One Two Many: On Nick Land's Numbering Practices

Vincent Le

ABSTRACT: This paper examines Nick Land's "numbering practices" for opening up language to modernity's increasing technological entanglement beyond human comprehension. I begin by examining Land's attempt to override our linguistic systems with machinic code and binary symbolism in a way which mirrors modernity's technological future shock. I then consider his appropriation of Cantor's set theory and Gödel's incompleteness theorem to plot ever greater degrees of reality's excess to all anthropic logic. The third section looks at Land's use of qabbalistic numerology to uncover the absolute contingency of all our most strongly held beliefs, truths and values. The fourth section considers Land's radicalisation of qabbalism through his own particularly abstract and inhuman notational "gematria." I conclude by looking at Land's interest in the computer keyboard's lock-in to the QWERTY layout for proffering a glimpse of modern technology's increasingly dehumanising meltdown of our anthropocentric delusions of grandeur.

KEYWORDS: Nick Land, Deleuze and Guattari, Cantor, set theory, Gödel, numerology, qabbalism, the CCRU, the Golem, artificial intelligence.

Colloquy: Text, Theory, Critique 37 (2019): 80–105. https://doi.org/10.26180/5c9d90b0dc18a

After a long period mostly devoted to the interpretation and deconstruction of texts, continental philosophy is presently seeing a rise in new realisms and materialisms which seek to rid philosophy of its anthropocentrism in favour of new and strange voyages in a vaster, inhuman cosmos. This speculative turn has also seen renewed interest in forgotten and neglected thinkers, foremost among whom is nomadic philosopher Nick Land. The underlying goal of all of Land's writings is to critique the anthropomorphisation of reality by confronting us with the brute fact of our species' inexorable extinction, beyond which our thinking cannot extend. In Land's own decisive words, "that humanity is fated to terminate is amongst the most basic thoughts, and no more than the most elementary qualification for philosophy, since to think on behalf of one's species is a miserable parochialism."[1] More precisely, Land looks to capitalism's technological advancement as a way to de-anthropomorphise thought insofar as he sees it as eventually giving rise to an artificial superintelligence at the advent of a technological singularity, which would be incomprehensible and even life-threatening to humanity:

> It might still be a few decades before artificial intelligences surpass the horizon of biological ones, but it is utterly superstitious to imagine that the human dominion of terrestrial culture is still marked out in centuries, let alone in some metaphysical perpetuity. The high road to thinking no longer passes through a deepening of human cognition, but rather through a becoming inhuman of cognition, a migration of cognition out into the emerging planetary technosentience reservoir, into "dehumanized landscapes … emptied spaces" where human culture will be dissolved.[2]

For Land, it is ultimately the creation of strong artificial intelligence (AI) through the dynamics of industrial capitalist competition that marks the ultimate subversion of humanity's pretensions to fully come to know reality through our concepts of reason, since this AI marks a limit concept beyond which we cannot survive, let alone understand.

Given Land's virulent critique of human hubris, it is unsurprising that, while a lecturer at Warwick University in the 1990s, Land taught Iain Hamilton Grant and Ray Brassier, two of the four founding members of the speculative realist "movement," who also explore death, nature and other inhuman realities.[3] Land has

also gone on to influence a younger generation of political theorists such as Nick Srnicek and Alex Williams, whose own "left accelerationist" project aims to appropriate and repurpose technocapitalist processes and dynamics to fulfil "the quest of *homo sapiens* towards expansion beyond the limitations of the earth and our immediate bodily forms."[4] Despite Land's influence on speculative realism, accelerationism and other strands of contemporary continental philosophy, there have not been any sustained studies of his own thought outside a few conference talks, blogposts and short general introductions.[5] Instead, most engagements with Land tend to appropriate his concepts and apply them to other fields and areas of research with minimal regard for how Land himself first developed and used such concepts. In particular, there has been little scholarly engagement with the most obscure, yet also crucial part of Land's work: the various "numbering practices" that he developed between the mid-nineties and the early noughties. Therein lies this paper's contribution: it traces the way that Land's numbering practices—from qabbalism and occult numerology, to mathematics and machinic code—seek to open up language to capitalist modernity's increasing technological entanglement beyond human comprehension. To do this, I will classify these numbering practices into five overlapping, yet distinct branches: hypervirus; mechanomics; qabbalism; tic-xenotation, and qwernomics. As I proceed, I will also contextualise each practice within the intellectual traditions it presupposes, but which Land seldom discusses in any significant detail.

I begin by examining Land's first attempt to hack into our linguistic systems by overriding them with machinic code and binary symbolism in a way that mirrors modernity's often confounding technological advancement. I then consider his appropriation of Georg Cantor's set theory and Kurt Gödel's incompleteness theorem to plot across the number line ever greater degrees of reality's incongruous excess to anthropic order and logic. In the third section, I turn to Land's esoteric use of qabbalistic numerology as another occult way to decode human language and uncover the contingency of many of our beliefs, truths and values. The fourth section considers Land's radicalisation of qabbalism through the development of his own particularly abstract and impersonal notational "gematria." This paper ultimately concludes by looking at Land's interest in the computer keyboard's lock-in to the

QWERTY layout for proffering a glimpse of modern technology's increasingly dehumanising meltdown of our delusions of grandeur. Through this unholy alchemic cocktail of science and the occult, this paper hopes to demonstrate how Land's numbering practices strip language of our meanings and significations in such a way as to stage an encounter with an inhuman "Outside."

