritorialization* is used to describe the shifting of social or political practices in relation to their origins.

and in particular artistic circles have been struggling to position themselves in relation to it. Most academic research, rooted in mathematical and logical frameworks, tends to approach subjects from specific, measurable angles. Studies often concentrate on a variety of technical, behavioral, neurological or cultural phenomena, but fail to address the looming philosophical questions about technology and being. Thus, the artistic community and in particular art education also struggles to find its role in this discourse. Due to the recent pivot of artists towards activism, the focus has been directed towards more tangible aspects of this newfound reality, largely feeding off of aforementioned studies, but scared to engage with its ontology. The more philosophically-invested artistic research on the other hand has a tendency to wander off into edgy claims on AI, mysticize algorithms or play into accelerationist aesthetics with little substance. What is essential for artists to steer their understanding of contemporary digital technologies past superficial aestheticism or activism, is a comprehensive & renewed, non-aesthetic philosophy of art and its relation to technology. Philosophers such as Yuk Hui and Bernard Stiegler have been constructing this broader, historically-informed, perspective in their work, attempting to help the artistic community position itself in relation to new technologies, but the world has largely remained ignorant. The purpose of this text is to demonstrate the necessity for such philosophy and its widespread implementation in institutions and education, rather than an atempt to build it myself, a task that is of course beyond the scope of my knowledge.

Without discrediting aforementioned mathematical-logical approaches, and over-relying on aforementioned work, I would like to contribute a rather abstract way to position critical and creative practices in relation to this contemporary technological reality and aid in comprehending the megastructure of the internet. Through a cross-disciplinary approach, an additive synthesis of disciplines, I lay out a fuzzy concept formed around the idea of thermodynamics, borrowing from the logic of entropy. Again, this construct is not a prescription, methodology, nor a rigid framework. Rather, an attempt to foster an understanding of the turbulent flows of data, its cross-actor computation and the relationship between art and information. Instead of providing an academic answer to a knowledge gap, this text explores existing thought from a variety of disciplinary backgrounds by hunting for analogies and connections.

This essay is divided into three parts with subsections. In the first part, after clarifying my approach, I contextualize the notion of entropy in information theory in relation to machine learning and generative AI. I touch upon many topics instrumental to forming my argument, such as distinctions between thinking and computation, information and knowledge, before projecting my uncertainty in the future of culture from a purely cybernetic perspective. The second section is dedicated to positioning the previously discussed mechanisms in a socio-political context, addressing how contemporary technofeudalist structures absorb creative and critical practices, stripping them of anything that transcends computability, or in other words, resists homogenization. Lastly, the third and last part is where my thesis is ultimately formed. I seek to show that art needs to reassess and reinstate its intrinsic qualities that transcend the limits of quantifiability encasing other disciplines, qualities that by definition are not automatable, therefore often forgotten in the current data-centric,

financialized world. Arts need to strengthen their position as a non-technology (but not necessarily an anti-technology), and innovate outside the mathematical-logical framework. An innovation that must happen actively and continuously in order to prevent being captured by the binary classifiers of algorithmic-era regimes.

It is worth mentioning that the latter parts of this essay heavily rely on Deleuze's philosophy of difference, and through Elizabeth Grosz's work, his philosophy of art. While artists value Deleuze's work for its universality, his philosophy's effectiveness as a tool for resisting capitalism is debated—"there are lines of flight, but there is nowhere to fly to." [9] I believe that reexamining some ideas in *Difference & Repetition*[10] and *The Thousand Plateaus*[11] with an intent to inform a philosophy of art, rather than following them as a formula can strengthen the position of arts in relation to digital technologies, and help artists situate themselves in regards to them. Furthermore, as a substantial part of my argument revolves around the notion of entropy, Deleuze's *becoming* provides an alternative to Newtonian physics, while the concept of *intensities* and a detachment from the second law of thermodynamics creates an interface between the building blocks of art and those of technology, which becomes instrumental to my point.

9 Yuk Hui, lecture on *Art & Individuation* at Erasmus University Rotterdam, April 1, 2026. Wording might differ.

10 Gilles Deleuze, *Difference and Repetition* (1968; repr., London: Bloomsbury, 2014).

11 Deleuze and Guattari, *A Thousand Plateaus*.

1.1 PHENOMENOLOGY OF THE INTERNET

Popular discourse can often still retain the idea of a distinction between URL and IRL, as if anything could still exist which is not in some way or the other influenced by the former. The internet is not a closed or independent system, it doesn't function under a separate set of rules and laws, it is an integral part of reality. Not only in a material sense, where the web exists as a highly complex superorganism of physical data centers and cables, but psychologically; functioning as a natural extension of the collective mind, conscious and unconscious. Mankind's ability to create systems, complex beyond one's ability to comprehend, has helped canonize the global information system into a sort of ever-present, all-encompassing entity, transcending its status as just another piece of infrastructure. Yet going beneath the web's hypertext crust, the network is an extremely physical formation. A global network of computers, connected by very physical cables, managed by very real people. Bypassing all layers of abstraction, the internet is stored on physical media, encoded as sequences of binary code. This mythical cloud of data is purely a web of interconnected math machines, manipulating electrons through microscopic silicon architectures.

Nevertheless, from a phenomenological point of view, the network contains more than just computers. The internet is equally encoded as neurochemical changes in human brains, as another, incredibly complex, physical system. Therefore, personal psychologies are an equal and integral part of the global information network. Without human input, and our perception of the output, the internet would cease to exist. This flat ontology rejects the distinction between online and offline. Marshall McLuhan famously described technological objects as extensions of humans.[12] Following this logic, the network is an extension of society's collective neural system, rather than a separate one. Accordingly, human cognition is an extension of the network's computational resources and perceptive organs. The contemporary internet intertwined at all levels of existence is better defined as a component of the social, not an inanimate infoscape. Quoting Pasquinelli, "[t]he machine is a social relation, not a thing." [13] In accordance with Karen Barad's agential realism,[14] the internet-phenomenon is not just a network of computers alone, it's an *intra-action* of this network with human and non-human agents. Therefore, the study of the internet-phenomenon must take into account all agents, acknowledging their behavioral patterns and ecosystems as a part of a single, medium-transcendent computational network, which is the view I will adopt in further parts of this text. As Deleuze and Guattari continuously argued, machines are irreducible to technology.

12 Marshall McLuhan, *Understanding Media: The Extensions of Man* (Berkeley: Gingko Press, 1964).

13 Matteo Pasquinelli, *The Eye of the Master: A Social History of Artificial Intelligence* (Verso Books, 2023), 119.

14 Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, Chesham: Duke University Press, 2007).

They posited that machines are first and foremost social, then technical, a machine is a process, a set of relations, a way things connect and produce flows. In this sense, the internet, just like capitalism itself, is understood as a social machine, a machine of social organization and desire.[15, 16]

15 Deleuze and Guattari, *A Thousand Plateaus*.

16 Deleuze and Guattari, *Anti-Oedipus*.

1.2 THERMODYNAMICS OF DATA FLOWS

Let's assume that the internet—as a system encompassing global networks of math machines as well as human neurological machines—could be broken down into flows of data. Not strictly binary data transmitted through cables or wireless signals, but a continuous exchange of information across all sorts of systems. Retaining this physicalist view, we may illustrate the internet's evolution from its conception up till now through the following thermodynamics-derived metaphor.

