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Research article

Ontolytic Writing of the Future

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Abstract

Visions of the future in the face of advancing scientific and technological developments are arguably as old as technological progress itself. In recent decades, however, and through new and emergent technologies such as nanotechnology or synthetic biology such writing of the future has increasingly taken on a quality that is more than merely imagining possible futures or extrapolating current developments. This is a writing of the future that can unravel the weave of the present – it is ontolytic writing. In order to illuminate ontolytic writing and what it means, we will first take a look at the phenomenon of the future tense II – how it represents a time loop through which an observer views the present from a position of the future and, in this act of viewing, 'determines' what of it will have been important. In a next step, parallels are drawn to prophetic speech that predicts a future and thereby rewrites the present. Then, through a look at the theory of science fiction literature, particularly Darko Suvin, this influence of the future narrative on the present is framed as ontolytic. Ontolysis is embedded in other concepts from science fiction theory, primarily estrangement, the notion of the novum, and chronotope. Using some examples of technovisionary texts, it is shown that this 'diagnosis' is transferable from Science Fiction literature to all other kinds of technovisionary narratives. The paper concludes with basic considerations about the kind of ontology that can be used to further elucidate the concept of ontolysis.

Keywords: Technofuturism; Ontology; Ontolysis; Ontolytic Writing; Future; Novum; Estrangement; Chronotope; Science Fiction

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Онтолитическое письмо будущего

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Аннотация

Видения будущего в условиях прогресса научных и технологических разработок, возможно, так же стары, как и сам технологический прогресс. Однако в последние десятилетия, а также благодаря новым и появляющимся технологиям, таким как нанотехнологии или синтетическая биология, описание будущего все больше приобретает качество, которое выходит за рамки простого воображения возможного будущего или экстраполяции текущих событий. Это письмо будущего, способное распутать ткань настоящего - это онтолитическое письмо. Чтобы пролить свет на онтолитическое письмо и его значение, мы сначала взглянем на феномен будущего времени II – как оно представляет собой временную петлю, через которую наблюдатель рассматривает настоящее с позиции будущего и в этом акте просмотра "определяет", что именно было важным. На следующем этапе проводятся параллели с пророческой речью, предсказывающей будущее и тем самым переписывающей настоящее. Затем, если взглянуть на теорию научно-фантастической литературы, в частности на Дарко Сувина, это влияние будущего нарратива на настоящее представляется онтолитическим. Онтолиз заложен в других концепциях теории научной фантастики, прежде всего в отчуждении, понятии новума (novum) и хронотопа. На некоторых примерах техновизионерских текстов показано, что этот "диагноз" переносится из научно-фантастической литературы на все другие виды техновизионерских нарративов. В заключение статьи приводятся основные соображения о том, какую онтологию можно использовать для дальнейшего разъяснения концепции онтолиза.

Ключевые слова: Технофутуризм; Онтология; Онтолиз; Онтолитическое письмо; Будущее; Новум; Отчуждение; Хронотоп; Научная фантастика

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PRELIMINARY CONSIDERATIONS

Some say: Past and future do not exist, only the now, the present moment, which is thought either unextended, or with a certain 'halo' of presence that surrounds it and is not further defined. This is what I want to start from. So, when I talk or write about past or future things, I talk or write about something that does not exist.

It seems as if – strictly speaking – I can only be silent about the present (in the narrow sense), because: if I talk about it, the thoughts preceding it, even if only minimally, are the past of what I talk about. So, I am talking about the past. If I now write this down, something similarly happens: At best, the writing reproduces past thoughts, at worst the past speech of my preceding thoughts. I am caught in the meshwork of the words, which are not the things, and which as 'known' always belong to or originate from the past.

(Let's stick to writing, and not be so strict – and understand the present as a subjectively felt period or space of time, be it the present minute, the current year, or 'the 20s'). When I write about what is, I write about the present, about what exists. I cannot write about the future, as something that exists. I create forecasts, prophecies, or the like with words. But this is double-faced, for if I do this in a certain way (which remains to be clarified), then I am again quite actually talking about the present, and into the present, changing it – doing so in the voice of the future perfect, thus going beyond what can be indirectly inferred from speech about the future that concerns the present. This is of such or such a kind. And: this will have been of such or such a kind. These are not the same – I am talking in a loop!

