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The Good, The Bad and the Grimdark: Why Technological Mastery Precludes Collective Self-Mastery

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Abstract

This paper argues that a modern technological society devoted to socially determined ends is impossible. This "Grimdark Thesis" assumes a posthumanist "New Substantivist" theory of technology whose upshot is that modernity renders technical entities *abstract* and *highly repeatable*. Abstract technology is functionally indeterminate and counter-final, lacking either intrinsic or extrinsic teleology. In particular, I argue that extrinsic teleology – e.g., socially determined ends – is foreclosed by modelling a technological society as a Hyperagent – a maximally mutable being capable of arbitrary changes to its technical or material substrate. Finally, I consider whether this technological "Outside" can be reintegrated into the normative space of reasons as lack or negation, along the lines explored in contemporary Hegelian/Lacanian theories of the Subject. I argue that there are no grounds for assuming that the barred subject assumed by Hegelians/Lacanians is a transcendental invariant, implying the Technological Outside is a subtracted but not a constitutive lack.

Keywords: Autonomy, Posthumanism, Pessimism, Disconnection

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Introduction: First the Good News!

Much as we might aspire to a condition in which advanced technologies are devoted to collectively determined, just ends—rather than expanded for profit, or for no reason at all—we can't have such nice things. We either relinquish modernity for some primitivist or despotic alternative or accept that the (possibly short) future of humanity is to inhabit a vast, ramifying, inhuman system we can never hope to control "like fleas on a cat."[1]

The reasoning behind this pessimistic claim stems from a philosophy of technology I dubbed "New Substantivism."[2] In outline, Old Substantivism claimed technology is a controlling and determining feature of human society. New Substantivism dispenses with the first proposition (The Good) while asserting that technology in its modern form cannot be controlled (The Bad). Both positions, however, assume that technology is an important, often disruptive, factor in socio-cultural change. Here, I want to sharpen its ontology and further consider its implications for theories of technological governance.

The argument assumes an anti-holist ontology that I set out in the first two sections. Its upshot is that modernity frees up technical entities from finite socio-technical contexts and renders them both *abstract* and *highly repeatable*.

Abstraction is a condition of the self-augmenting or self-catalyzing character of modern technique explored in Jacques Ellul's *The Technological Society*.[3] Self-augmentation, according to Ellul, is a condition of the normative control exerted by technology on culture. But while abstraction is a condition of self-augmentation, I argue that rampant functional indeterminacy forecloses autonomy. The disruptive and determinative effects of modern technique thus lack normative constraints from technology itself (Section 3). However, I also adapt the speculative posthumanist idea of a maximally flexible and self-modifying agent—or hyperagent—to argue that abstract technique could never be "clamped" to ensure it reflects collective values such as justice or some other wider social good (The Grimdark).

The Grimdark Thesis derives its name from the iconic lines introducing the hag-ridden, demon-haunted universe of the 41st Millenium in the Warhammer 40K universe.[4] But

1 The phrase is borrowed from the human Gaius Baltar's description of the robotic Cylons' relation to the sentient, living ships they inhabit in "The Passage," *Battlestar Galactica*, Season 3 (Universal Playback, 2009), DVD.

2 See David Roden, *Posthuman Life: Philosophy at the Edge of the Human* (London: Routledge, 2014), 150–165.

3 Jacques Ellul, *The Technological Society*, trans. John Wilkinson (New York: Vintage Books, 1964).

4 "[In] the grim dark future there is only war. There is no peace amongst the stars, only an eternity of carnage and slaughter, and the laughter of thirsting gods."" *Warhammer 40,000*, September 23, 2025, https://warhammer40k.fandom.com/wiki/Warhammer_40k_Wiki

rather than the post-secular conflict between Chaos and the Jackbooted Empire of Mankind, the tag implies a technological future of purposeless self-augmentation, though similarly unbounded by reason or sense. Abstract technology is fundamentally counter-final, lacking either intrinsic or extrinsic teleology. It bears no resemblance to a human agent or to a transcendental function. In contrast to those "anthropotechnic" holisms conceiving technology in terms of its ambivalent correlation with human social practices, it is radically inhuman, fissured from the human "manifest image" despite its contingent and, perhaps, passing dependence upon it. I refer to this as the "Second Disconnection Thesis." The First Disconnection Thesis prescribes the satisfaction conditions for posthuman agency which I set out in my first book, *Posthuman Life*.[5] The Second describes our posthuman predicament.

In the final section I consider, briefly, whether this technological "Outside" can be reintegrated into the space of reasons as lack or negation in a qualified manner, along the lines explored in contemporary Hegelian/Lacanian theories of the Subject. I use the hyperagency argument and the constraints of dark phenomenology to argue that there are no grounds for assuming that the barred subject assumed by Hegelians/Lacanians is a transcendental invariant; thus, that the Technological Outside is a subtractive not a constitutive lack.

1. Substantivism, Holism and Self-Augmentation

Most critical philosophy of technology has sought to complicate the instrumentalist view that the agency of technology depends only on the intentions of its users. Most radically, "Substantivist" philosophies of technology associated with thinkers like Martin Heidegger and Jacques Ellul conceive technology as a system that distorts the human lifeworld by subordinating it to technical ends.[6] Technology, so conceived, is "autonomous," determining its own principle of action.[7] According to Ellul, this principle is the injunction to maximize efficiency which constrains the conceptions of the good available to human users:

> Technical progress today is no longer conditioned by anything other

5 See David Roden, "The Disconnection Thesis," in *The Singularity Hypothesis: A Scientific and Philosophical Assessment*, eds., A. Eden, J. Søraker, J. Moor & E. Steinhart, 281-298 (London: Springer, 2012).
Roden, David. *Posthuman Life: Philosophy at the Edge of the Human* (London: Routledge, 2014). See also Section 3.