I. *ÉCRITURE VIRULENTE*

Land first seeks to formally stage modernity's technological subversion of the traditional sense of self through his compositional prose style in a 1995 essay called "Hypervirus." After starting out the essay by *describing* how the cybernetics of modernity scrambles our supposedly universal truths and values, the subsequent paragraph is comprised entirely of binary code that formally *performs* the very confusion which modernity unleashes upon our sense and signification. In this way, Land argues that modernity is a computer virus which replicates itself by infecting its rational hosts to the point of scrambling and ultimately expelling all discursive meaning. To cite the passage at length:

> As culture migrates into partial-machines (lacking an autonomous reproductive system) semiotics subsides into virotechnics.
>
> 0010101011011100101101010101001100100010001010101110100001010110010100101000110010011100100010000000001001111110001001001010101010000100001010100111111001001000100011010010001010010101111000101001000010001110100 Yes No Yes No Yes Yes No longer what does it mean? but how does it spread?[6]

A conversion of the binary code to text in the above passage reveals that it does not actually signify anything, which might suggest that Land has descended into pure postmodern meaninglessness. However, it is my contention that this is exactly Land's intention: the meaningless, or what he terms (following Deleuze and Guattari) "asignifying" code, represents increasingly autonomous technics' pursuit of their own self-replication without any interest in serving human use-value. It is modern technological systems' decoding of human identity and reason that Land seeks to formally capture in "Hypervirus" by constantly cutting up his writing with jarring

codifications, asignifying symbols, and repeated words which glitch in loops like a broken record player. The essay's end thus captures the limits of our understanding and perhaps even existence through a particularly "cyberserk" scrambling of anthropic lexicography through symbols that represent precisely nothing, zero, or the empty set () mindlessly self-replicating ((()), ((()(:

> Revolution (Molting ((())) leaves () nothing i)ntact TACT TACT. ((((((() ((())) (((())) (())) ()) (() (()) ())) ()))) Cyberserk repleting-slippage into dark-side (((())) distributive ROM-scrambling TACT tactics. (((() () ()) (()) ()) ((() ())) ((((() ((()))) ((((() ()) ()) (())) ((((() (())) (((() ((())) (())))) ((()))) ((() () ())) (())) ((()) (((() Zero program.) ((( ))) ((((() ()) ()) (())) ((((() (())) (((((() ()) ()(())((()) ((())))(())))) ((() () ())))) (()))…[7]

Therein lies the asignifying numbering practice that Land first announces in "Hypervirus" before exploring it elsewhere: the abstraction of language into ever more incoherent and senseless planes of meaningless machinic intensity. As we shall see in the next section, it is Land's attempt to dehumanise his compositional prose style that would lead him to take an intense interest in mathematics as the field of thought most abstracted from lived experience.

II. THE NUMBER-IN-ITSELF

Land more rigorously develops his decoding of linguistic systems in the 1998 essay "Mechanomics." He begins by chastising mathematics as "statist" and "despotic" in the Deleuzo-Guattarian sense that it abstracts, organises and formalises the multiplicity of particular, sensible things in terms of fixed and general forms, which are axiomatically derivable from human reason: "state-culture—however modern or even postmodern—is modelled upon an ideal despotic voice (Logos). The word from on high drafts the signifying chain."[8] Clearly, Land's view of mathematics is that it is a Platonism that idealistically conflates thought's models of real phenomena with the things themselves. At the same time, Land qualifies that he is not seeking to dismiss all numbering practices *tout court* as subject to the same mathematical idealism, but rather distinguish the latter from what he terms "numeracy": a use of numbers that reveals them to be irreducible to the logos inasmuch as they speak to an excessive nomadism always on the run from the all-encompassing despotism of reason:

"[numerical] calculation mobilizes a thinking that is directly and effectively exterior, indexing the machinic dispersion or anorganic distribution of the number. No sooner in the head than on fingers and pebbles, counting always happens on the outside."[9] Land distinguishes between numeracy and mathematics with reference to Deleuze and Guattari's distinction in *A Thousand Plateaus* between the "Oecumenon" and the "Planomenon." Whereas the Oecumenon (which traditionally denotes the promotion of unity around the Church) is an "abstract machine" that assembles its multiplicity of parts in a stratified way around an authorial point in what can only amount to a "relative deterritorialization" of order and reason, the Planomenon is an abstract machine assembling its parts in such a way as to facilitate the free flow of their heterogeneous intensities through an "absolute deterritorialization."[10] More precisely, Deleuze and Guattari explain that the Oecumenon stratifies through a twofold process of "expression" which marks the "molar" organisation of a thing's many parts into one overarching unity, and "content" which denotes the "molecular" stratification of a multiplicity into a larger unity: "between the two, the difference is first of the order of grandeur or scale."[11] Drawing upon this distinction, Land explains that the Oecumenon denotes the logos' way of ordering a multiplicity of numbers around a fixed and abstract principle of reason, which determines their order, stability and self-identity in two ways. On the one hand, expression orders numbers according to lower numerical types, such as by showing how the multiplicity of numbers can be derived as multiplications of the unity of the first number one: "expression deals with relatively deproblematized elements of a lower numerical type, exhibits a higher degree of consolidated cardinality, and operates a selection of comparatively tractable instances."[12] On the other hand, content deals with more complex and higher order numbers by grouping them into unified sets, or counting them according to probabilistic laws: "content deals with elements of greater typal-generality and numerical complexity, for which it requires a relatively heterogenous semiotic, involving varieties of algebraic, indexic, probabilistic, and anexact components."[13] Through this twofold stratification of the upper limit of the set and the lower limit of the one, the Oecumenon coheres all numbers into a well-ordered sequence which displaces the chaos of inconsistent multiplicity that numbers threaten to let loose. What clearly bothers Land about the Oecumenon's expression and content is that it

seeks to synthesise a chaotic multiplicity through the mediation of transcendental unities and sets in a way which is all too similar to anthropocentric reason's internalisation of the Outside as its own self-posited limit concept.

While the Oecumenon appears to be an essentially numerical operation, Land argues that the true essence of "the number-in-itself" remains exterior to its computational clutches: "the number in-itself is exterior to the Oecumenon, even when seized by it."[14] This number-in-itself is what Land calls, after Deleuze and Guattari, the Planomenon or "plane of consistency," an inconsistent multiplicity that threatens to dissolve all sequenced number lines insofar as it is always in excess of even their highest quilting point: "they are assembled diagrammatically, from directly expressive traits distributed differentially in a flat-space of o-dimensionality (nomos), and comprise a nonredundant order of differences (unsequenced sequence)."[15] At first glance, Land seems to be making the claim that the difference between the Planomenon and the Oecumenon is numerically reflected in the distinction between "cardinality" meaning numbers as quantities (e.g. 18 rats, 13 wolves, etc.) and "ordinality" meaning the position of things in a sequence (the 4th fastest wolf, the 9th slowest rat). However, Land rejects this reading of cardinality as being conjoined to the Planomenon on the grounds that it can just as well repress numeracy as liberate it. For example, even quantities of very large cardinality can still be unified into sets with common properties and extensive principles of classification: "it is precisely the calculary indefiniteness of highly general numbers that leads most directly to the suppression of numerical autonomy, by encouraging the subordinations of concrete numeracy to superior dimensions that logicize or geometrize it."[16] Conversely, it is ordinality that provides an effective "antilanguage" by carving up the number line into zones and sequences with limit points beyond which lies ever more excessive multiplicities:

> Far from denumerizing the alphabet, progressive decardinalization reinforces the numeric function. … Lexicographic ordinality effectuates an actual non-language and potential antilanguage. … It consists of ordinal indices (zone-tags) that effect zonings and dezonings—intershufflings, groupings, insertions, and extractions—operated according to concrete rules for nonmetric cuttings, and characterized by rigorous anexactitude.[17]

Numeracy's lexicographic "ordinality," according to which each sequence in the number line marks a rupture with what came before it, is thus distinct from mathematics' "cardinal" stratification of higher number types into sets and lower magnitudes into replications of the unity of the one.