FUTURE PERFECT/FUTURE TENSE II

Peter Bexte (1991) explores some implications or examples of this future tense II in his essay "Das wird's gewesen sein!" (This will have been it!). He traces some implications or examples of future tense II as understood here, extending it beyond the concrete grammatical form to a possessive gesture. First, we are confronted with the 'New Zealander' captured by graphic artist Gustave Doré. In the last panel of his London: A Pilgrimage (1890) the New Zealander as a tourist from the other side of the world contemplates the ruins of London as the British of the Empire contemplated the ruins of the ancient Romans and Greeks (Doré and Jerrold, 2020, p. 259). The origin of the trope, the stereotype of the New Zealander, is generally attributed to the British historian and statesman Thomas Babington Macaulay (1800-1859) but has a more distant history and was widely used in the 19th century (cf. Dukes, 2021). The (fictional) New Zealander generally approaches the reader as a chronicler of the future (Bexte, 1991, p. 96), casting his eye in the future on the remains of our present, thus saying: This will have been it! He says what of today will have been important tomorrow and thus changes today. Macaulay himself 'used' the New Zealander whenever he wanted to point out political developments that could lead to a decline of the Empire – expressing the colonialist's fear of a future reversal of the balance of power.



A variation of the theme of doom in the future tense II loop is Albert Speer's "A Theory of Ruin Value" (Speer 1970, p. 56; cf. Bexte, 1991, p. 101-02), which met Hitler's approval: The important buildings of the 'third Reich' were to be erected in such a way that in a very distant future, even in the stage of decay analogous to the Roman Empire, the splendor of Hitler's Reich will still be readable. "To illustrate my ideas I had a romantic drawing prepared. It showed what the reviewing stand on the Zeppelin Field would look like after generations of neglect, overgrown with ivy, its columns fallen, the walls crumbling here and there, but the outlines still clearly recognizable" (Speer, 1970, p. 56). Here we see an attempt to proactively encode into the now, through the lens of the future tense II, what it should have been in the future – "It is 'futurismo et fascismo' [...] in the German Romantic form of the future tense II" (Bexte, 1991, p. 103, translation S.G.).

Most interesting, however, with regard to an ontolytic writing of the future – we will come back to this – is Bexte's reference to Paul Valéry's Monsieur Teste, who is looking for a kind of *mechanical sieve* that would help him to consistently and continuously burn everything past behind him by helping him retain from today only what he would need in the future: "I keep what I want. But that is not the difficulty. It is rather to keep what I shall want tomorrow" (Valery, 1973, p. 11). Such a sieve would have to be able to say at any moment: This will have been it!

Of course, it is beyond human capacity to have or to construct such a sieve, for it would presuppose a divine perspective that bridges time, an "algorithm of God" (Bexte, 1991, p. 97). As Jacques Lacan points out: only a divine consciousness could say "what I shall have been for what I am in the process of becoming" (Lacan, 1989, p. 94). Bexte continues: "However, as long as we do not possess the algorithm of God, the future tense II tears the present apart. It splits it into its material and its unattainable meaning, its forever only future meaning. [...] Thus the future tense II, as a linguistically completed future, plays Judgement Day. In its name, the power of the origin falls into the maelstrom of the end" (Bexte, 1991, pp. 97-8, translation S.G., emphasis added). "The fracturing of the present by the future tense II expresses itself in a double-tongued way: Dampening desire while focusing its alignment. [...] As a memento mori, this rupture stands in a melancholy tradition and at the same time has its aggressive side in the breaking of the present by the presence of the future. In this grip there can be a threatening gesture that denies the hypothetical character of the future tense II and forcibly transforms it into apodictic certainty by constantly knowing how to remember only the same thing about the present [...]" (Bexte, 1991, p. 101, translation S.G.). Bexte thus remarks on the not inconsiderable 'power' of the future tense II, since it "[forms] the present in a way that human Dasein cannot escape" (p. 103). In current debates it can be observed, for example, that some futurologists want to give the impression that they have such a sieve at their disposal.

