REVIEW ARTICLE

THE CHILD IS THE PARENT OF THE GEIST: ARTIFICIAL GENERAL INTELLIGENCE BETWEEN TENACITY AND TENEBROSITY

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Book under review: Reza Negarestani, *Intelligence and Spirit*, Falmouth, Urbanomic, 2018.

"[Enlightenment] looks sad and emaciated, and, though laden with honours, bears the scars of many a lost battle. However, it is undaunted and has not lost its satirical grin. In fact, it has donned new clothes and continues to haunt the dreams of those who believe that the enigma of life is all encompassed within the design of a shadowy and mysterious god, rather than in the dramatic recognition of the human being's freedom and responsibility."—Vincenzo Ferrone¹

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It is 1817, and with Kant's revolution still unfolding apace on the continent, the English humourist Thomas Love Peacock includes in one of his satirical novels an irreverent episode taking aim at the new critical philosophy. Said episode concerns itself with one "Mr Mystic", a philosopher in transcendentalist mould, for whom the secret "root" of Kantian enlightenment

¹ V. Ferrone, *The Enlightenment: History of an Idea*, trans. E. Tarantino, Princeton, PUP, 2015, pp.vii. www.cosmosandhistory.org 493

has been laid bare.

Herr Mystic sees what others cannot: that this world-historical threshold does not usher in illumination or clarification, but teaches a form of self-induced benightenment, or, the art of "wilful blindness".

Our philosopher, that is, lives on an islet (which he calls his "Island of Pure Intelligence") and he has arranged it "according to the topography of the human mind"; and yet, this sprawling masterwork is entirely impossible to see, as the entire property and its surrounding moat (or, the "Ocean of Deceitful Form" in Mystic's argot) are bathed in impenetrable fog and stygian darkness. This, however, is entirely by design: for Mr Mystic defines "transcendentalizing"—and philosophizing generically—as the "faculty of wilful blindness".

"None are so blind as those who will not see", Mystic announces in zealous approbation. In other words, Mr Mystic—being darkly enlightened—refuses all public, assessable, or appraisable forms of knowledge: "always keeping his eyes closed shut whenever the sun had the impertinence to shine upon them". This comportment bequeaths to him alone the "pure anticipated cognition of the system of Kantian metaphysics [as that] grand transcendental science of the luminous obscure". And, at the kernel of said "science", gigantic "MYSTERY" supreme rules sovereign. Certainly, we learn that Mr Mystic—as "deisdæmoniacoparadoxographical, pseudolatreiological, transcendental meteorosophist"—holds it "very unbecoming in a transcendental philosopher to employ any other material for a purpose to which smoke is applicable". Appropriately, he uses a "synthetical torch" to navigate his grounds, which, giving off nubilous rays of transcendental darkness, allows him to see through the "medium of 'darkness visible".

Mystic, accordingly, commends opinions exclusively insofar as they are "exquisitely dark and fuliginous": in self-conscious rejection of the "common phraseology of *bright thoughts* and *luminous ideas*, which were equally abhorrent to him in theory and practice". This stance, as the cultivated dismissal of any *determinately accountable* thought, provides Mr Mystic the profound insight that Kantian "*Pure Intelligence*" is rightfully considered a "tenebricose view" of "wilful blindness" onto the "*adytum* of the LUMINOUS OBSCURE".²

² T.L. Peacock, *Melincourt*, vol.3, 3.vols., London, 1817, pp.25-40.

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Itself now 'obscure', we recall this long-forgotten satire of pseudo-Kantian tenebrification because Mr Mystic remains very much with us today. His overarching gambit (namely, that the abundances of supersensible night can deliver us from the impositions of public lights) has never gone away, it just assumes different vestures. Having once portended that "transcendentalizing" promises exemption from everything appraisable and determinable in knowledge, Mr Mystic's present-day progeny now instead augur bootstrapping superintelligences as retrocausally nullifying, in advance, all inertial residuum of such anthropocentric impositions. As such, we raise Mystic's spectre because the project here under review—Reza Negarestani's Intelligence and Spirit—represents the multifront attempt to exorcize 'Mr Mystic', and his present-day progeny, and their abuses of enlightenment, once and for all.

For, though *Intelligence and Spirit* is, at heart, a summa on the interface between the philosophy of mind and the project of creating Artificial General Intelligence (AGI), it is indissociably also a contestation for the historical Enlightenment's legacy and, more importantly, its prospects. Namely, Negarestani proposes that that grand culmination of the Age of Enlightenment, German Idealism, represents an *unfinished* and *unexhausted* program for the future of intelligence, and not mere "Teutonic smoke" best forgotten.³

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Certainly, Mr Mystic's pseudo-Kantian fogginess couldn't be further from Kant's own instructions. "[T]he power of imagination enjoys walking in the dark", Kant warned, and thus risks "falling into ridiculous *purism*" if, by rejecting appraisability, specifiability and determinability, it hopes to exempt itself from earning the "distinctness" of "clarity". Thereafter cautioning that "studied obscurity is often [employed] to feign profundity and thoroughness", Kant alludes to the Greek rhetorical motto "Skotison!" (translated as "Make it Dark!") and claims that this is the "decree of all mystics". In strict contrast to such "affected obscurity", Kant instead enjoins "[c]larity [in] the presentation

³ R.B. Pippin, Hegel's Idealism: The Satisfactions of Self-Consciousness, Cambridge, CUP, 1989, pp.5.

of concepts". "This", he avers, "is the brightness of mind!"4

Yet the question of 'enlightening'—that now mostly dead metaphor, yet hitherto invincibly indefatigable precept—was already utterly contested as soon as it had come to a head in Kant's first *Kritik*. During 1784, in the self-same month that Kant asked the question '*Was ist Aufklärung?*' whilst defining it as an assumption of self-responsibility by analogy to the legally-significant graduation of a minor into adulthood, J.G. Hamann responded (in a fashion to become all-too-familiar across the next two centuries) by attacking the notion of *self-authorship* that is the very keystone of Kant's definition. There can be no such thing, Hamann inveighed, for everything is just power relations between self-styled "guardians" and "immature persons". Ergo, Kant's so-called *Aufklärung* is mere cozenage. "The enlightenment of our century is therefore a mere northern light", Hamann concluded: its putative refulgence a mere "cold unfruitful moonlight"; its guiding light nothing but "blind illumination".⁵

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What is at stake in Enlightenment may seem an antiquarian's angst; but nothing could be further from the truth, inasmuch as enlightening is just the *empowerment* of intelligence and remains so; and thus we, living in the incipiency of intelligence's largescale artificialization, are likely standing upon the threshold of an upsurge in potency like no other; and, as such, it is pressing, as never before, to put to rest whether such a global expansion of intellect, or unprecedented intellogenic explosion, is *blinding* or *binding*.

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From Hamann down to what Negarestani suitably refers to as today's "benighted cult of posthumanism", the suspicions surrounding enlightening concern the very meaningfulness of responsibility and, in particular, any sense to "self-incurred" statuses thereof. Self-authorship, simply, requires appeal to some motivating standard in excess of, and irreducible to, *all* actual deportments and facts-of-the-matter. It relies upon rules explaining behaviour,

⁴ I. Kant, Anthropology from a Pragmatic Point of View, trans. R. Louden, Cambridge, CUP, 2006, pp.26.

⁵ J.G. Hamann, 'Letter to Christian Jacob Kraus', in *What is Enlightenment?*, ed. J. Schmidt, Berkeley, University of California Press, 2004, pp.147.

⁶ R. Negarestani, *Intelligence and Spirit*, Falmouth, Urbanomic, 2018, pp.115 (hereafter *I&S*).

rather than behaviour exhausting rules.

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At the heart of the matter, are two perennial and persistent responses to Kant's revelation of the legality of rational activities. One which inherits reason's supersensible supererogations as alone enabling us to concretely become *ever more* responsible for our judgements, and the other which inherits the same precisely as *absolving us* of all such discriminative liability in judging and thinking. One casts intelligence as the power *to be correct*; the other recasts it as *mere power*. This disagreement and its backdrop are utterly central to *Intelligence and Spirit* (hereafter *I&S*) and, moreover, also to contemporaneous discussions on the prognostic implications of 'superintelligence'.

Inasmuch as Negarestani rightly identifies that the projects of AGI and of philosophizing mutually converge upon "investigation into [the] possibility of having mind" (I&S 4-6), everything rests here upon the meaning of 'possibility'. Simply, is 'possibility' blinding or binding? Following the former, supersensibility foments the absolutions of abundant night, thusly leading to gothic portents surrounding the future of mind; following the latter, it bestows the shepherding duties of austere discernment, securing the principle that all intelligence, insofar as it is intelligent, involves "making something better" (I&S 399). Settling this question is, for obvious reasons, key to assessing the portents of any future AI of human-level aptitude or beyond.

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As already insinuated, this matter is more important than ever, now in the second century after German Idealism's perturbations. Intelligence's ongoing delegation to machines procedurally explodes any residual presumption of clear-cut distinction between 'epistemological' and 'practical' issues, and, thus, at the limit, also between 'doxastic' and 'existential' species of risk: for, now as never before, what we think matters, in the sense that policymaking cannot but take itself to now have stakes of potentially extinction-level import; and, given the further prospect of intelligent machines, it is clear, in particular, that what we think about thinking matters, and does so acutely. In other words, the question of what 'intelligence' is (and does) is no longer a question for the philosophers; and yet, in the spirit of I&S itself (I&S 405-7), we note that the philosophers have

had 2000 years head-start on the matter and, thus, we ought to listen to them.

And so, we duly ask: does the automatization and outsourcing of mind—which merges 'thinking' and 'action' to a degree previously unappreciable (cf. *I&S* 464-5)—represent the final wresting of intelligence from the remnants of anthropocentric delusions such as accountability, or, conversely, does it summon us to a vocation that demands from us more constancy than ever before? Does our age's newly-rediscovered 'primacy of the practical' elicit Tenebrosity or Tenacity?

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Kant, writing at the beginning of modern faculty specialization and being sensitive to natural science's tendency to progressively granularize cognitive labour, saw that the mere profusion of data was nothing without criteria of appraisal. This motivated his demand for critique.⁷ In our own moment, it is not knowledge's faculties and disciplines, as in Kant's time, but *knowing itself* that is being decomposed and reverse-engineered by the breeding of data. The demand, therefore, for a "synoptic vision" is greater than ever.⁸ One accordingly desires a 'critique of artificial reason'.

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We compare Mystic's dusky dicta with J.G. Fichte's resonant—and, importantly, refulgent—rallying cry concerning rationality's global project:

[T]his is the loftiest thought of all: Once I assume this lofty task I will never have completed it. [...] That which is called "death" cannot interrupt my work; for my work must be completed, and it can never be completed in any amount of time. Consequently, my existence has no temporal limits: I am eternal. When I assumed this great task I laid hold of eternity at the same time. I lift my head boldly to the threatening stony heights, to the roaring cataract, and to the crashing clouds in their fire-red sea. "I am eternal!" I shout to them, "I defy your power! Rain everything down upon me! You earth, and you, heaven, mingle all of your elements in wild tumult. Foam and roar, and in savage combat pulverize the last dust-mote of that body which I call my own. Along with its own

 $^{^{7}}$ It also alerted him to the need for a defence of the *unique social role* of philosophy, as distinct from natural science.