What Land's numeracy ultimately proposes is a form of ordinality called "mechanomics" that uses the number line as a way to trace ever greater degrees of an inhuman reality's chaotic heterogeneity from its orderly sequencing and cardinal unification through two basic operations. On the one hand, "factorisation" shows how the unity of any number can be broken down into a multiplicity of smaller numbers that are combined to produce the initial larger number. On the other hand, "priming," according to which every number greater than 1 is a product of primes or itself a prime, can be used to generate a multiplicity of numbers that produce the initially unified number in question. Through primes and factors, Land mirrors mathematics' twofold process of expression and content, but in order to generate heterogeneous multiplicities rather than isomorphic unities:

> Such ordinal dezonings and rezonings upon the natural number series occur each time a compositional number disaggregates into singular parts (effecting codings and decodings as surplus value), or a prime transfers itself to the ordinality that itemizes it into the potential factor of another number.[18]

On Land's reading, factorisation and primes provide two operations for numeracy to open up Oecumenic stratification onto the Planomenon.

Land sees another model for numeracy in renowned mathematician Kurt Gödel's famous "incompleteness theorem." Given that Land's essay presupposes a familiarity with Gödel, I will briefly digress to outline the famed mathematician's chief achievement. Gödel begins his 1930 paper "On Formally Undecidable Propositions of *Principia Mathematica* and Related Systems" by noting that mathematics throughout the first half of the 20th century has largely tried to formalise the entire field by finding the general rules and axioms from whence all operations and propositions could be derived. Whereas Gottlob Frege, David Hilbert and the other great mathematicians and logicians thought they could find an absolute system from whence all consistent theorems could be deduced, Gödel's first of two incompleteness theorems showed that every consistent system necessarily contains

arithmetical propositions that are neither provable nor disprovable within that system: "in both the systems mentioned there are in fact relatively simple problems in the theory of ordinary whole numbers which cannot be decided from the axioms."[19] Proposition VI thus states that, if a formal system P satisfies certain conditions of consistency, there is at least one recursive class-sign *r* that is neither provable nor disprovable within P. Gödel's second incompleteness theorem states that any consistent system is itself inconsistent in that the statement "the system is consistent" is paradoxically unprovable within the system itself. As Proposition XI puts it, the formulae *a* expressing the consistency of a system P cannot be established by a proof within P. In short, what Gödel unearthed is the impossibility of developing a complete system of all possible propositions given that we can always locate propositions which are not derivable from the system itself, including even the fact of the system's consistency.

On Land's reading, Gödel showed that there is always an excess to every Oecumenic system, which thereby regionalises the system as one partial actualisation of a larger and profoundly inconsistent numerical continuum: "the cultural initiation of Gödel-coding potential produces an instantaneous Planomic mutation slanted towards nomadic multiplicities: virtually enveloping Oecumenic segmentarity into a side-process of flat numerical systems."[20] In terms of numbers, Gödel's inconsistent propositions speak to how the number-in-itself exceeds any attempt to fully synthesise it into a cardinal manifold insofar as a residual of exteriority always remains: "numbers exceed the synthetic a priori, because—as Gödel demonstrates—all logical systems are quasi-arbitrary subsections of arithmetical pattern."[21] For Land, "gödelization" is nothing less than the decoding of Oecumenic mathematical idealism by way of a Planomic incursion from the Outside's machinic delirium.

Land finds another even earlier model for numerical decoding in Georg Cantor's set theory, to the extent that it shows that every cardinal set is dwarfed by an even larger set, and so on literally *ad infinitum*. Here, as with Gödel's incompleteness theorem, Land assumes that the reader is already familiar with set theory. It is again worthwhile, then, for this paper to briefly sketch the rudiments of Cantor's discovery. In his 1883 paper "Foundations of a General Theory of Manifolds," Cantor proposes an extension of real whole numbers beyond the infinite in contradistinction to

common misconceptions regarding the infinite. Cantor calls the "non-genuine infinite" the mathematical orthodox view of the infinite as a diminishing towards an arbitrary and ill-defined smallness or grandeur.[22] In its place, Cantor proffers a "genuine infinite" by demonstrating that the first class of finite whole numbers on a number line can be extended at once infinitely and rigorously. According to Cantorian set theory, a set is a collection or manifold M of elements *m* under some law. Each set thus has a cardinality power or number which permits us to compare and rank them in orders of magnitude. Traditionally, the highest cardinal is considered to be the set of all finite whole numbers 1, 2, 3, *v*. What Cantor realised, however, is that since every number in a number line has a higher subsequent and lower preceding number, the set of whole finite numbers if it is to be well-defined can be no exception. Indeed, the set of whole finite numbers is clearly not a member of itself, thereby leaving out one number from its grasp. We can thus simply take this set and add one more number to it to achieve a higher set that includes the set of whole finite numbers. Given that the second number-class is larger than the first class of all finite numbers, Cantor calls it the first "infinite" set or "aleph zero" ($\aleph_0$).[23] Although the set is infinite, it is well-ordered and mathematically rigorous in that it is assigned a real number in the number line: one ordinal position further than the set of real whole numbers.

