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The Metaphysics of Modernism and the Aesthetics of Reason in Wittgenstein, Deleuze, and Others

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A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Theory and Criticism

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Abstract

This work makes a contribution to a theory of the general conditions by which—via language and sign use—the intelligible structure of the content of thought comes about and changes, which in turn affects our collective practices, affordances, and causal powers in short, our doings. It is argued that this latter point is the reality of the intelligible and the only possible test of metaphysical realism. Through this it develops a 'metaphysics of modernism' by constructing a concept of sense derived from the philosophers Ludwig Wittgenstein and Gilles Deleuze, among others. After elaborating the framework of sense, it looks to its emergence out of social embeddedness through a concept of common sense, understood aesthetically in terms of the construction of forms of life. There it investigates the relation between sense and value-form in Marx, aesthetic judgment in the work of Kant, the relationship between aesthetics and language-use in the late Wittgenstein, and the political aesthetics of contemporary art and media. Finally, this work indicates the limit of common sense in a concept of **nonsense**, taken as the intercession of the absolute within language and thought, which in turn points to the conditions for the contingent, ampliative capacity of thinking as the essential activity of reasoning, i.e. the organon of the new. In this final part, it focuses on the writings of Samuel Beckett, whose work is incessantly concerned with the liminal space of thought and language encountering their own transcendental humiliation as the indicative affect of the subject of modernity.

Keywords

Ludwig Wittgenstein, Gilles Deleuze, Immanuel Kant, C. S. Peirce, Karl Marx, Samuel Beckett, sense, nonsense, common sense, transcendental philosophy, modernism, modernity, reason, rationality, forms of life, capitalism, logic, contemporary art, media theory, cultural theory, information theory, literary theory, continental philosophy, history of philosophy, political economy, compression, noise, perception, rationalism, empiricism, transcendental, aesthetics, metaphysics, emergence, immanence, realism, form, crisis, critique, speculation, speculative, philosophy of mind, philosophy of language, semiotics, Robert Brandom, expression, expressivism, inferentialism, representationalism, semantics, pragmatism, pragmatics.

Summary for Lay Audience

This work contributes to the theory of how the intelligible structure of the content of thought comes about and changes. This in turn affects and determines what we can do—our powers of affection and action. It is argued that this latter point is the reality of the intelligible and the only possible test of metaphysical realism. Through this it develops a 'metaphysics of modernism' by constructing a concept of **sense** derived from the philosophers Ludwig Wittgenstein and Gilles Deleuze, among others. After elaborating the framework of sense, it looks to its emergence out of social embeddedness through a concept of **common sense**, understood aesthetically in terms of the construction of forms of life. Finally, this work indicates the limit of common sense in a concept of **nonsense**, taken as the confrontation with what is external to language and thought, or what is (not yet) intelligible from within language and thought themselves, understood via the ampliative capacity of thinking as the essential activity of reasoning. In this final part, this work is concerned with the liminal space of thought and language encountering their own transcendental humiliation, taken as the indicative affect of the subject of modernity.

We were not taught to speak but to babble—and only by listening to the swelling noise of the age and bleached by the foam on the crest of its wave did we acquire a language.

- Osip Mandelstam

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I owe a debt of gratitude to so many people that naming each of them would negate the force of acknowledgement altogether. In any case, my waning faculty of memory could hardly supply such a list, free of exceptions. For this reason, I will aim to be as parsimonious as possible. I am grateful, nonetheless, to many others.

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List of Abbreviated Works

Works by Gilles Deleuze (and co-authored with Félix Guattari):

What is Grounding?: WIG

Empiricism and Subjectivity: ES

Nietzsche and Philosophy: NP

Kant's Critical Philosophy: KCP

Proust and Signs: PS

Bergsonism: BRG

Masochism: Coldness and Cruelty: MCC

Difference and Repetition: DR

Expressionism in Philosophy: Spinoza: EPS

The Logic of Sense: LS

Anti-Oedipus: AO

Desert Islands and Other Texts: 1953-1974: DI

Kafka: Toward a Minor Literature: K

A Thousand Plateaus: ATP

Spinoza: Practical Philosophy: SPP

Cinema 1: The Movement-Image: C1

Cinema 2: The Time-Image: C2

Francis Bacon: The Logic of Sensation: FB

The Fold: Leibniz and The Baroque: FLB

What is Philosophy?: WIP

Negotiations: N

Works by Immanuel Kant:

The Critique of Pure Reason: CPR1

The Critique of Practical Reason: CPR2

The Critique of the Power of Judgment: CJ

Works by Baruch Spinoza:

Ethics: Spinoza (Roman numeral denoting the book, p followed by an Arabic numeral denoting the proposition. Ex.: Spinoza, IIp44)

Works by Ludwig Wittgenstein:

Individual Works:

Notebooks, 1914-1916: NB

Tractatus Logico-Philosophicus: TLP (followed by proposition number)

Lecture on Ethics: LE

The Big Typescript: TS 213: BTS

The Blue and Brown Books: BB

Philosophical Investigations: PI (1 or 2 denoting the part, followed by the remark

number. Ex.: PI 1, 198)

Remarks on Colour: RC

On Certainty: OC (remark number)

Compendia:

Remarks on the Foundations of Mathematics: RFM

Lectures, Cambridge 1930-33: LGEM

Lectures and Conversations on Aesthetics, Psychology, and Religious Belief: LC

Philosophical Occasions: 1912-1951: PO

Culture and Value: CV

Zettel: ZTL

Preface

The work that follows attempts to intervene in the understanding of how intelligibility comes about in concrete domains of thought. That is, it attempts to understand not how things are but how they become intelligible. The word 'intelligible' here (which is not used in a technical sense below) should not be construed as 'understandable by the intellect' if, by the latter, we mean to indicate a distinct mental faculty. It should be construed as the correlate of intelligence, where this signals a being's relation to the determination (and sometimes the solution) of problems. In particular, this work looks at the ways that intelligibilities come about through the semiotic, perceptual, cognitive, and linguistic capacities of human beings which are formally collected under the rubric of reason, taken in a very ample and historically inflected sense. It does not pretend to get to the bottom or even the sides of this phenomenon. In fact, it makes gestures to the effect that the exercise of reason commits the thinker to the idea that there is no bottom and no sides to the intelligible that cannot be expanded or contracted, shallowed or deepened, as the space of problems dictates. What, from one perceptual, epistemic, or metaphysical vantage seems fundamental, originary, or unalterable can become, from another vantage, highly derivative, changeable, and vice versa. For example, from the standpoint of causation, fundamental ontology (or elementary physics) seems to have priority in the order of explanations, but with the respect to knowledge, other factors (phenomenological, psychological, normative, epistemic, or historical) will have priority. From the standpoint of practical concern, still others will (perhaps aesthetic, ethical, political ones). There is no fact of the matter about first philosophy, but neither is there a fixed and naturally shared

equiprimordiality, a virtuous circle of learning—an *encyclopaedia*, as it were. The fact that intelligibility is dynamic and relative to our projects (but also does not wash out into undecidability, except in mostly artificial cases), is something still not understood intuitively enough. We are all Nietzschean spiders in logical space, weaving our Quinean webs. In the work below, this ungroundedness of the intelligible with respect to problems is called 'vertigo' and it opposes lofty philosophical notions of 'horizon' and 'world'. ² I take articulating how intelligibility comes about in concrete domains (whether human or non-human) to be the most important aspect of what Gilles Deleuze calls 'transcendental empiricism,' which he conceived as a philosophy of the conditions of real experience and as a problematics of Ideas. More specifically, a particular variety of intelligibility hangs, in what follows, on a technical notion of the genesis of sense, derived from Ludwig Wittgenstein and Deleuze, but spreads itself out into forays of substantially differing kinds, encompassing things as disparate as projective geometry and the political aesthetics of contemporary painting. In its elaboration of how sense comes about, it is a work that makes no special effort at exhaustive expertise or specialization (although both have been required in different ways and in different degrees as the case dictated). Thus, inevitably, whatever

¹ See Nietzsche, "On Truth and Lie in an Extra-Moral Sense," Sect. 1: "Here one may certainly admire man [sic] as a mighty genius of construction, who succeeds in piling an infinitely complicated dome of concepts upon an unstable foundation, and, as it were, on running water. Of course, in order to be supported by such a foundation, his construction must be like one constructed of spiders' webs: delicate enough to be carried along by the waves, strong enough not to be blown apart by every wind." See also Quine, *The Web of Belief*.

² Deleuze, EPS, 180: "Immanence is the very vertigo of philosophy." See also the wonderful article of Kerslake, "The Vertigo of Philosophy: Deleuze and the Problem of Immanence," 10-23.

its merits, it is a work with shortcomings since it aims at more than can reasonably be expected of a grasp of the epistemic complexities with which contemporary thinking must contend (not confining itself to a single intellectual discipline or tradition). I do not think, therefore, that it grasps only at straws—after all, it has the aid of many incomparably great thinkers. All I can say about the spirit and motivation of such broad work is this: while it is certain hubris to believe one has fashioned the totality of things in words (a belief I do not hold in any case), it is a different kind of hubris to assume we (collectively) have any other choice but to try to so fashion them. The imperative of thinking the 'universal' (in our case, the universal vertigo of immanence) is impressed upon us, not because of some overweening sense of our own omniscience, but rather because of the acute and persistent evidence to the contrary. We do not yet know. The fact that we do not freely determine the conditions of our experience, that these conditions always come to us contingently by virtue of an outside, which both precedes and proceeds us, one which cannot be hypostatized and to which we are condemned to respond (whether in an unconscious, a socius, a history, an environment, a biological endowment, etc.), demands that we fashion an indefinite and 'universal' field of thought, which attempts to contend with and articulate its real (and, as it happens, transcendental) conditions. This field of thought is what Wittgenstein in the *Tractatus Logico-Philosophicus* (TLP) calls logical space; what, following Deleuze, we may also call the space of problems. While this may seem like purely idle speculation, an intellectual flight of fancy, it is worth remembering what Wittgenstein says about daydreams: "...part of their purpose is to prepare people for any possibility (including the worst)" (CV, 73e, translation modified). In fact, we can go a step further, and say that its purpose here is to prepare people even for what remains after the

possible or the world have been exhausted. Anything else but what the philosopher and physicist Gabriel Catren calls the "worldless daydream" of reason is, in the last instance, a promissory note to absolute stupidity, servitude, and ultimately death.

Nevertheless, issuing from the inevitable failure of the adequate construction of such a dream, there are many apologies I could make on behalf of the work below, but I will limit myself to the most important ones. First, while in my vainest hopes this text might be, to quote an old friend, "a book for all and none," I must begrudgingly qualify this otherwise happy maxim. It is theoretically for all, practically for none. It presents many ideas circulating around contemporary culture and its problems—principally from the fields of philosophy, art, literature, political economy, as well as media and cultural studies—but does so in an idiom that is not very legible to any of them singly. For one thing, it assumes a certain facility with the history of European philosophy, and in particular with Kant, Wittgenstein, and Deleuze. Just taking the subset of those already acquainted with both Wittgenstein and Deleuze in a more-than-cursory manner cuts down considerably on any prepared readership. While I would have liked to make it more accessible to the nonphilosopher for this reason, by way of introductory material or more extended exegesis of certain concepts, the interdisciplinary direction pursued here left little room for anything other than what I have mustered.