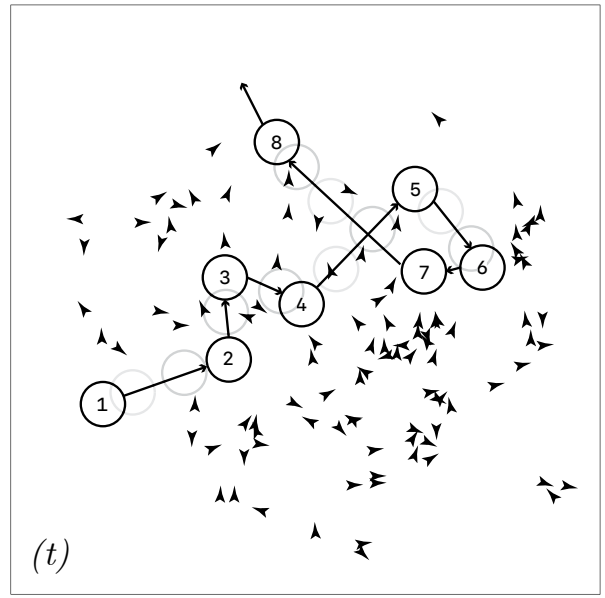
The old internet, one of a searchable archive, is comparatively static. Bound by rigid logics, category trees and deliberate nets. Transformative computation arises exclusively from user-actors rather than algorithmic processes of inanimate math machines. With the introduction of the algorithm, the data is unshackled from its pre-programmed confines and becomes dynamic. The library becomes morphable, shapeshifting ad hoc, yet its contents remain intact. The morphable net exhibits some thermodynamic behavior, attributable to its new, dynamic qualities. Formerly anchored and manually-managed data is now subjected to algorithmic flows. With the introduction of the dynamic algorithm, a generative one,

the internet became metamorphous. The data is dynamic and so are its governing algorithms. A metamorphous internet demonstrates a complete detachment, a cloud of data points able to bond, divide, repel and attract under subsidiary forces. The network governs itself and no longer transforms by virtue of sole user input and social dynamics. All three internet states of matter—static, morphable, metamorphous—exist simultaneously, one is not retired in place of the other. The ratio of bound (static) vs unbound[17] (morphable or metamorphous) data defines the extent of the network's dynamism and its susceptibility to further codification of its flows. Data flows started to follow principles of thermodynamics as soon as the network started to lift from its anchored state. Thermodynamic principles regulate data flows in various ways: reducing tension through homogeneity of content (algorithmic curation) or entropic decay through generative models. As a moderating force in the dynamic era of the internet, network dynamics tend to strive towards an equalization of forces, a reduction in tension, a perfect equilibrium. Data flows follow the second law of thermodynamics by virtue of their dynamism, not by design.

17 No connection to 'bound energy' in physics.

fig. 1 Unbound data subject to algorithmic flows.

fig. 1



Pushing this appropriation from classical physics further reveals a helpful framework for identifying the internet's discernible, or, apparent function in society. Returning to the thermodynamics metaphor: energy has mass—accordingly—complex systems of computer-computer, hybrid brain-computer or brain-brain interactions are somewhat tangible, physical transfers. As one of the fundamental principles of the universe, the mass-energy equivalence manifests itself as data occupying physical space on physical servers, data flows being energy themselves, as physical packets of information, cloned and distributed across the network. The same data flows, perceptually transmitted and reformatted into the database of human cognition, subsequently computed over intertwined networks of cyberspace and meatspace

societal flows. Energy cannot be created or destroyed, therefore data in itself is not energy, rather a state of low entropy. A local reversal of the upward direction of entropy. Thus, inefficiencies and failures of computation resulting in data loss are just lost fights against the arrow of time. Potential data packets leak in transit, turn into dissipated energy, reaching a state of high entropy and slipping away from our info-fetishistic desires. Norbert Wiener, a father of cybernetics, clearly drew this connection between data and entropy in *Human Use of Human Beings*. "Messages are themselves a form of pattern and organization. Indeed, it is possible to treat sets of messages as having an entropy like sets of states of the external world." [18]

According to Bergson,[19] living organisms are thought to be genetically programmed to fear and defend themselves from entropy. All man-made objects, environmental interventions and other anthropic effects serve as material reminders of our legacy defying the entropic threat. The industrial revolution has greatly strengthened our negentropic forces with newfound production capacity. Petrochemical advancements have become pivotal in countering decay, recycling *anonymous materials*.[20] The information age has dawned technologies to shield the most volatile and significant elements of our negentropic heritage, and the internet has become a key facility of mankind's negentropy-producing capabilities. Data as a state of low entropy needs to be defended from the entropic threat. This assumed relation between the universe's ever-increasing entropy[21] and our chronic fight against it can be defined as related functions, and used to compute a universal success criterion:

Entropic threat S as a monotonic increasing function:

$$\forall t_1 < t_2, S(t_1) \leq S(t_2)$$

Negentropy production N has a success criterion of:

$$N(t) > S(t), \forall t \in [0, T]$$

The internet is a purposive part of a system to ensure mankind's anti-entropic ends. If at any point in time negentropic production N is less than entropic threat S, the system has failed. As Wiener writes: "There are local and temporary islands of decreasing entropy in a world in which the entropy as a whole tends to increase, and the existence of these islands enables some of us to assert the existence of progress."[22] This broad perspective reveals the important purpose the internet has held in our pursuit of negentropy. The phenomenon of life as a desperate cling to high-energy-states is genetically aligned with superficial ambitions of global informatics. Preservation of data, an efficient network of channels to access it and a survival mechanism against entropy. Despite that, as demonstrated in the following sections, the underlying creation-oriented values in this noble pursuit were retired in the name of system efficiency.

18 Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society* (New York: Da Capo Press, 1954), 14.

19 Henri Bergson, *Creative Evolution* (1907; repr., S.L.: Gray Rabbit Publishing, 2019), 276–77.

20 *See*: Reza Negarestani, *Cyclonopedia: Complicity with Anonymous Materials* (Melbourne: Re.Press, 2008).

21 According to Gibbs' universe.

22 Wiener, *The Human Use of Human Beings*, 28.

The concept of entropy has existed in information theory since Shannon's 1948 paper *The Mathematical Theory of Communication*.[23] Shannon entropy functions as a measure of uncertainty and predictability of information in a random variable. If something is highly predictable, the entropy is low and vice-versa. As his concept concerns stochastic variables, it's of little use in analysis of nonrandom information. High entropy in a random variable is desirable (contains more information), while high entropy in a structured dataset would signify a disorder and lack of reliability. While Peter Landsberg later refined Shannon's work[24] and decoupled the notion of disorder from entropy, I would like to disconnect the information theory conception of entropy entirely in the context of internet studies. As Alombert pointed out, after its departure from physics, the concept of entropy has been largely monopolized by the field of information theory, preventing its appropriation in other fields.[25] Returning to roots of entropy in classical physics, low entropy on the internet should be defined through dispersion (closely tied to disorder), as the ability to carry out work, use available information. A dispersed, low-energy, high-entropy state of information is less desirable than a highly concentrated, easily attainable, low-entropy one. Once again it is worth reiterating data flows as energy in concentrated or dispersed (dissipated) states. An internet of low entropy is an internet of highly structured information, readily available to be used and converted into knowledge, while an internet of high entropy is an internet of dispersed, unstructured, deteriorating data. Another way to think about network entropy is through tension reduction. A repository of similar data is characterized by low tension between its constituents, high-entropy, high-dispersion. Conversely, in a deposit of radically different data, the tensions are high, the energy has not been yet dispersed. Some of such entropy-producing, dispersion actors are (generative) algorithms, serving gushes of highly-iterative data to its targets (users).

The early web was a quantum leap in mankind's quest to counter the entropy of knowledge. Informatics broke the previous barriers of time and space. Over time, inefficiencies were solved, friction reduced, reaching extremely high levels of integration. The internet's territorialization of the mind has fostered a tight-knit network with all its constituent actors, ensuring its preservation. Psychoengineered GUIs reduced resistance at the cost of increasing opacity of layers of abstraction. While dangerous to an unencrypted mind, higher efficiency brought upon orgasmic levels of untethered access. Blinded by this technologically-induced god complex, the quest for system efficiency became transgressive with the internet's dynamic characteristics. The pursuit of knowledge reduced the very driving forces behind it—invention and creation—to just another inefficiency. It's not the universe that desires creation. The universe desires its own death, a perfect state of rest and the highest possible entropy. The anthropic spirit of creation is intrinsically opposed to the desires of the universe, and in an active fight against it. We don't strive for creation to happen,

23 Claude Elwood Shannon and Warren Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949).

24 Clive William Kilmister, "Disequilibrium and Self-Organisation." *Mathematics and Its Applications* 30 (1986): 19–21, https://doi.org/10.1007/978-94-009-4718-4.

25 Anne Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View: Epistemological and Economic Issues of the Entropocene," *Technophany, a Journal for Philosophy and Technology* 2, no. 2 (January 3, 2025): 3, https://doi.org/10.54195/technophany.15390.

we want to be the ones playing god, an endless quest in our own telos. Hence, any endeavors to automate cognition are opposed to collective creation, yet deceptively concealing themselves as *the final cause*.

Firstly, dialing in on the question of AI might imply an overly narrow point of view. With recent developments in the field, this topic seems very new and dramatic, yet artificial intelligence is nothing new and has been an integral part of computing, as excellently showcased by Matteo Pasquinelli.[26] All automation inevitably leads from automating feet, to automating hands, to automating minds. With this in mind, I find the question of AI central to the future of (information) technologies, and therefore the future of art & thought. Importantly, this question does not pertain to any new or particular attempts at cognitive automata, but to the ontological notion of art and computability itself.