6 P-P Verbeek, *What Things Do: Philosophical Reflections on Technology, Agency, and Design* (University Park PA.: Penn State Press, 2005), 11.

7 Langdon Winner, *Autonomous Technology: Technics-out-of-control as a Theme in Political Thought*. Cambridge Mass (The MIT Press, 1978), 16

> than its own calculus of efficiency. The search is no longer personal, experimental, workmanlike; it is abstract, mathematical, and industrial. This does not mean that the individual no longer participates. On the contrary, progress is made only after innumerable individual experiments. But the individual participates only to the degree that resists all the currents today considered secondary, such as aesthetics, ethics, fantasy. Insofar as the individual represents this abstract tendency, he is permitted to participate in technical creation, which is increasingly independent of him and increasingly linked to its own mathematical law.[8]

I refer to the thesis of autonomous technique as "Old Substantivism" as opposed to a posthumanist "New Substantivism." New Substantivism agrees that technology is a highly disruptive influence but denies that it possesses any inherent normativity. Technology is not *in control*, even if it is significantly *outside* our control. The scope of this "Outsideness" will be considered in Sections 3–5.

The title of this section implies a relationship between philosophy of technology and holism. Let me explain. As Fodor and Lepore put it "Holistic properties are properties such that, if anything has them, then lots of other things must have them too."[9] In other words, a property is holistic if it is constituted by multiple liaisons between its possessor and other similar entities with similar properties. In contrast, atomistic properties can inhere in a thing independently of whether other entities of a similar kind have them.

Traditional substantivisms entail holism because the ability to determine society they attribute to technology plausibly requires technical items to occupy nodes in large and ubiquitous functional networks.[10] It is the networks of interconnected techniques, rather than individual devices, which exert normative constraints on society. *Failing ubiquity*, the system's demands could be escaped or avoided too easily, diminishing its influence and interest. *Failing functional connectedness or integration*, its normative demands would be too weak. Integration has the effect of prescribing standards for machines as well as machine users. Thus, networked computers require compatibility protocols to allow them to communicate with other computers or with ancillary devices: for example, the TCP/IP protocols which handle information transfer across the internet and the MIDI protocol which standardises the way computers and electronic musical instruments communicate with each other.

8 Ellul, *The Technological Society*, 74.

9 J Fodor and E. LePore, *Holism: A Shopper's Guide* (Oxford: Blackwell, 1992), 2.

10 Babette Babich, "Constellating Technology: Heidegger's Die Gefahr/The Danger" in *The Multidimensionality of Hermeneutic phenomenology*, eds., Babich B and Dmitri Ginev, 153–182 (Springer, 2014.)

An example of the normative pressure of ubiquity: In advanced economies, it is currently impossible to work in any area of business, communications, or education without competence in ICT technology. An example of integration: if you use such ICT technology at all, you will need to be familiar with one of a few dominant operating systems and software packages, as well as various forms of visual, textual, or haptic interfaces. Even in the few years during which this article has been written, the normative pressure has been exacerbated by the massive investment in Generative AI systems employing Transformer Architecture and the data centres required to store their training data and weights. These multi-parameter neural networks, which utilise self-attention mechanisms to tractably encode dependences within large input vectors (corresponding to complex texts, images, etc.) constitute an industrial step change beyond the recurrent networks that earlier generation of natural language processing and computer vision research explored.[11] In particular, they have scaled up in a way that allows them to exhibit fluent language capacities, including the ability to write complex text far faster than a human. Of course, there are issues of reliability, relevance and epistemic justice raised by such systems. But their ubiquity means that anyone working in areas like information science, education, or complexity science must learn to address both their capacities and their limitations.

Now, function holism, characterised by ubiquity and integration, *prima facie* supports Old Substantivism's autonomy thesis for it explains how a technical system at a given stage of its development imposes efficiency standards on its human and nonhuman components alike. As Ellul observes, technology produces problems that only further technical change can address, catalysing new problems in multiple feedback loops. The demand of integration provides one basis for self-catalysing technical change, since change can produce integrative difficulties that require further novelty by way of a solution. Ellul cites John Kay's invention of the flying shuttle in 1733. This greatly increased productivity of weavers but, the increased speed of weaving necessitated increases in the production of yarn, later addressed with the invention of the spinning jenny. However, this initially caused an over-production of yarn—a problem resolved by the invention of Cartwright's power loom.[12] The mechanised loom in turn allowed the introduction of "adjunct" techniques such as steam power and the development of mechanised textile production, with all its concomitant demands on the integration of transportation, raw materials, and the disciplinary organisation of factory life.[13]

11 Vaswani, Ashish, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Łukasz Kaiser, and Illia Polosukhin, "Attention is all you need," *Advances in Neural Information Processing Systems*, 30 (2017). See also Jeffery Elman, "Language as a Dynamical System," in R Port and T Van Gelder (eds), *Mind as Motion: Explorations in the Dynamics of Cognition,* (MIT: Cambridge Mass., 1995), 208–222.

12 Ellul, *The Technological Society*, 112.

13 Winner, *Autonomous Technology*, 102.

This feedback process is an example of what Ellul calls *self-augmentation*. Self-augmenting technical systems evolve through a circular causality whereby technical developments catalyse further developments.[14] Function holism produces an environment in which technical self-augmentation can occur. For the tight integration and ubiquity of industrial scale processes generates the pressure for novel solutions.

Self-augmentation can exert pressure to increase such integration—as in the case of the introduction of adjunct technologies. Thus, it can account for the progressive emergence of more integrated or holistic technological systems.