PROJECTED TIME

Let us first note: the future perfect (in writing or speech) does something to the present, it changes it, possibly even does violence to it; and this occurs especially when



the gesture of the future tense II denies its hypothetical character, that is, when it- comes across as prophecy. In the context of ethical aspects of nanotechnology (as a new and emerging technology), Jean-Pierre Dupuy (2007, 2012) has dealt with the question of how enlightened doomsaying is possible, that is, enlightened prophetic speaking about the future in the form of apocalyptic predictions. This is to create the precondition in the present for exerting influence without losing oneself in hypotheses about possible futures.

This establishes a relation to the future of a sort that can best be illustrated by Dupuy's (2007) distinction between *occurring time* and *projected time* (p. 126-127). While occurring time is structured like a decision tree diagram in which various alternative time paths and options for action branch out from the present into the future, projected time is a closed loop.

To foretell the future in projected time, it is necessary to seek the loop's fixed point, where an expectation (on the part of the past with regard to the future) and a causal production (of the future by the past) coincide. (Dupuy, 2007, p. 127)

The prophet, according to Dupuy, must in the act of prophecy always already consider that the prophecy itself will play a part in the causal chain that will lead to the predicted result. Thus, prophecies do not belong in discussions of an open future, but instead afford an ontological positing. The prophet takes the standpoint of the future and looks back from there to a past which is the present, and from this perspective the future is no longer open but a fateful development. In such a way, not only is our relationship to the future reshaped, but looking back from the future also makes the present and its past something other than it was before. Ultimately, it is Bexte's future tense II – with the fixing of the future – which delivers a verdict on the present: this will have been it.

SCIENCE FICTION

So, what is this particular kind of talking about the present through the future, of writing into the present through the future? In order to be able to answer this question, the focus will be narrowed from general considerations to a writing of the future, asking how one can grasp the influence of this writing which delivers its words on the present quasi technically. Here it recommends itself to look at science fiction literature. Science fiction is writing in the future tense, but – as far as it is high quality literature – it is actually future tense II, insofar as it knows how to irritate the everyday world, the everyday present, in some form or other, to put an irritating sheen of estrangement on it. In the case of Science Fiction literature this does not imply a violent process, broadly understood, but takes place by way of an implicitly presupposed agreement with the reader.

It was Darko Suvin, an important theorist of Science Fiction literature, who stated an effect of high quality Science Fiction literature on the perception of the reader's life world, calling this effect ontolytic: An "ontolytic effect: the social addressee's empirical norms are being challenged by the estrangement inherent in the oscillation the text sets up between them and a new normative system, between the addressee's 'zero world' and the possible world of the SF text' (Suvin and Canavan, 1979/2016, p. 366-367). In a



Science Fiction narrative, an alternative future world is described in which characters are subject to "ontic change," in terms of a shift in space or time, or in terms of reality itself changing. The presentation of this fictional future provides points of connection to the life-world of the implied reader, and thus refers the future back to the 'present,' creating an oscillation between the two 'worlds' that allows the reader to see his or her world in a new light, namely that of the written future. The 'fabric' of the present (of what is) is restructured in this light, nuanced, opening up previously unseen connections and reevaluations – passing a sieve that reveals now what will have been important later. The furniture of the reader's world is being moved around.

For this to succeed, Science Fiction stories or histories need a novelty or novum around which they are structured. The Novum "makes for the SF narration's specific ontolytic effect and properties. [...] SF does not posit another superordinated and 'more real' reality but an alternative on the same ontological level as the author's empirical reality – one should say that the necessary correlate of the novum is an alternate reality, one that possesses a different historical time [...]" (Suvin and Canavan, 1979/2016, p. 87).

[Science Fiction's novum] is 'totalizing' in the sense that it entails a change of the whole universe of the tale, or at least of crucially important aspects thereof (and it is therefore a means by which the whole tale can be analytically grasped). [...] Quantitatively, the postulated innovation [the novum] can be of quite different degrees of magnitude, running from the minimum of one discrete new 'invention' (gadget, technique, phenomenon, relationship) to the maximum of a setting (spatiotemporal locus), agent (main character or characters), and/or relations basically new and unknown in the author's environment. (Suvin and Canavan, 1979/2016, p. 80)

The novum or the nova – there can also be several from different fields – can thus take on a variety of forms, from concrete gadgets, new scientific-technological developments to relation relations or social structures.