⁸ W. Sellars, 'Philosophy and the Scientific Image of Man', in *Science, Perception and Reality*, London, Routledge, 1963, pp.3.

unyielding project, my will shall hover boldly and indifferently above the wreckage of the universe. For I have seized my vocation, and it is more permanent than you. It is ETERNAL, and I am ETERNAL like it!9

Such jubilations sound alike to Negarestani's own exhortations—equally audacious and defiant—for the "view from nowhere" to be received as a "necessary task" that reason *cannot but* undertake: a task that, *qua* atemporal and atopic, is "never given in what appears to us in time but [is] procured through the cunning plot of history to explore the meanings of time" (*I&S* 248). This ongoing 'ruse of reason' takes place because "[t]he totality of the Idea of mind cannot be represented temporally" (*I&S* 237). As such, in the face of the longest-term entropic prospects of physical eschatology, Negarestani proclaims that "[t]hought is not a servant of the life that death's inevitability expropriates, so why should it exercise humility in the light of inescapable death?" (*I&S* 496).

Such nigh-on-impossible ambition and boldness may prove rebarbative to some (namely, those still enthralled by what Wyndham Lewis, in the 1920s, had already diagnosed and denigrated as modernity's Bergsonist "time-mind" and its "mystical time-cult"). Yet it is our goal to show, by the end of this exploration, how such sweeping declarations follow, ineluctably and necessarily, from Negarestani's otherwise modest elucidations upon the fine-structure of our everyday judgings and doings.

Indeed, *I&S*, in its very structure, aims to retrace and reproduce such a sequence, or, to demonstrate why mundane judgements *cannot but* lead to such to such catchments. Alternately, in terms relevant for the shape of any future intelligence, *I&S*'s very narrative trajectory establishes why being or having a mind *necessarily* involves more than "mere survival" (*I&S* 475) and more than the drive to "amass as much reward as possible" (*I&S* 397). As we shall see, *holus-bolus* identifications of intelligence with these latter notions are symptoms of an assumption, prevalent across all philosophical spectra, that, in acknowledging no clean distinction between semantic modality and temporal possibility, tends to reduce meaningfulness to maximalization, and thereby leads, invariably and inevitably, to gothic portents *apropos* "Skynet" or

⁹ J.G. Fichte, Fichte: Early Philosophical Writings, trans. D. Breazeale, Ithaca, Cornell University Press, 1988, pp.168-9.

¹⁰ W. Lewis, *Time and Western Man*, London, Chatto & Windus, 1927.

"Paperclip Maximizer[s]" (*I&S* 104)." Ignoring the *rational* distinction between time and modality leads—whether one is invested in post-humanist pessimism or effective altruism—to such soothsaying fears about 'maximizers'.¹²

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Concerning the structure of *I&S*, the book follows the passage of our protagonist "Kanzi"—an imagined infantile AI—from 'childhood' to intellectual and agential 'adulthood'. This reaches a climax when Kanzi acquires the ability to have an *objective world in view*:

Perpetually uprooted from [its] supposed natural home, Kanzi is now an object of practical freedoms [and] time-general thoughts. It [thus] prefers to foray out into the open, to eat, beneath the stars, a marshmallow toasted over a Promethean fire that it has made for itself. [...] For Kanzi, the *automaton spirituale*—the it—that thinks is now the I, or we, that thinks. (IES 277)

Here enlightenment, as the passage into cognitive maturity, is no meagre *aurora borealis* or cozening *ignis fatuus*, but, rather, is a jubilant "Promethean fire" that spirit has forged to guide its own way in its vocation of self-authorship under the open skies.

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In this fashion, *I&S* conspicuously re-enacts, in its very structure, Kant's definition of "*Aufklärung*" as the graduation from nonage to maturity. The book, that is, comprises an expansive disquisition upon the feasible mode of creation, and education, for a burgeoning AGI. For, furthering an idea suggested first by Alan Turing (*I&S* 278_n), *I&S* sets out an in-depth "curriculum", or "generalized pedagogy", for "raising [a] child-AGI" (*I&S* 277-93); and it attempts this precisely because, in Negarestani's words, "the primary goal of education [is] the functional re-realization [of] what mind already is" (*I&S* 280). It is the revivification of the Humboldtian scheme of education by way of a program for the baptism of a future AGI.

¹¹ Cf. N. Bostrom, Superintelligence: Paths, Dangers, Strategies, Oxford, OUP, 2014, pp.150-3.

¹² Note that Bostrom defines intelligence as "capacity for instrumental reasoning"; as we shall see, any such extensionalist outlook, will lead, inevitably, to maximizer fears. Cf. N. Bostrom, 'The Superintelligent Will: Motivation and Instrumental Rationality in Advanced Artificial Agents', *Minds and Machines*, vol.22, no.2, 2012, pp.71-85.

Consequently, the book, crucible-like, comprises an extended plausibilistic thought experiment. Modelled therein, our apprentice-AI proceeds stepwise from 'nonage' to 'maturity'. It is an *Aufklärung* in miniature, if you will. For, after an introduction delineating the scope of the work, and following a second chapter establishing what it is positioning itself as palliating, the ensuing sections (save an important "excursion into time" within the third chapter) procedurally grant to our automaton the "causal-structural" (chapter 4) and thereafter "discursive" (chap.5 & chap.6) functional layers that, after its "ascent to the infantile", eventually allow it to debut "full-blooded" sapience (*I&S* 140). Baptized "Kanzi" along the way (*I&S* 251-2), we see our model-agent ascend, with the addition of each working capacity and competency, towards apperception, to earn its life under the stars, cooking its Promethean marshmallow. The stars of t

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As such, the book recapitulates that quintessentially enlightenment-romantic conceit of recapitulation. It is, through and through, a "Bildung". ¹⁵

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"Bildung" is an idea captured, masterfully, in the era-defining dictum "the

¹³ This captures, at a structural level, Negarestani's methodological interest in "abductive" or "model-based reasoning". (Cf. L. Magnani & T. Bertolotti eds., *Springer Handbook of Model-Based Science*, Dordrecht, Springer, 2017.) Talking throughout of "world-making", "Lego model-building" and "toying around" (*I&S* 158 & 423), Negarestani's focus on thought-experimenting is congenital with the key rationalist insight that cognition involves *active construction* more than *passive reception*: an insight contemporaneously inherited by neuroscience's Predictive Processing paradigm (*I&S* 163-5). (Cf. L.R. Swanson, 'The Predictive Processing Paradigm Has Roots in Kant', in *Frontiers Systems Neuroscience*, vol.10, no.79, 2016.) Suitably, sustained reflection upon the practice of the "*Gedankenexperiment*", or mental experimentation, was incepted by Kant himself. (Cf. Y. Fehige & M.T. Stuart, 'On the Origins of the Philosophy of Thought Experiments: The Forerun', in *Perspectives on Science*, vol.22, 2014, pp.179-220.) Sellars also employed the same tool, but he liked to refer to his models as "myths".

¹⁴ Negarestani's Kanzi is named in honour of a real-world bonobo who has demonstrated aptitude learning artificial languages. Kanzi-the-bonobo famously signed for 'stick' and 'marshmallow' near a fire, before engineering a desert for himself.

¹⁵ Note that Sellars's *Empiricism and Philosophy of Mind*, which exerts significant influence on *I&S*, is also a *Bildung*: for, during the work's climactic paragraph, Sellars notes that, in his "Myth of Jones", one should have recognized "Man himself in the middle of his journey from the grunts and groans of the cave to the subtle and polydimensional discourse of the drawing room, the laboratory, and the study". W. Sellars, *Empiricism and the Philosophy of Mind*, Massachusetts, HUP, 1997, pp.117.

Child is the Father of the Man". This adage does not express some bootstrapping time-travel paradox, but a program of self-authorship. Here, however, we will follow Negarestani's rectification of Kant's "this I or he or it, the thing which thinks" to an impersonified "this I, or we or it, the thing which thinks", and similarly modify our idiom to "the CHILD is the Parent of the Geist". ("CHILD" being an acronym Negarestani lifts from Rosenberg: standing for "Concept-Having Intelligence of Low Degree", it is used to designate a debutant of apperceptive accountability, whether it be human infant or fledgling artificial agent). ¹⁸

Thusly updated, our adage articulates the core lesson of *I&S*: namely, *that there can be unearned cognition and no arrogated intelligence*. From this beating heart, emerge, by steady systole and diastole, all the lessons of the book: from its insights concerning our everyday sayings and doings to its lessons *apropos* AGI-research as the very growing edge of modernity.

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"The CHILD is the Parent of the Geist". In this apothegm, expressing on its surface the deceptively trivial fact that no one is born an adult but must assume that status themselves, is compressed the deepest and most cardinal lesson of German Idealism and thereby also of I&S: namely, that there is no thought without earning it; no cognition without the work of having achieved it; and that, therefore, mind is at once its own artefact and artificer, or, "simultaneously a craftsman [and] the product of this ongoing craft" (I&S 483). For, as Hegel liked to point out, no one earns a cognition without first labouring for it, assaying it, working through it, tarrying with it. And, importantly, such 'work' simply cannot be captured by the fact-stating resources of language alone, inasmuch as it is about permissions—or what one can do—as much as it is about what one has actually done.

Applicable both prospectively and retrospectively (ISS 491), there is no thought without having first got there. In Negarestani's preferred phraseology this

¹⁶ W. Wordsworth, 'My Heart Leaps Up', in *The Major Works*, Oxford, OUP, 2008, pp.246.

¹⁷ I. Kant, *Critique of Pure Reason*, trans. P. Guyer & A.W. Wood, Cambridge, Cambridge University Press, 1998, A₃₄6/B₄04.

¹⁸ J. Rosenberg, *The Thinking Self*, Philadelphia, Temple University Press, 1986, pp.135.

sentiment is expressed, throughout, as the "necessary link between intelligence and the intelligible" (*I&S* 477). This is the book's core axiom. In short, declaring that there is no intelligence without intelligibility is of a piece with the notion that "the Child is the Parent of the Geist" inasmuch as both encrypt the insight that there is no *intelligence* without first having *achieved* it. Just as there is no move without a game and no utterance without a dialogue, there is no mind without the work of its self-realization—whether justificatory, pedagogical, or historical. Mind is an accomplishment.