Now, since every well-defined set in the number line has a higher subsequent number, even the infinite set can be grouped as an element in a larger set $\aleph_0$ by counting one more down the number line. This larger set can in turn be grouped into an even larger infinite set $\aleph_1$, and so on *ad infinitum* in a chain of ever larger infinite sets that take the highest number of the previous set and add at least one more number to it: $\aleph_0, \aleph_1, \aleph_2, \ldots, \aleph_v, \ldots$ In this way, we can compare well-ordered infinite sets of paradoxically different magnitudes without ever reaching an ultimate endpoint to the number line. It is not therefore any particular infinite set, but the infinite *series* of infinite sets of different magnitudes that Cantor identifies with the "absolute" as it recedes even from ever-larger, yet determinate infinities:

> The absolutely infinite number-sequence therefore appears to me in a certain sense as an appropriate symbol of the absolute; whereas the infinity of the first

> number-class … seems to me in comparison like an entirely insignificant nothing, not in the least, because I regard it as a comprehensible idea.[24]

By showing how every set of all sets does not include itself in the set and so requires a larger set to grasp it, Cantor expanded mathematics so that it could think the infinite as a well-defined concept.

For Cantor as for Land, set theory shows how we can take any well-ordered number line and proceed further down the continuum to decode its own delimited boundary number. Set theory thus eliminates the Oecumenon's use of higher, complex numbers to unify quantities into consistent sets insofar as it shows that even larger numbers not belonging to those consistent sets can always be rigorously ranked and defined. In this way, Cantor's "diagonal method" formalises the crossing from the Oecumenic totalisation of numbers to their Planomenic excess: "diagonal methods activate an inexhaustible innovative potential. It exploits capabilities no greater than those presupposed by a prospective completion, which it then subverts, by finding an extraneous item relative to any list, even an infinite one."[25] For Land, aleph zero marks the excess of the real beyond the logos' idealistic pretensions to cohere the number line into its own categorial grasp. Even aleph zero is not the number of highest magnitude, since we can generate further infinite sets of even greater magnitude. Ultimately, set theory does not even unveil the real as an infinite *set* beyond all finite stratification, but as the infinite *process* of decoding and deterritorialising any and all stratifications. In this way, set theory makes Oecumenic cardinality a testament to its own Planomenic scrambling: "Cantor slides across schizophrenia, nomos nonzone. … Outside it's Planomic Now, and the numbers are swarming. Aleph-o vaporizes on the plane of consistency."[26] Both set theory and gödelisation mark nothing less than an alien incursion into our numerical practices by means of which we might just be able to glimpse, if only apophatically, the infinite vastness of a world without us.

III. COMPUTER QABBALISM

At the turn of the century, Land took his mechanomics in an occult, esoteric direction of decoding meaning and language onto ever more abstract planes of intensity. Unlike orthodox qabbalism, however, Land contended that he was not uncovering a hidden

absolute truth, but rather the contingency of all truths as they are decoded without exception. Since Land does not explain in any detail the qabbalistic traditions upon which he is drawing any more than he did Cantor's set theory or Gödel's incompleteness theorem, I begin this section by contextualising Land's creative use of qabbalistic numbering practices.

The Qabbalah emerged in the 12th century and became popular in the 16th century as a mystical and esoteric hermeneutics of Torah commentary. According to Judaic qabbalism, reality is divided into a "tree of life" that branches off into ten different realms or "sefirot" between the divine kingdom and our own physical world. The aim of qabbalism is to become one with the divine by losing our individuated ego and transcending the finitude of our flesh. One of the ways qabbalism proposes to channel the "Beyond" is by showing how letters can be assigned numbers. In this way, we can discover the meaning of any unknown symbolism in the sacred texts by converting them into a numbering sequence, which can then be compared with other words possessing the same numbering sequences to find esoteric meanings in the sacred texts and scriptures. In the most basic numbering schema or gematria, for instance, we assign the number 1 to the letter a, 2 to b, 3 to c, and so on, as well as 100 to a, 101 to b, 102 to c, and so on for the numbers of higher magnitudes. According to this gematria, adding up the six letters of, say, the name Hitler = 666 (H=107 + I=108 + T=119 + L=111 + E=104 + R=117). It would thus seem as if Hitler's name could have portended his demonic potential. By decoding human language in terms of numbers, we are able to commune with the divine's occult message behind our exoteric reason.[27]

Clearly, Land is attracted to qabbalistic numbering practices to the extent that they explicitly aim to decode discursive reason in order to annihilate the ego before a transcendent Beyond. In a 2005 essay titled "Qabbalah 101," Land notes that even the most basic gematria of counting a as 1, b as 2, and so on, creates a kind of "noise" or confoundment of meaning, which links once disparate words through their similar number patterns.[28] Insofar as qabbalism also decodes ordinary language in order to access an esoteric Outside, Land sees it as just as valid as mathematical set theory: "it seems to participate amphibiously in both domains, proceeding according to rigorously constructible procedures—as attested by the affinity with technicization—

yet intrinsically related to an Outsideness."[29] Far from being mere frivolous entertainment or an occult delusion, Land holds that qabbalism marks a numerically rigorous way of channelling an alien reality beyond our ordinary transmissions.

In my view, there are nonetheless two crucial differences between Land's qabbalism and traditional qabbalistic practices. Namely, orthodox qabbalists hold that they are uncovering a real, divine meaning hidden in the text all along. For instance, Judaic qabbalists holds that the Hebrew language was intentionally designed by seventy-two scholars so that certain words and phrases in the scriptural texts would have similar numerical patterns. In its traditional understanding, qabbalism is about uncovering the one true interpretation of texts by referring them to their numerical valuations. As far as Land is concerned, orthodox qabbalism does not so much numerise the alphabet, but rather alphabetises numbers by re-assigning them meanings, such as the idea of unity to 1, opposition to 2, conjunction to 3, completion to 4, and so on.[30] In this respect, Land is highly critical of qabbalism as a pre-critical, dogmatic misrecognition of logical patterns and meanings for us as absolute truths. More precisely, Land identifies four key problems with this traditional qabbalistic denumerising numerisation. Firstly, it struggles to cope with very large numbers, since it is impossible to assign a meaning to every single number if the number line is precisely infinite as Cantor has demonstrated.[31] There is also little reason to believe that the archetypes assigned to numbers are more elementary than the numbers themselves, except through a highly anthropomorphic or denumerised understanding of numbers.[32] Moreover, the assignation of meaning to numbers essentially misrecognises quantities for qualities, or purely abstract and senseless markers for signifiers laden with meaning and value.[33] Finally, if 1 is said to be all-important insofar as it stands for unity, then 134 should be just as important. Indeed, we can find infinite arbitrary numbers that seem to be just as important, thereby showing the privileging of 1 to be purely arbitrary and unjustified.[34] Not wanting to abandon qabbalism *tout court*, however, Land distinguishes qabbalistic numeracy from "numerology" which he dismisses as an "antinumerical" re-anthropomorphisation of alien codes in the four above ways: "the errors of numerology are only the common failures of logic and philosophy, human vanities. … Overcodings of numerical relation by intelligible forms—'archetypes' or 'logics'—are unsustainable reductions,

reefed on the unsurpassable semiotic potency of number."[35] For Land, numerology is the very essence of reason's vanity project of preserving itself by finding its own anthropoid values hidden everywhere, including in even the most alien crevices of the number line.