The philosopher fares no better, however. A similar familiarity with the history and problems of twentieth- and twenty-first-century art and aesthetics, as well as a broad but superficial acquaintance with the critique of political economy would also prove useful in navigating the terrain (especially in Part 2). This is background I could scarcely expect many English-speaking philosophers to have. The project uses technical and formal

language to discuss problems of subjectivity and culture, expressive language to discuss logic, analytic philosophy to discuss continental and vice versa, painting to discuss economics, aesthetics to discuss reason, literature to discuss metaphysics. So, while I can claim the coveted epithet, 'interdisciplinary', these are disciplines relatively few have any interest in putting into correspondence. While I feel this is mistaken, a product partly of mutual alienation and indifference, it nevertheless presents a problem of how to construct a connection between them that demonstrates insight when taken *together* which is neglected separately.

Wanting of a ready-made *lingua franca*, what I've cobbled together is the only idiom I had to hand: it is aggregated out of those fields and authors which occupy some place of importance in some significant part of the work, made up of the very contingent cast of characters acting in my self-education. The idiom was not motivated by autodidacticism for its own sake, however, but driven by the problems encountered. It is thus a kind of theoretical pidgin—lexically rough-and-tumble, lacking a stable grammar. It has an order of reasons, to be sure, but they are ordered in a sedimentary rather than architectonic fashion. Under the weight of investigation, the forces of intellectual compression and lamination have sifted ideas into sections, bound themselves together, and strengthened in cohesion. It has required excavation for me to reiterate that order outside of the processes which produced it. In any case, the idiom involved is a kind of ideational sedimentation of diverse sources (ones sometimes overtly at odds). It is an idiosyncratic agglutination, which, though I wish it were otherwise, does not provide many concessions to the reader and, in turn, burdens them with a rather forbidding technical nomenclature. I have tried, where possible, to alleviate that burden, but it remains.

In light of this nomenclature, and the nature of the material brought under the heading of this work, it is worth saying something about its arguments and rigor. By no stretch of the imagination does it have the crystalline grandeur of great philosophical systems (of Aristotle, Nāgārjuna, Aquinas, Leibniz, Kant, Hegel, Peirce, etc.). It may even be a little terminologically inconsistent in certain places where the nature of the problem had changed, and the evocation of the insight seemed more important than keeping straight my constants and variables. Along similar lines, the argumentative stricture is also context-responsive: it is looser where it seems as though background assumptions will hold without argument and a rigorous jargon would prove gratuitous and cumbersome, but it constricts upon those moments when its subject strays considerably from intuition or conventional wisdom. This happens in a number of places: there, language battens down the hatches.

Another apology I must make is for the many sins of omission which a project this general commits. There is hardly any discussion of German Idealism, psychoanalysis, phenomenology, hermeneutics, and considerable omission or underrepresentation of clearly germane philosophers and semioticians such as C. S. Peirce, Gottlob Frege, Ferdinand de Saussure, Walter Benjamin, Louis Hjelmslev, W. V. O. Quine, Wilfrid Sellars, Nelson Goodman, Richard Rorty, John McDowell, Catherine Elgin, Umberto Eco, and Alain Badiou (to name only a few) which deserve attention regarding specific problems. These lacunae are due to solely to my limitations, either temporally or intellectually. A more satisfying account would synthesize aspects of these traditions and authors as well, but in order to impose some modesty and depth of engagement on what is in spirit a completely immodest enterprise, I have stuck, for the most part, to Wittgenstein and Deleuze and the problems I derive from them as theoretical cornerstones.

Finally, whatever shambles I've made of the whole machine shop of the dissertation, I hope the hammers of individual arguments generally strike the hot part of the problematic iron. Though not altogether without misshaping things, I have tried at least to forge the right implement in each case, even while lacking the subtlety of form and unity of design yielded by more seasoned smiths. For any distortions, I can only reiterate that thought is a process without intrinsic end, and so its current shape is never its final form. Moreover, with respect to the unconscious of thought, *nemo propheta in patria*. One thinker's spandrel has a way of becoming another's foundation.

O Introduction: The Metaphysics of Modernism and the Aesthetics of Reason

0.1 Whither 'Sense'?

Sense is the mode of presentation of what can be referred to and the form of appearance of value—it is, in this regard, the name for the intelligible. However, in order for sense to appear as such it must come into being, it must be made intelligible, it must have a genesis—one mediately expressive of *real* relations between things or subjects (or things and subjects), even when the sense in question is false, fabulous, or fictional. This work is an attempt to delineate the relationship between sense and genesis. It can be considered to contribute to a groundwork for a theory of mindedness or experience through a problematic nexus involving linguistic, aesthetic, and social form. Bundled together, I take this nexus to constitute a metaphysics of a certain kind which I call weak modernism.³ This label aims to provide a conceptual bridge between the advanced abstractions characteristic of the arts and those of the formal sciences (of logic in particular)—which roughly coincide in their emergence with the predominance of the 'real abstraction' of the value-form of capital as the preeminent structuring social form of modernity. Regarding aesthetic abstraction, this work examines the aesthetic conditions of reasoning as such—rendering both cognitive abstractions as aesthetic and aesthetic ones as cognitive. Regarding the relation of aesthetic and cognitive abstraction to the historical conditions of the social determination of mind,

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³ I construe weak modernism as a non-dogmatic and realist, necessarily incomplete, but rigorously pragmatic and anti-representationalist kind of metaphysics. More on each of these predicates below.

the understanding of reason undertaken here rejects the traditional subject of liberalism (as individual, spontaneous, self-possessed), and suggests a descriptive alternative in a figure that I call the *patient*—one engendering a historically-oriented mode of affectivity expressing the complex, mediated, and *prima facie* cognitively refractory social entanglements of our socius which disclose what AA Cavia calls the metaphysical 'irreducibility of contingency'; a subject formed out of the crisis of meaning and value that forces modernism and the concept of sense (as pursued here) to be articulated.

* * *

Sense as a concept appears only at the moment when its connection to that which it 'represents' (and indeed whether there is any such thing) is at issue to the thinker and is called into question. Only when 'sense' loses its self-assured meaning and value, when its connections are understood as problematic, unstable, or even potentially illusory, does the inquiry into its very constitution—its real conditions, its genesis—become possible. For example, when Marx and Engels say of the origins of industrial capitalism that "[a]ll fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away [by the cash nexus]", this applies not just to the institutions and ideologies of feudalism, but equally to the metaphysical and epistemological grounds on which the

⁴ This is today sometimes called the 'symbol grounding problem' or the 'problem of ostension' in linguistics and philosophy of language. See, Harnad, "The Symbol Grounding Problem," and Quine, "Identity, Ostension, and Hypostasis." But the philosophical problem, in its modern form, itself begins roughly in the 18th century, with the empiricists following from Descartes.

concept of meaning in general had depended.⁵ In this way, sense is, from the outset, essentially disenchanted. But, paradoxically, it is the very tenuousness of sense which allows for (and perhaps necessitates) its purest expression, as both eternal truth and pure abstraction (i.e. as an 'Ideal game,' in the lexicon of Deleuze's *Logic of Sense* (LS, 58-65)).⁶

On the other hand, through the problem of *expression* (rather than representation) sense gains traction on reality again, but this time through the relation between practice and language, and between politics and aesthetics. The role expression plays here is, to some degree, a counter-intuitive one. Expression, as delimited in what follows, is *impersonal*, which is not to say that it does not deeply affect experience at the level of the individual, but rather that its formal cause is not located in the externalization of subjective psychological states, insofar as these are taken to make up the private inner life or individual subjectivity of persons (for example in the way German expressionist works or the Freudian psychoanalytic 'symptom' are routinely understood, rightly or wrongly). Our version of expression is thus an 'abstract' expression by virtue of sense expressing no 'meanings' whether subjective or objective. Expression here instead hinges on the idea that the abstractions of modernism gained hitherto unknown causal, expressive, and epistemic powers relating to intelligible structure by means of practical efficacies involved in the

⁵ Marx and Engels, "The Manifesto of the Communist Party," 476.

⁶ In a similar vein, evolutionary anthropologist Terrance Deacon notes that this tenuousness makes possible the recursivity and semiotic ungrounding of reference through which language gains its naturally unrivaled expressive powers. See, Deacon, "Universal Grammar and Semiotic Constraints."

activity of abstracting, rather than through a correlation secured via representation (i.e. as theoretical contemplation, understood in its traditional sense). It is then in ungrounding the putatively spontaneous connection between thought and being that the real finds its way into thought, but always as *wager*. We follow Sean Bowden's immanent account of expression in that what is expressed and its expressing are not dissociable phenomena, if expression is not to fall back on representational contents that find their place in a dimension of language (for example, denotation or signification) which excludes the contribution made by expression, thereby cleaving what is to be explained from its explanation.⁷ Only a genetic account of language as sense can supply such an account. Wittgenstein's said/shown distinction is located in the place where expression is animated for itself. Deleuze locates sense itself in the dimension of expression.

Given the above, we argue below that performance and practice enter the fold of language to answer the question of the determinacy of expression, or what Deleuze calls the 'living usage' of language; a determinacy regarding sociality which is not in need of practice-

⁷ Bowden's account of expression can be found elaborated in "The Intensive Expression of the Virtual: Revisiting the Relation of Expression in *Difference and Repetition*"; and in "Assembling Agency: Expression, Action, and Ethics in Deleuze and Guattari's *A Thousand Plateaus*."

This indissociability involved in expression prompts Nelson Goodman to take expression as a form of reference via 'metaphorical exemplification,' This is because exemplary reference is secured by *being* an example of the thing referenced—in Goodman's case this involves singling out some predicate or quality of the expressive item and ignoring the irrelevant ones. See Goodman, *Languages of Art*, 45-98. Goodmanian exemplification maintains many points of overlap with the function of 'showing' in the picture theory of the TLP as well as the 'exemplary universality' of aesthetic common sense in Kant (cf. 2.2) which we do not have time to elaborate here. Expression marks one point where a theory of thought can be dissociated from a strictly discursive or inferentialist picture of cognition while including those as essential modes of thought.

transcendent 'interpretation' or 'explicitation' in order to be conceptually elucidated.⁸ Expression ties language to reality via practices indexed to a community which cannot be reduced to interpersonal relations between the self and the other (so-called 'I-Thou' relations). Such a community must instead be grounded in terms of the concept of a *form of life* (a 'we' structure).

The issue of expression aside, the theoretical intricacies in the field of sense are traced in this work, at the outset, in their most abstract form—as a theory of sense, pure and simple, whose articulation we owe first of all to Wittgenstein and Deleuze. This abstraction Deleuze calls 'the static genesis of sense.' In its static genesis, sense leaves itself open to a variety of idealism which it must compensate for by going "back to the rough ground" of social and psychic behavior. The relationship between sense and the modes of its social

⁸ This rejection of explicitation also broadly aligns with the practical philosophy of *Being and Time*, in which Dasein in its average everydayness does not operate in a conscious self-reflective mode, but rather through pre-theoretical 'circumspection,' a term we will develop independently below in sect. 2.4. I differ radically from Heidegger regarding the tie between individualism and authenticity for Dasein in *Being and Time*, insofar as Dasein in its average everydayness is essentially tied to a model of sociality associated with *prima facie* inauthenticity and the 'they-self'. Though Heidegger's account is complex and rich, it still relies on a broadly liberal model of the individual self-cultivation of personhood which we reject, even if the authentic structure of Dasein is itself always and only borne out by being-with-others. Instead, we hew closer to Wittgenstein's account of the rejection of philosophical 'theory' and the role played by elucidation in attending to the practices of forms of life through language-games. See, of course, Heidegger, *Being and Time*, §15, §69, and throughout.