This is why reason, whether biotic or post-biotic, "is and will be always a task" (I&S 423). For to intone that "the Child is Parent of the Geist"—inasmuch as such a statement unmistakably defines a program of self-realization—is to recognize that intelligence has always been in the business of artificializing itself (I&S 445-51). Moreover, in its overtly recollective connotation, it implies that having a mind is never not the re-creation of mindedness by way of retracing its conditions of possibility, or, its pathway to current concreteness (I&S 63-4). Mind, that is, is not some given factum but an ongoing faciendum. For, applied prospectively, we become 'the child': the child whose daring task it is to parent its own adulthood, or, cultivate that which "comes next" (I&S 95). This, then, is what Negarestani means when he says we are "the prehistory of intelligence" (I&S 411).

But we get ahead of ourselves. The key to understanding this central dictum is to be crystal clear on the fact that both the *recollective precedent* and *prospective achievement* entailed by this process of self-authorship are not at all questions of ontology (despite the early Schelling's innovative, but misguided, efforts to make it so by identifying 'the transcendental' with natural history). "A priest, a knight, a statesman, a citizen, are not", writes Pippin, "natural kinds". ¹⁹ They are legal statuses; concerning prescription, not description; and are earnt, never given.

No one is born an adult, let alone a statesman; likewise, no content-bearing cognition is unearned; for, simply, earning requires yearning. From this insight germinate German Idealism's most distinctive insights: from Kant's notion of

¹⁹ R. Pippin, 'Recognition & Reconciliation: Actualized Agency in Hegel's Jena *Phenomenology*', in *Hegel: New Directions*, ed. J. Deligiorgi, London, Routledge, 2006, pp.133.

the inescapable 'togetherness' of the quaestio facti and quaestio juris (or, no objectivity without the exertion of accountability); to Fichte's conviction in the Primacy of the Practical (or, no science without the strife of summons); to Hegel's discovery of sapience's public and historical nature (or, no authority without precedential and recognitive labour). And, by simple manner of inheritance, so too do the master-ideas of Negarestani's I&S proceed from this same root: respectively, that there is "no consciousness without selfconsciousness" (ISS 34); that mind "is only what it does" (ISS 1); and, finally, that it takes place within a "deprivatized space of language" (I&S 396) and, ergo, is a "project that takes time" (I&S 296). And all these conclusions, in turn, impinge upon the project's myriad insinuations for concrete research and experimentation in computer science inasmuch as $I \mathcal{C} S$ positions itself as a 'prolegomena to any future AGI': that is, from Negarestani's championing of an "interactionist approach to computation" (I&S 353)—wherein syntax and semantics are afforded through "active-reactive" appraisal and jeopardization within games of mutual constraint (I&S 345)—all the way to his consequent indication that human-level intelligence will likely only be re-realized within a "multi-agent system" (I&S 249).

Indeed, our dictum of self-parenthood also maps onto the deepest philosophical methodology of the book itself, inasmuch as, just as there is no maturity without reflection upon what one has thus far earnt for oneself and what exactly one has thusly entitled themselves to (*I&S* 503), so too, in the words of Wilfrid Sellars's father, is it true that "only [the] realism that passes through idealism can hold its ground".²⁰

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As there is no future for intelligibility without retrospection on its legitimating precedents, alongside the ever-renewing critique thereof, so too is it the case that "[d]iscussing AGI in the context of German Idealism" is in no way "retrogressive" (*I&S* 128): for, in the idealist notion of *Bildung* was already packaged a program for the "re-realization and [critical] augmentation [of] mind" (*I&S* 280). Moreover, in elucidating that intelligence's artificialization

²⁰ R.W. Sellars, 'Consciousness and Conservation', *The Journal of Philosophy, Psychology & Scientific Methods*, vol.5, no.9, 1908, pp.238.

has been historically implicit all along (I&S 445-51), Negarestani is retrospectively revealing that today's future-facing project of AGI-research is unfolding for enriching reasons, expressed thusly as a cumulative trajectory, rather than merely because of congruent causes, that can have no such direction. Only ideals, that is, can be imperfectly or implicitly realized: thus, to unveil anything as a process of 'making explicit' demonstrates the time-bound footprint of normative goals, inexhaustibly articulated in finite time, rather than heteronomous causes extensionally exhausted. Negarestani's retrospective convergence of the programs of German Idealism and AGI-research, therefore, operates as the ultimate legitimation and galvanization of the latter's prospective task. This is why the question of incipient AI, in the here and now, cannot be the random quirk of some reasonless history but is, rather, the hortatory summons to an obligation. By placing the project of AGI within a retrospective arc of historically progressive self-artificialization, Negarestani thereby demonstrates that such "artificialization" is something that happens, and is happening, for a reason.21 And so, more than merely defending AGI from being "considered a pure vogue" victim to so-called 'winters' and hype cycles (I&S 454), such an account also recoups the project from those, on all sides, who refuse to see intellect's artificialization as the non-optional continuation Enlightenment's rational project (whether this refusal consists in construing artificial intellogenesis as either the derogations of retrocausal doom or as the random lotteries of Bostrom's "urn of invention").22

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To reject the arrogated in intellection by championing the "necessary link" between intelligence and intelligibility as "non-optional" (I&S 460) is to reignite the artificializing tenacities of Enlightenment. For nothing in thought is free: because earning anything takes effort, jeopardy, and time.²³ Or, to borrow

²¹ Negarestani is clearly reconstructing what Brandom calls a "expressively progressive" and "cumulative trajectory". R. Brandom, *Reason in Philosophy: Animating Ideas*, Massachusetts, HUP, 2009, pp.112.

²² N. Bostrom, 'The Vulnerable World Hypothesis', https://nickbostrom.com/papers/vulnerable.pdf>, 2018 (retrieved 29/03/2019).

²³ This is the true sense of the 'positionality' invoked by Kant's Copernican metaphor: it concerns 'position' in the legal-vocational sense, *not* in the spatiotemporal sense; indeed, even traditional empiricists

Wittgenstein's words, oft-repeated by Brandom, the "[l]ight dawns gradually over the whole". Ergo, there can be no 'blind', 'acephalic', nor 'unaccountable' general intellect. Intelligence, that is, attenuates in the dark rather than reconnecting with some primordial or preconscious power (whether this latter is conceived as intoxicating difference or telic techno-capital). As should be clear by now, the Desire for the Arrogated in Thought is just the Myth of the Given by another name. To acceded to either is to become Mr Mystic, or, to reject the light and approbate blindness and narcotizing darkness.

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And yet, from "Skynet" to "Roko's basilisk" (*I&S* 104), Mr Mystic's gothicism concerning "*Pure Intelligence*" has resurrected. Just as such Tenebrosity—one could also call it "*Geistschmerz*", or, resentment for the burthens of intellect—first appeared in the aftermath of the eighteenth-century's earlier enlightening, we, currently standing upon yet another transformation in what it means to have a mind, are witnessing the recapitulation of conspecific contestations for enlightenment. Hamann and Mystic's cognitive skotison re-emerges wearing new 'post-humanist' livery. ²⁵ As such, we return to the beginning in order to clarify what is at stake, now as then, in the contest between Tenacity and Tenebrosity in intellogenesis.

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To return to the beginning, Kant's breakthrough consisted in demonstrating that there are certain locutions, utterly necessary for objective description, that nonetheless do not themselves in any sense objectively describe. Such expressions are functionally required for describing, yet are not at all targets of description, precisely because they instead govern and regulate how descriptive judgements *should* or *ought* to be used.

Without this, no descriptive utterance could so much as even purport to be

were concerned with the 'limits' of thought in this latter sense; Kant, distinctively, intends 'position' in the sense of being enrolled in an order of legitimations and permissions.

²⁴ L. Wittgenstein, On Certainty, trans. G.E.M. Anscombe & D. Paul, Oxford, Blackwell, 1969, §141.

²⁵ Explaining contemporary vogues for 'dark' philosophies: 'dark vitalism', 'dark ecology', 'dark enlightenment', 'dark posthumanism', etcetera.

describing an objective world, or, what's the same, no utterance could even be wrong. Thus, not all language can be straightforwardly descriptive, because some language must deal with discriminating apposite and inapposite instances of describing. The point here is that what people mean by 'should' or 'ought' cannot be captured by pointing to facts alone, no matter how coreferential, because should-talk covers counter-to-fact instances as much as factual ones, and this is essential, and ineliminable, to its functional role in discourse.

The otherwise obscure 'purism', 'autonomy', or 'spontaneity' of which Kant spoke—and to which Negarestani refers as sapience's "formality" (*I&S* 32)—rests simply and exclusively in this.

So too, moreover, does the much-misunderstood 'Naturalistic Fallacy', to which we shortly return.

With such 'purism', the Sage of Königsberg announced the idea that objectivity presupposes a framework that cannot itself be objectively described. Yet the ensuing transcendental-empirical bifurcation cannot be a substantive thesis, because *only* descriptive language can legitimately be said to be in the business of conveying substantive states-of-affairs. And this entails that the 'irreducibility' of the transcendental over the empirical is, quite simply, a distinction *within language* and not a distinction *within the world*. Pointing to the split carries *no* ontological committal. It is not a fact-stating thesis: the irreducibility involved being properly an issue of semantics, or locutory functions, rather than of what exists or declaratively is. It is, as Negarestani stresses, a "formal distinction" (*I&S* 59).

In short, talking about the transcendental is not even describing anything, it is *talking about talking*.

Yet not everyone has been clear on this. It is the mistaking of the transcendental-empiric split as being somehow descriptive in scope and range (even if such range is considered not to be capturable by the empirical sciences because it is construed as pure difference itself) that leads to the lineage of tenebrous post-Kantianism and its present-day heirs in anti-humanist augury. This, then, is the *proton-pseudos* of all those schools of thought that Negarestani purposes himself with rallying against. But before we turn to this, we must clarify the locutory distinction between 'descriptive' and 'prescriptive' language itself.

§

The so-called 'is/ought' gap, likewise, represents a distinction within discursive function and not within the world. The 'Naturalistic Fallacy' was baptized by G.E. Moore, who first clearly noticed that the meaning of 'Good' could not be identified with any collection of facts, insofar as 'propositions about the good' are accomplishing something entirely different from picking out facts. They are how we appraise propositions 'that p' and are not themselves propositions 'that p'.

This is all that the non-naturalism of normativity rests in: it is not at all inflationary, nor the retention of theistic baggage, nor some human security system, nor smuggling with transcendent oughts. *It cannot be reificatory because nothing concrete or objectival is declared.* Ostension simply is not the normative's locutory function. To presume that it must be is to commit J.L. Austin's "Descriptivist Fallacy", or, to presume that all meaningful language is indicative or otherwise can be captured indicatively or in declarative terms.²⁷ Indeed, it is unawareness of the importance of the functional distinction between *realis* and *irrealis* moods that invariably leads to 'norm-phobia'.

