## Maks Valenčič

## THE ART OF ENCODING



PostScript<sup>um</sup>

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Some branches of contemporary artistic production, for instance objectoriented art, draw theoretic legitimacy from, among others, media theory and its most famous slogan "The medium is the message". However, we believe that media theory (or media science) in fact has more to offer than object-oriented philosophy, which was the main inspiration for such interest in objectness and the belief that what occurs in the object, its materiality, is the message itself. Media theory provides an opportunity for a more refined understanding of such art, as it takes the latter's metaphysical assumption not from posthumanism but from computation, by which it is able to explain more precisely the posthuman ambitions found in such works and provide them with a more insightful, far-reaching potential. Media theory is not based on the critique of humanism nor does it consider such critique as an interesting starting point, as its own essence can be found in technology or, rather, in the metaphysical encounter between logos and matter.<sup>1</sup> The interest in objectness and its performativity thus highlights above all the various ways in which patterns can be encoded (compressed) – ontological egalitarianism therefore concerns the very ability to *encode syntax*<sup>2</sup> beyond the provinciality of the human frame and its anthropocentrism. As Joscha Bach points out: "For something to exist, it has to be implemented."<sup>3</sup>

<sup>1</sup> Ernst, W. (2021). Technológos in Being: Radical Media Archaeology & the Computational Machine. Bloomsbury.

<sup>2</sup> Cavia, A. A. (2022). Compression Artefacts: On the Aesthetics of Compressibility. *My Computer Was a Computer (Catalyst M. Beatrice Fazi)* (D. Cecchetto, Ed.). Noxious Sector Press.

<sup>3</sup> Bach, J. [@Plinz]. (2021, April 23). For something to exist, it has to be implemented. This implies that things that cannot be fully described in a self consistent language cannot exist [Twitter]. Retrieved August 29, 2023, from https://twitter.com/plinz/ status/1385674300775038976?lang=es

Artists are thus similar to scientists in that they examine patterns, but do so with quite different criteria. While there is a certain degree of openness regarding such examination in both registers - in mathematics, for instance, we have the stereotype of a scientist lost in thought, who has left our world behind and has given himself fully to the abstraction of mathematical objects - the examination of patterns nevertheless seems to be more limited (or tactical) in science, which is what gives the latter a more pragmatic or instrumental character. At least if our benchmark is mainstream science and its inherent connection to industry, or *techno-capital*, and not more speculative forms of theorising about the holographic universe and other subjects. The reasons for Plato's ideal state can be understood in this same manner, insofar as we know that Plato banished artist and poets, the two registers that. historically speaking, have been the most successful at evading scientific reductionism or acted as antitheses to the legitimacy of such activity. If we understand Plato's state through the capacity for information compression, we could claim via complexity theory that Plato attempted to banish everything that at the time could not be compressed and consequently made intelligible; he attempted to banish computational complexity, *non-computability*, yet happily brought artisans (what today are scientists) into his world of good activity.

The contrast is more than obvious here: artists concern themselves with *simulacra* because they're not (necessarily) interested in the existing world – they simply do not occupy themselves with the world, but with art. We could say that they're not interested in the sun. Scientists, however, mostly examine this world and are consequently protected by all the patrons of light: the intelligibility of the world gives meaning and legitimacy to itself. It is they who are on the right track, since from the very beginning, they're able to compress patterns and, consequently, immediately embed them into themselves (or into the machinery of the state). Artists, on the contrary, are interested in all patterns, even in the barbarians who lurk outside the walls of the ideal state. Artist are, quite simply, foolish. Nick Land has long since

given the diagnosis that they "can't get enough of too much".<sup>4</sup> As a matter of fact, David Krakauer has already said everything there is to say on the subject: "It's just that [art and science] live on this spectrum of the random to the regular, that lend themselves to different languages of expression. I think the novel is an almost perfect platform for theorising about reality when the reality you're describing has a ton of idiosyncrasy in it, as opposed to calculus or the theory of dynamical systems, which is really good at expressing and encoding a reality that has very little randomness in it, almost none, to be honest, and lives in what we would call low-dimensional space."<sup>5</sup>