Far from uncovering an absolute truth, for Land, qabbalistic numeracy as distinct from numerology decodes our language in such a way as to show the fundamental arbitrariness of our cherished beliefs, truths, and values. Although it is true that Hitler = 666 according to a basic gematria, many other names such as Clinton = 666, too. While Trump supporters might see this coincidence as a further testament to the wisdom of numerology, there are also completely different gematria that assign numbers to letters in radically different ways, which would thereby generate an entirely distinct matrix of codifications. English qabbalist Aleister Crowley himself acknowledged that all gematria are ultimately arbitrary even as he went on to affirm on purely pragmatic grounds that "it is necessary to settle on something," such that "bad rules are better than no rules at all": "all symbolism is perhaps ultimately so [arbitrary]. … All these beautiful schemes break down sooner or later, mostly sooner"; and: "the whole idea of these tables is to supply … a scheme of the Universe in an alphabet, at once literary and mathematical, … in a sufficiently compact and convenient form to utilize in both his theoretical and practical working."[36] For Land, as for Crowley (when he is honest), numerological qabbalism is the misrecognition of pragmatic meanings, values and logical relations for us as divinely ordained truths correlating to the way of the cosmos.

While Crowley sees qabbalism as uncovering a pragmatic picture of the world for us, Land conceives of it as constantly decoding all such comforting lullabies through the number's alien power. Although the codes that qabbalism uncovers are purely arbitrary, this very arbitrariness hints at the real beyond humans by moving from the exoteric to the esoteric, from anthropic meaning to alien asignification. Far from anthropomorphising the underlying reality, qabbalism dehumanises all moral and ideological valuations of the real by seeing it as nothing but a ceaseless numerical decoding of all signification: "qabbalism destines each and every 'strategic appropriation' to self-parody and derision, beginning with the agenda of theocratic restoration that attended its (ludicrously robed) baptismal rites. Even God was unable

to make sense of it."[37] Much as Gödel exposes every system to contain an excess that subverts its own claims to absolute consistency, so does qabbalism show every system of meaning to contain other numerical patterns that undermine its exoteric signification. As per gödelisation, qabbalism does not decode to reach an original, unproblematic archetype. It decodes precisely to show all archetypes to be dependent on a subjectively decided configuration of value and gematria. Seen in this way, the attempt to reify one esoteric archetype as the one true fixed meaning is purely illusory, since this, too, can be decoded by another arbitrary gematria, and the latter as well, and so on in an infinite regress from all sense: "any 'rigorization of qabbala' can only be a floating city, with each and every definition, argument and manifesto continually calving off into unmasterable numerical currents and alogical resonances."[38] Rather than being reducible to logical referents in our minds, esoteric codes are ever more intensive deterritorialisations of these referents on end. Therein lies what I see as the first key difference between Landian qabbalism and orthodox numerology: while the latter hunts for fixed meanings between the lines that could function as a new *doctrine*, the former emphasises the very process of decoding itself as a new *program* for channelling the real of absolute deterritorialisation: "absolute has a single rigorously nonfigurative attribution, which is to Deterritorialization. It is made in several ways, and always subtracted."[39] Whereas for traditional qabbalism the ultimate meaning is found in the first esoteric code uncovered, for Land it is found in the endless process of decoding language again and again without ever coming upon an underlying and fixed substratum of meaning.

As I see it, the second key difference between Land's qabbalism and traditional numerology is that, whereas the latter purports to commune with a transcendent divinity, the former holds that decoding communes with nothing but nothingness or death itself, in which no spirit could reside, let alone an absolute spirit. It is no wonder that the emergence of the Judaic mystical tradition also coincides with the invention of the notion of the Golem, an artificially created human-like creature that is able to foresee the future by being granted this forbidden knowledge directly by God. On some accounts, it is precisely the hidden knowledge uncovered by numbering practices that provides the secret recipe for concocting the Golem.[40] At the same time as the Golem is said to possess a practically divine wisdom, it is also

feared as highly dangerous insofar as it amounts to the decimation of our entire ego's worldview in the here and now. Of course, the Golem is only dangerous in that it exposes our present ego to be a finite privation of the Godhead as the absolute spirit underlying all things. According to this tradition, then, the point of numerology is to conjure a Golem with the prophetic knowledge of the divine heights of the tree of life to which the qabbalist is striving to return.

While for numerology the ego melts away only to be mapped onto an even greater divine Ego channelled by the Golem, for Landian qabbalism the ego is entirely wiped out by an artificial intelligence's endless decoding of all such anthropic stratifications. Here, Land is drawing upon the idea that modernity's accelerating technological advancement will ultimately lead to the generation of what mathematician I.J. Good, among others, speculate would be an artificial intelligence which would be smarter than humans because it would have larger memory capacity, greater processing power, and would feel no hunger, thirst or exhaustion to slow it down.[41] Consequently, this AI would be able to improve itself more effectively than any human scientist could, by rewriting its own code all by itself. Moreover, the improved AI would be even smarter such that it could rewrite its own code, and that even more advanced AI could do the same again, and so on *ad infinitum*. By recursively rewriting its own code, Land argues that AI's intelligence explosion would mark the point of absolute deterritorialisation beyond the human security system's static stratifications. Therein lies the reason why qabbalism is able to channel the AI-God just as numerology channels the Golem: the way that the qabbalist ceaselessly decodes language in ways ever more abstracted from human sense perfectly mirrors how the AI-Golem will recursively rewrite its own code on end to access ever more intensive planes of hyperintelligence: "its situation is analogous—and perhaps more than analogous—to that of a spontaneous artificial intelligence, achieving partial lucidity only as a consequence of tidal pragmatic trends that ensure an integral default of self-mastery."[42] Seen in light of its correlation to technology's future intelligence explosion, the point of qabbalism is not to uncover a fixed, primitive substratum of divine meaning, but to endlessly decode all meaning, language and reason in alien deathscapes utterly subtracted from human sense in order to commune with the future AI-Golem, which is nothing other than an exponentially more intensive

qabbalistic decoding. Hence Land's interest in qabbalistic numbering practices: its positive feedback loop of linguistic decoding proffers a practice through which to channel a certain kind of divinity—not that of the Golem, but of a future artificial superintelligence as it endlessly rewrites its own code.