Finally, self-augmentation is a causal precondition for the autonomy of technique. It is the self-catalysing character of technical change that explains why, as in the ferment over generative AI, we are continually forced to accommodate to multiply interlacing processes of technological change which we contribute individually (if only as passive consumers) to without being in a position to exert control. As Ellul puts it:

> [In self-augmenting technical systems] it is possible to speak of the "reality" of technique – with its own substance, its own particular mode of being, and a life independent of our power and decision. The evolution of techniques then becomes exclusively causal; it loses all finality.[15]

Finally, self-augmentation requires a feature I refer to as "technical abstraction." Prior to the modern era, according to Ellul, technique was diffused slowly with many false starts.[16] However, once technique can diffuse on an industrial-planetary or, prospectively, an extra-planetary, scale it becomes capable of squeezing out forms of life that do not answer to its increasingly enveloping functional requirements.

2. Abstraction vs Holism

The model that I draw from Ellul implies hierarchy of technical holisms, each subtending a less basic one:

> 1) *Functional holism* obtains when there is a complex interconnected network of technical elements, resources, infrastructures, users, and producers.
>
> 2) *Normative holism* depends on 1 for the reasons explained in Section 1.

14 Ellul, *The Technological Society*, 93.
15 Ellul, *The Technological Society*, 93.
16 Ellul, *The Technological Society*, 68.

> 3) Function holism and normative holism institute *semantic holism* for our concepts of concrete technical systems since they are typically conceptualised in terms of the functional roles they serve and the practical constraints they impose.[17]
>
> 4) Finally, we can add *anthropotechnic holism* to the hierarchy as an optional plug-in. According to anthropotechnic holism technology and human subjectivity are not two distinct entities but are locked in cycling coevolutionary spirals. Bernard Stiegler's anthropotechnic approach holds that the openness of the human to Being, to historical temporality depends on the ways humans exteriorise sensation and thought in technical media.[18] Similar indissociability claims are, of course, made via extended mind theory, cyborg theory, process externalism or theories of embodied/embedded cognition.

Stiegler's anthropotechnic account also draws on Jacques Derrida's account of generalised writing. Derrida's input is important here because his discussion of the retentional and iterable mark abstracts from regional phenomenological and mentalistic vocabularies and allows us to understand how generalised writing implements, but also modifies, the functions of the psyche, implementing them on inorganic as well as organic platforms. For example, Derrida's discussion of the role of copyright law in framing the boundary of the literary work allows us to see how one technology of repetition (printing) prompts legal framing that individuate the work in relation to the figure of the author.[19] This in turn allows us to see how the experience of the literary object emerges from a specific socio-technological juncture.

Anthropotechnic holism can thus explain how pervasive features of human cognition and culture—like the possibility of a modernist literary aesthetics, or the existence of state societies—are intimately bound up with technical media.

However, while philosophically rich, I think old substantivism and its holist ontology implies an anthropocentric view of technology as a quasi-transcendental organising

17 Dionysis Christias, "On the Proper Construal of the Manifest-Scientific Image Distinction: Brandom contra Sellars," *Synthese*, 195, no. 3 (2018), 1295–1320.

18 See Bernard Stiegler, "Elements for a General Organology," *Derrida Today*,13, no 1, (2020): 72–94; Pieter Lemmens, "From Ontology to Organology: Heidegger and Stiegler on the Danger and Ambiguity of Technology and Technical Media," preprint, n.d., https://www.academia.edu/33717425/From_Ontology_to_Organology_Heidegger_and_Stiegler_on_the_Danger_and_Ambiguity_of_Technology_and_Technical_Media.

19 Jacques Derrida, "Before the Law," in *Acts of Literature*, ed. Derek Attridge (London: Routledge, 1992), 181–220.

principle—a kind of impersonal subject—which fails to reckon with the radical ontological departure constituted by technical modernity. We can begin to see why this fails if we circle back to consider the implications of *technical abstraction*.

Technical repetition is any repetition of technical patterns mediated by technique. It comes in degrees since some technologies are easier to replicate than others given the available media. Technical repetition is also a special case of the minimal repeatability of particulars. A repeatable particular is any entity that occurs in a local spatiotemporal context and can be made to recur through some reliable causal process. We can contrast a repeatable particular both to a one-off object or event, on the one hand, and to a potentially occurrent eternal event, which is a purely abstract entity without the spatiotemporal properties of its instances.[20] Repeatable particulars have a historical existence and make a historical difference. They can come into being and pass away and be repeated inexactly, as when an utterance gets cited, ironised, or translated, or a germline genetic mutation occurs.

For a particular like an event to be repeatable, it must include a replicable pattern that can be inputted into a replicator. The pattern remains inherently variable; abstract but not eternal. Minimal repetition does not require that a repeating event exemplifies the exact patterns, forms, or structures the repeated event exemplifies. It is *non-identical repetition*, necessarily affected by variation. As Derrida argues, this differential repeatability is not rule-constrained. Patterned repetition clearly transcends the cultural world of language and convention, as examples such as genetic replication or recurrence in biological neural networks demonstrate. [21] However, even within the cultural sphere it can be shown that no set of rules can capture all the possible future uses of a sign. *So, differential repetition must likewise transcend any constitutive rules. It is, rather, a condition of there being any norms or rules in the first instance.*

Being differentially repeatable, abstract techniques are thus available for reconfiguration in disparate contexts of *re-use*. More abstract techniques are more functionally indeterminate, or "multistable" than less abstract techniques. As an example, Don Ihde cites sardine cans left in New Guinea by Australian gold prospectors and later appropriated by the indigenous inhabitants as ornaments for headgear.[22] Ihde and Verbeek both argue that the phenomenon of multistability shows that technologies are *just their roles in human practice* and not their intrinsic features:

20 See David Roden, "Radical Quotation and Real Repetition," *Ratio* 17, no. 2 (2004,): 203–4.

21 This idea is obviously inspired by the account of iterability as one of the infrastructures of generalised writing in Jacques Derrida*, Limited Inc*, trans. Samuel Weber and Jeffrey Mehlman (Evanston Ill.: Northwestern University Press, 1988). However, I opt for a more neutral account of repetition in this essay so as to minimize ontological commitments at the base of the theory.