⁹ Cf. PI 1, 107: "The more narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a result of investigation: it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming empty. — We have got on to slippery ice where there is no friction and so in a certain sense the conditions are ideal, but also, just because of that, we are unable to walk. We want to walk: so we need friction. Back to the rough ground!"

institution and constitution then come to the fore as an eminently aesthetic problem through the concept of *common sense*. Common sense points to aesthesis as a social process of minding, ineluctable as it is contingent, rather than as a pre-philosophical normative backdrop we can unproblematically presuppose, or a catalogue of rules set by *a priori* boundary constraints on licensed inferences, moves in language games, or the game of giving and asking for reasons. In this way, common sense lies neither in rote understandings of cultural or cognitive norms, nor in theories of the biological endowment of cognitive or linguistic capacities, but it touches and displaces each. In common sense, then, both the origin and end of sense (speciation and spiritualization) are elucidated through Wittgenstein's concept of forms of life from which alone sense gains social and psychic substance (as experience, spirit, *Geist*, or *Bildung*). Nevertheless, sense find its absolute genesis and terminus elsewhere, in a *nonsense* which both envelopes and inhabits language.

Accordingly, lastly, the genesis of sense is relayed via the concept of nonsense, one itself distributed according to differing registers (intra-linguistic and extralinguistic, shallow and deep) that reflexively positions the static genesis of sense as abstraction. In this last mode, again, art takes on a formative role, binding the natural and the normative in a process of 'absolution' (Catren) within which transcendental rationality finds its empiricity, and with it, its contingent or aleatory ground—thinking the conditions of the transcendental not as meta-transcendental (the possibility of the possible, or transcendental deduction) but as real genesis of sense (real or empirical abduction), beyond the unities of self, world, and god, through the production of abstractions. Absolution is a process without unconditioned necessity (though it expresses the unconditioned itself as unconditioning), always bound

up with the unavoidable contingency of the infinite non-finality of immanence (registered as vertigo of the intelligible). Absolution is thus the only sensical meaning one can give to a thought without horizon and without world—Gabriel Catren's 'worldless daydream' of the 'speculative subject.' We delimit this subject affectively, in its passive mode, as *the patient*.

In relation to nonsense, we look at this limit by interrogating reason as organon of the 'originative element of nature' to problematize the apparent normative 'fly-bottle' of forms of life. ¹⁰ In so doing, we look to the affective dimension of the patient as 'fortuitous case' to reflexively position the genesis of common sense, as aesthetic judgment, in turn. We do this first by looking at the absolution of the category of existence through the procedure of exhaustion as the abduction of 'pure and empty' time in Deleuze's work on Samuel Beckett via Beckett's last play *What Where*. Finally, through the breakdown in efficacy of normatively patterned social language and behavior in Beckett's *Endgame*, the repetition and combinatorics of reason as second nature are pushed toward the deep exteriority of vertigo or immanence (as the 'unborn,' or 'Primary Nature') one which puts linguistic expression in contact with the threshold of its powers of articulation and its absolute nonsense in the experience or thought of extinction.

¹⁰ The notion that reason is the organon of the originative element of nature is owed to Whitehead, *The Function of Reason*. The metaphor of the fly-bottle comes from Wittgenstein, PI 1, 309, "What is your aim in philosophy? – To show the fly the way out of the fly-bottle."

0.2 Wittgenstein and Deleuze, Hither and Yon

The concept of sense is raised to its ideal tenor in Wittgenstein and Deleuze. Of course, they did not inaugurate it and it does not end with them. But it is nevertheless through them that sense takes on the full weight of implication which the concept carries with it. With them, sense is carried to the limit of real experience, the limit of language, of logic—of apprehension, intelligibility, articulation. In both cases, sense is deployed to the point of its undoing, which is also its absolute moment.

At first blush, however, little seems to recommend any conjunction of their thought. Their approaches to thinking appear incommensurable, and the depth of their difference, even on the nature and task of philosophy, is evident. While Deleuze affirmed philosophy as an essentially creative enterprise, Wittgenstein sought the therapeutic or pedagogical point at which philosophy made itself unnecessary. Deleuze upheld philosophy as irreducibly problematic—a field in which even the solutions to problems could not exhaust them; while Wittgenstein, by contrast, anguished over their very dissolution. Nevertheless, their differences notwithstanding, there is a whole network of systematic connections, of profound and gross features in common in their theory of sense. It simply remains for the perspicuous, the 'uncaptive,' 11 the sufficiently conscientious observer to show that only immanence lies in wait between these two, and that "everything lies open to view" (PI 1, 126): "If there is nothing behind the curtain, it is because everything is visible, or rather all possible science is along the length of the curtain. It suffices to follow it far enough,

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¹¹ Another term borrowed from Wittgenstein but developed by Juliet Floyd. See, Floyd "The Uncaptive Eye: Solipsism in Wittgenstein's *Tractatus*."

precisely enough, and superficially enough, in order to reverse sides and to make the right side become the left and vice versa" (LS, 9).

* * *

In keeping with this conjunction, sense must be distinguished first of all from *meaning*, where 'meaning' usually means both more and less than sense. ¹² It means *more* in the sense in which 'meaning'—in the amphiboly between significance and signification for example—denotes a confused aggregate of differentiable dimensions of language (cf. 1.2.2). It means *less* in the sense in which 'meaning' (in the narrower sense of internal semantic content) is tied exclusively to language taken as a quasi-autonomous symbolic system, or a synchronic system of signification in the Saussurean sense and, thus, as a medium of thought, is reducible to states of subjects. As with the solipsism of meaning in the existentialists, things only have 'meaning' *for me* and only *I* can mean things, but they can have sense for themselves. On this last point, in the register of social subjectivity, there is no 'I' that precedes the 'we' within which latter it is born. In a pre-subjective register, semiosis envelopes language and thought in their narrow senses, which they depend upon and develop. One of the advantages of the concept of sense in this work is that, at least in

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¹² This is complicated by facts of translation regarding Frege and Wittgenstein. As is well known, Frege makes a distinction between sense and reference (*Sinn* and *Bedeutung*). While the former can be more or less rendered by 'sense' in English, 'reference' is an approximate rendering, not of Frege's term itself but rather its sense: in ordinary German '*Bedeutung*' means something like 'meaning' in its polysemy. This would not present too many problems, aside from the fact in the TLP, '*Bedeutung*' is used sometimes in the technical sense of 'reference' related to objects, and sometimes in the vernacular sense of 'meaning': this is translated uniformly, in the Pears and McGuinness edition, as 'meaning' since it is not always immediately clear which sense Wittgenstein actually intends.

principle, it makes possible a continuity thesis between sentience and sapience, as well as between causal and normative vocabularies, absolving their (ontological) distinction without dissolving their (practical) difference for human ways of taking things.

In short, sense is neither subjective nor objective. ¹³ By virtue of this special position between ideas and things, between propositions and states-of-affairs—'on the surface' that separates them as Deleuze likes to say—Wittgenstein and Deleuze inaugurate a metaphysical project divorced from both traditional idealism and materialism, one which is also neither dualist nor dialectical. Instead, it is *synthetic*—though in defiance of the strict Kantian sense of concepts bound to intuitions *a priori*. It is a metaphysics of 'inherence,' 'insistence,' or one which does not subsist independently of a complex and deep ontology—a metaphysics of being-qua-being, of pure immanence or univocity; the metaphysical vertigo of what Deleuze calls 'difference in itself' or what Wilfrid Sellars calls 'pure process'. ¹⁴ Nor does human sense subsist independently of its history, its economy, its society.

In the spirit of this 'surface' metaphysics, the following is a *speculative* and *constructive* elaboration of the theory of sense, first taking Wittgenstein and Deleuze as a bloc—gathering them together. From the model of the surface alluded to in Deleuze's quote

¹³ If subjective is taken to mean 'the pure artifact of the mind' on the one hand, and objective, 'existing by virtue of its verification by reference to an object or state of affairs ontologically independent of conditions of semiotic mediation, symbolization, conception, signification, etc.' on the other.

¹⁴ See Deleuze, DR 28-70; and Sellars, *Foundations for a Metaphysics of Pure Process*. See also Daniel Sacilotto's critical investigation and comparison of their metaphysics; Sacilotto, "El materialismo transcendental y la ontología de procesos: Deleuze y Sellars."

above, I approach the conjunction of their philosophies as that of the construction of a Möbius strip—that is, of a surface with only one side. In other words, I treat them in such way that one can, at any given moment along the surface, assign a top and bottom, a right and left, a Wittgenstein-side and a Deleuze-side, but that globally, in traversing the surface, they become continuous, though without being able to ascertain the *location* of their convergence, for there is none. They remain locally distinct while inhabiting a global zone of indiscernibility—this is the philosophical topology at play.

The elaboration is *speculative* in the sense in which the creation of concepts must always be provisional and suspect. Like Deleuze's fortunetellers, like philosophy as whole, speculative reason must inspire wonder and ridicule by turns. ¹⁵ Nevertheless, commitment to speculation is impelled since there is never sheer coincidence of thinking and being, thinking itself being immanent to that which it is forced to think. Indeed, with respect to the place of the thinker of sense, one must be prepared for humiliation and crisis, even while sense, as thinking, can only be understood *realistically*. In speculation there is even less than one step between the sublime and the ridiculous: they coincide in the Janus-face of weak modernism on the infinite surface of logical space. ¹⁶ Speculation is necessary, but

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¹⁵ LS 143, "Divination is, in the most general sense, the art of surfaces, lines, and singular points appearing on the surface. This is why two fortune-tellers cannot regard one another without laughing, a laughter that is humorous."

¹⁶ Deleuze likens the double-sidedness of sense as eternal truth and pure chance to "an equation under god Janus" a phrase which he takes from Mallarmé. See Scherer, *Le* "*livre*" *de Mallarmé*. Along almost identical lines, Baudelaire identifies the two-sidedness of modernity in that most famous of phrases: "By 'modernity' I mean the ephemeral, the fugitive, the contingent, the half of art whose other half is the eternal, the immutable." Baudelaire, "The Painter of Modern Life," 13.

ever risky. One could always have been performing 'quaddition' when one thought all along it was addition.¹⁷ One could always have been charting Ptolemean epicycles while thinking oneself the Copernican Captain of the Real, no matter how far through the history of one's practical or intellectual striving one cares to look. Peirce's fabled 'end of inquiry', far from being an asymptotic guarantee of epistemic adequation, is in fact an extinction narrative, not a theory of ultimate metaphysical truth.¹⁸ In this regard, all concepts are constitutively problematic and thus also lack fixity and finality (even when they are absolute concepts). But, it is not *in spite* of its problematicity but *because* of it that thought connects with reality—this is thought's universal pragmatism or real perspectivism.

So, given the problematic, this project is also *constructive* in the sense that the ideas of Wittgenstein, Deleuze, et al.—and what can be made of their connection—will take precedence over matters of exegetical recapitulation, historical etiology, biographical stricture and the like. To the extent that it is allowed by the important features of their ideas, I am sometimes revisionary, sometimes selective, and to that extent also partial, exclusionary, critical, expansionist, and so on. To those scholars for whom these procedures are uniformly corrupting or distorting, there is little more to say. I am the first to admit that this project strays very far indeed from doxographical reportage—the typical

¹⁷ Quaddition is a reference to Saul Kripke's elaboration of the 'skeptical paradox' in Wittgenstein's later work, within which for any rule there arises a seemingly inescapable indeterminacy of meaning and justification. More on this below in 2.3. Kripke, Wittgenstein on Rules and Private Language.