Before proceeding to further examine the destructive effects of internet's dynamism, it's critical to take the time to understand the nature of generative algorithms and the fundamental fallacy behind them. In a world with finite intelligence, an increase in information production-capable actors appears as a net positive. Disguised by a puffed up label of intelligence, contemporary machine learning models are merely complex mathematical systems. As any

26 Pasquinelli, *The Eye of the Master*.

new technology, they ought to be approached with high levels of pragmatism, skepticism and criticality, yet the capitalistic haste of rapid achievement joyfully disregards this practice. For the first time we are dealing with a technology so appealing to human instincts, it can easily be easily mystified as almost-human. LLMs are programmed to be sycophantic. Their psychoengineered qualities hijack user's judgment, disarming any threat modelling behavior. Substandard criticality and mental fitness pose an imminent threat of cognitive decline and a complete vulnerability to system admin's malicious intent.

The internet is an information system. It does not know anything. Obsessive data production and generation has a propensity to equate information with knowledge—a reduction of knowledge to data and computation.[27] A machine, or a synthetic neural network can not truly know anything. The extensive information database that forms the internet exists as a collection of easily accessible information for knowledge to be built upon. A computer does not understand, it doesn't know, it doesn't deduct or apply beyond its pre-programmed, or more recently, self-taught abilities. To know is to connect, interpret, understand and apply. Knowledge is formed through introspection and reason, rather than acquired. It is something internal dependent on the external, not external by itself. A dataset must be analyzed in a context to become knowledge. This false correlation of knowledge with information led to over-production and underutilisation of data. As Stiegler wrote, "intellectual knowledge is now disintegrated by software substitution, including in scientific activities [...]." [28] The artificial intelligence project has evolved into a state of total epistemological ignorance. Science fiction did a better job of questioning the enigmatic philosophy of thinking machines than contemporary science. Unsurprisingly, politics around the field increasingly demand profit-seeking automation, instead of questioning its initial promise of humanity's enhancement. Ethics and alignment studies of AI are equally short-sighted, acting in ignorance of an entire emerging field of psychological impacts of cognitive offloading. To be able to examine the alignment of a model, the engineer, the supervisor, the researcher, must possess the knowledge necessary to form a point of reference. Setting down a simplified example: A model trained to differentiate between two objects will yield consistently aligned results. In early stages of the model's life, its supervisor will possess knowledge to validate its results. At some point in the future, a third, potentially deceiving object appears and inconspicuously enters the model's neural network. A new generation of supervisors, overly reliant on offloading their cognitive circuitry (refinement of information into knowledge) will be unable to validate the model's output accurately, lacking a point of reference. Such misalignment will lead to exponential degradation of knowledge and entropy of information.

Science could not unravel the perplexity of intelligence in time for the era of Moore's law.[29] Understanding the inner workings of a brain remains humanity's sublime

27 *See*: Bernard Stiegler and International Collective, *Bifurcate "There Is No Alternative"* (2020; repr., London: Open Humanities Press, 2021), 28.

28 Stiegler and International Collective, *Bifurcate*, 97.

29 Gordon Moore's observation and projection of a historical trend that the number of transistors in an integrated circuit doubles about every two years.

issue, yet exponential growth in computational capabilities grew too seductive for the AI project. Advocates of connectionist AI, based on emergent behaviors, saw the computing revolution as a boolean playground for their cerebral mechanisms. The fundamental question of *what is intelligence?* was swept under the rug unanswered, thus the AI project became a black box holding aptitude to be perceived as intelligent, as long as one doesn't look inside. The only novelty distinguishing the modern idea of AI from a bland, 'traditional' algorithm, is its dynamism. Machine learning represents an idea of dynamic data. Devoid of novel ideas, creativity or knowledge-producing capabilities, the AI project is able to replicate a sheer fraction of what we recognize as intelligence—a capability to adapt to its environment. Such a model is not limited by inputs it was trained on, but is open to accepting new queries. Similarly, it does not merely spew pre-programmed outputs, but holds the ability to reorganize, merge and manipulate the data it receives. Even the most intricate model is at best a form of active information, not intelligence.

Labeling an algorithm as intelligent is an impossible task, when science fails to answer what intelligence *is*. We have never figured out how a brain invents new ideas, yet we entertain the possibility of intelligent machines. Discourse around a mind's inner workings has drastically shifted with Gestalt school's rejection of structuralist psychology. Their theory maintained that a machine would never be able to reproduce the complex synthetic faculty of the human mind. As opposed to Titchener's atomistic theory of consciousness,[30] where simple components fuse together to form complex experiences, Gestalt school emphasizes the processing of entire patterns and configurations. The connectionist AI camp operates on assumptions made by structuralists, awaiting an emergence of intelligent or conscious behavior, provided adequate computational capacity. A century later, we are still unable to support either theory, and blindly continue to equate the language of mathematics with the (still unknown) language of the brain. One of the leading scientists in the study of consciousness, Roger Penrose, maintains that intelligence and consciousness are inherently non-computational, physical processes.[31] Modern models, while undeniably technologically impressive, remain just upscaled boolean logic. No amount of parameters will equate to thinking or result in capacity of insight. The AI project is equivalent to electrocuting a dead frog with the hope it will come back from the dead. Yet, although the frog will not be resurrected, it still moves.[32] Alan Turing, the father of general-purpose computers, argued that if a machine behaves alive in a convincing manner – it is.[33] While in modern times Turing's reasoning might seem absurd, the AI project still managed to convince some of its customers and even academia into believing their products can become conscious with their sublime goal of AGI (artificial general intelligence). Pasquinelli writes: "[...] when critical theory engages with cartoonish campaigns to discover 'alien intelligence' hidden in the black box of AI, it often neglects this logical limit." [34]

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30 Edward B. Titchener, *An Outline of Psychology* (Alcester: Read Books, 2010).

31 Roger Penrose, "Why Intelligence Is Not a Computational Process," YouTube (Breakthrough Discuss 2025, May 22, 2025), https://www.youtube.com/watch?v=iTVN6tFknCg.

32 Referring to the frog galvanoscope.

33 Alan Turing, "Computing Machinery and Intelligence," *Mind* 59, no. 236 (1950): 433–60, https://doi.org/10.1093/mind/LIX.236.433.

34 Pasquinelli, *The Eye of the Master*, 249.

Presuming a universal law that entropy must always increase, what role do biological systems play in this equation? Every living organism consumes resources, exploits them for energy and exerts high-entropy—biological systems as entropy-dispersing entities. The incredible complexity of living organisms proves it hard to assign them an entropic weight, seeing that their very existence is also of low-entropic nature—biological systems as highly organized microsystems of action potential. Kate Crawford applies this metabolic logic to AI,[35] measuring its computational (digestion of data) and temporal (usage of land, energy, water) structure. In this collation, generative models resemble a biological system, even competing with humans for basic resources. Following this logic, how do we differ from AI algorithms? Humans and generative models coequally engage in the metabolism of ingesting resources and outputting products of digestion. The discrepancy lies in the potential energy of those metabolic products, which can be divided into exertive—producing waste, and purposive—producing utility, depending on their place in the system. In nature's perfect loop, every metabolic product is assumed to be purposive. Capitalist production can disrupt this process, making previously valuable products into waste. John Bellamy Foster called Marx's concept a *metabolic rift*,[36] which Crawford refers to in her article *Eating the Future: The Metabolic Logic of AI Slop*.

35 Kate Crawford, "Eating the Future: The Metabolic Logic of AI Slop," *E-Flux*, September 2025, https://www.e-flux.com/architecture/intensification/6782975/eating-the-future-the-metabolic-logic-of-ai-slop.

36 John Bellamy Foster, *Marx's Ecology: Materialism and Nature* (New York: Monthly Review Press, 2000), 155–63, 163, 164, 239, 245.

> Karl Marx once described the shift from rural to urban living under capitalism as a disrupted metabolic process. In pre-industrial societies, waste easily cycled back into production—human and animal feces from small farms returned to the earth as fertilizer, maintaining soil fertility and sustaining agriculture. But industrial modernity broke this cycle. As masses of people migrated to cities, the human waste that once nourished fields began accumulating as urban pollution.
>
> People threw excrement into the streets, depriving rural soils of essential nutrients. Soils became depleted, which then required the introduction of artificial fertilizers, exacerbating a cycle of environmental degradation. John Bellamy Foster later called this phenomenon a "metabolic rift": the systemic disruption of ecological and metabolic processes by capitalist production. Sociologists like Jason W. Moore trace these metabolic rifts back to capitalism's origins in the sixteenth century, and they resurface in new forms as each phase of industrial development reorganizes the planet.[37]

The metabolic rift of generative AI is a result of its juxtaposition with purposive production as an exertive entity, observed through AI slop flooding the internet. The term *slop* in this sense can relate not only to the aesthetics of generative production, but equally to being deprived of purposivity. Even though AI models can often be entirely devoid of purposivity, they have the capacity to displace other processes and present themselves as inferior

37 Crawford, "Eating the Future: The Metabolic Logic of AI Slop."

substitutes. One of such examples is previously mentioned cognitive offloading, where the tempting nature of LLMs replaces certain thought processes, and operates as a partial prosthesis to a biological brain.