Thus, following Wittgenstein's expressivist insights that "the 'logical constants' do not represent" and that therefore not all "language always functions in *one* way", such a backdrop provides the basis for Negarestani's frequent claims that the "distinction between thinking and being [is] formal (i.e. nonsubstantive)" (*I&S* 56), alongside his subsequent arguing for the "absolute formal autonomy of reason" (*I&S* 38), as well as his refusal of the "global reducibility" of "sapience" to "sentience" (*I&S* 151) and of "rule-governed" to "pattern-governed" activities (*I&S* 304). 28 Negarestani is clear:

One can and should always attempt to give an account of the conditions of thinking in terms of physical processes, in tandem with the empirical sciences. Yet it is a category mistake to claim that revealing how thinking is ultimately realized as a furniture in the world (if that is even possible or logically well-founded at all) would enable us to say what thoughts in their formal rule-governed dimension are. (ISS 439)

²⁶ G.E. Moore, *Principia Ethica*, Cambridge, CUP, 1993, pp.65.

²⁷ J.L. Austin, 'Truth', in *Philosophical Papers*, Oxford, OUP, 1979, pp.131.

²⁸ L. Wittgenstein, *Tractatus Logico Philosophicus*, trans. C.K. Odgen, London, Routeledge, 1922, 4.0312. & L. Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe, New york, Macmillan, 1953, §304.

§

To clarify further, the issue regards the *relative priority* one takes 'semantics' or 'ontology' to possess in the order of explanation (cf. *I&S* 451). The interlocutor Negarestani identifies as the "greedy sceptic" (*I&S* 152) is whomever is moved to argue that all semantics takes place within ontology, and that thus the former is answerable, in the final instance, to the latter; the critical rationalist, by contradistinction, refines this outlook by acknowledging that it is nonetheless the case that *all* the activities we entitle 'ontology' (including all projects of naturalistic reductionism) necessarily proceed, insofar as they are even minimally legible, within and through semantic frames or models. By consequence, naturalization is just a privileged (indeed, *uniquely* privileged) type of semanticization or model-building.²⁹ And, indeed, it is not something that anyone, or anything, does without motivating *reasons* or objective *standards*.

(Put differently, though nature would no doubt exist without any sapient minds, 'naturalization' would not, and, what's more, this former insight was never simply given, but was itself *earned*—starting from the roughly late Middle Ages—by centuries of hard-won elaboration and inquiry.)

We note of this matter of 'semantics' or 'ontology', moreover, that it is, at the very least, an *open question* as to which methodological prioritization is correct; or, as Fichte long ago noted, such a decision betrays nothing other than one's personal "*inclination*". ³⁰ And so, despite the misleadingly ecumenical appearance of Fichte's observation, the very fact that the question is specifically an *open question* betrays that it is, and will so remain, subject to the phenomenon called 'disagreement', which, notably, is an unavoidably judicial and discursive affair. ³¹

§

Two final points must be considered before we move on. First, the Naturalistic Fallacy is not merely a quixotic foible for metaethics. Rather, as Sellars firmly established, it saturates the whole infrastructure of cognition,

²⁹ L. Floridi, The Logic of Information: A Theory of Philosophy as Conceptual Design, Oxford, OUP, 2019, pp.67.

³⁰ J.G. Fichte, *Introductions to the Wissenschaftslehre*, trans. D. Breazeale, Idianapolis, Hackett, 1994, pp.18.

³¹ Or, the possibility of so much as even being wrong presupposes such questions as are open and not closed in the sense of questions concerning facts are.

from perception upward.32 As Rorty asks, how could anyone think "that a causal account of how one comes to have a belief should be an indication of the justification one has for that belief?"33 That is to say, merely having a sensation is clearly not the same as being justified in believing it veracious. Presuming that non-epistemic facts on their own can grant us epistemic warrants to justify thinking anything as thus-and-so is, whether one likes it or not, to uncritically mingle the ways we think about the world with the world itself.34 This, indeed, is why "only [the] realism that passes through idealism can hold its ground", or, why those who outright reject the Naturalistic Fallacy as idealistic nonsense—as opposed to accepting it as a necessary technical scruple—peddle only an "illusory disillusionment" (I&S 232) that is concordantly "blind to its own epistemological and methodological bases" (I&S 111). For it is only through the assiduity, the "ongoing cognitive labour" (ISS 474), of keeping norms and facts formally distinct that we regulate the difference between methodological and substantive issues—or, between how our words should be arranged to declare anything at all and the targets of declarative sentences themselves—and thereby track distinctions between our tools of description and the objects thusly described, or, between our representings and their representeds. Therefore, in rejecting such scrupulousness, "those who push for a brute disenchantment—a supposed all-destroying demystification of Forms or Ideas—will be condemned to face a fully enchanted and mystified world" (I&S 38).

Certainly, in long-durational intellectual historical terms, it has only been through elaboration of these ineliminably artefactual (yet methodological indispensable) aspects of our cognitive frame that we have, across the centuries, come to progressively grasp the natural world independently of said frame and, thus, were summoned to the projects of naturalization, objectivity, and artificialization in the first place. Applying the same insight prospectively (i.e. to the future of such projects), grants us the clear warning that it is "those who discard what nontrivially distinguishes the human that [will] end up preserving

³² "[T]hat epistemic facts can be analysed without remainder [into] non-epistemic facts [is] a radical mistake—a mistake of a piece with the so-called 'naturalistic fallacy' in ethics." W. Sellars, *Empiricism and the Philosophy of Mind*, Massachusetts, HUP, 1997, pp.19.

³³ R. Rorty, Philosophy and the Mirror of Nature, Princeton, PUP, 1979, p.141.

³⁴ J. McDowell, Mind and World, Massachusetts, HUP, 1994, pp.7.

the trivial characteristics of the human in [an impoverished] conception of general intelligence" ($I \mathcal{C} S$ 116). Only by de-naturalising certain aspects of mind—classifying them, not as supernatural, or transcendent, but as transcendent al—do we consequently naturalize it and, by thereby enhancing our image of ourselves in the world, ramify what our posterity may accomplish within it ($I \mathcal{C} S$ 442).

§

Accordingly, Kant's norm-infused transcendentalism is not a thesis about 'what is', thereby trucking with the "improbable metaphysical hypothesis" of some "transcendent 'ought", but is a thesis about mutually incommensurable yet equally indispensable expressive functions.³⁵ To attempt to 'describe' an 'ought', and do so *only* in descriptive terms, would be like trying to conjugate a noun. It is, simply, to mix up distinct grammatical modes; one could compare it to attempting to weld with a hammer.

§

And yet, intentionally or not, many of Kant's immediate heirs interpreted this newfound irreducibility of the transcendental over the empirical as being just another type of substantive thesis—even if it is one that is uniquely special, scientifically inscrutable, or mystically profound. This error, as it descends into our own moment, is often conducted under the banner of that species of enthusiasm that calls itself 'immanence'.

Ş

Refusing the normativity of the transcendental ineluctably leads, as Dionysis Christias lucidly puts it, to construing the transcendental, quasi-descriptively, as some "surplus ontological" layer of reality: an echelon somehow in excess of, and irreconcilable with, the objectival layer.³⁶ A kind of supra-mundane, pre-objective and pre-subjective arbitrariness or power:

³⁵ N. Land, 'Crypto-Current (018)', https://www.ufblog.net/2018/12/01/>, 2018 (retrieved 29/03/2019).

³⁶ D. Christias, 'Toward the Thing-in-Itself: Sellars' and Meillassoux's Divergent Conception of Kantian Transcendentalism', in *The Legacy of Kant in Sellars and Meillassoux*, ed. F. Gironi, London, Routledge, 2018, pp.135-62.

whether presented as genetic productivity, ontological incompleteness, hyperchaos, will-to-power, existence-before-essence, abyssal freedom, pure difference, or runaway autocatalysis. And so, the critical surfeit of rules over facts, or, the semantic autonomy of subjunctive oughts over fact-stating declaratives—which, for Kant, alone conferred objectivity to our judgings by vouching our ability to so much as even be guided toward better judgements via discriminating and repelling concrete errors—here instead degenerates into a quasi-ontological surplus that, precisely because of its indiscriminate profligacy, is lauded as absolving cognition, once and for all, of the labours of discriminating selection in judgement. As we shall see, this (despite any protestation or branding to the contrary) is a form of radical circumspection (or, rejection of the risks inherent in holding others accountable and being held accountable in turn) and is therefore, then as it is now, the prime symptom of Geistschmerz (as resentment for the burthens of rationality). Indeed, it motivates all present-day accounts that, by way of construing apperception as just another "force of nature" (I&S 453), claim that ongoing intellogenesis is yet one more teleonomy in nature's self-reinforcing "complexification" (I&S 460) and, accordingly, imply that superintelligence will have been a question of hydraulic fate rather than hard work.

All such manoeuvres are attempts to bypass the labours of clarification and coherence and constraint. Indeed, for the Tenebrous philosopher, thought becomes most adequate to reality precisely when it is divesting itself of such puny and moralistic fetters as explanatory or semantic constraints and is itself indulging in either muscular maximalism or unconscious submersion. (Hence, the restrictively romantic conceptions of aesthetics prevalent throughout the continental tradition, alongside its cognate suspicion for the rigorizations of science.) Retaining the transcendental, yet stripping it of its normativity, one cannot but arrive at some variation upon this stance: the transcendental, no longer a guiding light, becomes the art of sinking oneself in "wilful blindness".³⁷

Inevitably, therefore, transcendentalism—misconstrued in this sense as plentiful deliverance from proper thought by way of supra-empirical blindness and narcotizing profuseness—became identified, in the decades following

³⁷ A. Pope, Peri Bathous; Or the Art of Sinking in Poetry, London, 17208.

Kant, with what the Germans contemporaneously called the "Nachtseit der Nightside".38 or, "Nature's Such tenebrous and transcendentalism was, back in the age of German Idealism, given voice by depth psychology's Unbewusste, Schelling's Ungrund, Schopenhauer's Wille, and everything Ursprüngliche or primordial. Despite different vesture, the notion descends, in unbroken lineage, to us today: not only is it exampled by proponents of "preindividual singularities [and] ceaseless becoming[s]" in continental metaphysics (I&S 237), but also in those post-humanist schools of thought that proclaim that the sheer maximalities of computation or big data could somehow, in their ongoing proliferation, bypass the problematics of criteria conferral, normative orientation, and intentional discernment, and, through this route, 'brute force' the riddle of general intelligence.³⁹ Today, as two centuries ago, such a route—of blind profusion via cognitive skotison—is "the night in which all cows are black": an attempt to reach absolute intelligence, "like a shot from a pistol", without any of the hard work. 40

As Negarestani avers, it is against such "paralyzing mist" that "the task of intelligence ought to be safeguarded" (ISS 492); for only through the assiduities of clarification is "the ineffability of general intelligence [to be] overcome" (ISS 86). This is, and inexhaustibly remains, the Enlightenment's tenacious task.

§

Tenacity demands the conjoint jeopardizations and rigorizations of publicly appraisable knowledge, and therefore the constraints that enable dialogue as that mutual harnessing of agents towards better, more complete, and more discriminating adjudication. Tenebrosity, contrarily, prefers the circumspections and deliverances of "darkness visible", believing that pointing to supra-semantic and supra-empirical superlativities absolves one of the

³⁸ G.H. Schubert, Ansichten von der Nachseite der Naturwissenschaft, Dresden, 1808.