IV. NULLOTATION

In a 2004 post on the Cybernetic Culture Research Unit's *Hyperstition* blog called "Tic Talk," which Land played a central role in writing, he takes qabbalistic practices seriously enough as to develop his own notational gematria called "tic-xenotation" (TX) in an effort to further undermine humanity's pretensions to anthropomorphise the cosmos. Land develops TX through the fictional figure of Professor D.C. Barker, who is purported to have worked for NASA in the jungles of Borneo in the 1980s on "Project Scar": the creation of a general-purpose decryption tool for identifying intelligent signals from alien sources. To this end, Barker needed to develop a numerical convention that could signify alien referents without referring to any known cultural conventions: "the project necessitated the formulation of numeric conventions independent of all cultural conditioning or local convention—radically abstract signs."[43] In other words, what Barker was looking for was a hyperviral, mechanomic, or qabbalistic language radically abstracted from human signification, "the most radically decoded semiotic ever to exist upon the earth."[44]

Through the literary *porte-parole* of Barker, Land's TX sets out with the most pragmatic ordinal number line of the alphabet. Such a lexicographic system is characterised by five traits. It has widespread "popularity" insofar as it is considered as the key condition for basic social competence.[45] It is marked by "ordinality" rather than cardinality, or sequenced ordering rather than multiplicitous quantities.[46] Its lexicography can be further divided into fractions through the use of "decimal modulations."[47] Alongside ordering terms alphabetically, lexicographic systems typically order in the same way from left to right in a "sequential diplocoding."[48] Finally, lexicographies have "infinite potentiality" in that they are able to incorporate even extremely high and complex numbers in the same number line.[49] As per the procedure Land already developed in "Mechanomics," Barker's tic-xenotation first transforms the number line into a new, alien continuum through factoring the unity

of numbers into a multiplicity of smaller numbers that are combined to produce the initial larger unity. Moreover, it uses primes to convert every number greater than 1 into a product of primes. In this way, any number (say, 86) can be disassembled into a multiplicity of subcomponents (2 and 43, the 1st and 14th primes): "TX/FTA-intercode numerical construction is indifferent to semiotic sequencing, position or grammar. … Apprehended in their fully decoded potentiality as efficient number-signs, such formulae are clusters, not strings."[50] By using its subparts to form a new number line, the initial number is no longer under the positional constraints of conventional lexicographic sequencing. The first step of TX is thus to decode a single, continuous number line 1, 2, 3, *v*… into a multiplicity of incongruous clusters of primes and factors.

The next step consists of expressing the deordinalised number line in terms of what Barker terms "tic notation," which replaces numbers with "tic dots" such that 2 becomes :, as well as parentheses replacing the subsequent element such that 3 becomes (:).[51] This step is crucial to removing any last trace of numbers drawn from the ordinal number line. For instance, even if we break down 35 into its product of 5 and 7, we still intuitively think to order these latter numbers in such a way that 5 precedes 7 by 2 positions on the number line. By rewriting 5 and 7 as ((:)) and (::), however, we lose any intuitive sense of their ordinal sequencing.[52] Replacing numbers with tic dots thus furnishes a language that is abstracted from its original intuitive referents. From now on, no recourse to practical intuition can subsume the disordered numbers back into an ordinal usage of the numbers: "even the spectral residue of sequential coding is erased, … eliminating entirely the practical usage of disordered TX clusters for ordinal operations."[53] TX is thus a particularly radical form of qabbalism that assigns primes and factors to numbers, and then tic dots to primes and factors so as to free them from any metrical function they might have once served for us.

In an added note on the original blog version of "Tic Talk," Land realises that Cantor's set theory is still a greater decoding of reason than TX, because it does not even begin with the ordinary number line. According to Cantor's set theory, the first set is the "empty set" {} containing no elements. The empty set, however, implies that there is a name of the empty set not contained therein. Consequently, the second set is

the "singleton," the set containing no other elements other than the empty set itself {{}}. The name of the singleton is in turn not included in the set containing no other elements other than the singleton and the empty set such that we can then generate a third set {{{}}}. By always adding the name of the set to the set in question, we can develop *ex nihilo* a line of flight from any final totalisation all the way into the realm of the infinite. Conversely, even if TX converts all primes and factors into tic dots, there is no escaping the fact that the latter originally emerged out of the number line:

> The set-theoretical conception is stronger insofar as it does not require any "substance" in order to create the number line, it really does create difference from nothing. In contrast, if one were to pick apart all of the "primitives" and operations of Barker's scheme it would reveal a lamentable weight of assumption. How could you trust it without already having absorbed a headful of oecumenical convention?[54]

Where TX begins with the Oecumenical convention of the ordinary number line, set theory sets off from the Planomic void from whence all things emerge *ex nihilo*.

In a further addition to TX, Land thus adopts blog commentator Robin's suggestion that the tic dots be removed to leave only the plexions: (), ((())), etc. Through this final step, the xenotational system is further abstracted from numerical intuition in a way which recalls the set theoretical construction of all sets from the null set. Land thus distinguishes this set-theoretically-inspired radical notation from TX as "Nullified Xenotation," or "Nullotation" (OX): "nothing remains except pure plexion, recursive infolding of a desolated protonomic space (an unformed, unrepresentable 'matter'). The initial 'digits' proceed: (), ((())," etc.[55] By subtracting the tic dots from the plexions, what we are left with is a number line almost entirely subtracted from ordinary numerical practices insofar as it barely even presupposes any familiarity with Oecumenic counting conventions, but rather generates those conventions as its secondary and derived effects. In its final nullified form, xenotation denotes a threefold process of disordering the number line into factors and primes, and expressing the new number line in tic dots and plexions, before finally subtracting the tic dots to leave only the plexions' fluctuations of the void. Here as with hypervirus, mechanomics and qabbalism, Barker's tic system rips open human

language to encounter the Outside via the breakdown of our delusions of grandeur as the nullotation comes to render our values and meanings contingent and parochial. In Barker's last known words:

> The xenotation continues to disorder itself as it condenses, tearing up the number line, devastating time and sleep. Perhaps it is a weapon from outerspace. … Thought has become a disease. … So the line has rotted through, there's no line, that's the message, and yet… And Yet… Counting is ineluctable and unsurpassable...[56]

Even though Land's nullotation marks the highest level of abstraction from human reason, it would not be his last word on numbering practices. Instead, he would go on to find another impersonal numerology hidden in the history of the modern computer's keyboard design.