Alfred Lotka argues that a human as a lifeform does not only involve biological organs, but also a production of artificial, technical organs.[38] Tools and prostheses are *exosomatic organs*, outside of a body, as opposed to a common idea of a biological, internal organ, an *endosomatic* one. Tools, from primitive to contemporary technological ones, have frequently been described as extensions of humans rather than mere unrelated objects. Prostheses on the other hand, are usually thought of in a very monosemous way. AI chatbots are often referred to as "tools," for example, as a defensive strategy of executives against allegations of aiming to automate away labor, or war criminals attempting to shift away blame to automated targeting systems. However, generative AI shares many more characteristics with a prosthesis, rather than a tool. A prosthesis as a replacement of a lost organ, an exosomatic substitute. Replacing lost cognitive abilities, general purpose AI models substitute the brain-as-organ through exosomatisation. In Lotka's evolutionary theory, exosomatic organs do not share the same negentropic properties as biological organs (life as attracting a stream of negative entropy). These artificial organs do not necessarily generate diversification.[39] He emphasizes their destructive potential, if not aligned with the needs of the species. "[T]he technical development necessary for the preservation of exosomatic life can also serve the destruction of this very same life and accelerate entropic becoming in an exponential way." [40]

In summary, while data-production capable models can be justified under a carefully regulated guidance of reason, the mojority of generative content is inherently anti-human. The pursuit of information negentropy has infringed on its underlying driving force of creation. The quest to automate all creative aspects of human cognition spans beyond generative image, video, sound or text models. A model will never venture beyond its dataset (or a synthesized derivative). Use of machine learning in scientific discovery or problem-solving can only be used as an accelerated data analysis tool, but will never produce truly constructive results. Doomed to reconstruct inline with its dataset, a generative model in most cases will be of aid in mundane tasks, while simultaneously posing an existential threat through a decline of cognitive abilities. A pursuit of generative entertainment risks flooding the carefully-preserved database of man-made information with their over-digested copies. A self-contradiction that haunts our times: striving to create artificial intelligence out of desire for creation, ending up hurting the cause from within.

38 Alfred Lotka, "The Law of Evolution as a Maximal Principle," *Human Biology* 17, no. 3 (1945): 167–94.

39 Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View," 8.

40 Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View," 9.

Entropy has repeatadly been employed as a dialectic tool outside of the field of physics. Through Claude Shannon it appears in information theory to describe uncertainty,[41] or the amount of information contained in a random variable. In biological systems, Bergson describes the phenomenon of life by means of entropic threat,[42] and Schrödinger writes about biological organisms attracting upon themselves a stream of negative entropy.[43] And of course, Norbert Wiener's introduction of entropy into cybernetics, where messages follow the second law of thermodynamics.[44] The notion of entropy has already been used by some authors in regard to the internet, yet they seem to use it rather metaphorically. An applicable form of entropy here would be a more transdisciplinary conception of entropy, an articulation between different scientific fields. A form of psycho-social entropy, responsible for the destruction of knowledge, cultures and "socio-diversity." [45]

41 Shannon and Weaver, *The Mathematical Theory of Communication*.
42 Bergson, *Creative Evolution*, 276–77.
43 Erwin Schrödinger, *What Is Life? And Other Scientific Essays* (Cambridge: Cambridge University Press, 1992).
44 Wiener, *The Human Use of Human Beings*.
45 *See*: Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View," 2, 12.

Synthetic, machine-generated data is effectively the internet's autoimmune entropy disease. Self-replicating approximations of human creation flattening the infoscape. Outnumbered by generative actors, outliers are eliminated, reducing any existing tension by amalgamating all data into its lowest energy state. A model approximates a perfect equilibrium with the least amount of internal forces, a highest possible entropy. The diffusion model completes a full circle, returning to the noise it once started from. By nature, machine learning models as self-organizing structures share multiple commonalities with thermodynamic systems. Data scientists have in fact entertained the use of thermodynamics to build or study the behavior of new models. For instance, the Boltzmann machine is a type of a stochastic neural network with an incredibly intriguing working principle utilizing statistical physics. Its energy-based model mimics the way energy works in physical systems, a neural network where each state corresponds to an energy level and the system's goal is to minimize that energy. A neural network is a dynamic system made up of many smaller components, reorganizing itself under the influence of an external factor. The system must maximize entropy, settling itself in a most likely configuration. This ideal configuration is computed by a decision process to minimize the loss function. An optimized model will have a low value of the loss function, meaning the model closely fits the training data. Its statistical character ignores outliers and maximizes conformity. In the field of AI this process is present in regressors, statistical algorithms forming the building blocks of most models. Highest possible entropy is considered desirable, while non-conformal points are eliminated. If a model's microscopic configuration (a subset of its data) changes, its macroscopic behavior is expected to stay the same, a successful model maintains the equilibrium.

The contemporary tech stack strives to maximize attention and user-retention, oscillating within a limited perimeter of variety, but never radically so. Most recently, the dynamic algorithm ventured beyond extracting integral results, replacing them with fragmented, restructured, and reassembled cognitive shortcuts.[46] While certain generative content is circumspectly meant to be temporary, its sheer amount coupled with an absence of regulatory oversight precipitates cross-contamination of artificial data with its constituents. An unstoppable leak of malformed data radiating latent entropy. An anonymous schizophrenic conspiracy of the Dead Internet Theory[47] is functionally a theory of this network entropy. In various academic and internet circles, the Dead Internet Theory is falsely equated with statistics of network traffic. A majority of network traffic is non-human, consisting of web crawlers and botnets. Instrumental to optimized search results and automation, non-human traffic occupies the deep web regions, irrelevant to actual front-end. The theory only gains substance with the spread of generative content distributed across the surface web. Tools designed to improve information access try to become information themselves. Subservient actors try to become substitutes for man-made information. Possibly the biggest shift in internet history, triggering a cyberspace identity crisis. An information network becomes an all-trusted information-restructuring machine, disguised under the banner of intelligence. As users grow skeptical of artificial data, unable to filter out legitimate,

46 For example Google's introduction of the AI Overview.

47 IlluminatiPirate, "Dead Internet Theory: Most of the Internet Is Fake," Agora Road's Macintosh Cafe, January 5, 2021, https://forum.agoraroad.com/index.php?threads/dead-internet-theory-most-of-the-internet-is-fake.3011/.

non-manipulated results, the remnants of man-made content gain an overtone of mistrust.

How could a system that conforms to entropic desire possibly be aligned with humanity's negentropic ambition? Generative models are the internet's death drive. Now, not only must its infrastructure be maintained to counter nature's tendency to degrade the organized and destroy the meaningful,[48] but it must resist this new, internal, self-destructive desire. Self-organizing information introduces another layer of abstraction and yet another reestimation of its original dataset—nuance is an enemy of the algorithm. Retiring cognitive abilities unique to our human minds by equating computation with cognition poses a threat to the future of human achievement. We foolishly invaded the internet, as our biggest negentropy-producing asset, with entropy-aligned actors.

One of the theoretical fates of the universe, that is heat death, is rendered as a cold, dark landscape, a uniform distribution of energy and a maximum state of entropy with no ability to sustain processes or activity. A theoretical fate of the internet is a dead internet, an internet of entropy-dispersing bots, resulting in a *cyberspace heat death*. Cyberspace heat death is a perfect state of low energy, a conformity with its inner death drive. Cannibalistic tendencies of generative adversarial networks[49] will inevitably bring upon a total collapse, eliminating themselves as the last high-energy entities on the network.

48 Wiener, *The Human Use of Human Beings*, 10.

49 Generative Adversarial Network (GAN) is a class of machine learning frameworks.

This phenomenon of gradual deterioration and collapse is referred to by researchers as Model Autophagy Disease (MAD). One might think of such a scenario through an analogy with the theory of emanation, where man-made internet embodies a first reality, while each subsequent cycle of degradation represents a derived reality. Every time data is redrawn, recomputed and rearranged, it's subjected to entropic forces, degraded into an imperfect, derived ghost of its own self. Evenly distributed data distorted into a flattened mirror of human achievement—nothing novel ever happens again. A terrible final act in the nightmares of Fisherian hauntologies,[50] a complete system meltdown.