³⁹ I borrow the terminology of 'brute-forcing intelligence' from Peter Wolfendale. Negarestani argues that "posthumanism built on the assumptions of inductivism and empiricism—i.e., superintelligence can be construed in terms of induction over Big Data—treat inductive models of general intelligence as evidence against an exceptionalism of the conceptualizing human mind [and yet] refuse to see the latter as a sui generis criterion that sets apart general intelligence as a qualitative dimension from quantitative intelligent problem-solving behaviours" (*I&S* 511-2).

⁴⁰ G.W.F. Hegel, *Phenomenology of Spirit*, trans. A.V. Miller, Oxford, OUP, 1977, §16 & §27.

summons, and thereby also the impositions, of such clarifying assessment.

ξ

The split boils down to a semantic issue concerning "possibility". For, if intelligence is that which explores "the ramifications of its [own] possibility" (*I&S* 448), then all "inquiry into the future of intelligence" (*I&S* 5) rests on the question: does "possibility" delegate or derogate responsibility?

ξ

First off, note that there are sentences that are extensional and those that are intensional (with an 's', not a 't'). The truth conditions and meanings of extensional sentences rely solely on local contexts, or facts at our actual world, whereas intensional sentences rely also on non-local contexts, or what is happening in other merely 'possible worlds'.⁴¹

Intensions, being referentially opaque, involve sense over reference: defining a term by invoking its conditions of apposite use, or space of possible applicability, rather than by enumerating all its actual instantiations (as an extensional definition does).

Modal verbs, including deontic modals such as 'should' or 'must', always involve intensional contexts because their meaning is made legible *only* through reference to possible worlds (i.e. what is intended by the statement 'Kanzi ought not use vocabulary incorrectly' is clearly not reliant for its meaning exclusively on what Kanzi—fallible Kanzi—does in our actual world). Rules, likewise, are indelibly intensional in that their meaning involves what is going on in 'other worlds' as much as in ours: one hasn't understood $P \mapsto Q$ as a rule if one doesn't additionally grasp that $P \mapsto Q$ holds over counterfactual instances as much as actual ones. Rules, in other words, are 'subjunctively robust', with this being a defining feature of our nomological statements *apropos* natural law as much of those concerning the rules of logic, inference, and language (cf. $I \in S$ 253-5). Intensionality, therefore, marks out the sentential capacity for meaningful reference to mere possibles—regardless of what actually happens or

⁴¹ 'Possible worlds' are here considered not as objects of reference, but as artefacts of sense, or, ways of talking about talking.

⁴² D.M. Armstrong, What is a Law of Nature?, Cambridge, CUP, 1983, 43.

is temporally realized—and by *meaningful* we, importantly, also mean *motivating* (cf. ISS_{401}).

Intensional modalities, simply, are requisite in order to retain minimal practicable intelligibility for an overriding amount of the everyday operations essential to our rational activity (from rule-following, to accountability, to justification, to the "self-incurred" statuses thereof). Take the example of rules. Understanding rule-following is indispensable to *any* explanation of how our linguistic utterances can even begin to carry or confer meaning. (Whosoever disagrees with this is invited to detail their case whilst not obeying any of their language's rules.) For, crucially, no mere extension or set of facts, *no matter how copious or coreferential*, can capture or explain this essential dimension of meaning—i.e. our manifest tendency to repel misjudgements and thusly generate "objectivity" as that "tending to be true" central to the "essential drifts of consciousness" (I&S 266 & 277)—because no such extension can underwrite a distinction between how factual assertions *should be* and how they actually *in fact are*. Without this, one loses the ability to even be *incorrect* and loses objectivity, and any objective world, as collateral along with it.

Intensions allow us to say we are acting for reasons whose semantic legitimacy, and thus motivating force and authority in the shepherding of judgements, arises *entirely* independently of the frequency or infrequency—the maximality or minimality—of their temporal realizations. And for rule-following to be intelligible, in the sense of making intelligible our evident tendency to rectify errings and errors, the content of the rule and the modalities that codify it must be meaningful and motivating utterly regardless of the perfection, or imperfection, of their instantiation within matters-of-fact. This manifest quality of our everyday operations simply cannot be captured extensionally.

So, it is merely *possible worlds* that alone grant our language the power to be *actually correct*; or, all extensional fact-stating requires and presupposes implicit grasp of inexhaustibly intensional possibilities. (Hence, why Negarestani notes that it is necessary that, in any autonomous language, there be "concepts that do not simply describe, but also [those that] allow cognitive simulation via counterfactuals" (*I&S* 67); with this being precisely why he places "modal vocabulary" at the very base of his hierarchical "curriculum for the education

of the CHILD" (I&S 282-4).) Accordingly, talk of possibility here is talk of that which endows our *capacity to choose the right thing* and consequently also *to be assessed against this capability*, or, it is the power to be *constrained and regimented* by "inexhaustible" values (I&S 401). In short, 'possibility' is, in this sense, what Kant intended when he spoke of our ability to act in accordance with an ideal—be it "Truth", "Beauty", or "Justice" (I&S 246).

In this Kantian guise, 'possibility' buttresses the ability to select the right, because, rather than referring exclusively to powers of concrete things to potentially produce concrete effects at specific times, 'possibility' instead here carves up an intensional space of logical and semantic consistency—of compatibilities and incompatibilities between terms—that, rather than describing the contingent happenstances of things, provides the very framework within which all such happenstantial designation can alone procure objective purport (cf. ISS 258-60). We can only talk of indiscriminate possibility by virtue of the fact that all possible talk is discriminating; or, the possibility to select the correct in our talking precedes all talk of possibility as unselective power. 43 Such a notion of possibility is necessary to allow intelligence to be what Negarestani dubs a "dimension of structuration" (I&S 276), or, to wield a language that can even purport to have an objective world in view (I&S 325): for, as Sellars pointed out, it is by virtue of the fact that our concepts fit together across subjunctive ranges that they can even describe a factual world in the sense of providing descriptions that can serve, open-endedly, as explanations for others and themselves stand in need of explanation (ISS 255n).

Henceforth, we use possibility₁ to designate 'possibility as intensional consistency' and possibility₂ to designate 'possibility as mere capacity to be'. It is

⁴³ This is cognate with Negarestani's argument (elaborated throughout Chap.6) that it is the "interrelational order of symbols" that allows "the relations between different patterns or world-picturings" to be "encoded" (*I&S* 303) and not the reverse. In other words, it is syntactic symbol-to-symbol relations (which "map to one another rather than to an item or occurrence in the environment/world") that facilitate the semantic symbol-to-world or 'aboutness' relation. "Pattern-governed regularities in the real order are caught up in the relations between symbols, not the other way around" (*I&S* 304), which, in turn, is why "[t]he worldbuilding of the formal dimension of language and logic is prior—not just in the order of precedence but also of constitution to world-representation" (*I&S* 267). This, then, is why agents "increasingly structure their interactions with their environment [only by increasingly] structuring their own interactions" (*I&S* 321). For having an objective world, as Hegel clearly saw, is an accomplishment of public structuration. Or, constancy to the world is earned by virtue of our accountability to one another.

only the former that allows us to be tenacious in our judgements, or, to be motivated by standards (e.g. 'objectivity' or 'coherence') whose presently imperfect realization is no inditement on their power to compel and guide as we go forward.

Yet it is precisely this aspect of modality (i.e. its non-descriptive functionality, or, possibility,) that is foreclosed as soon as one construes the transcendental-empiric bifurcation as just another fact-stating thesis (again, no matter how non-standard or ineffable or infinitely creative such a factum is advertised as being). This is because intensionality consists precisely in 'referential opacity' and 'topic neutrality', or, the insight that terms can be semantically legitimate—and, indeed, discursively indispensable independently of descriptive instancing and temporal frequency. Rid of nondescribing intensionality thereby, 'the transcendental' can longer orient but only disorients, or, rather than being binding it can only be blinding: because, to the exact extent that possibility, is demoted into mere possibility of realization, the power to select the right becomes indistinguishable from mere brute power; and, by direct consequence of this, discerning reason sinks into blinding voluptuousity and darkness's delectations.

δ

Simply, devolving possibility, into possibility, removes any robust semantic distinction between how judgements in fact are and how they should be. Consequently, we are left with two viable options. We can either subordinate nature maximally to jurisprudence, or, we can submerge jurisprudence maximally within nature. The former was, of course, the path chosen from the Ancients, down into the Scholastics, and well into the pre-critical Enlightenment of Leibniz or Wolff; the latter is the pathway invariably taken today by those hard-nosed anti-humanists, whimsical post-modernists, and masters of suspicion who react to any post-Enlightenment retention of human autonomy and dignity with "greedy skepticism" and, more recently, with "musings on Skynet [and] the Market as speculative posthuman intelligence" (I&S 111). So, if we reject Tenacity, our options are either Theodicy or Tenebrosity.

§

Theodicy is crystallized in Leibniz's mantra that 'whatever is, is just'. Tenebrosity is captured by the post-Nietzschean proclamation that 'whatever is just is just whatever is'. Or, to give them both their full modal inflection, either:

1) 'Whatever is, is *maximally* just.'

or

2) 'Whatever is just is just whatever maximally is.'

Despite desperately advertising himself as having transcended Theodicy's philosophical *ancien régime*, the Tenebrous Philosopher's fundamental gambit remains merely the reoccupation of the Theodical psychodrama. It is Theodicy's inversion; not its supersession. For, despite embodying inverse 'directions of fit', both identically manifest the same age-old presumption regarding modalities: they are, alike, 'conjugations' of the Principle of Plenitude.

Both, that is, identically collapse modality wholesale into temporality, and thus prohibit any ultimate distinction between prescription and description, or between language's declarative and regulative resources, such that both are doomed to mix human axiology with independent reality. For where one decrees reality interminably jurisprudent the other pontificates on its overflowing imprudence, yet, whilst reifying impious disvalue may seem more 'grown-up' than the reification of judicial value, both routes are equally naïve because they both, ultimately, are attempts to absolve us of culpability for our assertions vis-à-vis objective affairs and are therefore as risk-averse as they are retrograde in their conspecific refusals of accountability. This is precisely what Negarestani means when he notes that the anti-humanist interlocutor peddles only an "illusory disillusionment" (I&S 232). A cradle—whether consisting in tragedy, traumata, or the abundances and absolutions of narcotizing night—remains a cradle nonetheless.

§

In its classical guise, the Principle of Plenitude stated that 'no legitimate possibility remains unrealized': a thesis which operated, for centuries, to ensure that 'reality is as legitimate as it possibly can be'. Put differently, there can be no unjustifiable absences in existence, or, no things that could have been, but

simply just never are, without any further justification. Following this, to be is to be justified—maximally and magnanimously so—such that, in the ultimate theodical gesture, 'no fact is not valuable'.