¹⁸ For the notion of the 'end of inquiry' see, e.g., Peirce, "Fixation of Belief" in *The Essential Peirce Vol. 1*, 109-123; Sellars, "The Conceptual and the Real: 3. Picturing" in *Science and Metaphysics*, 112-142; Legg, "Charles Peirce's Limit Concept of Truth"; and Misak, *Truth and The End of Inquiry: A Peircean Account of Truth*.

stock and trade of the history of philosophy. Even so, it follows that just as all concepts are problematic, so too is all history, and for the same reasons: accounts of history cannot be meta-historical, just as accounts of concepts cannot be meta-conceptual, or accounts of language meta-linguistic. 'Meta-discourse' is always a subset of the discourse it takes as its object. This again confronts us with the paradox or vertigo of immanence as it abuts thought and language. Given this problem of recursion or self-reference, problematics as Ideal genetics of sense implies incompleteness or inconsistency (as we will see in 1.3-1.4).

As pertains to the validity of the construction of this project, I must paraphrase a well-known Kantian adage: vision without rigor is blind, rigor without vision is empty. However, one must add to this the proviso that there is no definitive harmony between them. Thus, everyone must opt for one generosity or another in all endeavors of writing and reading. So, if I must make a sacrifice, it is sayable (explicit) rigor that will be put on the altar of philosophy if the vision can be *shown*. This is authorized, in part, by what I take to be the deeply pedagogical rather than thetic or alethic use of language in both Wittgenstein and Deleuze at the level of method and style. They are much less concerned with *demonstration* than with *expression*—something which separates them from most 'major' philosophers. If Hegel is a philosophical Beethoven—motivically or dialectically developing or demonstrating his science of logic—Wittgenstein and Deleuze, taken together, are a kind of Satie. Rather than demonstrative or developmental (i.e. epistemic), they are 'noological' or gnoseological. ¹⁹ This is to take nothing at all away from the depth

¹⁹ Hegel's dialectical triads and their development can be likened to Beethoven's famous four-note 'fate' motif and its development in first movement of the 5th Symphony. Both earlier took Napoleon as inspiration. In this respect, Beethoven's 3rd Symphony can be

or precision of their thought. On this point, the aesthetic dimension of their output is directly hooked up to the genesis of sense and the generation of knowledge. Knowledge as *apodixis* may proceed from demonstration, but *gnosis* (understanding as philosophical 'know-how,' to put a Rylean spin on it) proceeds from showing. As suggested by Stiegler,

[a]podictic thinkers, or 'dialecticians,' as Plato and Aristotle call them, are interested in working on the conditions in which one can *put at a distance* and *contemplate deixis*—and thus pass from *monstration* to *de-monstration*, from showing to de-monstrating. However, these conditions are themselves *monstrative*—they are themselves of the order of showing; they cannot be demonstrated or proven. (Stiegler 2017, 11).

Apodixis, while less mutable, is also less fungible—it is currency not widely circulated outside of heaven and, occasionally, mathematics departments. Those who think reason and logic proceed definitively through apodictic demonstration alone mistake the functional role or practical use (i.e. the expressive power) of formalization and cognitive/aesthetic abstraction more broadly. We will see later in what deep way it affects the heart of epistemology and metaphysics as they regard sense.

0.3 The Problem of Sense in Modern Philosophy

The problem of sense has elusively plagued the history of modern philosophy. With respect to its not-easily-assignable epistemic and metaphysical status, the theory of sense engenders an unsung version of realism, situated between a naïve realism and an anti-realist

compared with the *Phenomenology of Spirit*, and the 5th with the *Science of Logic*. The first couple was enamored with the agent of 'progress' and development, the second with development itself. Deleuze and Guattari describe their own work in *What is Philosophy?* as noological, which they take to mean the 'study of the images of thought.' The *Gnossiennes* are a series of experimental piano works in 'free time' written by Erik Satie between 1889-93.

solipsism (whether individual or cultural)—something akin to what Bento Prado Jr. in his essay on Wittgenstein and Deleuze calls 'perspectivism without relativism' or what I called above real perspectivism.²⁰ In this respect, sense demands a transcendental realism, or to use Deleuze's term, a 'transcendental empiricism'. This means, according to him: a theory of the conditions of experience pushed beyond the conditioned, which no longer makes of the ground the shadow of the grounded. Such a theory supplies, in thought, the genesis of sense.

On the one hand, naïve realism (dogmatism) assumes the following identity without further ado: Real = True. Thus, realism is determined either by an abstract identity of content or by a correlation of stipulations to that which they indicate. There are many variations of these, but Frege's (Platonist referentialist) and Russell's (correspondence) models of language are examples, respectively.²¹ Although both made great contributions to the

²⁰ Prado Jr., "The Plane of Immanence and Life" in *Error, Illusion, and Madness*. Real perspectivism or universal pragmatism is also something I discuss at some length in "A Letter on Metaphysics, Existence, and Forms."

²¹ Russell, *The Problems of Philosophy*, 69-75; and Frege, "The Thought", esp. 294. The situation of Frege is nonetheless especially complex here with respect to the ontological status of truth, since it's not immediately clear how to draw the line between sense and reference, or between abstracta and concreta with respect to his theory of truth. For example, Frege distinguishes three moments within the use of an indicative sentence (a proposition): thinking, judgment, and assertion. Thinking 'apprehends' the truth-conditions (the sense) of the sentence, independently of their truth-value; Judgment 'recognizes' the reality of the content of the thought (its 'actual' truth or falsity), but this is distinguishable from its 'manifestation' by the person asserting the truth (or falsity) or the sense of the indicative sentence in its utterance. Frege escapes correspondence here, only by the reintroduction of a mathematical Platonism. In this case, both the "thought" and the "judgment" would seem to be abstracta, insofar as each is distinguishable from the empirical situation of utterance and from the psychology of the speaker. At the same time, the judgment seems only to be decidable on the basis of matters-of-fact—and as such must fulfil itself via a reference which would obtain; here the ultimate relation

philosophy of language (Frege himself made one of the greatest articulations of the concept of sense), at the same time, they represent a metaphysical regression precisely back to what is untenable in pre-critical realism: that the relation between the real and the true is at bottom, unproblematic.²²

We know well the anti-realist objections to this form of realism: that the conditions of the apprehension or intelligibility of the phenomenon to be verified are presupposed in the relation of verification meant to vouchsafe for its reality (either in the case of a referentialism or representationalism). One makes truth claims on reality only by way of the mental contents (e.g. 'sense data' or 'thoughts'), but there is never a moment, according to the anti-realist, within which access to ostensibly mind-independent objects are cashed out in something other than these contents, which are themselves never reducible to the

between sense and reference its connection to the being of truth is unclear.

These moments would seem to correspond to the three dimensions of proposition Deleuze diagnoses as signification, denotation, and manifestation (see 1.2 below). Thus, it is already here that Deleuze intuited very robust relations between Frege and the Stoics, though Frege seems to miss out on the problematic character of these moments that Deleuze attributes to sense. Such connections have been borne out by recent scholarship investigating very widespread systematic correspondences between their theories of logic and language (including in their analysis of quantification and predication). Of course, this is to take nothing away from Frege's originality in formalizing these concerns and showing their importance for mathematics. While I disagree with a polemical spirit of Susanne Bobzien's title, the evidence she presents of Stoic influence on Frege, though circumstantial, is exhaustively convincing. See, Bobzien, "Frege Plagiarized the Stoics." Lastly, there are ways to read Frege as an inferentialist (such as Brandom suggests), and there are good reasons to think Frege articulated some of the basic insights of inferentialism—however, it seems to me the centrality of a robust concept of reference makes the prospect of a strict inferentialist interpretation of Frege untenable.

²² On the supposed unproblematicalness of representation in the classical episteme and the philosophical and semiotic issues that arose out of the philosophy of the 17th century as a consequence, see, Foucault, "Representing," in *The Order of Things*, 51-85.

objects they are supposed to verify. This is the mystery around which conditions of possibility orbit. Thus, all assertoric knowledge, from the standpoint of the anti-realist skeptic, appears as one giant *solipsistic* game of question-begging. Despite the old empiricist skepticism about the ground of metaphysical assertions, the attempt at regrounding the matter on the basis of psychological priority was predestined to flounder on what *it* necessarily presupposed; this time in the form of an inescapable metaphysical backdrop without which all psychology evaporates into unscientific superstition. For example, Hume's associationism falls back on the metaphysical priority of habit, time (in particular the past as given), and causal law, even while conceptually eviscerating the latter via his challenge to induction. Here the vicious circle between dogmatism and skepticism seems inescapable, without the intervention of divine beneficence (e.g. the Cartesian-Malebranchean theological 'occasion', Leibnizian pre-established harmony, Berkeleyian divine perception).

Of course, it was Kant's project to provide a synthesis to the issue of which the 17th and 18th centuries were at loggerheads. Kant was the first, then, to provide an account of sense, and in particular of the 'bounds of sense.' Kant's price for such an account was the abandonment of realism (a faith held by both sides of pre-critical philosophy), with which he sought to purchase the security of knowledge. The pure concepts of the understanding swoop in to give the sensuous manifold the form of the object which it apparently cannot

²³ This phrase was popularized by P. F. Strawson's book on Kant of the same title. For an exploration of the relation between Wittgenstein's TLP and Kant on this locution, see, Moore, "The Bounds of Sense."

give itself. Again, it is *logic* that counts with respect to 'sense,' this time Kant's transcendental variety. Via Kant, the problem of sense is ramified and displaced, but it remains. The transcendental was thus born, but at the expense of an account of the genesis of the relation between cognition and the objects of its knowledge. *That* such a relation exists is Kant's noumenal faith: an abandonment of the real for the sake of truth.

Sense, on the other hand, is superior to the truth, and "does not ground truth without also allowing the possibility of falsity." (DR 153). This fact engenders the profound problem that animates the whole Idea of sense and the philosophy of language (and normativity), through and through. It is the point at which the logic of sense must enter the picture, and where its metaphysics must be elucidated. It is the point at which language 'reaches out' and 'touches reality' (TLP 2.1511-2.1515), and where the coincidence of realism and solipsism articulate the limit of logic and the ground of sense. Here the skeptical anti-realist worries about an epistemic foundation—about how we *know* the real—give way to the very real *metaphysical* 'groundlessness' of sense, which is at once practical ground as well as existential and semiotic ungrounding. In this originary ungrounding, the great Tractarian themes of silence and nonsense, of picturing, showing, mirroring, and the limits of language can only be properly elucidated in the genesis of sense.

0.4 Modernism and Reason: The Patient and Cognitive Complexity

Sense only emerges as concept after meaning (personal, cosmic, or divine) falls away. Nevertheless, in its purest, most static expression (which is not its deepest, but its most abstract) sense appears timeless and yet always comes into being transitively (through the category of 'Thirdness' as Peirce would say.)²⁴ Sense is always aesthetic and practical as much as logical and epistemic—their relation is what grants its metaphysical standing as both justified (when it is), conditioned, and ungrounded. As logical and aesthetic at once, the concept of sense and its genesis are also the signal achievement of a tradition I would like to call *philosophical modernism*, or *weak modernism*, as against *philosophical modernity* or *strong modernism* (the latter beginning with Machiavelli, Bacon, and Descartes).