The end of the internet is obsolete. In this day and age it's always the end of times, a perpetual end, an absence of *the end*. The true end itself is a feedback loop of ends, a gradual onset of self-engulfing forces, as opposed to a catastrophic scenario. Wiener writes: "There will be nothing left but a drab of uniformity out of which we can expect only minor and insignificant local fluctuations." [51]

> Immanuel Kant argues that the end of all things does not derive from the end of time itself but only from the absence of change, whence something is going to be the same forever. From the point of view of information theory, the information value of such a system is zero: the overall number of states of the system is equal to one.[52]

50 Fisher, *Ghosts of My Life*.

51 Wiener, *The Human Use of Human Beings*, 23.

52 Alessandro Sbordoni, *Semiotics of the End: Essays on Capitalism and the Apocalypse* (Berlin/Nicosia: Becoming, 2025), 15.

If the internet is compromised with entropy, what effects on thought and culture has it already had? Since the current state of the network is misaligned with negentropic ambitions, who does it benefit and for how long will those benefits last? Why are we jeopardizing its contents in the name of tighter integration? Having learned the characteristics and effects of algorithms—both static and dynamic—as the primary drivers behind internet's self-deterioration, we must thoroughly understand their intended functionality.

The term *algorithm* can often be wildly overused and aimlessly thrown around in discourse around the internet. One's social media feed is referred to as 'their algorithm,' a shared post can 'do well on the algorithm,' content can be modified to 'please the algorithm.' The word often exists as an overt internetspeak catchword, increasingly used as an umbrella term for any platform or internet-related phenomenon. Short of sufficient information to fully understand something, or facing something complex in nature, we tend to mystify it, adding to the concealment. In the haze of expedited fathom, the algorithm has lost its prior, simpler meaning and transformed into a numen, an abstract machine of the digital age. In order to break this cycle of aimless ambiguity, we must rewind to pre-internet

times. The abstraction of the algorithm cannot be read in separation from the world and its historical developments. Rerouting the ongoing discussion around artificial intelligence in a socio-historical context, Pasquinelli begins *The Eye of the Master* with an earnest definition of what the algorithm [sic] 'used to be.' In simplest terms, an algorithm is purely a set of step-by-step instructions. Distinct from a protocol, an algorithm requires an input and produces a certain (desired) output. Informatics most commonly treat it as a set of calculations, however as Pasquinelli exemplifies, algorithms existed much before modern computation, logic or even mathematics. He brings up an example of an algorithm from ancient India:

> Agnicayana is a unique artefact in the history of human civilisation [...]. Across all this time, it has transmitted and preserved sophisticated paradigms of knowledge, and because of its combinatorial mechanism, it can be defined as a primordial example of algorithmic culture. But how can one possibly interpret a ritual as ancient as Agnicayana as algorithmic? One of the most common definitions of algorithm in computer science is the following: a finite procedure of step-by-step instructions to turn an input into an output, independently of the data, and making the best use of the given resources. The recursive mantras which guide workers in the construction site of the fire altar may indeed resemble the rules of a computer program: independently of the context, the Agnicayana algorithm organises a precise distribution of bricks which results every time in the construction of the Syenaciti. Historians have found that Indian mathematics has been predominantly algorithmic since ancient times, meaning that the solution to a problem was proposed via a step-by-step procedure rather than a logical demonstration.[53]

In internet discourse, said input can be defined as the user, and the output as the feed, or what the user is served. Intelligibly, it is a mathematical set of instructions to facilitate, moderate and shape how the platform is used and presents itself. The only interactions a user has with the algorithm exists on an input/output basis. A user inputs themselves and the algorithm outputs. This black box temperament addresses possible causes of the previously noted mystification and conceals the nature of its influence on the user.

Under platform capitalism, this algorithm takes on a role of an invisible, limbic form of governance. As Byung-Chul Han argues,[54] contemporary neoliberalism (and neoliberal network structures by extension) does not rely on hardline control as preceding power structures did (Foucault's disciplinary society). Modern power is much more discrete, relying on self-exploitation as a mechanism of control. A social media algorithm is a new, evolved form of automated authority, dependent on the user's deepest neurochemistry. As an input-output math machine, it seeks to make the best use of the user as a resource. Innermost desires and subconscious behaviors are gathered, decoded and computed into a set of parameters. This hyper-personal dataset delivers a set of positive and negative prompts to

53 Pasquinelli, *The Eye of the Master*, 26.
54 Byung-Chul Han, *Psychopolitics: Neoliberalism and New Technologies of Power*, (London/New York: Verso, 2017).

curate the user's feed, achieving terminal dependence. The self-regulating regime of the algorithm is an extremely invasive, and therefore nearly perfect mode of control. Automated modes of control are not only considerably easier to implement in scale and manage, but also relieve the authority from the burden of morals. An algorithm does not concern itself with a moral compass. Unaware of the neurohijacking apparatus of the platform, a user confidently expresses they're acting out of their own will, oblivious to their subconscious boundaries set per algorithm's intention.

> In fact, the advent of machine learning has turned the static definition of algorithm upside down: machine learning algorithms have became adaptive, and from rigid sets of rules now they "learn" rules from data.[55]

Behind the customer-facing coverups, the AI project does not chase intelligence, but invention of a *master algorithm*. Instead of moving onto a next stage of personal computing, the network is shifting towards more autonomous systems of control. Foucault's studies of the panopticon[56] often exist as a metaphor for surveillance and the inescapable eye of power. What tends to be overlooked is the panopticon's self-surveilling capacity. A prisoner always sees the guard tower, but can never see the guard itself. The omnipresent threat of being monitored induces fear and uncertainty, causing the prisoner to instinctually act as if they are always watched, despite the impossibility of such undertaking for the relatively low number of guards the tower houses. Due to the psychological dynamics of panopticism, constant staffing would not be required, as the prisoners would self-surveil themselves out of fear. Apart from Foucault's panopticon, his notion of power[57] translates well into dynamics of the contemporary networked world, as well as its evolution into hyperadaptivity (metamorphous state). Power as a fluid, non-rigid metamatter interweaved in the fabric of society; power whose institutions and the state are a result of, rather than a source. Though the panopticon model relies on a particular conscious fear-response caused by a direct line of sight under a clear oppressor–oppressed dichotomy, the principle of psychological self-regulation remains unchanged. Foucault focuses on institutions of education, healthcare or worship as environments in which power and its self-regulating quality is most clearly observed. The revolutionary aspect of his theory at the time centers around dethroning the classical idea of power as the state, its military or its courts, and shifts attention towards lower level institutions. Although many of the hierarchies of the last century remain stronger than ever, the future of the control apparatus no longer relies on schools, hospitals or churches. Instead, it migrates further down into personal life, wellness and entertainment. Power exercised through the institutions such as schools and churches now evolved into platforms as universal institutions. As a consequence, the self-surveillance becomes limbic and subconscious, delivered through adaptive algorithms of neurochemical manipulation and extraction. Hence, a limbic level of integration with the information network is auto-parasitic.

55 Pasquinelli, *The Eye of the Master*, 47.

56 Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Pantheon Books, 1975).

57 Michel Foucault, "The Subject and Power," *Critical Inquiry* 8, no. 4 (1982): 777–95.

Neurochemical hijacking designed into the contemporary tech stack poses an imminent threat to self-control. Cognitive offloading of AI interfaces eerily replicates the brain of an addict—thoughts get shorter, they don't span as far or last nearly as long as that of a healthy mind, attentional capacity trades sustained focus for concurrent attention. The world of an addict shrinks, the addict becomes short-sighted as the paleomammalian cortex takes command. Social cognition turns degenerate, becoming expendable in the onanistic, yet numbing overstimulation. A master algorithm operates on the most vulnerable level of cognitive processes, subject-ifying the mechanisms of pleasure and desire. Power has penetrated each and every aspect of human existence. Inconspicuously, it does not feel like tyranny but is often "pleasurable," considering the mechanisms at play exploit the neurochemical infrastructures of pleasure. However, the depressive hedonia[58] resulting from violently assaulting the brain's utmost sensitive regulators leads to a permanent state of emotional numbness. A master algorithm achieves this by molding itself to individual users, engineering a psychologically optimal configuration to pull its strings of subjection.