22 Verbeek, *What Things Do*, 136.

> Just as perception can be understood intentionally only as perception-of, and consciousness only as consciousness-of, so technology can only be understood as technology-in-order-to. The "in order to" indicates that technologies always and only function in concrete, practical contexts and cannot be technologies apart from such contexts.[23]

Unfortunately, multistability demonstrates the complete opposite. *Function shifting* is only possible if technical entities are more than any list of functions that they have in concrete, practical contexts. *This functional indeterminacy is, moreover, a technical power*. For example, modern inertial guidance technologies are based on an effect whereby rotational movement in an interferometer causes a phase difference between two beams from a split light beam. The interference can be recorded at their destination and used to measure the angular velocity of the apparatus. The technique was originally designed by George Sagnac in 1913 to detect the luminiferous ether, replicating the 1887 Michaelson-Morely experiment with greater accuracy. To be sure, Sagnac had speculated that the interferometer could be used to measure changes of course on a ship, but it was not until the development in quantum electronics and lasers that a device small and accurate enough for use in aircraft or missile guidance systems could be developed.[24]

As Brian Arthur puts it, a technology is "like a highly reactive building block in chemistry – the hydroxyl ion say – doing little on its own but appearing in a host of different combinations."[25] Parts of technical assemblages thus acquire new powers to affect the world through re-use. Abstract techniques are consequently neither eternal nor ephemeral. Their repetition does not have to take place in conformity to constitutive rules. *Since there are no rules determining what counts as an instance of a repeatable technique, there can also be none to fix what one should do with it.*

Technical abstracta consequently elude the functional, normative, and semantic holisms discussed above. They are ontologically independent of mechanisms or rules governing given context so long as some causal channel exists for their replication. Thus, even if functional holism is true of concrete technical things like networked computers, abstract technique is, of its nature, functionally indeterminate, free to range between disparately patterned technical assemblages and thus not constrained by the demands of integration. It follows that the abstract techniques are not determined or normatively constrained by any finite, local functional context.

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23 Verbeek, *What Things Do*, 117.

24 D.A. MacKenzie, *Knowing machines: Essays on technical change* (MIT Press, 1998), 73.

25 W. B. Arthur, *The Nature of Technology: What It Is and How It Evolves* (New York: Free Press, 2009), 25.

3. Against Autonomy

It might be objected that technologies are limited to some higher order or "transcendental" context if not to particular contexts of use. For example, it could be claimed that technologies are essentially human or "anthropoform." Otherwise put, does it follow that techniques might be constituted by a hypothetical "totality" of human practices not *as* particular technical types but simply as tokens of the type *technical entity*?

This would not be so if *posthuman life* is metaphysically possible *as per* Speculative Posthumanism (SP)[26] and thus separable from the Wide Human—the historically variable mass of human, cultures, environments and practices—*as per* the (First) Disconnection Thesis. According to the First Disconnection Thesis, a wide human descendent of humans is a Posthuman if and only if (I) It has ceased to belong to WH (the Wide Human) as a result of technical alteration. Or (II) is a wide descendant of such a being (Outside WH). The notion of wide human descent is introduced to accommodate the fact that when considering hypothetical posthumans, emphasis on biological descent from biological humans is excessively narrow. An entity is a wide human descendant of humans if it is the result of a technically mediated process:

> A) Caused by a part of WH where the ancestral part may be wholly biological, wholly technological or some combination of the two.
>
> B) Caused by a wide human descendant.

Clearly a wide ancestor of a posthuman need not be a biological human at all, given this definition—they could be an AI or synthetic organism produced within WH, for example. Equally clearly, some wide descendants of wide humans (biological humans or their artifacts) could have ceased to be human by virtue of leaving WH.

Disconnection is technologically mediated by definition. Disconnected technologies would be incorporated (thus differentially repeated) in nonhuman wide descendants of current humans—known as "posthumans."[27]

I assume, in what follows, that some kind of posthuman technology is possible and thus that *technology cannot be an anthropological kind*. Not only this, but I also want to show that technology already qualifies as an Outside, radically exterior to human practice, albeit one that our current technical civilisation is participating in replicating into this potentially nonhuman future (Second Disconnection).

26 The SP schema simply states: *Descendants of current humans could cease to be human by virtue of a history of technical alteration.* See Roden, *Posthuman Life*, 107.

27 See Roden, *Posthuman Life*, 107–113 and "The Disconnection Thesis."

The first step in the demonstration is to show that the old substantivism of the Ellul/ Heidegger variety is incoherent in its own terms. Then I want to argue against the heteronomy of technology with respect to human ends. We have seen that technical autonomy presupposes self-augmentation, while self-augmentation requires high transmissibility and promiscuous re-use. *However, it is easy to show that normative autonomy is also incompatible with the abstraction and functional indeterminacy of techniques*; thus, incompatible with its own preconditions.