Artistic modernism, in its inception, is often characterized by a critique or decomposition of the forms of representation built up in Europe since the Renaissance, and by attention to the form and content of experience as such (sensory, affective, perceptual, conceptual, etc.). Whether against psychological and narrative verisimilitude in literature, or against illusionistic depiction and linear perspective in painting (for example), modernism exhibits a tendency toward the formal, the sensory, the affective, and the abstract. The non-symbolic, 25 the a-teleological, the nonsensical, and the amoral replace the symbolic, the teleological, the meaningful, and the moral. While these generalities are not under dispute as such here, the philosophical ramifications of this 'critique' have less often been asked after. What had changed in our conceptions, in our forms of life that might account for the rapid undoing of the representational modes of modernity, which, in terms of historical time, had barely reached maturity? One can always point to the breakdown of the

²⁴ Peirce, "On a New List of Categories" in *The Essential Peirce Vol. 1*, 1-10.

²⁵ Non-symbolic in the sense of symbolism (of iconography and iconology); it is not non-semiotic or non-linguistic.

transcendent assurances of the 'moral world order' insured by, for example, analogical ontotheology, the doctrine of the great chain of being, as well as the feudal, monarchical, and ecclesiastical powers of the Middle Ages. And while there is much to say about these historical factors, they only account for a strong modernism still rife with meaning from Hobbes to Hegel, from Constitutional Monarchy to Republicanism to the U.N. and E.U.... In the politics of the nation state, it goes without saying, the regime of 'strong modernism' is ongoing, but faltering seriously. In philosophy there is, of course, also today's brand of strong modernism: a 'heroic' tradition of rationality, for example, (consider Habermas or Brandom)²⁶ still clinging to the last available scraps of the fabric of liberal post-war whiggishness which remain in Western Europe and North America—scraps which linger, threadbare, but are quickly fraying forever into the ecumenical instability of the twentyfirst century. The thinkers of this tradition are woefully silent on many of the salient features of the intellectual milieu of the 20th century as well as on the importance of geopolitical-economy more broadly. They do not seem capable of accounting for the sudden and widespread transformations indicative of modernism—whether in art or thought—or the social turmoil which has pervaded the globe for centuries and which continues to do so in recent decades with increasing intensity.

What could account for the transformations of modernism? Might it be that the concept of practice itself must change and with it our self-conceptions as 'agents' and 'subjects,' experiencers and under-goers? Might it be, as Deleuze suggests in *Negotiations* (N 121-

²⁶ For the clearest panorama of this view see Brandom, *Heroism and Magnanimity* and "The Age of Trust: Reachieving Heroic Agency" in *A Spirit of Trust*, 726-744.

134) and in the *Cinema* books (C2 1-24), that purely optical and aural aesthetic situations arise—i.e. a-moral, a-teleological, formal, and abstract ones—only when those 'subjects' who bear witness to such situations no longer have a spontaneous habitus for them; when an 'adequate' response to the situation is no longer given in advance; when the only available model of the subject is no longer organic or natural—growing into its relation with the world—but 'ready-made'. In this regard, modernity, once it has outstripped the motive powers of the individual, becomes "a cinema of the seer and no longer of the agent" (C2 2). It is only then, crying out from under the inadequate mask of the reified person,²⁷ that the 'mute witnesses' and the 'perspicuous presenters,' the 'non-knowers,' and 'non-can-ers,' and those inhabiting zones of 'non-being' as it were—rather than the heroes: the statesmen and the industrialists, the savants and the 'geniuses'—come to fabricate the experience of modernism, whether in painting or in language, in film or in politics.²⁸ This idea finds parity in a line of Baldwin:

That the individual as 'person' be identified with the mask is perhaps no accident, since the Latin etymology of 'persona' attests to its history in the theatre. It is on this basis that our undertaking is consonant with what Asad Haider has diagnosed in Althusser's structural rendering of the issue as 'the human mask', in which, as he quotes of Etienne Balibar: "the mode of existence of the agents of the production process [are] the bearers (*Trager*) of the structure': individuals 'are nothing more than masks'." Etienne Balibar, cited in Haider, "The Human Mask," 117.

²⁸ In connection to the concept of non-being in Fanon, see Lewis Gordon's exposition of the figure of Blackness with respect to Hegel's *Philosophy of History*: "Standing neither on the level of history nor on the dialectical level of a particular negation that moves history forward, the black is left as nonbeing, non-Other, nothing. A project emerged, then, of articulating at least a point of universal subjectivity from such an abyss." Gordon, *Existentia Africana*, 23. Deleuze gives us the tools to think non-being without negativity, as we will see later (sect. 1.4).

People who believe that they are strong-willed and the masters of their destiny can only continue to believe this by becoming specialists in self-deception. Their decisions are not really decisions at all—a real decision makes one humble, one knows that it is at the mercy of more things than can be named—but elaborate systems of evasion, of illusion, designed to make themselves and the world appear to be what they and the world are not.²⁹

The task is then not to become the self-possessed subject of one's own action, but something else. The task is instead "to become the offspring of one's events and not of one's actions, for the action is itself produced by the offspring of the event." (LS 150).

* * *

In one sense, this is a new task for human thought, but in another, perhaps, it has always been like this—our self-image and its world-picture was thoroughly self-deceptive, and being persuaded otherwise is, as Wittgenstein suggests, a matter of will as much as one of thought.³⁰ It is a matter, not of personal willing, but rather of a 'volitional intuition' (LS 149) which is in itself involuntary, and born of fortuitousness—often enough, also of violence, cruelty, domination, and suffering. But it is no less 'our own' by virtue of its contingency—it is only that those words must ring differently than they once had.

²⁹ James Baldwin, *Giovanni's Room*, epub. I would like to thank my student, Andrew Neville, for bringing this connection to light for me.

³⁰ If the functional advances of the last thirty years in the neuroscientific modeling of mental life are to be believed, then consciousness seems to play an increasingly diminished role in theories of executive function in human decision and behavior. See, for example, some of the results extrapolated from data of functional models tested against patients with schizophrenia in Frith, *The Cognitive Neuropsychology of Schizophrenia*. This seems to call for, at least, the displacement of the seat of reason out of consciousness (at least in part) if not the abandonment of the idea that reason (as a deliberative executive function) is itself a localizable phenomenon or faculty.

So, why has it become necessary to embody this task now, in contrast to the bootstrapping of the will by the executive functions of consciousness? Is it not because modernism harkens the dawning darkness surrounding a new kind of complexity—not the complexity of the sensuous manifold mastered by cognition (our parochial transcendentality), but a properly cognitive complexity³¹—which characterizes the dumbstruck and ready-made 'subject' of modernism who gives rise to the expression of a new kind of affectivity. Society itself has become unfathomable, intractable to the subject—recalcitrant to analogy, narration, myth, and metaphor. According to Deleuze, following Kant and Husserl, this subject's syntheses are first of all *passive* rather than *active*, but, as we will see, not less 'pragmatic' on that account. Accordingly, because of this complexity, one does not exactly *will* thinking of things in a new way, rather one wills on the basis of the pressure of events. In sum, this 'subject' is not the *ideal agent* of a projected teleological world history but a *real patient* to an unending, introjected one. Deleuze again:

In effect, a pure spatio-temporal dynamism, with its necessary participation in the forced movement, can be experienced only at the borders of the livable, under conditions beyond which it would entail the death of any well-constituted subject endowed with independence and activity. [...] There are movements for which one can only be a patient...". (DR 118).³²

³¹ The notion of cognitive complexity is taken up in 2.4.4. and 2.6.2.

³² It is on these grounds that there seems to be a great confluence between the deep philosophical themes of Deleuze and the emancipatory theorization of oppression and peopling, especially with respect to scholars of the African diaspora, one which, echoing Lewis Gordon, opens the way to a point of universal subjectivity unlike those modeled before.

However, this 'subject' of modernism is not yesterday's news. Modernity's true subject the patient—is our subject, no matter what some would have us believe about the 'postmodern' or 'contemporary' as distinct cultural-historical classifications.³³ If the historical experience of the patient, the experience of modernism, is somehow itself abstracted or abstract, detached from the parochial, metastable regularities of experiential modulation required of the 'well-established subject', as we have claimed, then the relation between the formal and historical is not as straightforward as canonically imagined. As regards modern art and criticism, the failure of formalism in the 20th century—its supposedly a-contextual, a-political treatment of themes—was little more than a failure of imagination by historicist scholars to apprehend the social and logical import of modernism in its 'formal' dimension, not merely in the arts, but across the historico-material activity of human being.³⁴ In truth, the burgeoning social/cognitive complexity which began, arguably, with global industrial mechanization, the expansion of European colonial exploitation, and the emerging world-market in the 19th century has certainly escalated in scope and density since then: technological development, planetary economic and ecological entanglements, and our apprehension of their effects (on many registers, from

³³ On this, see Brown, "Postmodernity, Not Yet". From the perspective of historical materialism, while the tendential processes responsible for the advent of modernity have certainly undergone unprecedented economic developments since the 1960s and '70s (financialization, deindustrialization, occasionalization of employment, increasing automation and surplus populations, etc.), these are historically continuous with the rise of the capitalism in general, such that, although we must be sensitive to changing conditions, nothing justifies our defining a new epoch on the basis of such changes, since the mode of production remains essentially intact.

³⁴ This is one the premises of Osborne, *Crisis as Form*. Another recent attempt to remedy this fault line can be found in Levine, *Forms: Whole, Rhythm, Hierarchy, Network*.

online experience to so-called 'deindustrialization' to environmental degradation, mass extinction events, and global climate change) have only amplified. This is not to say that we grasp the whole any better than Marx or Simmel, Benjamin or Fanon. In many ways, collectively, we grasp it much less firmly than they did. Our view is far more obfuscated, and the possibility of mass apprehension and action is better diverted by our current media into fragmentary cull-de-sacs of (often illusory) special interest. Only very dimly could we be considered today to see through such obfuscations, to have any effective knowledge of this complexity, if by 'effective' we mean 'politically operable,' despite the profusion of data, theory, opinions, and activity surrounding these subjects. Not only is there no place for personal mastery in this kind of social complexity (this would be the heroic 'can-doer' narrative of the world-historical individual which died in disgrace with the 'tragic' bourgeoisie of Napoleon and Hegel), but it is a genuine question as to whether *collective* mastery, though perhaps necessary, is even possible given the configuration of the present. Hence is revealed, also, the comic (Deleuze might say 'perverse' or 'humorous' rather than 'ironic')³⁵ status of our experience as patients and undergoers in societies saturated by control without mastery. The regimes of statistical, computer-aided State and corporate

³⁵ Deleuze devotes an entire chapter to humor and its contrast with the concept of irony in LS: "Romantic irony determines the one who speaks as the person and no longer as the individual. It grounds itself on the finite synthetic unity of the person and no longer on the analytic identity of the individual." (LS 138). We elaborate the consequences of the difference between finite synthesis and infinite analysis in 1.4.