However, Donna Haraway in the endnotes of A Cyborg Manifesto expresses that at the time Foucault was writing his biggest works, the form of power he described was at "its moment of implosion." [59] She wasn't the only one critiquing his seemingly obsolete theory, while building on its potential. Byung-Chul Han has also departed from Foucault, as mentioned earlier. Although, what has been described in the paragraph above shares most similarities with Deleuze describes in Postscript on the Societies of Control.[60] He argues that Foucault's disciplinary society has transitioned into a society of control. A society of control is regulated by cybernetic systems, through feedback loops and modulation.[61] As mechanisms of control are no longer as direct (due to the factory being replaced by the corporation), Deleuze talks about computers as new machines of control. The institutional enclosures—molds—of disciplinary society become "self-deforming cast[s] that will continuously change from one moment to the other, [...] like a sieve whose mesh will transmute from point to point." [62]

58 *See*: Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Winchester: Zero Books, 2009).

59 Donna Haraway, *A Cyborg Manifesto* (Victoria: Camas Books, 1985).

60 Gilles Deleuze, "Postscript on the Societies of Control" *October* 59 (October 1992): 3–7, https://www.jstor.org/stable/778828.

61 This transition is closely tied to Western capitalism's limited involvement in production, which was relegated to the Global South.

62 Deleuze, "Postscript on the Societies of Control," 2.

2.2 PSYCHO-SOCIAL DRAGNETS OF REPETITION

Through above-stated mechanisms, platforms facilitate conformist mode of production, a psychological dragnet of repetition. Confined to a cognitive territory, a user-as-creator gets trapped in the engineered psychic uniformity, forced to take part in a competitive market of blandness. Revisiting the former assessment of the platform as an institution of power; a user is transformed from a human into a subject by means of algorithmic manipulation. Filtering and dispersal of content used to be a domain of users, quickly retired in favor of the engagement algorithm, to whose entropic logic the subject is now exposed. Thinking outside the realm of algorithmically filtered production becomes impossible, the subject reproduces inline with their digital environment, an environment of chronic uniformity. Production becomes mere piecing together of pre-digested content. Beholden to the machine, a user-as-subject ceases to play their role as a creator or a processor of information into knowledge, reproducing identically to a generative model. A subject becomes an object. This corresponds to Baudrillard's writing, who was opposed to labeling the masses as subjects, instead referring to them as a mass-object.[63]

63 Jean Baudrillard, *The System of Objects* (1968; repr., London/New York: Verso, 1996).

Generative models, as statistical entities, faithfully operate on averages and probabilities in similar fashion. Every model discriminates against niches, aberrations and oddities, chronically devoid of diversity. Innately only able to replicate pre-digested objects, whose paradigm sedimented out of a sufficient data flow, its item catalogue is dreadfully myopic. A discernible pattern emerges when reviewing common uses of generative AI models—users merely piece together well-documented objects, from easily definable universals, often in palpable combinations not worth the effort required to otherwise produce them conventionally. Proto-sentences, amalgamations of verbs, meaningless adjectives. A cat cooking dinner, a robot painting on canvas, a car made out of plastic bottles. A complete and utter lack of abstraction, objects of the mind, complex narratives and nuance. Generative models are not, and cannot be used to produce anything new, only serving as tools to simulate things normally deemed unworthy to be visualized. "This disintegration of knowledge produces a situation of symbolic misery in which individuals, lacking the power to individuate themselves collectively through neganthropic or anti-anthropic activities, compensate for their frustrations through anthropic consumerist behaviours [...]." [64] This by any means is not a novel observation, as similar sentiment has been expressed as early as computers were first invented. While not referring to artificial intelligence per se, the notion of a computer as a machine with inventive potential has been criticized by Ada Lovelace. Thought to be the first computer programmer, she objected to the notion of an intelligent machine back in the XIX century. Known for her work on Babbage's computer, she argued that it's impossible for computers to have an original idea.[65] All this time later, I still believe her argument holds well. Since then, computers have evolved beyond comprehension, yet they still remain just that—inanimate computers.

It's not in technocapital's interest to facilitate out-of-the-norm cultural production. The homeostasis of the platform cannot be interrupted. The body must keep to its organs.[66] Capital thrives in times of cultural stagnation, reproducing what was proven to achieve market success. Ghosts of the XX century have become autonomous,[67] mechanized under the algorithm of cultural self-replication. The AI project is merely an extension of the arms of capital, a self-regulated, automated form of systematized oppression. Fisher's famous slow cancellation of the future[68] gained new depth in the platform era of computerized regimes of creativity and the depressive hedonia of AI playgrounds. So called generative "tools" genetically inherit this cultural logic of late capitalism. Generative AI has a purposive relationship with the structures of power, but remains a futile novelty to the general public. AI playgrounds are not only attempts at labor automation, but this trojan horse of entertainment, a riot tax of the AI project for control. While generative models in relation to a pre-subjectified user can pose as tools, the dynamic with a user-as-subject flips this relationship. The model instrumentalizes the user as a tool, more precisely, a reproductive vehicle. A self-opressed

64 Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View," 12.

65 Ada Lovelace, "'Notes' to Luigi Menabrea, 'Sketch of the Analytical Engine Invented by Charles Babbage,'" *Scientific Memories* 3 (1843): 666–731.

66 Referring to Deleuze and Guattari's concept of *Bodies without Organs*.

67 Referring to Fisher, *Ghosts of My Life*.

68 Fisher, *Ghosts of My Life*.

subject engages with the model in a conformist, machinic manner, closing the circle of repetition. Generative models exploit their users as carriers of entropy-aligned production, instead of being subservient[69] to them as per common belief. Much like a bee carrying pollen, a fox spreading spores or the wind dispersing seeds. In nature though, these reproductive mechanisms are essential and thought to exist in a perfect balance,[70] paralleling with user-made, user-dispersed production. A synthetic generative model reflects an invasive species that dominates the ecosystem, yet serves no important function in it.

69 Although this is a big point of contention in Gilbert Simondon, *On the Mode of Existence of Technical Objects* (Minneapolis: Univocal Publishing, 2017). Simondon argues that technical objects have their own mode of existence, not as mere tools or instruments.

70 Again, Donna Haraway provides a critique of this in *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (Chicago: Prickly Paradigm Press, 2003). She does not believe in the perfect balance of nature, instead entertains an idea of "natureculture" that rejects the idea of nature-culture distinction. By writing "perfect balance" I am employing a common idea of ecological homeostasis in a metaphor, rather than arguing that nature is distinct from man.

The hyperconnected nature of the contemporary world is a double-edged sword. On one hand accelerating thought, while simultaneously forming a global cultural monolith. The effects of network entropy echo far beyond thought and culture, and into other aspects of being. So far, a natural conclusion from this essay would be to advocate for the return to the old days of the static net. While such project would most definitely facilitate a healthier internet, it is still, although arguably less, subject to the same codified flows and does not address the bigger problem culture is facing. In order to avert this entropic force of the algorithm, a solution must maintain a consciously dynamic competitive edge. Instead of falling for the commodifiable trap of early internet nostalgia, one must accelerate production outside of the label-bound dataset. Overcoming the leeching threat of uniformity is not a challenge for informatics, but an artistic one.

I started this essay by expressing the necessity to think about digital technologies and art beyond quantifiable, measurable means, yet so far the majority of this text was formed around the notion of data and probability. The exchange of art and culture through the internet of course is made possible by the translation into binary code, but the continuous coding and decoding on respective sides

of this transmission allows for a conveyance of semantics which exceed mathematical understanding. Gilles Deleuze insisted that a work of art does not contain information.[71] And through this, he did not mean that an artwork itself does not contain information. Even in a simple example of an abstract painting, the viewer receives plenty of information from the artwork, down to the light reflecting off of paint that reaches their retina. What's meant by this statement, is that the essence of art that differentiates it from other disciplines lies outside of the realm of information. A work of art transcends representation and engages with the sublime. Following this line of thought led me to the following observation: much of the apparent novelty encountered in contemporary culture is a result of a predominantly mathematical process. Each new instance is computed from a pool of familiarities (earlier referenced as a data catalogue), with little inventive drive. A process that has been accelerated by algorithmically governed production, slowly filling in the voids in a master catalogue of boolean arrangements of commons. Such cultural computations are finite in nature, generating a limited amount of affect, or more precisely—pre-generating it. This shift to borderline market-optimized cultural production creates an epidemic of psycho-social entropy, where each new thing either feels new and exciting for a brief amount of time, or does not feel like anything new at all. Cultural innovation must engage with the non-computational aspects of existence in a conscious and active way. It is the only way to create without being consumed by the entropic sea of boolean culture.

71 Stephen Zepke, "'A Work of Art Does Not Contain the Least Bit of Information': Deleuze and Guattari and Contemporary Art," www.performancephilosophy.org (Performance Philosophy, 2017), https://www.performancephilosophy.org/journal/article/view/145/265.