According to this theory, the novum is the structure-giving center of the chronotope (Greek for time-place). The chronotope was borrowed from the natural sciences and coined as a concept by the Russian literary scholar Mikhail Bakhtin (1997). The notion of chronotope allows one to see the various ways in which space and time form a unity in a narrative and how they are related to each other differently in different literary genres, structuring the plot differently. The design of settings and their representation matters, as do the plot that unfolds in time, as do the space (and time) of action of characters in the narrative, and as do structures of sequence of events in relation to plot location and time. The chronotope is thus the combination of map and timeline or cycle.

In the literary artistic chronotope, spatial and temporal indicators are fused into one carefully thought-out, concrete whole. Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and



responsive to the movements of time, plot and history. This intersection of axes and fusion of indicators characterizes the artistic chronotope. (Bakhtin 1997, p. 184)

One could say that "the chronotope is a way of 'seeing' time in the physical and spatial world" (Renfrew 2008, p. 114). Bakhtin himself applied his theory to the analysis of classical literary genres such as the picaresque novel, the Greek novel, or the romance of chivalry.

In science fiction as a "future" genre, the chronotope has two dimensions. There is a synchronic dimension, namely the structure of the space-time of the described world. And then there is a diachronic dimension which concerns the inner mechanics of development of this world and which explains – in the sense of a "future history" – how and for what reasons the reality of the reader and author has historically developed into the one described in the novel. These chronotopes are fascinating: as literary devices they captivate the reader, but in their linking power they also determine deeper structures of the narrative. The future history is an extrapolative construct that spins on technological and social currents of the present. And on the nature of the chronotope depends decisively whether this represents alternative developments under the premise of plausibility, prognosticism, or even determinism. The chronotope contains the author's actual conception of the future and the attendant world view.

Another brief look should be taken at another element of the science fiction genre, which – also introduced into the Science Fiction discourse by Darko Suvin – is closely related to novum and chronotope. This is the notion of estrangement, especially cognitive estrangement. The tension between the reader's experience in the respective everyday world and the novum "estranges the empirical norm of the implied reader [...] Clearly the novum is a mediating category whose explicative potency springs from its rare bridging of literary, extraliterary, fictional and empirical, formal and ideological domains [...]" (Suvin and Canavan, 1979/2016, p. 64).Defamiliarization, then, is ultimately a function of the novum, which through its novelty and otherness subverts the empirical norm of the implicit reader and is meant to override automatisms of perception.

Suvin explicitly refers to Bertolt Brecht and Viktor Shklovsky (Suvin and Canavan, 1979/2016, p. 6), but he applies in his own way to the genre of science fiction their concepts of Verfremdung (V-effect) and ostranenie (making strange). He integrates the different levels on which estrangement can take place into different aspects for his poetics of science fiction, concerning the nature of fictional worlds and their relation to empirical reality, a formal procedure to justify the novum – the naturalization of the marvelous, an opposite formal procedure, namely the rendering strange of the known, the de-automation of perception, the re-recognition of the known (cf. Spiegel, 2006, p. 19). Suvin chooses the term cognitive estrangement for his own conception.



BEYOND SCIENCE FICTION

Thus, having read the written future, the reader re-reads the present. Here we have a first meaning of the expression *ontolytic writing of the future:* writing the future in such a way that it has an effect of dissolving the fabric of the present.

The interesting thing is that this kind *of ontolytic writing of the future* can also be found in non-fictional texts, primarily in those that present grand anticipations of the future in the name of new and emerging technologies – visionary schemes with strong extrapolative claims. This development experienced a great upswing at the beginning of the 2000s with the start of the hype around nanosciences and nanotechnologies which will therefore serve as an example here. Futurologists, technovisionaries, transhumanists, and people with a scientific background – interestingly, a disproportionate number of software engineers – saw in the nanosciences the potential for a new industrial revolution and a fundamental upheaval of almost all areas of life and science. Some still see unfathomable possibilities of power and control: With the harnessing of the atom – *Shaping the World Atom by Atom* (NSTC, 1999) – the world as a whole opens up to comprehensive control. This claim to control is a central motif in the visionary technofuturism that accompanies nanotechnology as a globally unified research program as it was represented also by national science agencies.