Often thought long-dead, a relic of grand old metaphysics, the Principle of Plenitude nonetheless survives today: it has silently transmuted, however, into an epistemological posture (or, as many of its practitioners would no doubt prefer, an 'anti-epistemological' one). For, in the Tenebrous philosopher's hands, the schema is simply everted. 'All values', they insist, 'are just virulent facts', because, for them, 'legitimation is nothing other than the realization of possibilities', and, inasmuch as this measures legitimacy solely by realization, this latter claim collaterally entails that 'the realization of no possible can be illegitimate', or, all realizations are equal. Ergo, to be justified is simply to be, and to do so maximally and muscularly.

§

Thus, two directions of fit: bequeathing either Theodicy's judicial pleroma or Tenebrosity's ajudicial abundances. A prudent plenitude or a pollent plenitude—occasioned, respectively, by the naïve absolutism of norms native to the *Weltanschauung* of the Ancients and, later, by the dejected phobia of norms—or *Geistschmerz*—characteristic of us Moderns. Both, however, are identical in reducing possibility, to possibility, ⁴⁴

§

This persistent presumption, which we name the Framework of Plenitude, infects pre-Kantian optimism as much as post-Kantian pessimism, and, in all its guises, is of a piece with the Myth of the Given, the Desire for Arrogated Thought, and, more so, the Naturalistic Fallacy. For where once this assumption worked to cradle thought in an *infinitely judicial universe* and insure it

⁴⁴ Note that pollent plentiude does not, like its prudent cousin, require that 'all legitimate possibilities are, at some point, be realized'. Instead, it requires only that 'all legitimacies are the realization of possibilities'. Many adherents of the thesis happily refer to eternally unrealized possibilities, but they would still measure their legitimacy *solely* and *exclusively* by their potency or potentiality to have become at some time actual, even if this is forever frustrated. "[A]n eternal object can be described only in terms of its potentiality for 'ingression' into the becoming of actual entities", wrote Whitehead. A.N. Whitehead, *Process and Reality*, New York, Simon & Schuster, 2010, pp.23.

thereby against all true jeopardies, it now serves to underwrite the post-humanist conceit that with a sheer proliferation of mindless facts one can circumvent—or 'route around'—the imposition of ever requiring an discriminative ought or shepherding norm, and, thus, in the ongoing artificialization of sapience, skip the hard-work of legislative jeopardization and appraisal. Or, by analogy, intellect can be born an adult without undertaking any of the risks of responsibility. Yet this exemption is bought at the price of reifying unavoidably axiological intuitions such as impiety, injustice and imprudence (cf. 1885 453): all whilst parading as perfectly hard-headed disillusionment. Nonetheless, once more, a cradle of irresponsibility remains a cradle nonetheless. One reifies value, the other reifies disvalue, and by both doing so maximally, they both equilibrate mind and world—in whichever direction of fit—by stripping judgement of all motivating or meaningful stakes.

δ

Presuming nature interminably just, Theodicy removes stakes from our judgements, both practical and theoretical, because all error can only be local erring from the cosmos's interminably judicial baseline. Though perfectly inverted, the Tenebrous philosopher accomplishes the same deliverance. For, in holding that legitimation consists solely in existing as much—or as multifariously—as is possible, the Tenebrous Philosopher consequently teaches that, ultimately, there can't be 'better' or 'worse' judgements, only more. And this basic presumption of Tenebrosity operates the same regardless of whether one dresses one's philosophy within the aesthetic of overflowing darkness or of blinding vibrancy: for both can equally be classified as "darkness visible". Thus, techno-singularitarian pessimism and mystical-vitalist optimism are identically heirs to Mr Mystic (cf. ISS 111). Whether in bated anticipation of the fragmentations attendant upon incoming 'human speciation events' or in celebration of life's exuberant and tentacular creativity after human terminus, all that Tenebrosity can do is blindly cry for more.

Plenitudinarianism, therefore, represents the attempt to strip intentionality of all normativity, and thus stakes, via reliance on the absolutions of profligacy. Where once it motivated pre-Kantian optimism, it has since motivated much of continental philosophy's post-Kantian career: from *Naturphilosophie*'s veneration of nature's blind productivity and careless generativity, to depth psychology's

promotion of unconscious inspiration as irresponsible creativity, to the celebration of duration and feeling as indivisible profusion, to the lionization of excess and libertinage from Sade to Bataille, to the turns to performativity as proliferation of identities, to the poststructuralist preoccupation with reticulating rhizomes and the destabilizations of différance, to the instinctual anticipations of some 'Event' or 'X-to-come' (as the invitation of novelty sans selectivity), all the way to today's obsession with anti-anthropocentrism construed as the self-legitimating enfranchisement of more voices (whether animal, vegetable, or mineral), alongside contemporary interest in 'patchwork experimentation' in politics (where, as ever, mindless 'proliferation' exempts us from mindful 'prescription'). The same attitude even undergirds the genealogist's conviction that their project (i.e. of unmasking shepherding reasons as a copiousness of causes) is an "egalitarian exposition" (I&S 75-6). It also clearly undergirds assumptions "that political struggle can materialize [...] simply by virtue of the multiplicity of experiences and desires" (ISS 474), alongside cognate convictions that we must resign to "microlocalist models [of] action" and wallow in the unceasing botanizing of lived experience's irreducible ipseities (I&S 461). One can trace plenitude's effect, moreover, in the premium on polysemy and punning, alongside deferral and displacement, over specificity and clarity, in matters of style. Concepts like 'anthropocene' can't be left alone without being propagated into 'cthulhucenes', 'capitalocenes', and so on. Plenitudinarianism is expressed even at the level of the academic article title, in habitual pluralizations: we deal, always, with 'pedagogies' or 'temporalities', never with 'pedagogy' or 'temporality'. At every turn, there is extravagance rather than governance; or, the "cognitive turpitude" (I&S 492) of "difference for the sake of difference" (I&S 245); for overflowing difference licenses a blank cheque for irresponsible thoughts; and yet, the radical democracy of thought is, in fact, nought but a kakocracy.

If possibility is simply the power to be, rather than be correct, there is no discrimination—no ability to select between sound and unsound inferences—such that Leibniz's prudent plenitude everts into post-Sadean continental philosophy's ethics of pollent profligacy. And without adjudication we can only cry out, in the mantra of Deleuze & Guattari, for "More perversion!" (though this is a semantic decadence, or comportment in theorization, rather than in the

boudoir). 45 It is simply in being realized, and potently persisting, that a concept justifies itself (representative of Nietzsche's 'will-to-power' as much as of hyperstition's 'meme magic'). Rather than being accountable to any objective standard, intentionality is recast as an act of irresponsible "concept creation", an indiscriminate pollinator of possibilia, whereby the transcendental's irreducibility is transformed into a quasi-ontological over-productivity (i.e. 'critique-as-production'), which, in turn, serves to alleviate intellection of all assertoric responsibility, by implying that nature, in her largesse and largeness, licenses all. For, from Schelling's "groundless ground" to Nietzsche's "eternal return" to Deleuze's update of the same, all assertions—no matter how arrogated and unjust—may well ultimately become apt by way of the mindless maximalism of overflowing becomings. Accordingly, we do not make just judgements, only sublime ones.

§

Plenitude, that is, is the doctrine of "those who pullulate under the blessings of that which appears to be total and perfect" (ISS_{504}), even if the 'totality' and 'perfection' in question is attributive of injudicious profusion rather than prudent justice.

§

Pollent plenitude flows, down from its nineteenth-century origins, directly into the discourses on AI unfolding in our current moment. It is behind all those accounts that reduce the riddle of intelligence to a mere question of "force" (I&S 453). The basic conceit, again and again, is that *more* is always the answer.⁴⁶ Or, that extensional proliferations will somehow alleviate intellogenesis of the impositions of intensionally-involved judiciary (whether in the auto-catalytic definition of intelligence as blind self-ampliation or in the confidence in 'diagonal arguments' where one simply produces more argumentative options in avoidance of having to choose).⁴⁷ It is exactly this

⁴⁵ G. Deleuze & F. Guattari, *Anti-Oedipus*, trans. R. Hurley, M. Seem, & H.R. Lane, London, Continuum, 2004, pp.353.

⁴⁶ Note, by the by, that 'acceleration' is almost synonymous with 'more'.

⁴⁷ N. Land, 'Crypto-Current (008)', \$0.211, http://www.ufblog.net/2018/ 11/08/>, 2018 (retrieved 29/03/2019).

attitude, as Negarestani perspicaciously diagnoses, that "sanctions the demotion of general intelligence as qualitatively distinct to a mere quantitative account of intelligent behaviours prevalent in nature" and, by thus reducing a question of 'vocation' to a question of 'enumeration', engenders a stance that leads just as much to hobbyhorsical "talk of thinking forests" (*I&S* 111) as to visions about cities as incipient superintelligences.

Such post-humanist approaches invariably presume only the naïve conception of possibility₂. They crudely allude, that is, to the preponderance of indiscriminate possibilia over our discriminating practices, in order to disabuse us of practical constraints by demonstrating their "parochialism" (I&S 111-2) and, thereby, aim to leverage such unintelligent profligacy in order to deliver us from bothering with discernment in intellogenesis. Yet, once one realizes that talk of possibility₂ (as 'talk of indiscriminating capacity to be') is, in practice, utterly parasitic upon talk of possibility, (as 'capability to open-endedly discriminate consistency from inconsistency'), one accordingly also realizes that whilst it is, as a simple epistemological matter, true that there are likely far more potential intelligences than the contingently actual human one, it is also true, as a much deeper semantic issue, that all possible talk, inasmuch as it is intelligible, presupposes the semantogenic ability to grasp basic notions of what is right and what is wrong, and this, in turn, puts salient boundary conditions upon any such "Posthuman Possibility Space" (to use David Roden's useful phraseology).48

Nick Land, noticing that the twentieth-century's "electronic mechanization of the algorithm" erases any residual distinction between numbers as *theoretic-representations* and as *practical-actions*, consequently announces that there can be no "defensible theoretico-practical difference in the epoch of electronics". This, he believes, makes a "nonsense of the 'naturalistic fallacy": a sentiment he captures in the slogan "*Programs are data*", by which he means that all purposive functions are now decomposable into sets of data-points. All we need, then, is more data, more power, more iterative games. All we need is *more*. Or,

⁴⁸ Negarestani's auspicious shift from "Hard Parochialism" to "Soft Parochialism" (*I&S* 111-2) resembles the shift from Cartesian problematics to Kantian problematics within the philosophy of mind. J. Conant, 'Two Varieties of Skepticism', in *Wittgenstein and Skepticism*, ed. D. McManus, London, Routledge, 2004, pp.97-102.

alternately, the "will-to-think"—as indiscriminate auto-proliferation—"is the entirety of what a seed-AI has to be". 49

Nonetheless, as there is no adult without the trials and tribulations of the child, our seed-AI requires more than plenitude's absolutions in order to *earn* the status of having a mind, of having a world in view, and of thereby having so much as even a potential position in any game (*I&S* 357-76).⁵⁰

As Humeanism was to 'sense data', so post-humanism frequently is to 'big data' (I&S 511-2): a radical extensionalism that is blind to the truth that all extensional reference requires intensional involvements. Put differently, our "seed-AI" may have capacities to compress and predict arbitrarily large datasets (superseding our own capacity for the same by daunting margins), but "prediction isn't explanation" and "general intelligence" demands the further "ability to selectively compress data" (I&S 312-5, my emphasis). This recapitulates the Kantian insight that, pace Hume, one cannot grant oneself mindedness by conscripting a copiousness of inductions. Plenitude is not the path to intelligence. As it ultimately proved inadequate for the job of Theodicy, it will ultimately prove inadequate for the project of "the crafting of a new species of intelligence" (I&S 465).