The artistic practice of general patterning (or general externalisation of patterns) can be generalised to the investigation of all possible forms of perception, which thoroughly deanthropomorphises such examination and guides it beyond the recognisable conscious states and the aesthetic judgements that follow, into the unknown. As David Roden explains: "Since the aesthetic is that part of our cognition that exceeds apperception, the aesthetician is better advised to abstract from actual phenomenology and consider – as [Alexander] Wilson does – the relation between indistinction and distinction within cognitive agents in general."<sup>6</sup> Thomas Nail gives a similar explanation of the essence of art, yet one that is not rooted in speculative posthumanism but in new materialism: "Art is not contemplation (Plato), judgement (Kant), idea (Hegel) or communication (Tolstoy), but is first and foremost about the affectations of matter. The experience of beauty is not a judgement of the world. It is a direct sensation of the world by a body woven into the qualities of the world."<sup>7</sup> This is precisely why most patterns cannot

5 Krakauer, D. (2019, October 9). David Krakauer on The Landscape of 21st Century Science [Podcast]. *Complexity by the Santa Fe Institute*. Retrieved August 29, 2023, from https://complexity.simplecast.com/episodes/1/transcript

6 Roden, D. (2020, January 10). Alexander Wilson on Nonhuman Aesthetics and Disconnection. *Wordpress*. Retrieved August 29, 2023, from https://enemyindustry.wordpress.com/2020/01/10/ alexander-wilson-on-nonhuman-aesthetics-and-disconnection/

<sup>4</sup> Land, N. (2021). Fanged Noumena. Urbanomic Press, p. 145.

<sup>7</sup> Nail, T. (2023). What Is New Materialist Aesthetics? *Diffracting New Materialisms* (A. Bayley & J. Chan, Eds.). Palgrave Macmillan, Cham. https://doi. org/10.1007/978-3-031-18607-3\_7

be appreciated (or even perceived) as such: there are no registers into which they could be embedded, no model that would make them into an intelligible pattern, and art is precisely the beginning of such patterning or *explication* that renders a certain thing operative.

In this sense, artistic action is media active, as it foregrounds precisely the need to pattern, to compress regularity, which can then be recursively embedded into new forms of such activity – in this sense, Davor Löffler's example of the spear and a hit-zone on a deer does not illustrate a pre-existing object in the world, but further virtualises the world through the spear:<sup>8</sup> it establishes a pattern or, rather, regularity that becomes recursively embedded into a different pattern, bringing about their entanglement. *Patterns turning patterns on*, as Sadie Plant would perhaps say. The question of any kind of capacity for sensing is therefore also part of our pattern recognition framework, as it implies the capacity to judge or, rather, discriminate between information and noise, i.e. to take the infinite number of possible combinations and turn them into the final pattern: the message. This is precisely why such a dynamic points to the lack of a hard dividing line between the two registers, especially if we consider McLuhan's famous statement that artists are masters of perception<sup>9</sup> and therefore the only ones not looking into the rear-view mirror, and above all Land's writing on the inherently political nature of noise: "To fail to acknowledge such questions is to take the notion of 'noise' as a purely passive and non-sentient interruption rather than as a strategically oriented 'jamming' of the message, and thus to ignore the conflictual aspects of both grammars and anti-grammatical subterfuges as they contend within the fluctuating space of redundancy or control."<sup>10</sup> What some see as simple noise can from the other side be seen as a planned disruption and distortion of a signal that attempts to switch to a different channel (or even bring such a transmission and thereby the supremacy of the dominant way of encoding to an end).

<sup>8</sup> Löffler, D. (2021, June 29). *Davor Löffler – "The Meaning of Life. A Journey to the Origins of Worlds"* [Video]. YouTube. Retrieved August 8, 2023, from https://www.youtube.com/watch?v=s16ScBXR1s

<sup>9</sup> McLuhan, M. (1964). Understanding Media: Extensions of Man. McGraw Hill, p. 71.