We can see why, if we note that Ellul's account of technical autonomy invokes *a second order efficiency concept*. This is because there is no efficient process *per se*. Considered abstractly, any technique can be efficient in some ways but not others. However, according to Ellul, all particular techniques are goal-directed operations. As he put it: "Technical methods are not multipurposive, or adaptable, or interchangeable." [28] So even if technologies can in principle be evaluated according to different efficiency criteria, concrete technologies have their efficiency criteria fixed by their purposes.

It follows that first order efficiency in autonomous systems must be pinned down by local norms of use. Autonomy thus requires a mapping from the higher order efficiency requirement of the global system to the first order efficiencies of local use. *However, we have seen that this mapping strictly does not apply to abstract techniques, which are unbounded from local uses.* And since abstract techniques account for the universality and power of modern technique, *old substantivism and the autonomy thesis are false with respect to the technical dynamics of modernity;* that is, regarding the transmission and modification of repeatable technical entities over time. Modern technology cannot, then, be autonomously self-governing with regard to its dynamics. *Normative function holism applies, if at all, only to the synchronic organisation of situated technical networks. But this is of less significance than the diachronic aspect when considering the implications of technology for social disruption and governance.*

4. The Grimdark Thesis

If the autonomy thesis signally fails for modern technique, might this be the unalloyed Good News, might it salvage instrumentalism, nay even humanism? Might it follow that abstract techniques are, potentially at least, *heteronomous* with respect to the determining norms and values of humans and their societies? I will argue that instrumentalism fails for the same reasons that the Technical Autonomy thesis does. However, the argument is somewhat more involved. To see why heteronomy fails, I want to consider what the

28 Ellul, *The Technological Society*, 75.

reliable human governance of abstract technique would require. It is plausible to suppose that it would require method for monitoring technical innovations by predicting their outcomes for wider society. Such an organon is arguably a condition of realising the "mastery of mastery" Ray Brassier identifies with Hegel's Absolute Spirit and the conditions for communism.[29] The domination of domination plausibly requires a social capacity to prevent undirected technical change.[30]

Let's call this organon a "Controller." A Controller would be a kind of simulation technology that would allow future divergences of abstract techniques to be modelled ahead of their adoption. By "simulation" I mean that some representational model of the technology and its potential repetitions and applications. Since a Controller could generate a representation of a notional technology and its socio-technical relations, it could also be used to *bring about those same divergences effectively* and not just in simulation. This implies what we might call "technical hyper-abstraction": the capacity to rapidly replicate and modify any arbitrary component of the technical system in multiple ways. Of course, this is an idealisation of the requirements for the social direction of technique, but not an entirely fanciful one. The existence of AI systems that can write code based on functional specification given in natural languages suggests that it might be possible for later iterations of AI systems to generate models of notional technologies, which models could be later exploited by humans or AIs to implement in the real world. Such a simulation technology must itself be highly replicable because, as the general technology of replication *par excellence*, it must be capable of modelling its own effects. Secondly, it would need to be accessible to every node in the technical system to furnish the tools for deliberation on the human future.

In what follows, I will develop an argument to show that the Controller simply could not furnish the human control of its own technical mastery that the mastery of mastery necessitates.

This proceeds by modelling the Controller as a Hyperplastic agent (Hyperagent), a maximally flexible agent with a highly efficient and detailed self-model that allows it to intervene in its own substrate at arbitrary grain. Elsewhere, I have argued that a hyperagent would find it impossible to follow basic maxims involving *categorical values* which furnish its reasons to continue existing.[31] A plausible such maxim might be that if a collective or individual agent **A** has a categorical value **V** at a given time it would act to

29 Ray Brassier, "The Human," Accessed December 10, 2022, https://www.foreignobjekt.com/post/ray-brassier-posthuman-pragmatism-selecting-power-the-human-from-subversion-to-compulsion.

30 One might claim, for example, that this highly deliberative arrangement would have a) predicted anthropogenic climate change and b) mobilized effectively to prevent it.

31 David Roden, "The Filter Problem for Posthuman Bioethics: The Case of Hyperagency," in *Bioethics and the Posthumanities*, ed. Danielle Sands, (London and New York: Routledge, 2022), 116–128.

ensure that future iterations of itself retain **V**. However, for **A** to achieve this assurance with respect to a given **V** is impossible, as we shall see.

Assume that some repeatable cortical circuit pattern **s** in **A** codes for **V**. Each circuit pattern ***s*** can be instantiated or repeated in multiple tokens in different configurations of **A**'s hardware. Now, we can expect this value fact to be radically contextual because such content is itself liable to be holistic. That is, *no **s** intrinsically represents a value but only by virtue of some wider context whose affiliations fix the relevant content.* Consequently, ensuring **A** retains **V** in its future iterations would require **A** to use its excellent self-model (its *inner Controller*) to *clamp* that circuit, ensuring some of its circuits (the **s**'s) only occur in those contexts where they mean **V**, not **V***, **V****, etc. This creates a search problem for a highly flexible agent that wants to retain **V** as a categorical value in its future forms: *how to generate a list of configurations in which one of its states implements or represents V and thus avoid losing whatever gives purpose and reason to its existence*.

To solve the search problem, we can picture the Controller generating partitions between contexts in which **V** is retained and those in which it is not. Call each such output a "Tier." Each Tier can be thought of as a finite but arbitrarily large set which is part of a partially ordered series of Controller outputs. Each tier contains previous tiers as subsets but may include additional new elements that do not have that container structure. Within each tier there would be two disjoint subsets corresponding to the partition between **s**'s. Each element would be allocated to one or the other and their union would be the Tier itself.[32]

It is easy to see that the contents of each Tier are just more circuits of the same kind as the **s**'s, *so the same problem recurs for each tier*. Thus, we move onto a second tier partition, and a third …. and so on. The "and so on" applies because of the technical flexibility (hyperplasticity) of **A**, which can always intervene in its architecture and generate new contexts for its circuits. Some may contain the earlier ones, while others may not. Some may clamp some **s** tokens to **V**, and some of which may not. Where an **s** which happened to clamp to **V** in an earlier tier is included in a new context in a subsequent tier, the holistic principle means that there is no guarantee that it will still represent that value for the new Agent it composes.