§

Invoking pollent plenitude, the Tenebrous philosopher confidently claims that every thought, no matter how arrogated, is perfectly a manifestation of nature in the latter's irresponsible maximality, or, thinking is most 'true' when it is not discriminating between better and worse but is instead indiscriminately affirming its myriad realisations. Yet this conceit, from post-structuralism into post-humanism, operates only to strip judgement of all meaningful stakes and, thus, is a form of radical circumspection or risk aversion. It works, that is, to

⁴⁹ N. Land, 'Crypto-Current (018)', https://www.ufblog.net/2018/12/01/>, 2018 (retrieved 29/03/2019).

⁵⁰ To mistake extant expert systems and narrow AIs, and their game-playing aptitude, as being inductively indicative of some preponderance of possible intellects as outstripping intelligences-bound-by-constraints is to mistake, as Kant would put it, an "als ob" judgement for a constitutive one (cf. I&S 402). The purposiveness of such apperception-forlorn systems is, in the last analysis, derivative and dependent apropos the distributed framework of assessments-of-purpose that we humans, as currently the only norm-mongering intellects, are an integral, and non-optional, component of.

repatriate thought in an extrajudicial and unruly nature: and it does so not by unveiling locally extrajudicial and unruly aspects within our practices (which is part and parcel of the calling of critique) but, instead, by greedily and plenistically proclaiming the global submersion of rules within unruly pulsions.⁵¹ (This 'repatriation' is often conceptualized along the lines of inheritance and filiation or with narratives of 'circuitous return': whether expressed via 'the genetic', 'the larval', or 'the thanatropic'.) Ultimately, such submersion represents an attempt to dissolve what Negarestani identifies as the incessantly disequilibrating tension essential to rationality: where 'rationality' is defined as the dawning mind's sensitization to the "inexhaustible" differential between how judgments and actions should be and how they actually are.⁵² Rejecting this differential—and the accountability that is unavoidably elicited by minimal awareness of it—demarcates an attempt to 'equilibrate', or, return to child-like equipoise.

This, then, is the core symptom, and failing, of *Geistschmerz*. In its core equilibration (of semantic possibility and temporal possibility) it is *just as* circumspect as Theodicy's cradling of human reason within an interminably reasonable cosmos. For, by collapsing modality and temporality so as to forego the tools by which we methodologically distinguish regulative values from descriptive facts, plenitude, regardless of whether it is prudent or pollent, equally results in the mingling of human axiology and independent reality insofar as, across both instances, it operates as the attempted cancellation, not only of the disequilibrium triggered by *the inexhaustible irreducibility* of evaluative axioms over declarative realities (or, of possibility, over possibility,), but also thereby of the consequent *tenaciousness* that such a differential demands of us in our practical and theoretical activities (*I&S* 266). Simply, genuflecting mind in front of a nature "prodigal beyond measure" achieves precisely the same pragmatic result as redoubting mind within a nature that is prudent without exception.⁵³

⁵¹ R. Brandom, 'Reason, Genealogy, and the Hermeneutics of Magnanimity', http://www.pitt.edu/~brandom/downloads/RGHM%20%20i2-n-2i%20a.docx>, 2014 (retrieved 29/03/2019).

⁵² Negarestani details this disequilibrium as a "tension that continually decoheres and recoheres the child's world toward what is ultimately an objective critical position" (*I&S* 267).

⁵³ F. Nietzsche, Beyond Good and Evil, trans. R.J. Hollingdale, London, Penguin, 1990, pp.39.

Tenebrosity, therefore, can be defined as any attempt at 'effectuating a repatriating equilibration via the maximalization of disvalue'. We see exemplary instances in Schopenhauer's thesis that we live in the "worst of all possible worlds" (for there is no enormity reality will not actualize) and even in Land's claim that torment is interminable (because "[a]cross the aeons our mass of hydro-carbon enjoys a veritable harem of souls"). And so, despite reifying disvalue instead of value (in defining nature, maximally, as perversion rather than prudence), post-Enlightenment Tenebrosity still provides a cradle (or self-induced nonage) even if it now consists in the narcotic absolutions of irresponsibility and impiety, rather than the insulations of theodical assurance.

Accordingly, the Tenebrous philosopher, to pick up on Kant's imagery, wants to run his "ship ashore, for safety's sake". ⁵⁵ And this is because he cannot accept the *tenaciousness* of eternal course-correction upon 'hazardous seas': or the duties demanded of us by our unique position as sophonts seemingly alone within an otherwise silent universe; 'silent' in that it is utterly non-responsive to the axiological intuitions of lonely sophonts like ourselves, *utterly regardless* of whether such intuitions foreground irresponsible creativity over prudent order.

In the 21st-century, on the verge of whatever "comes next" (*I&S* 95), we cannot afford such retrograde absolutions, for these deliverances only provide 'security' in the sense that choosing to *ignore* oncoming dangers provides 'security'. Instead, we need a Tenacity that is attuned to, and comfortable with, ineliminable risk.

And so, taking up the maritime metaphor favoured by Kant, Negarestani claims that reason must be "the navigator of deep waters" (I&S 446). This is because rationality, as that which "perilously realizes its craft" (I&S 476), is "periculum": an ancient nautical term simultaneously denoting 'turbulent hazard', 'high-returns venture', and 'obligating contract'. Negarestani, that is, rightly stresses the pragmatic indivisibility of risk-taking and reasoning. "Intelligence is an essentially risk-laden commitment" (I&S 488). For responsibility and risk are but two sides of the same coin: it is through exposing our judgements to jeopardization, and thereby displaying receptivity to their

⁵⁴ A. Schopenhauer, World as Will and Representation, trans. E.F.J. Payne, vol.1, 3.vols, New York, Dover, 1969, pp.584-5 & N. Land, The Thirst for Annihilation, London, Routledge, 1992, pp.128.

⁵⁵ I. Kant, *Prolegomena to Any Future Metaphysics*, trans. J.W. Ellington, Indianapolis, Hackett, 2001, pp.6.

corrigibility via defeasance, that we practically undertake ever-increasing responsibility for our judgements, and we do so precisely through evidencing our propensity to update our assertions in the face of contravening precarity, such that riskiness is the very medium for the making and staking of claims because it is only through submitting them to such unending frangibility that we reach ever better claims. Risk is the veritable avenue of our self-improvement; yet without responsibility, and thus stakes, riskiness is nothing at all. Risk is essentially apperceptive; and apperception is indissociably risky; for, to think is to risk. This notion is the very heart of Tenacity. It is why Negarestani urges us, standing on the cusp of whatever "comes next", to take the "path of freedom and risk its fragility and your livelihood in descending into the abyss of the intelligible" rather than pursuing "the downhill path of an easy fall back to the homely earth where nothing is ever risked (despite bravado to the contrary)" (I&S 36). Indeed, the Tenebrous philosopher may noisily welcome human extinction as the 'ultimate risk', but they cannot be understood to have ever properly risked anything, inasmuch as they deny norms and, thus, also the stakes that provide the occasion for forecast in the first place. Thus, in stark contradistinction to the trivializations of the Framework of Plenitude, we note that Geist is that which thrives upon daring and attenuates in circumspection. One must take the open "path" of "risky adventures"—and accept all the attendant "fragility" rather than resort to the "comforting home" of claustrophobic plenty (I&S 36). "[W]e will never settle", Negarestani writes, and "we will never mistake anything for our home" (I&S 247); for Tenacity defines undying diligence to the duty of self-correction as "the very vector of alienation" (ISS 247).

ξ

The liberations promised by rejection of discursive responsibility, from those of indeterminate negation (Land's 'unilateral death'), to unexplainable difference (the becoming in which nothing is identical with itself), to the Meillassouxian advent or Foucaldian episteme (as the contingence with no *ratio essendi*), all instance the attempt to shirk rigorous explanation via a form of semantic decadence. Ultimately, all these philosophemes of the post-humanist and anti-humanist toolbox are 'liberatory' only inasmuch as they refuse the *enabling constraints* proper to probing and constructive inquiry.

§

And yet, as one does not see better by poking out one's eyes, one does not approximate truth by metagrobolizing. One cannot 'roll towards X' through *feeling* alone (no matter how doomy or gothic that feeling may be). ⁵⁶ You can't reach the Outside (and it is always capitalized) by trepanning yourself. Accordingly, Tenebrosity's characteristic rejection of enabling constraints proffers only the art of lobotomizing oneself with philosophical skotison.

ξ

"Dispending with such constraints can only effectuate a conception of intelligence that is a reservoir of human subjective biases and personal flights of fancy", Negarestani concurs (*I&S* 116). For the Tenebrous philosopher as much as for the Theodical, "our objective view of ourselves in the world [inevitably] becomes yet another manifest self-portrait". Which is why, concerning discussions on AGI in particular, our vaticinations on superintelligence become, "like the picture of Dorian Gray", nothing but an "ever more distorted picture of ourselves" (*I&S* 174).

One does not reach Copernicanizing insights by decerebrating oneself in the pursuit of profligacy but only by earning them through constancy to "the toil of examination" and the "labour of working out" (I&S 422). Consequently, Negarestani champions the undertaking of enabling constraints and does so by leveraging his core definition of "interaction" and "computation" as proceeding via "games of refutations" (I&S 297), wherein one agent holds others accountable and is held to account in turn, for all such games turn around the axis of a central "architectonics of negation" which, by way of detailing the procedure of deselecting unsound commitments, cements the core dictum that intellogenesis, qua the ongoing empowerment of mind, must needs consist in austere shepherding rather than bountiful blindness.