Nano-visionary Eric Drexler's book *Engines of Creation* is a good example: "Drexler's seminal and influential *Engines of Creation*, outlining his program for nanotech research, is composed as a series of science-fictional vignettes" (Milburn, 2002, p. 271). Drexler's work is composed of many stories that sequentially discuss and illustrate various instances of the novum of nanotechnology, often going beyond popular science rhetoric to create small literary scenes intended to emotionally engage the reader. Successively, the text introduces the various engines through which a mastery of the nanocosmos will come about – *Engines of Construction* (Chapter 1), *Engines of Abundance* (Chapter 4), *Engines of Healing* (Chapter 7), etc. In these episodes, one can regularly find passages like the following:

If we succeed [...] then you may be honored with endless questions from pesky great-grandchildren: 'What was it like when you were a kid, back before the Breakthrough?' and 'What was it like growing old?' [...] By your answers you will tell once more the tale of how the future was won. (Drexler, 1986, p. 239)

The Tale of the Temple: Once upon a time, there lived a people with an information problem. Though they had replaced their bulky clay tablets with paper, they used it oddly [...] (Drexler, 1986, ch. 4).

Both passages make use of narrative techniques that are characteristic of fictional texts. The second quotation plays explicitly ("once upon a time") with the fairy tale genre to set the readers up for that sense of being obsolete which will take hold of them once they are introduced to the backwardness of current technology in comparison to the "coming era of nanotechnology." Thus, in *Engines of Creation* Drexler weaves a tapestry of small Science Fiction vignettes woven around his chosen novum.



The NBIC report on nano-bio-info-cogno convergence of the US National Science Foundation (Roco and Bainbridge, 2002) "worked" in an analogous way. The editors of the report provide the framing in an overview into which they insert statements and visionary essays on improving human cognition, health, national security, etc. These texts also revolve around disruptive novelty or nova – new kinds of gadgets and radical concepts – which unfold in detail within the essays.

José López (2006) analyzes Drexler's *Engines of Creation* and the NBIC report with regard to the novum used in each case and comes to the conclusion that both texts are structured by a central metaphor dominating the text, which is joined by further novas. In Drexler's case, this is the "breakthrough" – the breakthrough into the world of assemblers and atomic world construction kits, accompanied by the heroic engineer, the reductionist machine metaphor, and so on (López, 2006, p. 339). In the case of the NBIC report, it is the "convergence" of the nano-, bio-, information-, and cognitive sciences that is at the center of the narrative and gradually allows social sciences and humanities to also "converge" with them under the paradigm of the reducibility of reality to atomic construction kits and information patterns (López, 2006, p. 364).

In these texts by Drexler, Bainbridge and Roco, and others, "the" nanotechnology unfolds as the actual novum in the background. Like a black hole or singularity it "sucks up" into itself all the scenarios and vignettes that are told and embellished about the possibilities of its application, in order for these possibilities to re-emerge from it perceptibly realized. Into the black hole's gravitational field are sucked, however, not only the imagined purposes of various applications, but also timelines and a conception of the future, which becomes narrowed from an open space of development to an inescapable necessity – recalling Peter Bexte's future perfect – and Alfred Nordmann's analysis of "Tunnel Visions for Technovisionary Research and Policy" (Nordmann, 2013). Nordmann refers to Patrick McCray's (2012) book *The Visioneers*, which tells the story of visionary engineers – visioneers – like the ones mentioned before.

Visioneering thus mobilizes skills, expertise, and resources to forge something much stronger than a narrative thread that more or less plausibly leads from the present to the future. What visioneering aims for is to exhibit a compelling causal link between a state A (technological work-in-progress) and a state B (a future so desirable as to mandate its realization) such that A will actually lead to B while B necessitates A." (Nordmann, 2013, p. 89)

One could say visioneering, the telling of visionary tales of engineering tunnels from A to B, from the present to the future, and its shovel is a mesh of words arranged to loosen the secure ground of the present beneath one's feet.

What Drexler's text achieves, unwittingly or not, is a narrative that re-ontologizes the past, present, and future. This is achieved by rebuilding the world synchronically and diachronically around the *Breakthrough*, the arrival of the molecular assembler. (López, 2006, p. 340)

Independently of "ontolysis" and without reference to Suvin, Lopez employs here a notion of re-ontologization, which, however, fits very well as the next step that follows



the shock of ontolysis. In Drexler's text, the entire world is conceived under the viewpoint of the atomic construction kit, and under the metaphor of the "machine." Everything that replicates, including DNA, is ultimately a machine that can be improved. Or one can build new machines like nanobots right away to replace our "old" nature with a better one. Through this novum a new world is presented *synchronously*, in which everything without exception is reducible to specific machine-like configurations of atoms and molecules. *Diachronically*, the present and the past are also subjected to this conception.