Thus, clamping any given **s** token to V requires that *all tiers in the hierarchy are computed in advance: a complete partition of all possible contexts in which V is retained and not retained.* For even if it outputs a list of contexts sufficient to clamp **s** to **V** up to a given $tier_n$, that is consistent with any of these contexts being inserted into the "wrong" partition in a further iteration. A search algorithm specified along these lines could not terminate

32 I derive my description of the "tier" from Thagard and Verbeurgt's description of the Max Cut problem in Thagard, P. & Verbeurgt, K, "Coherence as Constraint Satisfaction," *Cognitive science* 22, no. 1 (1998): 1–24.

without leaving the search problem unsolved (though of course, following Turing's proof of the insolubility of the Halting Problem, we could never acquire a method to prove this for an arbitrary program).[33]

Although this falls short of a formal proof (something I will leave to those more mathematically talented than I) it gives us reason for thinking that the clamping problem is undecidable—there is no algorithm that could spit out the answers that a hyperagent would need to solve it. Since the clamping problem is essentially a computational problem *only computation provides the power to solve it. But, assuming the arbitrary flexibility of the Hyperagent, it cannot.* The very flexibility and power of the Controller to generate new shapes for its Being (its technological mastery) precludes self-mastery: *the Grimdark Thesis*.

The preservation of categorical value commitment proves impossible for the individual hyperagent. But whether we think of the hyperagent as an individual like a self-modifying robot or a collectivity or swarm intelligence is irrelevant here. The same considerations apply, then, for a *social hyperagent* attempting to clamp abstract technologies, ensuring their use exhibits a favoured set of values (justice, equality, freedom, individual or political autonomy, etc.) Here the ***s***′s are not cortical states but *abstract technologies* and their concrete applications their tokens. Clamping requires not only that we can simulate technical divergences but all the contexts in which these obtain and their contexts in turn (up the hierarchy of tiers) which, as in the first case, are still more technical divergences for which the same question must again be posed.

Thus, as with the individual hyperagent, this subjectification of technology would never be achieved because clamping a particular abstract technology would require clamping members of all the achievable contexts into which it could be iterated.

33 See Alfonseca, Manuel, Manuel Cebrian, Antonio Fernandez Anta, Lorenzo Coviello, Andrés Abeliuk, and Iyad Rahwan, "Superintelligence cannot be contained: Lessons from computability theory," *Journal of Artificial Intelligence Research* 70, (2021): 65–76. They argue that the undecidability of the Halting problem means that the problem of containing a superintelligent AI is also uncomputable. They do this by defining a function *HaltHarm* (T, I) where T is an arbitrary Turing machine and I some set of inputs that it executes. *HaltHarm* first implements T, whatever that is, and then implements an algorithm *HarmHumans*. *HaltHarm* will harm humans only if T halts and gives an output. Now, if the problem of whether an arbitrary program will harm humans is computable then it must be possible to compute whether *HaltHarm* (T, I) will harm humans for arbitrary T and I. But this would require solving the halting problem and thus the assumption that it can be computed leads to a contradiction. If the Harm Problem cannot be computed, we cannot have an algorithm for computing whether a given superintelligent AI can be let out of containment. Now, I do not assume a Hyperagent or any other posthuman would be superintelligent (See Roden, *Posthuman Life*, Chapter Five.) However, if superintelligence is possible in our world and this argument is sound, we get the same result: namely that no technological society, communist, capitalist, or whatever, can ensure its technologies harmonize with its categorical values.

We can make a supplementary twist of Grimdark Blade (or 40K Chain Sword) by noting that the problem of the hyperagent is rendered even more challenging if we consider what *kind* of agent it is. It cannot be intentional, rational, or reflexive since—given modest anti-reductionist assumptions—it would have no means to predict the psychological consequences of an arbitrary functional or physical self-modification. The only assumption we need to make to demonstrate this is milquetoast anti-reductionism: the kind that denies that there are any robust psychophysical laws.[34] Assuming this modest metaphysics, a hyperagent would have no reliable way of determining the psychological consequences of any changes it makes to its functional or physical substrate. Any belief/desire could be deleted with the merest self-tweak. In this situation, sapience becomes impotent and unimplementable.

It would be useless to treat such a radically extended agent as an "intentional system" or as a user of symbolic language since interpreting a system as a symbol user would require ascribing propositional or conceptual content to beliefs and desires that are likewise robust over time, saving ordinary processes of rational belief fixation. Since the hyperagent would not be able to do this for itself, neither would a human or anthropoform interpreter. A hyper-reflexive social-technical system consequently resembles an individual hyperagent in all the ways that matter. It can have no collective intentions or symbolic structure at all.

5. Conclusion: The Second Disconnection

> *A technological society organised on modern lines cannot exhibit rational and collective self-mastery.*

The Grimdark Thesis follows from the Second Disconnection Thesis: namely, that technologies are not only concrete correlatives of human practices but also abstract repeatables disconnected from any such correlation. Technology in its abstract form is neither for us nor for itself. The dynamics generated by technical abstraction cannot conform to our collective intentions *in principle*, as shown in Section 4.