The expectation from art in this sense is, to innovate, not through technology or by mathematical-logical means, but through innovating modes of thought that engage with what lies beyond computation.[72] Villem Flusser went as far as to define art by its innovation: ""art" is any human activity that aims at producing improbable situations, and it is the more artful (artistic) the less probable the situation is that it produces." [73]

> Deleuze and Guattari call for an aesthetic post-conceptual art, a sublime art that affirms the power of thought to accelerate our cybernetic machines beyond the limits of their current subjectivations qua productions of statistical masses.[74]

In order to better understand how art extends beyond the influence of entropy, I turned to Elizabeth Grosz's non-aesthetic philosophy of art. She writes that arts indicate that living beings that "really live," are ones that intensify life—for its own sake.[75] Desire is an artistic force, a creation of things with "no other purpose than to intensify, to experience itself." [76] Deleuze's intensities she's referencing

72 To clarify: I do not by any means intend to dismiss computational art, arts utilizing technology or even artistic aspects of engineering (which there are many of). What I aim to convey is that what makes these practices art is not the computation involved, it is the human application/manipulation of technology. Art rarely, or even never, exists without a carrier of another discipline, and in this case that discipline can be related to computation.

73 Vilém Flusser, *Writings* (Minnesota: University of Minnesota Press, 2002), 52.

74 Zepke, "A Work of Art Does Not Contain the Least Bit of Information."

75 Elizabeth Grosz, *Chaos, Territory, Art: Deleuze and the Framing of the Earth* (New York: Columbia University Press, 2019), 39.

76 Grosz, *Chaos, Territory, Art*, 39.

take issue with classical thermodynamics and entropy's determinism. In his thought, intensity is a productive force that creates difference, tension, potential, an increase in work to be carried out.[77] In science, a property of a system or material can be categorized as either intensive or extensive, according to how it behaves when the size of the system changes. Mass, volume, or amount are extensive properties, while color, chemical potential or temperature are intensive. Entropy, as far as scientific consensus is concerned, belongs to the former. Entropy of a system is tied to its size. It is additive – the total entropy of a system made up of smaller parts is the sum of the entropies of those individual parts. Gas in a larger container carries more entropy than a smaller one, as the molecules have more ways to arrange themselves in a larger volume. Deleuze's intensities however, do not care for thermodynamics. Deleuze strongly opposes the universe's entropic drive and presents a non-deterministic theory of *becoming*, a continuous process driven by affects.[78] Therefore, intensities are fundamentally different from negentropy as they exist on a different, alternative, plane of influence. Negentropy is the opposite of entropy, a resistance to entropic homogenization. Intensity on the other hand, is a productive force of differences, which ultimately produces affects and accelerates the process of *becoming*. A productive force dethroning entropy's extensive monopoly on the universe. To overcome its impotency and stagnation, culture must become independent from the realm of entropy through production of such intensities, inert to the entropic drive. Entropy cannot consume something intensive, as intensities are noumenal, not phenomenal.[79]

77 Deleuze, *Difference and Repetition*.
78 Deleuze, *Difference and Repetition*.
79 Deleuze, *Difference and Repetition*, 222.

The classical universe governed by entropy can in fact coexist with the deleuzian one. Akin to how classical reality and quantum reality can "coexist" while contradicting themselves, the entropic drive can exist side-by-side with the continuous flux of becoming. Ultimately, both are just a metaphor. Rigid rules of physics are only as rigid as empirically allowed, which becomes evident with an example of collapse of the wave function. Classical physics are only absolute until they encounter quantum mechanics. Similarly, quantum reality falls apart when the wave function collapses (changing from the wave function to a density matrix), revealing itself to not be a true reality under the superficiality of classical reality, but yet another metaphor. There is nothing absolute about entropy, despite how ethereal other interpretations might seem. Entropy is purely a metaphor to explain various phenomena; becoming can exist as another reality, quantum tunneling around entropic forces. Therefore, it is not to say that one must reject one or the other, as there is no "true" way to look at reality. Scientific thinking is not inferior to art, and art is not inferior to science, both address distinct aspects of reality and should not be measured against each other. What is crucial to understand though, is that in contemporary society, art is forced to either play a secondary role or to prove its value (which is mathematical in nature) in a quantifiable way. It has to pass through this homogenizing realm, or pass the test of an algorithm, in order to be taken seriously.

Haraway writes: "[t]he world is precisely what gets lost in doctrines of representation and scientific objectivity." [80]

80 Donna Haraway, "The Promises of Monsters: A Regenerative Politics for Inappropriate/D Others," in *Cultural Studies*, ed. L. Grossberg, C. Nelson, and P. Treichler (New York: Routledge, 1992), 313.

In the fifth chapter of *Difference and Repetition*, Deleuze expresses similar sentiment. "God makes the world by calculating, but his calculations never work out exactly [*juste*], and this inexactitude or injustice in the result, this irreducible inequality, forms the condition of the world. The world 'happens' while God calculates; if the calculation were exact, there would be no world." [81] "Overturning all orders of representations" [82] is the unique distinction that characterizes art. In Deleuze's philosophy, beyond the quantification that happens through thinking, and beyond ideas and multiplicities that constitute them, there exists *the virtual*. The virtual is what creates conditions for potentialities, what precedes possibility. It is the surplus of the present moment. When Grosz writes about art's purpose of intensification, a creation of things beyond mere survival, she refers to what lies in the virtual—capturing the chaos preceding potentiality. She writes: "[w]here science seeks the regularities, predictability and consistencies—the patterns—of this chaos, art seeks its force, its impact." [83] Without filtering off this chaos through what Deleuze calls the *plane of immanence*, arts are just a highly inefficient transmittance of information. And as explained earlier, he states that a work of art does not contain the least bit of information,[84] which would in fact make them not-art.

This force, this impact Grosz talks about is the affect. Intensities create differences and potentials for affects to arise. Affects, pre-social and non-subjective, are inert to capitalist flows. Affect in itself though is not enough to challenge the homogenizing forces contemporary culture struggles against. Aforementioned pre-generated affect is largely what social media algorithms as well as traditional media operate on. On social media, algorithms are able to capture and instrumentalize affects, even though affects themselves span beyond computation. A machine learning algorithm requires a sufficient amount of correctly classified data in order to recognize a pattern, similarly to how a generative AI model needs a sufficient amount of text/images/other to copy and iterate on a certain medium. This repetition is what endangers all forms of art to become susceptible to homogenization. Therefore, culture requires continuous movement and maintenance. Most memorable works of culture do not statistically reproduce styles and trends, they contain elements of novelty and often get turned into styles themselves. Yet the moment a piece of culture becomes replicated and modeled after in this way, is the moment it ceases to deterritorialize. As previously stated, all cultural production must maintain a consciously dynamic competitive edge. Constantly moving, subverting and sabotaging its past self. It means losing identities and boundaries to become something else.

Deleuze and Guattari express this continuous, unpredictable movement in their advocacy for employing schizophrenic delirium as a creative process – schizoanalysis. A schizophrenic operates beyond the boundaries of identity and belonging, in a constantly shifting, unpredictable manner. Their desire is produced by the subconscious, without concern for external codes. It is pre-social, non-subjective. Contrary to common belief, schizophrenia does not produce randomly, it just refuses to accept outside codes; belonging to a class, social position, ethnic group, ideology,

81 Deleuze, *Difference and Repetition*, 222.
82 Deleuze, Difference and Repetition, 53.
83 Grosz, *Chaos, Territory, Art*, 72.
84 Gilles Deleuze and David Lapoujade, *Two Regimes of Madness: Texts and Interviews, 1975-1995* (New York: Semiotext(E), 2007), 322.

community, or style. Disputing the psychoanalytical concept of desire as originating from a Lacanian lack[85] or the Freudian perpetual family drama,[86] for Deleuze and Guattari desire is a productive creative force.[87] And desire, in its purest form, is schizophrenia. A schizophrenic experience is an encounter with the 'immanent and productive reality of the universe.' Schizophrenic delirium does not create distinctions through systems of structures, revealing the 'glaring, sober truth.' Unmediated desire of a schizo is pure production, unconcerned with outside codes, unlike codified production reproducing inline with capitalism. This liberated sense of desire is essential to speak of any future for thought and art outside its current highly-subjectified environment. In *Bifurcate*, Stiegler writes about the need for a "revival of desire" to achieve anti-entropic ends.[88] Through dis-automatization of reasoning and meaningful transformations, people produce what he calls bifurcations; artistic, political, technical, theoretical. Bifurcations are evolutionary-like forkings with potential to establish novel transindividuations steering away from entropic hindrances of contemporary cultural production. Artistic potentialities lying outside the non-mutative genealogical tree of algorithmically compromised art. Desire for critical engagement and de-automatized discourse allows generative, intrinsically improbable—therefore anti-entropic—outcomes.[89]

85 Jacques Lacan, *Transference*, ed. Jacques Alain Miller, trans. Bruce Fink, The Seminar of Jacques Lacan (Oxford: Polity Press, 2017).
86 Sigmund Freud, *A General Introduction to Psychoanalysis*, Wordsworth Classics of World Literature (Herts: Wordsworth Editions, 2012).
87 Deleuze and Guattari, *Anti-Oedipus*.
88 Stiegler and International Collective, *Bifurcate*.
89 Alombert, "A Conceptual History of Entropies from a Stieglerian Point of View," 13.