<sup>10</sup> Land, 2021, pp. 111–112.

McLuhan's (famous) slogan "We look at the present through a rear-view mirror. We march backwards into the future"<sup>11</sup> is therefore yet another observation that new media technologies have brought about a transformation of the field of aesthetics and that the very nature of ontological (re)mediatisation requires a new conceptual apparatus – a new way of encoding patterns. This ability that artists possess is well demonstrated in McLuhan's analysis of Cubist art, itself a prime example of medium as a message.<sup>12</sup> Cubism transcends the classic gestalt distinction between figure and ground, foregrounding through its artistic practice an entire spectrum of possible perceptions, as well as the very conditions of perception and not, as is classically the case, "a certain focus, certain foreground it is always aware of".<sup>13</sup> That is precisely why art is not *about something*, as it does not deal with the already existing, which it leaves to other, less important beings (orcs, as Bach would say);<sup>14</sup> instead, in its state of elven timelessness, it studies the infinite reconfigurations of all possible forms of perception. McLuhan, of course, understands this very well: "The message, it seemed, was the 'content', as people used to ask what a painting was about. Yet they never thought to ask what a melody was about, nor what a house or a dress was about. In such matters, people retained some sense of the whole pattern, of form and function as a unity."<sup>15</sup> Bach indeed additionally radicalises McLuhan's insight when he points out that "the arts is slightly different. It's a mutation that is arguably not completely adaptive. It's one where people fall in love with the loss function. Where you think that your mental representation is the intrinsically important thing. That you try to capture a conscious state for its own sake, because you think that matters."<sup>16</sup>

15 McLuhan, 1964, p. 15.

<sup>11</sup> McLuhan, M. (2019, July 29). *This Is Marshall McLuhan – The Medium Is The Massage* (1967). *Reelblack One* [Video]. YouTube. Retrieved August 29, 2023, from https://www.youtube.com/watch?v=cFwVCHkL-JU

<sup>12</sup> McLuhan, 1964, p. 23.

<sup>13</sup> Fisher, M. (2010). Misrecognising Narcissus. *Flatness*. Retrieved August 29, 2023, from http://archive.flatness.eu/fisher-essay.html

<sup>14</sup> Musser, G. (2018, September 4). The Wizard of Consciousness. *Psychology Today*. Retrieved August 29, 2023, from https://www.psychologytoday.com/intl/articles/201809/ the-wizard-consciousness

<sup>16</sup> Bach, J. (2023). *I find that most people serve practical needs* [Quote]. Goodreads. Retrieved August 29, 2023, from https://www.goodreads.com/ quotes/10476072-i-find-that-most-people-serve-practical-needs-they-have

Anil Bawa-Cavia also writes on the politics of noise by linking computation with contingency, a temporal logic that replaces timeless axioms with the dynamics of inference.<sup>17</sup> In his text *Shannon's Demon*, he points out the inherent problem of perception that is at work both in various theories of cognition, for instance predictive coding or the free energy principle, and in the very ways that deep neural networks are trained, most famously through next token prediction, which is precisely the method of learning that emulates such principles. Bawa-Cavia writes: "As [Inigo] Wilkins notes, for Wiener, 'organism is opposed to chaos, to disintegration, to death, as message is to noise'. By contrast, an epistemics of surprisal contextualises this relation by way of the indeterminacy of physics, and its statistical formalisation as an irreversible movement in time, as an encoding of uncertainty. For [Cecile] Malaspina, this dynamics resembles not so much a dialectical synthesis, but rather 'repeated cycles of acquisition and loss of equilibrium', which fluctuate between 'entropic dispersion and structural rigidity [...] without succumbing to the temptation to seek rest in either of them.' If, as Wilkins states, a defining characteristic of biological organisms is that they 'tap available free energy and degrade it into bound energy', this process plays out at both the thermodynamic and epistemic level, only due to an unfolding of uncertainty, in which signal and noise continually elude attempts to fix their role as figure or ground, respectively."<sup>18</sup>

In this back-and-forth, recording patterns is by no means innocent, as it can throw the system off balance or embed into it states that it is not ready for or cannot explain within its own categories or its own normativity. In this sense, we're not dealing with the classic *circular causality*, where a system, which is in fact a metastable pattern or better yet model, can simply respond to perturbations in the signal and adapt accordingly. No, art precisely does not make it possible to simply correct an error; it does not enable the classic method of optimisation where the goal is to re-align the relation between the

<sup>17</sup> Cavia, 2022.