Whereas the First Disconnection Thesis is a speculative futural hypothesis, the Second defines our "posthuman predicament."[35] Abstract technique does not belong to a symbolically constructed world.[36] The encounter with it is "phenomenologically dark": experiencing it through technical practices does not afford non-trivial knowledge of

34 David Roden, "Nietzschean Hyperagents," in *Nietzsche, Critical Posthumanism, and Transhumanism,* ed. Aura Schussler, 159–171 (Trivent, 2025).

35 Roden, *Posthuman Life*, 186.

36 David Roden "Ways of Unworlding: Against Aesthetic Inferentialism," *Identities: Journal for Politics, Gender and Culture*, 18, nos.,1–2 (2021): 54–64.

its nature.[37] From the perspective of a human manifest image (structured by reasons and purposes) the Technical is an ontological monster, made for reasons while eluding normativity or finality.

The Second Disconnection Thesis could prompt an idealist rejoinder inspired by Lacan's psychoanalytic conception of the real and Hegel's introjection of the antagonism between subject and substance, subject and essence, within subjectivity itself.[38] The *real*, so understood, is an "impasse in formalisation or that which cannot be exhausted by the symbolic."[39] Here, the Symbolic is roughly the "signifying order" of rule-governed linguistic practices that constitute science and objectivity.[40] *The real* is not a metaphysical realm independent of the signifying order but the constitutive gap in its capacity to secure objective claims and determinate desires.

This would only be a partial solution to the problem posed by the Grimdark Thesis. It would amount, firstly, to a form of "Bounded Posthumanism," where the scope for disconnection is restricted by the invariant structure of human subjectivity or agency. [41] Technology would be restored to an anthropological kind along the lines of anthropotechnic holism (Sections 2, 3) and thus bound to normative realm by default. This would not, of course, ensure our capacity to control technological systems according to collective ends, but it would at least place bounds on the possible outcomes of this lack. It thus amounts to a qualified denial of the Second Disconnection Thesis. A Hegelian/Lacanian understanding of the technological real could accordingly treat the technical as a further iteration or exacerbation of an unreason immanent to the dynamics of the Symbolic (or Thought) rather than a wholly inhuman and arational formation.

As I will show, this prospectus for reincorporating the metaphysical reality of technique into the real of subjectivity is explanatorily inadequate. Nonetheless, it may be fruitful for exploring the ways technical self-augmentation enlists, alters or (in a value-neutral sense) *perverts* desire. Of special relevance to this supplementary task, perhaps, is the Lacanian idea of *extimité*, or "extroverted interiority" discussed in Isabel Millar's *The Psychoanalysis of Artificial Intelligence*.[42] The Extimate straddles the psyche considered as a subjective domain and the extra-mental, extra-bodily world. Millar argues that our anthropotechnic

37 David Roden, "Nature's Dark Domain: An Argument for a Naturalised Phenomenology," *Royal Institute of Philosophy Supplements*, 72 (2013): 169–188.

38 Slavoj Žižek, *Sex and the failed Absolute* (London: Bloomsbury Academic, 2019), 20.

39 Isabel Millar, *The Psychoanalysis of Artificial Intelligence* (Basingstoke: Palgrave Macmillan, 2021), 61.

40 Millar, *The Psychoanalysis of Artificial Intelligence*, 58-9.

41 For the distinction between bounded and unbounded posthumanism see David Roden, "On Reason and Spectral Machines: Robert Brandom and Bounded Posthumanism," *Philosophy After Nature*, eds. Rosi Braidotti and Rick Dolphijn (New York: Rowman & Littlefield International, 2017), 99–119.

42 Millar, *The Psychoanalysis of Artificial Intelligence*, 49–81.

dependence on exteriorized technological supplements "propels" and produces need rather than constituting an instrumental response to them. This process is extimate insofar as it exteriorises the psychical operations of the drive beyond the meat sac.

This ambivalent investment in technological entities and systems is explored in her discussion of Baudrillard's *Consumer Society* and the idea of the "gizmo" as the techno-fantasy object which propels our desire rather than offering the solution to particular problems:

> Whilst most objects seem to fulfil some sort of obvious functionality, the distinction he makes with the gizmo is that its supposed hyper-functionality conceals the complete opposite, the fact that the gizmo is actually itself the creation of a function or need as opposed to the solution to one. The technological object for Baudrillard is one, not driven by functionality but *rather defined by its relationship to human fantasy and desire.* "The myth of the 'wonder-working functionality of the world" as he calls it, is the idea of a world which "works," a world which makes sense as a functional whole. This myth of unity and teleology Baudrillard believes finds its parallel in the phantasy of the human body as a similarly functional whole.[43]

As an iteration of the Lacanian real, the technical thing is "defined" in terms of this constant displacement of local function by what Baudrillard terms the "hyperfunctional," shattering the anthropocentric, symbolically coded fantasy of technology embodying human ends, intentions, or purposiveness as such.[44]

Given our intimate dependence on self-augmenting technological systems, their impact on desire and the place of desire in a posthuman dispensation absolutely needs to be theorized. After all, given the Second Disconnection, our investment in technology existentially commits us to facilitating an undirected process immanent to the Wide Human in any advanced technological form. This constitutes a perverse will to technical difference without determinate content since, as the hyperagency argument shows, there is no *a priori* guarantee that a disconnected posthuman will be a subject or agent as we presently understand it. I refer to this pre-emptive desire or will as "xenophilia."[45]

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43 Millar, *The Psychoanalysis of Artificial Intelligence,* 68–9. My emphasis.

44 See also Jean Baudrillard, *Simulacra and Simulations*, trans. Sheila Faria Glaser (Arbor: University of Michigan Press, 1994), 113; David Roden, "Cyborgian subjects and the Auto-destruction of Metaphor," in *Crash cultures: Modernity, Mediation, and the Material,* eds. Jane Arthurs and Iain Hamilton Grant (Intellect Books, 2003), 91-102.