See also: "The tragic and the ironic give way to a new value, that of humor.... It is the art... of the always displaced aleatory point; it is the art of the static genesis, the savoirfaire of the pure event..." (LS 141).

control, also foreshadowed by Deleuze,³⁶ certainly speak, more than anything, to our current social *impotence* in affecting the economic, energetic, and ecological powers loosed upon the world. It is the peculiar perversity of our world that it is both completely administered and, at the same time, incapable of lawfulness—a situation which Kleist and Kafka each foresaw with frightening clarity. In this respect, the inhabitation of powers (*puissances*) cannot be made to coincide with the imposition of control in the socius. The 'control' of corporations suffices only to direct our meanest personal appetites into an oblivion of socially extraneous production—the powers deployed and amplified in this direction figure, inversely, as means without end. Such is the challenge facing a theory of reason today.

* * *

Rightly, one may ask: what has any of this to do with the concept of sense? Well, being unable to attack the unwieldy problem above head on, what I want to argue in what follows, is that weak modernism should be the label for an occurring history which affects the whole rubric of sentience and sapience, one which demands a redetermination of the ideas of thought and reason themselves—especially as these are expressed in the concept of sense and developed through its genesis. Such a redetermination gains its paradigmatic articulation here from Wittgenstein and Deleuze—but they are not alone. Starting with Kant, and moving through Marx, Peirce, Frege, Beckett, and others—to name only a handful of major nodes undertaken in this work—a host of thinkers contribute to its

³⁶ Deleuze, "Postscript on the Societies of Control".

collective achievement; one still underway and long overdue. Its belatedness is doubly true of Anglophone philosophy, which, in its mainstream conceptual frameworks and academic attitudes regarding reason has, in some ways, only barely entered the Hegelian 19th century, and even that remains a scandal. Perhaps it is time that philosophy in general begin to digest the Deleuzian (and Wittgensteinian) 20th century.³⁷

A redetermination of reason, it should also be said, is already underway from many thinkers: AA Cavia, Adam Berg, Ray Brassier, J.-P. Caron, Gabriel Catren, Olivia Lucca Fraser, Rocco Gangle, Helen Hester, Anna Longo, Catherine Malabou, Quentin Meillassoux, Reza Negarestani, Patricia Reed, Daniel Sacilotto, James Trafford, Peter Wolfendale, Fernando Zalamea, and many others have their place here as well. However, neither the anti-foundationalist analytics (Quine, Sellars, Davidson, Rorty, McDowell, Brandom, etc.) nor the neo-rationalists, by and large, give the aesthetic any significant place in theories of thinking or reasoning.³⁸ This is where the present work attempts to make some intervention.

³⁷ This, of course, echoes Foucault's famous pronouncement that the 20th century will one day be known as Deleuzian. See, Deleuze and Foucault, "Theatrum Philosophicum" in *Language, Counter-Memory, Practice*, 165-198.

³⁸ There are important exceptions: Nelson Goodman among the analytics, as well as Caron, Catren, Reed, and Zalamea among the neo-rationalists, as each develops lines of thought which engage explicitly with aesthetics. Goodman's entire holistic constructivist project—which spans the breadth of systematic philosophical topics—could be seen as an attempt at a supra-aesthetics. Suhail Malik has also spent considerable time on the problem of contemporary art but is less explicitly interested in questions of the philosophy of mind.

The general task to articulate the experience of the patient and to change our conceptions of thought and reason which this work participates in, is not driven by the desire for novelty. On the contrary, things would be much simpler if we could still believe in individual intentional transparency, the normative binding power of commitment and entitlement, the mastery of desire by a 'rational' faculty of will, and institutional representation—so configured in current parliamentary 'democracies'—as a valid mode of democratic politics. All of these are on offer in the 'heroic' liberalism of rational agency beginning with Kant. But they rely on a dubious metaphysical conception of the independence (even if dialectical) of self and other, subject and object, mind and world, inside and outside, which—in light of the originary exteriority exposed in the genesis of sense—can no longer be maintained in good faith. The patient is not only permeated by the outside, whether natural, historical, or social, but constituted by it. Here we risk being misunderstood, so let it be emphatic: the fact that the patient is constituted by an outside which it has no dominion over and no causal independence from is not at all to claim that the patient has no genuine activity that issues from it. It certainly doesn't mean that we must accept the present state of things just because we happen to be irrevocably affected by it. It is rather this: reason's redetermination, according to the present author, is required not because of a fashion for new ideas, it is an undebatable material and social need to change ourselves—our collective being, our Geist, our form of life, the commons of our practico-linguistic activity, our most stubborn attachments to (sometimes) comforting but ill-begotten institutional inertia, values, and concepts. This is not to say that speculative thinking alone can save us. There are immense material-institutional fetters standing in the way of the demand to change ourselves (whole economic and mediatic infrastructures, in

fact). However, if we intend to persist through modes of existence which do not induce the shame of every individual's complicity, modes capable of formulating a form of life that would stand the chance of redeeming our past, or of no longer needing to try—a form of life in which we might even become 'worthy of what happens to us' (LS 149)—then the accomplishment of this demand is not a voluntary one. It is the very involuntariness of our coexistence which is at issue: a coexistence that has become suspect under the regime of complexity of world-integrated capitalism—its utter poverty of common life, politics, art, thought, and its perversion of science that we unwittingly or unwillingly instantiate. Again, just because the imperative to change ourselves is not voluntary does not mean its outcome is guaranteed: there is no *lumière naturelle* for the patient, no 'good will' or 'good sense' for the philosopher of sense. Far from it: there is no natural necessity and no destiny, only contingency and fate. Nonetheless, it is in the Idea of sense that weak modernism at least receives its partial due in thought—come what may of all us paupers of experience.

1 The Idea of Sense

1.1 Introduction: Senses, Signs, Language

Speaking is a beautiful folly: with it the human dances over all things.

- Friedrich Nietzsche, *Thus Spoke Zarathustra* (1883-85)

Sense, in its most basic description, is born out of a tripartite encounter of which it is itself the middle term. This encounter ensures that a sign is produced, which is nothing but the determination of sense. In this regard, at first blush, sense appears between propositions and things or between subject and object. Although, at its most abstract, sense is understood as eternal truth (that is, as an event irreducible to 'what happens'), it comes into the world transitively, as a problematic (semiotic) relation between entities—in other words as a mediating entity, fact, or datum which in turn configures both that which takes it, and that which it is taken as. This is why it was earlier related to Peirce's category of Thirdness. Peirce's idea is that among the fundamental categories of Being, quality (Firstness) and relation (Secondness) alone do not suffice to supply a naturalistic, nondualist genetic account of thought (or sign-use more broadly), and thus these by themselves cannot exhaust the ontological catalogue of Being. In order to complete it, a third category must be invoked: mediation (Thirdness), which is the formal ground of all semiosis, and characteristic in the highest degree of sense as symbolizing activity in particular—whether

linguistic, pictorial, notational, or expressive, etc.³⁹ In keeping with Peirce's catalogue, I take there to be a qualitative distinction between the semiotic activity involved, for example, in reliable differential responsive dispositions (RDRDs) and that of genuinely normative, socially consubstantiated, consciously articulable reasons, but this qualitative difference is wrought, it seems, only by a difference in the degree of complexity of the semiosis or its functional structure.⁴⁰ In this respect, one's choice of where to draw the line for what constitutes norm and what pattern is, to some degree, a matter of expedience, not one of principle. So it goes, too, for the line between sense and nonsense. In the activities

³⁹ See again, Peirce (1992 [1867]), 1-10. Symbol is here taken in a Peircean and Goodmanian sense. While both the icon (first) and index (second) are non-arbitrary, though in different ways, symbols (third) are, for Peirce, established by convention or habit, meaning that they are ungrounded and instead assured by formal regularities of use. This is largely in keeping with Saussure's understanding of the relation between signifier and signified as arbitrary, though much broader in scope. Finally, this list of symbolizing activities is owed to Nelson Goodman and are for him the material grounds of human cognitive behavior generally speaking. The fact that Goodman calls these activities symbolic is entirely compatible with Peirce's system of signs within which symbols (which are characteristic of what makes human thought a distinct form of semiotic habituation) are understood as third thirdnesses (as opposed to icons (first thirdnesses) or indices (second thirdnesses)). It is only in this Goodmanian/Peircean register that we use the term. It should not be confused with the symbolic as discussed in the "Introduction" as related to iconography.

⁴⁰ It may also be worth correlating this distinction between symbolic activity and lower forms of sign use, or that between sapience and sentience, with the Chomsky hierarchy, the polynomial hierarchy, and/or classes of automata, but this would be a project for another day. Though, something like this is attempted by Brandom in *Between Saying and Doing*, as well as in "How Analytic Philosophy has Failed Cognitive Science," I take issue with Brandom's understanding of practices and norms as always-already circumscribed by the categories of expressly discursive rationality from the outset, which makes them susceptible to a certain lossless and non-constructive understanding of explicitation, whereas, as I understand it, explication is a lossy form of compression which is useful for certain epistemic purposes, but less useful for the uses (such as aesthetic and common uses) to which the implicitness of forms of life are put in general in *geistige* phenomena. See 2.3

that concern us, 'sense'—as aligned with 'reason'—will designate the content of thought as the mode of presentation of what can be referred to or the form of appearance of value. But one should always keep in mind that what can be related to (reference being a mode of relation) is relative to what the relatum is taken to be, and this is a general truth of the metaphysics of powers or dispositions—or, what is the same, a semiotics in its broadest and deepest sense—not a quirk of humanity's paradise lost, our supposed cognitive distance from an immediately given real. This problematic of relationality is just as true of basic physical systems—for example, bosons are signs between fermions—as it is of our cognitive biases, though in entirely different ways. Nevertheless, it is the peculiar championing of Thirdness that gives sense its unbridled power.

However, not all triangles are created equal. Distinctions must be made clear. Sense does not primarily refer, in its intermediary role, to sensation, which is also an object of encounter, supposing anything like pure (non-inferential, behaviorally inert) qualities of experience exist apart from any doing and thinking. There is something cognitive, linguistic, practical about sense which cannot be reduced to a psychology or physiology of impressions. To put it in a slightly different way, as Frege points out from the beginning, there is necessarily something *impersonal* or public in every presentation of sense.