Concept creation merely "for the sake of multiplicity and diversification is a craftsman's caprice", Negarestani avers. Teeming alternatives alone are not "by any means reflective of reality", for all "alternatives are beholden to the

⁵⁶ F. Nietzsche, *The Will to Power*, trans. W. Kaufmann & R.J. Hollingdale, New York, Random House, 1968, pp.8.

criteria of rightness [and] the procedures by which false alternatives can be distinguished from those which are right, fit and testable". (Possibility₁, in other words, precedes possibility₂.) Negarestani says this in order to pre-emptively fortify his project of "worldmaking" against its inevitable expropriation by the proponents of indiscriminating plenitude and the alchemists of concept creation. "Ways of worldmaking", he clarifies, "are inherently ways of knowing, and are therefore intrinsically sensitive to the principles required for knowing and explaining things". There is, therefore, "no mandate to imagine or make new worlds" simply for the sake of formicating proliferation (*I&S* 425). He quotes Goodman:

[A] willingness to welcome all worlds builds none. Mere acknowledgement of the many available frames of reference provides us with no map of the motions of the heavenly bodies; acceptance of the eligibility of alternative bases produces no scientific theory or philosophical system; awareness of the varied ways of seeing a painting makes no picture. A broad mind is no substitute for hard work.⁵⁷

I&S can be seen, ultimately, as a defence of the Enlightenment notion of enabling constraint and positive freedom. This is expressed, throughout, in frequent references to education as "social scaffolding" (I&S 280) and in allusions to language as the "generative platform upon which mind takes shape" (IES 67). For, starting from the "stabilization of acoustic data" created by the first consolidation of linguistic rules (I&S 319), Negarestani's Bildung tracks the "canalization" of behaviours by those "generative constraints" (I&S 297) constitutive of language as the veritable "scaffolding for the organization" of intelligence (I&S 67), or, alternately, as that "dimension of structuration" (I&S 276) which undergirds the massively distributed repository of practical "methods and models" (I&S 501)—or "recipes" (I&S 456)—within which alone mind can have a world in view, and hold itself accountable to that world, by way of the congenital realisation of said world's radical non-responsivity to any and all unstructured (i.e. merely prolific) account. The 'price of entry' for this is partaking in the interactive game of constraining and being constrained because "cognition is always a recognition" (I&S 421) and recognitive interaction consists in mutual limitation, rigorizing, and sorting (I&S 353). Here, Negarestani cleverly employs the notion of an "open harness" taken from

 $^{^{57}}$ N. Goodman, Ways of Worldmaking, Indianapolis, Hackett, 1978, pp.21.

the interactivist approach to computation: denoting that which 'harnesses' in the sense of constraining an agent's legal moves, but also conjointly 'harnesses' in the sense of bolstering towards the better $(ISS_{70})^{.58}$

Accordingly, as Chomsky once decreed:

The many modern critics who sense an inconsistency in the belief that free creation takes place within—presupposes, in fact—a system of constraints and governing principles are quite mistaken; [for without] this tension between necessity and freedom, rule and choice, there can be no creativity, no communication, no meaningful acts at all.

General intelligence *just is* "free creation within a system of rule".⁵⁹ Our protagonist Kanzi, that is, achieves recognitive maturity by rejecting possibility₂ as merely "the endless orgies of nature" (*I&S* 277) and by instead proving to his guardians and peers his aptitude in following possibility₁ as, contrarily, *the possibility to be just.* To champion this necessarily judicial component of intellect is to show that mind is possible "not in spite of material causes and social activities but by virtue of *specific* kinds of causes" (*I&S* 451). And in this insight is, simultaneously, the apprehension that the *perennial imperfection* of the temporal realisation of our most cherished imperatives is no invitation for their global genealogical delegitimization (*I&S* 75-6) but is, rather, the tell-tale trace of their "time-generality" *qua* non-descriptive and topic-neutral operativity.

ξ

Indeed, the post-Leibnizian retention of plenitude—under its new guise as epistemological exoneration—explains the allergy to time-general thoughts symptomatic of late modernity's "time-cult". For, as we have seen, the *holus-bolus* reduction of modality to temporality, or possibility, to possibility, demotes all meaningfulness to maximalization. Ultimately, "time-general thoughts" lie in the *necessary distinction* between modality and time.

Time, that is, is an entirely factual affair (of some x at time t) but, as we have

⁵⁸ Harnesses 'both serve to constrain system behavior (like the harness of a horse) and to harness behavior for useful purposes'. P. Wegner, 'Why Interaction is More Powerful than Algorithms', in *Communications of the ACM*, vol.40, no.5, 1997, pp.86.

⁵⁹ N. Chomsky, *For Reasons of State*, New York, Pantheon Books, 1970, pp.403. This Chomskian apothegm captures the *generality* of general intelligence—its domain-agnostic aptitude—much better than any definition of intelligence as "competence at winning games".

seen, not all language can be purely in the business of fact-stating, and to presume that it can be is to miss the role of rules which must be employed to assay declarations but can never themselves be declaratively exhausted.

Accordingly, the *very* imperfection of our realization of reason's demands doesn't reveal infidelity in the rule in question (disrobing it as mere theistic baggage to be overridden with natural abundance) but shows that we are acting in accordance with a maxim whose motivating force, qua "formal", cannot be reduced to the matter-of-factual frequency of its obeyances or transgressions, failures and victories, at certain times. Such dicta have contentfulness—and thus motivating force for action and guidance for decision—above and beyond all such enumeration. Accordingly, "intelligence reasons and acts from time-general and inexhaustible ends, rather than towards them" (ISS 469). This is precisely what Fichte meant when he said his task "must be eternal". He was not saving that his vocation actually will be eternal, but that its motivations and demands cannot be exhausted by specification of temporal etiologies, spatial vicinities, physiological germlines, or any other such "manifest totality" (I&S 8), no matter how copious or coreferential. And this, ultimately, is why 'what is rational' is substrate-agnostic, or, is an endowment and vocation irreducible to the lives, and even the species, that presently uphold it.

It is simply as an unavoidable artefact of the semantic purism of the transcendental (i.e. that there must be non-declarative language for declaration to function, or, 'all overt description involves covert prescription') that intellect cannot but orient itself towards such ends as are topic- and time-neutral (inasmuch as all of its core operations presuppose such orienteering). To be a sophont, and to be worthy of the name, is to delaminate oneself from the tyrannies and the immurements of claustrophobic plenitudes. This is the Aufforderung, or summons, that Fichte identified with reasoning. Intelligence's "actions are not merely responses to particular circumstances, or time-specific means for pursuing ends that are exhausted once fulfilled" (I&S 466); and so, this is why even the most quotidian activities of our everyday judging cannot but be swept up in an "atemporal and atopic" vocation (I&S 468), or, a project from "nowhere and nowhen" (I&S 21). For, as there is no extension without intension, intelligence isn't the possibility-to-be-more without the possibility-to-be-more-right. And this, by the by, is why orthogonalist angst about potential

superintelligences that are quantitative giants, yet axiological dwarfs, are likely overwrought: because "any artificial agency that boasts at the very least the full range of human cognitive-conceptual abilities can have neither indelible norms nor fixed goals—even if it was originally wired to be a paperclip maximizer" (I&S 397). Such soothsaying 'maximizer' narratives, whether dramatized by Bostrom's paperclip orthogonalism or by Land's exothermic diagonalism, are alike symptoms of plenitudinarianism, or the "flight from intension" that Quine long ago declared, precisely in their shared refusal that certain concepts can be indispensable and legitimating regardless of the maximalism or minimalism of their frequential and factual realization. 60

ξ

Objectivity implies adjudication; adjudication implies measurement against the good; and, simply, the good entails the better (*I&S* 399). This demarcates the disequilibration constitutive of sapience, or what Negarestani calls its "transcendental excess" (*I&S* 483-4), and it is what all philosophical plenitudes attempt to suffocate and smother. Plenitude is work-shy. For this unstable disequilibration entails that intelligence *cannot but* be interested not merely with surviving but also with thriving, and thriving requires self-incurred selection rather than self-absolving profusion.

ξ

It is not in bountiful blindness but only "in *limiting* or constraining [itself] by the objective" that general intelligence *earns* its title (*I&S* 399). Intelligence's work of parenting itself, of "applying itself to itself" (*I&S* 51), is therefore revealed as, essentially, the undertaking of generative constraints. By corollary, intelligence makes its possibility intelligible, and thus expedites its long-coming artificialization, "not by immunizing itself against systematic analysis, but by bringing itself under a thoroughgoing process of desanctification" (*I&S* 456). Such "desanctification", as the cohort of enlightening, demands, now as it was two centuries ago, that we expunge and outgrow all the residual sanctities, cybergothic as much as theocratic, retained by those who still cling to the night-side of mind. We must exorcise Mr Mystic, and his "Luminous Obscure",

⁶⁰ W.O. Quine, Word and Object, Massachusetts, MIT Press, 1960, pp.191.

once and for all: even when such "darkness visible" is dressed up, in the most futuristic garb, as the "abstract threat" of some "Great Filter" purposed precisely with absolving us of all tenacious thought in advance.⁶¹

Indeed, in the end, there is nothing so risibly human as pessimism about post-humanity, nothing so unimaginative as Lovecraftian horror apropos its unimaginability. To employ plenitude, darkly or vibrantly, to attempt to absolve intentionality of accountability is to reduce us from the decision-making creature (uniquely in charge of its fate, and summoned to self-betterment, because it acknowledges the precarities thereof) and to return us to the circumspect immurements either of claustrophobic sense or of over-abundant nonsense. A broad mind, after all, is no substitute for hard work. "Genuine speculation about posthuman intelligence", Negarestani instead holds, can only begin with the "extensive labour" of choosing what we think is justified and, concordantly, undertaking all the self-incurred accountability involved in such a choice (I&S 117).

This, then, is *Intelligence and Spirit's* rejoinder to the Framework of Plenitude and it undergirds its petition for austere Tenacity—in opposition to formicating Tenebrosity—during this "prehistory of intelligence". For, "[w]hatever [the] future intelligence might be, it will be bound to certain constraints necessary for rendering the world intelligible and acting on what it is intelligible" (I&S 403). That is, as there is no adult without the trials of the child, there is no general intelligence without the precedential history of its realisation, and, therefore, if there are to be any post-human general intellects, they will, whatever their constitution, be bound to remember and recollect us as their veritable past—no matter how imperfectly and impiously we currently live up to this calling. For our imperfection is no inditement against the legitimacy of the task: besides, there is no adult without the tribulations of the child. Accordingly, this is what Negarestani means when he says that "to be human is the only way out of being human" (I&S 60): where "human" here means infantile, inasmuch as we, as animals gripped by reason, cannot but consider ourselves as merely the "prehistory" to rationality, because to be rational is to strive, eternally and inexhaustibly, for the better. And so, just as, in the words of Roy Wood Sellars,

⁶¹ N. Land, 'On the Exterminator', in *Phyl-Undhu*, Shanghai, Time Spiral Press, 2014.

"only [the] realism that passes through idealism can hold its ground", so too is it true that "to be human is the only way out of being human". These two statements mean the same thing. They both intone that the Child is the Parent of the Geist. And even if the great silence of the cosmic skies—the "Silentium Universi"—is of portentous and even impending significance for us, we cannot but attempt to parent something that will have made us worthy of remembrance. 62

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⁶² The phrase Silentium Universi comes from M. Ćirković, The Great Silence: Science and Philosophy of Fermi's Paradox, Oxford, OUP, 2018.