Our ability to arrange atoms lies at the foundation of technology. We have come far in our atom arranging, from chipping flint for arrow-heads to machining aluminum for spaceships. (Drexler, 1986, p. 3)

The development towards a nanotechnological future is presented in quasievolutionary terms, deterministically, as inevitable. This inevitability, bought by extreme reductionism, becomes tangible in the two dimensions of the chronotope developed by Drexler in *Engines of Creation*. It is precisely here that López shows how the analysis of narrative techniques provides insight into the way in which a worldview is hidden behind supposedly pure scientific considerations.

Eric Drexler's *Engines of Creation* and many other technovisionary representations also exhibit the characteristics of cognitive estrangement: On the one hand, the foreign nanoworld is made familiar by extending the chronotope from the future through the present into the past, and by re-ontologizing the present, redescribing it under the categories of the atomic kit and the machine metaphor. On the other hand, *at the same time*, the familiar world given by the empirical norms of the reader becomes estranged by being described as the "nanomachinery" that drives the always actual reality (see also López, 2006, p. 338). The crucial difference introduced in *Engines of Creation*, as in other visionary nanotexts, is that the mirror function is suspended: There is no distance between the reader's assumed reality and the imagined "future" world – one is merely the soon-to-be-obsolete precursor of the other in an inescapable evolution. In these texts, estrangement does not serve to point out alternatives by offering a fresh look at the given. Instead, they ontolytically tear readers from their "anchoring" in their life-world in such a way that it can be reconstructed "under their feet" as a deficient version of reality in light of the future that establishes past and present reality in new terms.

Besides these larger texts, ontolytic wirting of the future may well be seen in 'small forms,' such as brochures of governmental agencies, industry associations and the like – up to the IBM logo, which Don Eigler and Erhard Schweizer "wrote" in 1990 with 35 xenon atoms. It is just a word that stands for the name of a company.

[A]toms were prompted to perform a silly trick, devoid of natural and technical meaning – just to show what they can do and what humans can do with them. If they can do something completely arbitrary, if they can be arranged to spell the name of the IBM research laboratory or spell the word "atom," then there is no limit to what they can do. A world of new human powers has arisen, in the beginning a token of seemingly unlimited human willfulness. (Nordmann and Bylieva, 2021, pp. 7-8)



This is a special form of ontolytic writing of the future: a detour through the loop of the future tense II is not necessary at all – the future is inscribed into the present as a blank space to be filled by power.

OUTLOOK: ONTOLYSIS AND ONTOLOGY

If this talk of ontolysis is not to remain merely metaphorical, the question arises which kind of ontological consideration can make the process of ontolysis more tangible or describable in detail. First of all, this cannot be a reductionist ontology that tries to reduce complex phenomena, entities or concepts to simpler or more fundamental components or elements – relying on the basic idea that everything in the world can be traced back to a limited number of elementary building blocks or principles. Another candidate is a 'vulgar' or 'mundane' ontology (Heidegger), which – oriented towards analytic ontology – aims at cataloguing the furniture of the world. This furthermore leads to the ontological understanding of information science, that is, to the cataloging, categorizing of the entire lifeworld, ranging from concrete material objects to abstract entities that are categorized and linked in separate, yet interconnected 'partitions.'

An example that will only be touched upon at the end of this text is human 'moral enhancement' which has been and still is subject of a whole series of scientific and popular publications over the years (to name but a few, see Douglas, 2008; Harris, 2011; Persson and Savulescu, 2012). The point is that the moral aspects of human nature might be improved by biochemical interventions into the brain. This ranges from 'small' improvements regarding living together – difficulty being faithful in a relationship? There will be a pill for that! – to the establishment of a sustainable general morality which in the long run will enable the survival of humankind and save it from self-destruction.

However, the discussions for and against moral enhancement exhaust themselves in the desirability or feasibility of such a development with its numerous possible effects on the individual and society. Not discussed is the underlying ontolysis and subsequent re-ontologization. This is involved in the shift of the "moral" from a category of personal responsibility, subject to its own free will, into an ontological partition of reality, which pathologizes questions of fidelity, truthfulness, etc. and sorts them into a catalog of human ailments on a level with the common cold and bronchitis. With each turn of the discussion circle this mundane view becomes more deeply inscribed into our understanding of the world – today's ontological order of things upset by writing the supposed future of technology and morality.