There is no sense apart from the proposition which expresses it and the state of affairs it attributes or the object it predicates, etc., but these are in turn embedded in what Deleuze calls the 'living usage' of sense. One might say, then, in keeping with the natural history of truth, there were entities and relations and even signs before language, but no facts. *Things* happened but *events* did not. And it's worth a reminder of Wittgenstein's dictum here that the *world* is also "the totality of facts not of things" (TLP 1.1). So, there was no

world either. Insofar as sense is the domain of events, as Deleuze tells us, and sense, at least in its more restricted use, inheres in the language which expresses it, then the way of being proper to the event—what Deleuze calls 'insistence', 'inherence', 'extra-being', 'nonbeing,' or '?-being' (the being of the problematic)—is expressed only when it is possible to speak of it, even if the *existence* of the event precedes this possibility. 41 Of course, just because, in some sense, there are no expressed events without minds to think them, or language to speak them, that doesn't mean that events depend on what we do think of them, nor that we merely invent them. Furthermore, it becomes possible to speak of events only when the mediate entities in question—namely, the senses of what we say—are detached from the order of causes and no longer obey the 'laws' of bodies even if they must inhere in those bodies and articulate that order and those laws in turn. In other words, it must be possible to articulate events which never take place, and even those which *could* never take place: counterfactual and counterpossible events are part of the logical makeup of those of the factual kind. Therefore, only when sense as 'nonbeing' is pried from the course of being-as-existence does truth become possible. Corollary to this requirement, a stupid or delirious world is the ineluctable conjoinedtwin born alongside the intelligent or sober one—truth comes into being only when it is

⁴¹ Naturally, this depends on one's definition of the terms 'fact' and 'event.' Here we depart terminologically from Peirce's metaphysics which places these terms within the scope of mind-independent natural phenomena, and as such allies them with the category of relation in his evolutionary cosmology. As Nathan Houser puts it: "The world of secondness is a world of events, or facts, whose being consists in the mutual interaction of actualized qualities. But this world does not yet involve thirdness, or law." Houser, "Introduction" in *The Essential Peirce*, Vol. 1, xxxiii. By contrast, we would call this the world of individuals and their relations, rather than the world of events, facts, structure, or form.

at the same time possible to be false. Stupidity is created just because the disposition of intelligence demands it in order to realize itself. Or again, one might say, in a very precise sense, that truth is not distinct from error, nor intelligence from stupidity. As Nietzsche taught us long ago, truth is not only the error of species but a species of error: truth is the worst form of error, except for all the others.⁴² This marks the essential ungrounding of sense from that which it makes coherent, consistent, or intelligible. But this ungrounding is also the anointment of sense—through it, sense becomes the generative power of reason itself—the ability of thinking things to deliberately amplify their own powers—making contact with the vertigo of immanence, becoming superior to all horizons of opinion, and providing for itself its fortuitous absolution from the notion of world.⁴³

⁴² Cf. Nietzsche, *The Gay Science*, 265: "What are man's [sic] truths ultimately? Merely his irrefutable errors."; and *The Will to Power*, 493: "Truth is the kind of error without which a certain species of life could not live. The value for life is ultimately decisive."

⁴³ There are remarkable resonances between the critique of the 'world' and 'horizon' in this work and several of Patricia Reed's ideas. One point of difference is that, in my formulation the forms of possibility and the counterfactual (excluding counterpossible statements) are in themselves insufficient on both metaphysical and epistemic as well as (ultimately) on practical grounds (see sect. 1.4.3-1.4.5)—and this has additional consequences for localization and situatedness, and well as the production of value and the valences of necessity. See, Reed, "Making Ready for a Big World"; "Orientation in a Big World: On the Necessity of Horizonless Perspectives"; "The End of the World and its Pedagogies"; and "The Valuation of Necessity."

1.2 The Concept of Sense in Wittgenstein and Deleuze

1.2.1 Pictures and Senses in the *Tractatus*

The *Tractatus Logico-Philosophicus* (TLP) is a *Bildungsroman* about the overcoming of representation. It is a tragic overcoming, one which leaves itself nothing to say beyond the limit of representation, but one that nonetheless, obliquely, shows us the way forward. The hero of this novel is the Idea of sense. And it is the dramatization of the Idea of sense in the TLP which provides for us the coordinates for the elaboration of its concept.

For Wittgenstein, the sense of a proposition is presented by a picture. In other words, "[w]hat a picture diagrams [darstellt] is its sense" (TLP 2.221, translation modified). The German term 'Darstellung' is ordinarily rendered as 'representation' and this use is followed by both English translations of the TLP. 44 While this is an obvious and correct translation, it hides the underlying problem that animates the whole of the TLP. I use the unorthodox translation of 'diagrams' for 'darstellt' above because Wittgenstein makes it clear that pictorial form (Form der Abbildung (2.22)) is isomorphic with that of the states of affairs it depicts or 'represents'. The pictorial form of the proposition shares with states of affairs the same logical form; and although Wittgenstein understands sense quite literally

⁴⁴ Though it shouldn't go without saying that there are several words in German which are often rendered by the term 'representation' in English and that none of them exactly match the semantic contexts of use in English, and in some cases, uniform translation can hide quite profound conceptual differences between terms. Here *Darstellung* is compared and contrasted with *Vorstellung*, and *Vertretung*, all of which Wittgenstein uses in different senses.

via its picturing, the "pictorial relationship" (2.1513) connecting it to reality is not determined by resemblance. Rather, it is determined by an "internal relation" (4.014) expressed in terms of a "law of projection" (4.0141)⁴⁵ which preserves structure without (necessarily) preserving resemblance. If language is built on the idea of a 'similarity' with that which it expresses, it can be nothing but the "non-sensuous similarity" of which Walter Benjamin speaks, or the "normative similarity" which Meredith Williams has elaborated so carefully in Wittgenstein's late works. 46 Rebus writing, which resembles (either pictorially or phonetically) what it represents, stands at the origin of most (if not all) writing systems, but nothing mandates that it stays that way, and there are significant pressures on the expressive power of a notation to abstract away from rebus in order to capture the full scope of expression needed for language, even if it is only by first imitating speech that writing latches onto and develops its own powers. This echoes what Deleuze recalls of Bergson, in connection with the cinema: "things are never defined by their primitive state, but by the tendency concealed in this state." (C1, 25). Instead of resemblance as such, it is form (via structure), in the TLP, which must be taken care of above all: "A gramophone

⁴⁵ We will see later (1.3.4) the way in which the 'law of projection' is important for the relation between the metaphysical subject and logical space, which we've attempted to illustrate using the projection from the Reimann sphere to the complex plane. Other scholars such as Aloisia Moser and Pablo Acuña have also independently made similar connections, which I have since become aware of. See Moser, "Hegel's Speculative Method and Wittgenstein's Projection Method" in *Wittgenstein and Hegel: Reevaluation of Difference*; and Acuña, "Projective Geometry in Logical Space: Rethinking Tractarian Thoughts."

⁴⁶ See Benjamin, "On Language as Such and the Language of Man" and "On Semblance" in *Selected Writings Vol. 1* as well as "On the Mimetic Faculty" and "Doctrine of the Similar" *Selected Writings, Vol. 2, Part 2.* 'Normative similarity' is the subject of Meredith Williams' *Blind Obedience*, to which we will return in 2.2, when we discuss the vision of language in the late Wittgenstein.

record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same internal relation of depicting that holds between language and the world. They are all constructed according to a common logical pattern." (4.014). In this sense, resemblance of representation is a species of a wider relation which must always obtain with respect to picturing. If resemblance stood at the origin of language, this is only because it was the most 'natural' tool available for expression; the originality of resemblance is only accidentally related to the genesis of sense, and its constraints turn out to be severely inhibitory (as the histories of writing, painting, and algebra attest).

However, even if what the proposition *pictures* is its sense, this is not what it says. What a proposition says is an assertion: it claims that the sense of the proposition is actually the case. "A proposition shows its sense. A proposition shows how things stand if it is true. And it says that they do so stand" (4.022). Thus, the sense of the proposition is not given by what the proposition explicitly says. Rather, it is shown by how the elements of the proposition are composed—and this is what allows propositions to have truth conditions. A valid proposition—as opposed to a pseudo-proposition—is one in which what the proposition pictures is or is not the case. But its sense, what makes it so, we must be able to apprehend independently of what is the case, otherwise we would have no basis for applying truth conditions to propositions in the first place. Logical form is shown, in the ideal case, by the elaboration of a perfect notation, grammar, or logical syntax. Nevertheless, "[t]he rules of logical syntax must go without saying, once we know how each individual sign signifies." (3.334). This is because, according to Wittgenstein, "a propositional sign cannot be contained in itself." (3.332). Finally, therefore, sense is not something which can be stated in the proposition which expresses it, but only shown in its

picturing. If a proposition is a picture of reality, "[w]e can see this from the fact that we understand the sense of a propositional sign without its having been explained to us." (4.02). Therein the whole paradox of immanence lies in wait.

1.2.2 The Linguistics of the *Logic of Sense*

Deleuze tells us that the notion of sense is similarly elusive with respect to the proposition. It cannot be stated directly since what a proposition says and what its sense is never completely coincide. This is why we can always be taken to mean what we did not say, and why we often find ourselves saying what we did not mean. We struggle to find the words for our sense, interminably so. How then are we to direct our words to the theory of sense? To begin, Deleuze elaborates three dimensions of the proposition, which obtain through the circularity of their grounding: denotation, manifestation, and signification. The first, denotation, operates by virtue of reference, and indicates 'extra-propositional' entities. The linguistic figure of denotation is the *name* and the special deictic of indexical words which indicate a particular (this, that, etc.) (LS 13); its signal feature is description. The proper name is the privileged indicator. This is confirmed also by the role of proper names in Russell's theory of description. That to which the denotation refers is the state of affairs: "What matters for the moment is that certain words in the proposition, or certain linguistic particles, function in all cases as empty forms for the selection of images, and hence for

⁴⁷ Russell, "On Denoting".

the denotation of each state of affairs." (LS 12-3). Denotation demands the truthfunctionality of reference, by virtue of the logic of facts.⁴⁸

Nevertheless, from an empirical position, of course, there is no proposition without someone who is capable of uttering it, and from whose point of unity the reference has a direction, that is, indicates some object(s). (LS 13). Speech is therefore referred back to the form of the 'I' in which denotations are enveloped. This is the dimension of manifestation. While on the one hand, manifestation is expressed through 'propositional attitudes' by which the truth values of denotations appear primary, ⁴⁹ on the other hand, this causality itself rests inferentially upon the relations in the subject (as in Hume), and thus "it is not only the other manifesters which depend on the "I": all indicators are related to it as well [...]. [M]anifesters, beginning with the "I," constitute the domain of the personal, which functions as the principle of all possible denotation." (LS 13).

Additionally, the problem of the relation between the speaker and the state of affairs is doubled back on itself in a third dimension of the proposition: signification (demonstration). While there exist generic variables or proper names by which objects and states of affairs are realized as *denotata* of the proposition, as well as the form of the "I"

⁴⁸ This is as true of the early Wittgenstein, as it is of Russell and Frege, where it can be tied back both to Frege's distinction between sense (*Sinn*) and reference (*Beduetung*) as well as his functional concept of the object (the object as variable of a function). See, Frege, "On *Sinn* and *Bedeutung*", in *The Frege Reader*, 181-193.

⁴⁹ Deleuze himself focuses on two propositional attitudes—desire and belief—wherein the 'direction of fit' is distinct (internal and external in the subject respectively). See, LS 14. For the notion of the 'direction of fit' see below.

from which indications manifest the direction of their value, 50 signification "is a question of the relation of the world to *universal or general* concepts, and of syntactic connections to the implications of the concept." (LS 14). Significative concepts are semantically general, and syntactically demonstrational, by virtue of their systematic character—one which comes in advance of the manifestations of the 'I' in speech (parole) and which condition, a priori, the validity of its inferences and activities:⁵¹ "When we speak of demonstration in the general sense, we mean that the signification of the proposition is always found in the indirect process which corresponds to it, that is, in its relation to other propositions from which it is inferred, or conversely, whose conclusion it renders possible." (LS 14) This is why, as is well known, for Saussure, language (langue) is differential, since signification of a single term implies a holism of signification by difference from the others.⁵² It is in the same vein that Hegel understands the process of determinate negation, and that Brandom understands inferential role (or conceptual role) semantics. Yet, it is also why, from the standpoint of Deleuze's outline, language can rise above the verification of phenomena to their conditions: "The logical value of signification, or demonstration, thus

⁵⁰ This called the 'direction of fit' in analytic philosophy of language and mind. See, Anscombe, *Intention*, 56. See also, Searle, "A Taxonomy of Illocutionary Acts" in *Expression and Meaning: Studies in the Theory of Speech Acts*, 59-83

⁵¹ Cf. LS 15-16: "This primacy of manifestation, not only in relation to denotation but also in relation to signification, must be understood within the domain of 'speech' in which the significations remain naturally implicit. It is only here that the I is primary in relation to concepts—in relation to the world and God…" More will be said on these dimensions in relation to the TLP later, but one can already see many convergent lines.