<sup>18</sup> Cavia, A. A. (2022, March 27). *Shannon's Demon*. && Retrieved August 29, 2023, from https://tripleampersand.org/shannons-demon/

model and the input, i.e. to again minimise the discrepancy between prediction and the signal. For that would be a classic form of passivising the signal, its excess, where the attempt is made to, in McLuhan's terms, eliminate input patterns via the rear-view mirror. However, the inherent generativity of artistic pattern encoding, i.e. the very method of recording states that is based on encoding as such and not on the *principle of reality* (Freud), problematises the classic ways of adaptation, for it embeds into them aesthetic sensibility, which the existing model is unable to respond to. The latter therefore cannot undertake the process of minimisation, it cannot foretell what will or can be expected to happen, even if it knows that something is communicating with it, as this communication fails to establish a communication channel. Noise or the outside which the existing model fails to embed into leaves the latter in a state of continuous shock, even hallucination, where mental representations fail to embed into reality (they fail to process the signal). Roden adds: "It follows that if we define the human in terms of a typical Markov blanket, the aesthetic corresponds not to a particular kind of phenomenological description (e.g. in terms of a refined species of pleasure) but to marginal, anti-normative states that provide no 'decision procedure' whereby the flow of its dynamics undertakes a gradient descent towards minimal surprisal."<sup>19</sup>

The dynamics of encoding therefore requires a more comprehensive transformation that occurs from within. This is the very event that makes it impossible for things to simply continue, for something crucial not to break in the centre and for the process of worldbuilding not to recommence. Patterning therefore also recodes encoded norms or worldbuilding blocks, for these clearly weren't built on a solid basis or, rather, the building continued even in a seismic zone and according to an unchanged construction method. In doing so, the model no longer changes the environment or reacts to it; instead, it must change its relation to it, which sets off a change on the level of both the environment and the model itself. We could say that, in a way, a similar process also partakes in evolutionary dynamics, even if on a different level

and different temporality. The concept of *mesa-optimisation* aims precisely at the fact that it is in the organism's interest to change its own function. Meaning that it does not improve its level of evolutionary fitness in relation to the existing environment, but performs the function of the environment (selection) better than the environment itself. An excellent description of such principle was given at the AI Alignment Forum: "Mesa-Optimisation is the situation that occurs when a learned model (such as a neural network) is itself an optimiser. [...] Example: Natural selection is an optimisation process that optimises for reproductive fitness. Natural selection produced humans, who are themselves optimisers. Humans are therefore mesa-optimisers of natural selection."<sup>20</sup> Artistic encoding of patterns can partly be understood in a similar manner, where patterns also throw the system off balance or, rather, impact its genesis, trajectory or cone of realisation,<sup>21</sup> for they encode a pattern that only a new, and not already existing, metastable configuration, or rather a new equilibrium that is part of a new dynamics and logic of becoming, can embed into itself.

This can now help us better understand not only artistic appropriation of noise through alternative encoding of patterns but also recent artistic obsessions that take a different approach to "critique". Indeed, art has recently seen a turn towards *fictioning*, i.e. away from the commonplace critique and entanglement in relation logics with a mainstream model of reality, which can only mirror the latter and point to the myriad inconsistencies that it cannot address in any way. Here, art is no longer simply outside or beyond, it's not about a pure, structureless excess, about the intangible or ineffable, or about something that cannot be encoded or made intelligible. No, it's the other way around. The turn towards fictioning and such building of alternative realities and alternative worlds is a turn towards a different way of encoding patterns that, for this very reason, make the world into art or, rather, submit the