REFERENCES

Bakhtin, M. M. (1997). *The Bakhtin Reader: Selected Writings of Bakhtin, Medvedev, Voloshinov* (P. Morris (ed.)). Hodder Arnold.

Bexte, P. (1991). Das wird's gewesen sein! Zeitschleifen durch das Futur II [That will have been it! Time looping through the future tense II.]. In W. Künzel and P. Bexte (Eds.), *Präsenz: Zeitspeicher und time machines* [*Presence: Time-reservoirs and time machines*] (pp. 93–105). Künzel.



- Dorè, G., and Jerrold, B. (2020). *Gustave Dorè's London: A Pilgrimage* [Retro Restor. Spec. Ed.]. CGR Publishing.
- Drexler, K. E. (1986). *Engines of Creation. The Coming Era of Nanotechnology*. Anchor Books.
- Douglas, T. (2008). Moral Enhancement. *Journal of Applied Philosophy*, 25(3), 228–245. https://doi.org/10.1111/j.1468-5930.2008.00412.x
- Dukes, H. (2021, Oct. 26). "When London is in Ruins": Gustave Doré's The New Zealander (1872). *The Public Domain Review*. https://publicdomainreview.org/collection/dore-new-zealander/
- Dupuy, J.-P. (2007). Copmplexity and Self-Organization. In F. Allhoff, P. Lin, J. Moor, and J. Weckert (Eds.), *Nanoethics: The Ethical and Social Implications of Nanotechnology* (pp. 119–131). John Wiley and Sons.
- Dupuy, J.-P. (2012). The precautionary principle and enlightened doomsaying. *Revue de metaphysique et de morale*, 76(4), 577–592. <u>https://doi.org/10.3917/rmm.124.0577</u>
- Harris, J. (2011). Moral Enhancement and Freedom. *Bioethics*, 25(2), 102–111. https://doi.org/10.1111/j.1467-8519.2010.01854.x
- Lacan, J. (1989). Écrits: A Selection. Routledge.
- López, J. (2006). Bridging the Gaps: Science Fiction in Nanotechnology. In J. Schummer and D. Baird (Eds.), *Nanotechnology Challenges: Implications for Philosophy, Ethics and Society* (pp. 327–356). World Scientific Publications.
- McCray, W. P. (2012). The Visioneers. Princeton University Press.
- Milburn, C. (2002). Nanotechnology in the age of posthuman engineering: Science fiction as science. *Configurations*, *10*, 261–295. <u>https://doi.org/10.1353/con.2003.0017</u>
- Nordmann, A. (2013). Visioneering Assessment. On the Construction of Tunnel Visions for Technovisionary Research and Policy. *Science, Technology & Innovation Studies*, 9(2), 89–94.
- Nordmann, A., and Bylieva, D. (2021). In the Beginning was the Word. *Technology and Language*, 2(1), 1–11. <u>https://doi.org/10.48417/technolang.2021.01.01</u>
- NSTC. (1999). *Nanotechnology: Shaping the World Atom by Atom*. National Science and Technology Council.

https://www.ewh.ieee.org/soc/cpmt/presentations/nanoarticle.pdf

- Persson, I., and Savulescu, J. (2012). Unfit for the future: the need for moral enhancement. Oxford University Press.
- Roco, M. C., and Bainbridge, W. S. (2002). *Converging Technologies for Improving Human Performance*. WTEC and NSF.
- Speer, A. (1970). Inside the Third Reich: Memoirs. Macmillan.
- Spiegel, S. (2006). Der Begriff der Verfremdung in der Science-Fiction-Theorie [The concept of estrangement in theories of science fiction]. *Quarber Merkur*, 103–104, 13–40.
- Suvin, D., and Canavan, G. (2016) Metamorphoses of Science Fiction. On the Poetics and History of a Literary Genre. Peter Lang AG International Academic Publishers. (Original work published 1979)
- Valery, P. (1973). *Collected Works of Paul Valery, Volume 6: Monsieur Teste*. Princeton University Press.



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