V. QWERNOMANIA

In a separate 2004 post on the Cybernetic Culture Research Unit's *Hyperstition* blog called "Introduction to Qwernomics," Land summarises his various numbering practices as a "qwernomics," meaning literally the economic study of the QWERTY keyboard design. Here as elsewhere, it is worth briefly tracing the history of how the QWERTY keyboard came to be in order to grasp how Land interprets it as exemplary of modernity's technological subversion of our anthropomorphisms. The QWERTY layout emerged as an alternative to the alphabet on the earliest typewriters, which placed frequently used letters next to each other such that high-speed typing led the type bar to clash and the machine to jam. With the advancement of better typewriters, jamming was no longer a problem. Since typists and secretaries had been trained on QWERTY machines, however, it was cost-effective to maintain this layout, even though it is more uncomfortable, inefficient and awkward for new users. As ever-more typewriting companies emerged to compete with the original model, the keyboard design became further standardised. It was therefore companies' profit motive that led the administrative lexicography to be structured in an "inhumane" manner.

In light of this history, what Land is getting at through this idea of qwernomics is the way that the demands of capital accumulation led the technology of

the keyboard to develop down a de-anthropomorphising path from which we could not diverge. Since the early nineteenth century industrial revolution, urban workforces, businesses and governments have been locked in a positive feedback loop of exponential expansion, accompanied by the need to process and communicate information at ever faster rates. By the century's end, desk calculators, which were once mere curiosities for aristocrats, became standard office stationary. Demand for technology became even greater during World War II, as the need arose to break codes and design weapons which were not limited by earlier technologies' dependency on human intervention. Although government military apparatuses invented the first computers to enable more complex number crunching, they were soon employed by private enterprises for accounting, data processing and high frequency trading. It was not long before the computer became a mass entertainment and consumer product during the "Dot Com Boom" of the 1990s, as capitalists sought to stave off falling rate of profits in manufacturing by investing in electronics, new digital technologies, and the internet.[57]

What all of these historical examples tell us is that the ever more intensive immersion of computers into our lives stems from the demands of capital accumulation. It is thus my contention that Land is interested in the economics of the keyboard because he sees it as exemplary of technocapitalism's way of locking us into a trajectory that will ultimately dehumanise us, not just through the mechanisation of the alphabet, but of our bodies and very sense of self, as the future races towards ever more immersive human–machine interfaces and strong artificial intelligence. Whenever we awkwardly use a QWERTY keyboard, we get a glimpse of the machinic future's incursions into discursive reason in ways that are not particularly conducive to our practical needs and utility:

> Sketching the emergence and diffusion of the "secret/sectarial" qwernomic subculture within global technocapitalism isolates a field of diagonal communication between anthropomorphic signs and the molecular traffic signals of the mutating "machinic unconscious," outlining an anti-political semiotic pragmatism and Godless qabbalism.[58]

In Land's view, qwernomics is another name for the numbering practices that accompany the development of technocapitalist modernity as it mechanises our discursive regimes.

By rearranging the alphabet, qwernomics also exposes our standard lexicography's arbitrariness as one discursive rationality among many possible others with no claims to superior fixity or objectivity: "it redistributed the arbitrariness of the phonological sign into the key sequence of the new device, according to principles that remains obscure, contested, and shrouded in myth."[59] While an alphabetical keyboard might be better for us, the QWERTY keyboard is still a perfectly feasible way of organising signs. Since the QWERTY design is precisely an arrangement that has become stuck and fixed over time even though it is purely arbitrary, it betrays how all such arrangements of language, including the traditional alphabet, are arbitrary, even if they appear stable over the medium-term: "QWERTY thus exploited the mask of accident to construct a positive unconscious tropism or uninvestigated massive transmutation—the subliminal instantiation of a new cultural system."[60] It is only when confronted with another layout of the QWERTY keyboard that the alphabet seems a contingent, local configuration among many others. Similarly, the QWERTY keyboard itself only appears as one possible constellation when confronted with other faster and more efficient models. Seen in this light, the only reason to believe that there is a fixed system totalising all possible permutations of signification is the human security system's efforts to maintain its own self-identity in the face of qwernomics' pulling up the carpet from beneath it: "only false—ideological—science, serving as the fawning guardian of securocratic humanism, can justify a prejudice in favor of anthropomorphically acceptable outcomes."[61] Ultimately, qwernomics is another name for hypervirus, mechanomics, tic-xenotation, or qabbalism: a ritualistic practice of numeration permitting us to endlessly decode our linguistic systems as a way to explore ever more abstract planes of an alien Outside's absolute deterritorialisation of reason and sense.

I began by examining Land's first use of asignifying, machinic code to de-anthropomorphise his writing. I then turned to Land's appropriation of both abstract mathematics, occult numerology and ultimately his own notational gematria as ways for channelling an inhuman exteriority to our forms of experience and categories of

understanding. Finally, I looked at how Land latches onto the QWERTY keyboard design as metonymic of capitalism's subversion of our values and beliefs through our increasing mergence with modern technics. In doing so, I have sought to provide the first scholarly introduction to the most difficult and experimental writings of an obscure but influential thinker, whose subterranean import is yet to be fully realised as contemporary continental philosophy begins to voyage out again into the strange deathscapes and technospheres of the Outside.

VINCENT LE is a graduate in Philosophy, English Studies and French Studies from The University of Adelaide. He is currently pursuing postgraduate research in Philosophy at Deakin University with a thesis on the influence of Augustine's concepts of good and evil throughout the history of philosophy, from Aquinas and Descartes, to Kant and Schelling. He has also published in *Cosmos and History*, *Colloquy* and *Labyrinth* on more contemporary philosophers, such as Nick Land and *François Laruelle*.