<sup>20</sup> Mesa-Optimization. AI Alignment Forum. Retrieved August 29, 2023, from https:// www.alignmentforum.org/tag/mesa-optimization

<sup>21</sup> Löffler, D. (2018). Distributing Potentiality: Post-Capitalist Economies and the Generative Time Regime. *Identities: Journal for Politics, Gender and Culture, 15*(1–2).

former to the practice of creative re-engineering (or even artistic terrorism - the beginnings of encoding are much simpler and deal with classic forms of memetic warfare and the ways of recoding reality, particularly the forms of ideological (esoteric) warfare which point out that the network society has no centre, meaning that a centre is established mainly as a consequence of a semiotic monopoly, which in this register is understood as brainwashing or thought control). Different forms of encoding embed into the world different temporalities and sequences of events, thereby thoroughly remediating the world. They embed into it a dynamic that is subject to a different logic of becoming and is for that very reason performative, *hyperstitional*, which is also the point where philosophy also becomes art and art becomes philosophy, since they both directly transform the existing reality (i.e. the very way of encoding patterns) and interfere in it. As Rowan Elizabeth Cabrales cryptically points out: "Aesthetaphysicks performs as an experimental Complex-Systems-Theory of and as Onto-Temporal-Network Aesthetics; a Philosophy of, for and from Hyperstition, Occulture and Accelerationism: the creative manipulation of time, reality, culture, History and society as art by artistic means."22

The difference between the classic world and the world as transformed by art is very similar to data transfer in quantum mechanics, where the alternative world, the alternative way of encoding patterns, successfully establishes communication and thereby the possibility to exchange or update the state in the other model of information encoding as well: "Quantum teleportation provides an alternative. Although it cannot move objects from place to place, it can move information by taking advantage of a quantum property called 'entanglement': a change in the state of one quantum system instantaneously affects the state of another, distant one."<sup>23</sup> In this sense, it's about actually transforming reality or, rather, about a form of ontological remediation,

<sup>22</sup> Cabrales, R. W. (2019). Aesthetaphysicks and the Anti-Dialectical Hyperoccultation of Disenchanted Representation: Hyperstitional Esoterrorism as Occultural Accelerationism [Master's Thesis, University of Amsterdam, Theology and Religious Studies: Western Esotericism], p. 16.

<sup>23</sup> Quantum teleportation. (2023, August 15). *Wikipedia*. Retrieved August 29, 2023, from https://en.wikipedia.org/w/index.php?title=Quantum\_teleportation&oldid=1170450415

as patterns are thus encoded in a new way. The change therefore relates to the very manner of encoding, which becomes increasingly general or, rather, increasingly less based on preconceived premises, meaning that such patterning is additionally virtualised or, rather, brought to a new level of abstraction. It operates in a world that enables more general and dynamic forms of patterning which relate to the possible encoding of information and, in turn, the ways in which the modality of the world, its intelligibility, is presented. As such practice is further democratised, the world becomes increasingly plastic, since pattern encoding flees from necessity and propagates itself through time. And when patterns take over the way (or gain agency over how) they themselves are inscribed into space or the world, they, needless to say, also take over the invariants or, rather, rules by which this inscription operates, radically increasing the potential of all possible transformations that a certain model of the world can effectuate. Fewer transformations means fewer possibilities to intervene into the world. less capacity to dissipate entropy and generate logical forms and, needless to say, a greater entanglement in the established temporality of the world and linear dynamics of events that lead into predictable states which, for that very reason, have no time. Something similar is emphasised in constructor theory, which deals with all possible transformations allowed by the laws of physics and where knowledge is precisely the constructor or, rather, the recipe capable of effectuating a transformation.<sup>24</sup> Of going from one state of the world to another or, rather, one way of encoding to another, which soon orients the initial observation towards creating constructors that are as general as possible and can automate such practice of effectuating transformations as efficiently as possible. The universal constructor as the holy grail of computational reason.