45 See David Roden, "Subtractive-Catastrophic Xenophilia," *Identities*: *Journal for Politics, Gender and Culture* 16, no 1–2 (2019): 40–46.

Millar's subtle discussion is helpful for getting a grip on the idea of xenophilia. Using the notion of *Extimité* to think the inhuman automatism of technical self-augmentation as a kind of outsourced, disembodied drive—a drive for nothing beyond difference, without telos, subject or object—captures what is distinctive about this operation of posthuman desire and the way in which it is expressed within planetary technological systems.[46] Thought in these terms, Xenophilia isn't the psychological cause of undirected technical change—it is not, for example, driven by fantasy, though it can also be expressed in fantasy. It is what being *existentially committed to an uncontrollable, self-catalysing technical system consists in or does*.

Likewise, it is possible Baudrillard is right about the fantasy of wholeness *insofar as it is effectuated in technical practice as such.* The fantasy could be enacted via the serviceable, if patently false, heuristic that these evanescent concreta conform to a functionally integrated "world."[47] By the same token, xenophilic desire would be vehiculated through all the defiles by which abstract technique diverts practice into the void of hyperfunctional excess; seducing us away from the "Manifest Imaginary" of a teleologically and normatively ordered human world. Its fabulation would be neither purely psychic or biological, nor purely outside the meat-bag, but, in Millar's terms, *extimate*. Thus, the technological and its extimate displacements imply xenophilia as an operative perversion behind all our technical agency.[48]

However, defining the technical as a newly intricated impasse in the Human Subject would be legitimate only if the barred subject of this lack is a transcendental invariant: a presupposition of any conception of reality or agency, for example. Dark Phenomenology and the Hyperagency Argument (Section 4) each give us reason to reject a "bounded" posthumanism in favour of one devoid of transcendental bounds. The Dark phenomenology principle obviates the Lacanian move because it makes it illicit to infer cognitive or ontological necessities from contingent limits on the mind's capacity to consciously represent its activity.[49] This lacuna is born of "medial neglect," the mind/brain's inability to represent its representational machinery.[50] Since, we are not aware of our experiences as involving such subpersonal mechanisms, it is natural to infer that they are diaphanous, magical; reaching directly out to the world (as in the assumption that mind possesses "intrinsic aboutness" or intentionality). Thus, since our access to our mental life is largely

46 Roden, "Subtractive-Catastrophic Xenophilia."
47 Roden, "Ways of Unworlding."
48 "Subtractive-Catastrophic Xenophilia."
49 "A feature of conscious experience is intuition-transcendent or "dark" if it confers no explicit or implicit understanding of its nature on the experiencer" see David Roden, "Nature's Dark Domain,"172.
50 R. Scott Bakker, "From Scripture to Fantasy: Adrian Johnston and the Problem of Continental Fundamentalism," *Cosmos and History: The Journal of Natural and Social Philosophy* 13, no. 1 (2017): 540.

privative, *we are prone to conflate absence of information about causes for information regarding a causally effective or active absence*: the pole of negativity around which the barred subject of Lacanian-Hegelian ontology pivots.[51]

Now, I also want to insist on an epistemological void arising from the abstract, inhumanist character of technical modernity, but this is not a constitutive negativity or lacunary subject. Its Outside has only a passing connection to Subjectivity or Thought. It cannot be converted to a transcendental function of thought or subjectivity as such because it renders the hyper-agential extension of agency *unthinkable as thought or subjectivity* (Section 4).[52] From this purview, Millar appears to make the idealist error of defining the hyperfunctional technical entity as a correlate of human subjectivity or fantasy, whereas it is as structurally uncorrelated with desire as it is to social practice.[53]

The metaphysics of repetition set out here accounts for the capacity of technical systems to produce ramifying cycles of need as new constellations of technique form through proliferating re-use. Consequently, we do not need to postulate the fantasy of a perpetually incomplete "phallic body" to "drive" self-differentiating technical systems.[54] The phantasy does not produce hyperfunctionality but may be its manifest consequence. Technical systems will disseminate themselves just fine as long as mechanisms for proliferating technical abstracta across planetary or post-planetary technical networks exist. How these are effectuated at a psychological or micro-social level is underdetermined and, arguably, multiply realizable. They may involve such fripperies as the "phallic body" but others (distributive justice, profit, longtermist utilitarian calculation or simple curiosity) might work as well.

This is why *Posthumanism is Grimdark to its core*. There is no human, inhuman or posthuman subject that provides a transcendental source of meaning or value—not through the rational fixation of higher order beliefs or values, nor through an infantile and redundant "unconditional accelerationism" which affirms the Molochs and Medusas of planetary technical production. There is nothing to affirm, nothing to identify with. We are irrevocably invested in becoming *xeno* through being enmeshed in "divergent, disrupted and diffuse systems of forces, in which the role of human decisions and perceptions is a contributing factor at best."[55]

51 Bakker, "From Scripture to Fantasy," 542, 545–548.

52 See Roden, "Subtractive-Catastrophic Xenophilia," 40–46.

53 This is also evidenced in her peremptory dismissal of the question of artificial superintelligence as "hyperbolic" see Millar, *The Psychoanalysis of Artificial Intelligence*, 62.

54 Millar, *The Psychoanalysis of Artificial Intelligence*, 68.

55 Claire Colebrook, "A Globe of One's Own: In praise of the Flat Earth," in *Death of the Posthuman: Essays on Extinction, Vol 1* (Open Humanities, 2014), 70.

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