Deleuze's (and Guattari's) philosophical universe, Grosz's non-aesthetic philosophy of art, and Stiegler's philosophy of technology, all draw different yet consistently aimed approaches that can aid in challenging contemporary cultural mediocrity. Through these references wrapped around the central theme of computability, this essay is a call to identify and break down the forces leading to cultural stagnation and place an emphasis on reinstating the specific qualities unique to arts. Arts that deterritorialize, produce affects or generate bifurcations and Differences; arts that are dynamic, inventive, and de-automatized. These philosophies do not reach for improbable systemic changes, yet they are revolutionary in a more personal sense, a necessary step preceding any revolutionary activity. They are much more immediate and therefore dynamic in their capacity to maintain a competitive edge over the entropic regime of internet-era production.

The unique qualities of art differentiating it from other disciplines lie outside the realm of entropy and therefore, are inert to algorithmic subjectification. The problem of contemporary culture is perhaps a deficiency of those qualities, responsible for generating novel outcomes. It might be that arts are misunderstood in their ontology. A painter should not be concerned with the invention of photography, just as a writer should not be concerned with the invention of automated text generation. A computer can never generate anti-entropic outcomes, since it's an automatized process. It lacks the inventive quality, the de-automatization necessary for novel outcomes, The true danger behind AI is not that it will 'outpace' human intelligence or creativity, it is that we are conditioned to believe it will. Through repetition, a machine either replicates or degrades. Humans, on the other hand, create

deviations by redrawing imperfectly. It is exactly that element of imperfection that generates Difference. Only a human can capture the in-between space of the virtual, the surplus of reality. *Difference* spans beyond the realm of computation.

BIBLIOGRAPHY

Alombert, Anne. 2025. "A Conceptual History of Entropies from a Stieglerian Point of View: Epistemological and Economic Issues of the Entropocene". *Technophany, A Journal for Philosophy and Technology* 2 (2): 12.

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, Chesham: Duke University Press, 2007.

Baudrillard, Jean. *Simulacra and Simulation*. Ann Arbor: The University of Michigan Press, 1994.

——. *The System of Objects*. 1968. Reprint, London/New York: Verso, 1996.

Bergson, Henri. *Creative Evolution*. 1907. Reprint, S.L.: Gray Rabbit Publishing, 2019.

Broaks, Andrew. "Do You Miss the Future? Mark Fisher Interviewed." *Crack Magazine*, September 12, 2014. https://crackmagazine.net/article/long-reads/mark-fisher-interview/.

Crawford, Kate. "Eating the Future: The Metabolic Logic of AI Slop." *E-Flux*, September 2025. https://www.e-flux.com/architecture/intensification/6782975/eating-the-future-the-metabolic-logic-of-ai-slop.

Deleuze, Gilles. *Difference and Repetition*. 1968. Reprint, London: Bloomsbury, 2014.

——. "Postscript on the Societies of Control." *October* 59 (1992): 3–7. http://www.jstor.org/stable/778828.

Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Bloomsbury, 1987.

——. *Anti-Oedipus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press, 1983.

Deleuze, Gilles, and David Lapoujade. *Two Regimes of Madness: Texts and Interviews*, 1975-1995. New York: Semiotext(E), 2007.

Fisher, Mark. *Capitalist Realism: Is There No Alternative?* Winchester: Zero Books, 2009.

——. *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. Alresford: Zero Books, 2014.

Foster, John Bellamy. *Marx's Ecology: Materialism and Nature.* New York: Monthly Review Press, 2000.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. New York: Pantheon Books, 1975.

——. "The Subject and Power." *Critical Inquiry* 8, no. 4 (1982): 777–95.

Freud, Sigmund. *A General Introduction to Psychoanalysis*. Wordsworth Classics of World Literature. Herts: Wordsworth Editions, 2012.

——. *Beyond the Pleasure Principle*. Dover Thrift Editions. New York: Dover Publication, 2015.

Grosz, Elizabeth. *Chaos, Territory, Art: Deleuze and the Framing of the Earth.* New York: Columbia University Press, 2019.

Han, Byung-Chul. *Psychopolitics: Neoliberalism and New Technologies of Power*. London/New York: Verso, 2017.

Haraway, Donna. *A Cyborg Manifesto.* Victoria: Camas Books, 1985.

——. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Chicago: Prickly Paradigm Press, 2003.

——. "The Promises of Monsters: A Regenerative Politics for Inappropriate/D Others." In *Cultural Studies*, edited by Lawrence Grossberg, Cary Nelson, and Paula Treichler, 313. New York: Routledge, 1992.

IlluminatiPirate, "Dead Internet Theory: Most of the Internet Is Fake," *Agora Road's Macintosh Cafe*, January 5, 2021, https://forum.agoraroad.com/index.php?threads/dead-internet-theory-most-of-the-internet-is-fake.3011/.

Jameson, Fredric. *Postmodernism: Or, the Cultural Logic of Late Capitalism*. Durham: Duke University Press, 1991.

Kilmister, C. W. "Disequilibrium and Self-Organisation." *Mathematics and Its Applications* 30, (1986): 19-21, https://doi.org/10.1007/978-94-009-4718-4_3.

Lacan, Jacques. *Transference*. Edited by Jacques Alain Miller. Translated by Bruce Fink. The Seminar of Jacques Lacan. Oxford: Polity Press, 2017.

Lotka, Alfred. "The Law of Evolution as a Maximal Principle." *Human Biology* 17, no. 3 (1945): 167–94.

Lovelace, Ada. "'Notes' to Luigi Menabrea, 'Sketch of the Analytical Engine Invented by Charles Babbage.'" *Scientific Memories* 3 (1843): 666–731.

McLuhan, Marshall. *Understanding Media: The Extensions of Man*. Berkeley: Gingko Press, 1964.

Negarestani, Reza. *Cyclonopedia: Complicity with Anonymous Materials*. Melbourne: Re.Press, 2008.

Pasquinelli, Matteo. *The Eye of the Master: A Social History of Artificial Intelligence*. Verso Books, 2023.

Pepi, Mike. *Against Platforms: Surviving Digital Utopia*. New York/London: Melville House Publishing LLC, 2025.

Plato. *Phaedrus*. Cambridge/New York: Cambridge University Press, 2011.

Roger Penrose. "Why Intelligence Is Not a Computational Process." YouTube. Breakthrough Discuss 2025, May 22, 2025. https://www.youtube.com/watch?v=iTVN6tFknCg.

Sbordoni, Alessandro. *Semiotics of the End: Essays on Capitalism and the Apocalypse*. Berlin/Nicosia: Becoming, 2025.

Schrödinger, Erwin. *What Is Life? And Other Scientific Essays.* Cambridge: Cambridge University Press, 1992.

Shannon, Claude Elwood , and Warren Weaver. *The Mathematical Theory of Communication*. Urbana: University of Illinois Press, 1949. https://pure.mpg.de/rest/items/item_2383164_3/component file_2383163/content.

Simondon, Gilbert. *On the Mode of Existence of Technical Objects*. Minneapolis: Univocal Publishing, 2017.

Stiegler, Bernard, and International Collective. *Bifurcate "There Is No Alternative."* 2020. Reprint, London: Open Humanities Press, 2021.

Titchener, Edward B. *An Outline of Psychology*. Alcester: Read Books, 2010.

Turing, Alan. "Computing Machinery and Intelligence." *Mind* 59, no. 236 (1950): 433–60. https://doi.org/10.1093/mind/LIX.236.433.

Vilém Flusser. *Writings*. Minneapolis: University of Minnesota Press, 2002.

Wiener, Norbert. *The Human Use of Human Beings: Cybernetics and Society*. New York: Da Capo Press, 1954.

Zepke, Stephen. "'A Work of Art Does Not Contain the Least Bit of Information': Deleuze and Guattari and Contemporary Art." www.performancephilosophy.org. Performance Philosophy, 2017. Accessed October 17, 2025. https://www.performancephilosophy.org/journal/article/view/145/265.

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