As best pointed out by Bawa-Cavia and Patricia Reed: "From a topological perspective, the updating of mental models is akin to recognising new conditions of situatedness: absent a static or a priori site from which to

<sup>24</sup> Deutsch, D. (2013). Constructor theory. Synthese, 190.

think, cognitive transformation is equal to the construction of other locales for embedding thought."<sup>25</sup> The implicit goal of pattern encoding is therefore to change the environment or, more generally, space. The goal is to exert influence in such a way that the sensory structure of the environment changes or, rather, that it enables new forms of sensibility and thereby new ways of encoding information. In this sense, such a project is always in between, always between worlds and trapped in a never-ending process of data exchange between different models of reality or, rather, ways of information compression that only enable perception and the world's becoming, by which they codify their own temporal trajectories, their own forms of becoming and capacities of operation. Every world is therefore an *as-if* world.<sup>26</sup> a simple expression of something that this world or, rather, its information complexity enables, of what it emphasises again and again: that input data can be synthesised differently, thereby creating a different function that explains it and encodes itself into existence. We're at a point where our reason is capable of such a transformation, which further radicalises Bach's statement that there are only two consistent theories of reality: "One is that we are basically in a machine. We are a part of the machine and there's nothing that is not part of the machine. [...] And in this world it's pretty hard to explain miracles. [...] And the other explanation [...] is that we are living in a dream, that magic is possible, and that the reason why miracles are so rare is the result of the way we are dreaming the dream."<sup>27</sup> Encoding therefore also pertains to navigation, but in this case navigation does not pertain to a path through the existing space but, more comprehensively, to encoding itself, where different forms of encoding are precisely the various forms of metanavigation between the existing ways of encoding that their

<sup>25</sup> Cavia, A. A. & Reed, P. (2023). Pointless Topology: Figuring Space in Computation and Cognition. *KI-Realitäten Modelle, Praktiken und Topologien maschinellen Lernens* (R. Groß & R. Jordan, Eds.).

<sup>26</sup> Benjamin, J. J. (2023). *Machine Horizons: Post-Phenomenological AI Studies* [Dissertation, University of Twente]. Retrieved August 29, 2023, from https://research. utwente.nl/en/publications/machine-horizons-post-phenomenological-ai-studies

<sup>27</sup> Bach, J. (2023, June 11). Is There Really a Hard Problem of Consciousness? – Joscha Bach, Artificial Intelligence Researcher. YouTube. Retrieved August 29, 2023, from https://www. youtube.com/watch?v=PkkN4bJN2pg

own abstraction embeds into new topological systems and gives these same patterns new meaning and new possibilities for their transformations or, rather, operationalisations. The essence of encoding thus changes, for we no longer wonder what the encoded pattern means, but where and how it's localised: "Productive navigation, in contrast, changes the very environment or neighbourhood of search as a transformation in the conditions of embedding and encoding queries."<sup>28</sup> Or as Reza Negarestani writes: "Pointless topology as a frame for thinking abductive novelty translates into the space of search, such that gueries shift from what an object of inquiry is, to where (and how) it is located/localised."<sup>29</sup> Art is therefore the art of encoding, which makes the latter's essence congruent with media archaeology or *computation science*, where the subject of research are precisely such changes in encoding and abstraction that different forms of encoding and operationalising patterns, or such syntax, enable. We live in a *technological civilisation* and perhaps the best description of this generative logic of encoding is given by Alan Kay, who could also be read in the context of *design* or *synthetic sciences*, where science has also become emergent. Kay adds: "Computer science inverts the normal. In normal science, you're given a world, and your job is to find out the rules. In computer science, you give the computer the rules, and it creates the world."<sup>30</sup>

<sup>28</sup> Cavia & Reed, 2023.

<sup>29</sup> Negarestani, R. (2015). Where is the Concept? (Localization, Ramification, Navigation). When Site Lost the Plot (R. Mackay, Ed.). Urbanomic.

<sup>30 29</sup> Alan Kay Quotes on Success (PROGRAMMING). (2023, May 14). Gracious Quotes. Retrieved August 29, 2023, from https://graciousquotes.com/alan-kay/

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