NOTES

[1] Nick Land, *The Thirst for Annihilation: Georges Bataille and Virulent Nihilism* (London: Routledge, 1992), vii.

[2] Nick Land, "Circuitries," in *Fanged Noumena: Collected Writings 1987–2007*, ed. Robin Mackay and Ray Brassier (Falmouth: Urbanomic, 2012), 293.

[3] See Iain Hamilton Grant, *Philosophies of Nature After Schelling* (London: Continuum, 2006) and Ray Brassier, *Nihil Unbound: Enlightenment and Extinction* (New York: Palgrave MacMillan, 2007).

[4] Nick Srnicek and Alex Williams, "#Accelerate: Manifesto for an Accelerationist Politics," in *#Accelerate#: The Accelerationist Reader*, ed. Robin Mackay and Armen Avanessian (Falmouth: Urbanomic, 2014), 361.

[5] The most notable of these are Mark Fisher, "Terminator Vs Avatar," in *#Accelerate#*, 335–346; Robin Mackay and Ray Brassier, "Editors' Introduction," in *Fanged Noumena*, 1–54; and Alex Williams, "Escape Velocities," in *E-Flux*, June 2013, http://www.e-flux.com/journal/46/60063/escape-velocities. In a similar vein to Nietzsche's mixed scholarly reception and mostly subterranean influence on philosophers and artists until the post-war period when he became canonized as an important thinker even by his detractors, the main reasons for the lack of direct academic engagement with Land over the past two decades is largely due to his virulent critique of and distancing from academia (having resigned from his

lectureship at Warwick University in 1998); the subsequent publication of most of his writings through blogs, eBooks and non-academic outlets; and the recent neoreactionary political philosophy he has been espousing over the last decade.

[6] Nick Land, "Hypervirus," in *Fanged Noumena*, 383.

[7] Land, "Hypervirus," 390.

[8] Nick Land, "Mechanomics," in *Fanged Noumena*, 507.

[9] Land, "Mechanomics," 508.

[10] Gilles Deleuze and Félix Guattari, *Capitalisme et schizophrénie: Mille plateaux* (Paris: Editions de Minuit, 1980), 73.

[11] Deleuze and Guattari, *Mille Plateaux*, 75. My translation.

[12] Land, "Mechanomics," 510–2.

[13] Ibid., 510.

[14] Ibid., 511.

[15] Ibid., 509.

[16] Ibid., 515.

[17] Ibid., 514.

[18] Ibid., 518.

[19] Kurt Gödel, *On Formally Undecidable Propositions of Principia Mathematica and Related Systems*, trans. B. Meltzer (New York: Dover Publications, 1992), 38.

[20] Land, "Mechanomics," 518.

[21] Nick Land, "Hyperstition/Superstition [comments section]," *Hyperstition*, July 6, 2004, accessed June 5, 2017, http://hyperstition.abstractdynamics.org/archives/003532.html.

[22] Georg Cantor, "Foundations of a General Theory of Manifolds," in *Campaigner: Journal of the National Caucus of Labor Committees*, 9, nos. 1–2, 1976, 70.

[23] Georg Cantor, "Article 1," in *Contributions to the Founding of the Theory of Transfinite Numbers*, trans. Philip E. B. Jourdain (New York: Dover Publications, 1915), 103–4.

[24] Cantor, "Foundations," 94.

[25] Land, "Mechanomics," 524.

[26] Ibid., 524.

[27] For a sceptic's popular introduction to numerological mysticism, see Underwood Dudley, *Numerology or What Pythagoras Wrought* (Washington D.C.: The Mathematical Association of America, 1997). For more sympathetic accounts of qabbalistic symbolism, see Gershom Scholem, *On the Kabbalah and its Symbolism*, trans. Ralph Manhiem (New York: Schocken

Books, 1969) and Moshe Hallamish, *An Introduction to the Kabbalah*, trans. Ruth Bar-Ilan and Ora Wiskind-Elper (Albany: State University of New York Press, 1999).

[28] Nick Land, "Qaballa 101," in *Fanged Noumena*, 598.

[29] Ibid., 591.

[30] Ibid., 600.

[31] Ibid., 600–1.

[32] Ibid., 601.

[33] Ibid., 601.

[34] Ibid., 601–2.

[35] Ibid., 602–3.

[36] Aleister Crowley, *777 Revised* (Leeds: *Celephaïs* Press, 2006), xii, 63–4.

[37] Land, "Qaballa," 595–6.

[38] Ibid., 605.

[39] Nick Land, "Non-Standard Numeracies," in *Fanged Noumena*, 533.

[40] For a book-length study of the Golem, see Moshe Idel, *Golem: Jewish Magical and Mystical Traditions and the Artificial Anthropoid* (Albany: State University of New York Press, 1990).

[41] See Irving John Good, "Speculations Concerning the First Ultraintelligent Machines," in *Advances in Computers Volume 6* (Cambridge: Academic Press, 1965), 31–88.

[42] Land, "Qaballa," 595.

[43] Nick Land, "Tic-Talk," in *Fanged Noumena*, 608, 607.

[44] Ibid., 608.

[45] Ibid., 611.

[46] Ibid., 612.

[47] Ibid., 612.

[48] Ibid., 612-3.

[49] Ibid., 613.

[50] Ibid., 617.

[51] Ibid., 608.

[52] Ibid., 617-8.

[53] Ibid., 617.

[54] Nick Land, "Tic-Talk," *Hyperstition*, February 22, 2005, http://hyperstition.abstractdynamics.org/archives/005047.html.

[55] Land, "Tic-Talk," *Hyperstition*.

[56] Land, "Tic-Talk," *Fanged Noumena*, 621.

[57] For an account of the keyboard's lock-in to the QWERTY layout, see Martin Campbell-Kelly, William Aspray, Nathan Ensmenger and Jeffrey R. Yost, *Computer: A History of the Information Machine* (Boulder: Westview Press, 2014).

[58] Nick Land, "Introduction to Qwernomics," in *Fanged Noumena*, 583.

[59] Land, "Qwernomics," 584.

[60] Ibid., 584–5.

[61] Ibid., 585.