⁵² Hence the famous phrase from Saussure, *A Course in General Linguistics*, 120: "... in language there are only differences without positive terms."

understood is no longer the truth [...] but, rather, the *condition of truth*, the aggregate of conditions under which the proposition 'would be' true' (ibid).

However, just as before, denotation doubles back on signification by virtue of its role in grounding the conclusions of the premises of a demonstration, since signification cannot vouchsafe for the soundness of its premises but only the validity of the inferences from these premises and the assertion of their counterfactual conclusion (if/then). Nevertheless, insofar as the conclusion (the assertion) of a demonstration or signification is affirmed in its own right, it demands from its own proposition a denotatum of which the significations provide the conditions of referability (signification as the logical structure or the condition of the true). But on this account, still other premises must always be invoked:

This amounts to saying that signification is never homogenous; or that the two signs 'implies' and 'therefore' are heterogeneous; or that implication never succeeds in grounding denotation except by giving itself a ready-made denotation, once in the premises and again in the conclusion. From denotation to manifestation, then to signification, but also from signification to manifestation to denotation, we are carried along a circle, which is the circle of the proposition. (LS 15).

The circularity of grounding and the paradox of infinite regress that are its inevitable consequence indicate the insufficiency of these three dimensions of the proposition and point to the fact that the 'living-use' of language, for Deleuze, must be sought in an idea of sense, irreducible to these ordinary dimensions.

* * *

Sense is no more objective or subjective than it is demonstrative. It is no more reducible to the denotations of its supposed objects, nor the state of the subject in manifestation, than it is to a signification that envelopes, by virtue of its role as conceptual and inferential ground of the proposition, the other dimensions of the proposition. Rather, the situation of the circularity of these dimensions, and of the cases of paradox which ineluctably present themselves in the analysis of the proposition, point us inevitably, if reluctantly, toward the theorization and conceptualization of the dimension of sense proper.

Sense is not reducible to denotation. The relationship between the attachment of words to things relies on a ground which is *not* purely arbitrary (as in the case of a pure naming). If this were not the case for reference the theory of sense must then fall back upon a theory of the object understood through the concept as the function of a variable (Frege) (see 1.4.2). In other words, as in the case of picturing, propositions must share a logical structure homologically related to that which they express. Further, from the perspective of its referability, the conceptual armature of the object's individuation must also already be in place in order for us to make truth-functional assertions about states of affairs. That is to say, in order to refer to an object, predicative content must be available in advance to the one who names. This is why Russell, wrongly, insists on naming as a form of description. ⁵³ Moreover, the criteria of individuation themselves need not be dictated by the objects-in-themselves, though they may not for all that lose their objectivity. In this sense what is

⁵³ See Russell (1905).

required of objectivity is not mind-independence, but rather intersubjective discursive invariance under appropriate conditions, which is the definition Kant gives.

Sense is not reducible, either, to manifestation. For the 'I' to be located in a field of sense, from which its functional indications usher forth, it must itself be enveloped in a complex conceptual/representational armature. For example, it might be assured by *God* as guarantor of the truth of the representations which the subject has and as cause of the whole (Descartes); or again, by the *world* as guarantor of the unity of form (Kant) which alone assures the continuity of the subject's inferences through time; or even by the concept of *cause* as the guarantor of inductive inferences about the determination of states of affairs (Hume). The 'I' for Deleuze, prior to any intentional acts of manifestation, already depends upon concepts that precede it, and which are only givable at the level of signification.⁵⁴

Lastly, despite what appears to be its promissory note with respect to the dimensions it grounds, sense cannot be made to coincide completely with signification. The problem concerns the detachment which occurs in virtue of the circularity of grounding, between the condition and conditioned, wherein the ground of the truth of a proposition is derivative of its empirical form and verification (its realization), thereby tracing the condition of possibility of the phenomena from the very things it is meant to ground. Thus, signification as conceptual mediation instantiates only the mere form of possibility, which is always less than the conditioned (the former lacking empirical content), since its form derives from it

⁵⁴ This priority of language (via sociality) to the subject is dealt with via the late Wittgenstein in 2.3.

and since its ultimate appeal—the test of the facts—lie again with it, but with which it is nonetheless identified. This then leaves the reasons for the empirical reality of phenomena (and their transcendental genesis) completely unfathomable:

Here one rises to a foundation, but that which is founded remains what it was, independently of the operation which founded it, and unaffected by it. Thus denotation remains external to the order which conditions it, and the true and the false remain indifferent to the principle which determines the possibility of the one, by allowing it only to subsist in its former relation to the other. One is perpetually referred from the conditioned to the condition, and also from the condition to the conditioned. For the condition of truth to avoid this defect, it ought to have an element of its own, distinct from the form of the conditioned. It ought to have *something unconditioned* capable of assuring a real genesis of denotation and of the other dimensions of the proposition. Thus the condition of the truth would be defined no longer as the form of conceptual possibility, but rather as ideational material or "stratum," that is to say, no longer as signification, but rather as sense. (LS 19).

The question of what the dimension of sense consists in, which "has neither physical nor mental existence" (LS 20), of what envelopes it and what it envelopes—the development of this dimension and the metaphysics appropriate to it—is precisely the point of conjunction between Deleuze's early project and the logical scaffolding of the TLP.

Sense is difficult to state, because it is, so to speak, both the whole of the proposition, and what is expressed by the proposition. As we've seen, what a proposition *says* is that it correlates or does not correlate with a state of affairs, but what it *shows* is its sense. Russell's paradox (the so-called 'barber's paradox' or 'the paradox of the set of all sets which are not members of themselves') was introduced precisely on the basis of which

Frege's logic allows a slippage between these two registers, since such a set asserts elementary content that it can only contain by contradiction—going against what is said. For this reason, the sense of the proposition must be distinguished from what it says. According to the paradox of infinite regress elaborated by Deleuze (which he also calls Frege's paradox), the sense of a proposition (or a set), while not said in that proposition, could always become the said of another proposition. It is not hard to see how this leads to the fact that there is never a final sense—one in which the sense of the whole is both said and shown all at once. 55 This is what eliminates the pretensions of signification to envelope sense—the totality of propositions and the inferential links between them can never finalize the project of sense. Instead, the development of the two heterogeneous series (saying, showing) makes language incliminably infinite. Deleuze calls this dimension of the proposition expression. It is why sense is both necessitated as a real and distinct dimension of language, but also always and only inferred indirectly, never given in itself as an explicit content. The rock on which the ship of early analytic philosophy repeatedly crashed lies on the shores of this problem of 'good sense' in which (it is supposed) the sense of a proposition can be rigorously and uniquely determined from the proposition in which its sense itself occurs, and thus, a complete and definitive *analysis* of language is possible. Despite the desperation of the early Wittgenstein concerning the determination of the whole of language from elementary propositions and the metaphysical objects of which the

⁵⁵ John Bova has diagnosed a similar problem in the search for consistency and completeness in the distinction between the syntax and semantics of formal languages and in relation to the security of knowledge in Hegel's system in the *Phenomenology of Spirit*. See, Bova's comments in DeDeo, "Seminars 3-4" of *Introduction to Future Theories of Intelligence*.

elementary propositions are the reflection, he already saw this problem of total and unique sense well and tried to rigorously distinguish the said from the shown because of it. But, he also understood immediately that any language that determined the proposition as such in relation to its sense has, in the final analysis, pure *nonsense* as its ultimate ground. This is because any finite model of a language (e.g. finite state-machine, regular language) lacks the expressive power to contain either the totality of possible propositions or a metalogical account of its own logical basis, and any infinite model with the requisite expressive power (Turing machine, Unrestricted language) cannot be made both complete and consistent. This is why Deleuze insists that the dimension of sense must represent an 'unconditioned' element, which at once guarantees that language is an open system and, at the same time, connects it necessarily with its reality or empiricity. Sense is thus always the genetic product of a matter-of-factual encounter which is, prior to the genesis of sense, an extralinguistic, nonsensical process. Yet it is only in giving rise to sense, that the metaphysics of modernism becomes possible.

1.2.3 Senses and Events

As we've already alluded to, sense is intimately bound up with the category of the event. How, then, might we outline Deleuze's concept of the event in the *Logic of Sense* from the perspective of sense? In Deleuze's vocabulary, many familiar terms and concepts take on new determinations (such as the transcendental for example), as such the following is an inexact schema of the event:

• The event is transcendental; it is neither subjective nor objective; Deleuze says events have neither, "mental nor physical existence" (LS 20);

- The event subsists, inheres, or 'insists' rather than exists;
- The event is distinct from but dependent upon the 'body' and the 'state of affairs', and the modifications of the body (actions and passions). I.e., it is distinct from the order of physical causes;
- Events have a special relationship with language, typified by the verb (the
 infinitive), around which the metaphysical functions of the noun and the
 adjective (the subject and predicate) are ramified;
- The event is not 'actual'; it is effectuated by a 'counter-actualization.' Therefore, the event is always multiply realizable in many times and in the same time (cf. the analogy of the battle (LS 100-101));
- It is characteristic of the event to elude the present. Or, put another way, the ordinary linear order of passage of tenses (of past, present, future) (Chronos) is arrested in the event. The event, instead, is infinitive; it infinitely divides past and future (Aion);
- The event is neutral or impassible with respect to its realization or actualization.

We may add still more to this list of claims and determinations regarding the event. But, in short, we may say that, with the event, a metaphysical project distinct both from substances and processes has been inaugurated. What is meant by this?

Prima facie, substances are those actual entities by which the persistence of the world obtains. (We will leave the question as to their existence, priority, and the epistemic conditions of our access to them to one side.) According to the venerable tradition of Aristotle, substances are things which perdure under accidents, and form determines their being. On the other hand, processes are those 'non-entities' by which the persistence of the world obtains (that is, for example, from one moment to the next). By the lights of

substance, it is the unalterable (as Wittgenstein calls it) which provides the guarantee of existence. This we can call actualism. By those of process, it is temporality as passage that provides the condition by which what appear as substances appear at all. Each of these poses deep and interesting philosophical problems, ones we will not get into here. However, the event is neither of these. Events are not reducible to substance or process any more than substances and processes are themselves reducible to the event. This is another way of evincing the event's insistence in the proposition or in the state of affairs. The event has no independence, no existence of its own; it makes no entity persist as such. It has only shallow, fragile, 'extra-being' (cf. LS 35). From the perspective of our investigation, one interesting question you can ask between all three is: by what right does the idea of the fact obtain? Here it seems that the metaphysics of facts remains quite mysterious. A fact is something that is thus and so. But where does this 'thus and so' occur and how is it apprehended? If it is simply by virtue of pure substances, then how, as persistent actual entities, is there room for *falsehood* to obtain in the order of mental episodes (something it seems is necessary, since in order for a fact to be what it is, it needs to have been possible for something else to have been the case, but accidents are ruled out by substances). It seems impossible for us to be wrong about Being as substance, since Being is all being, and being (as substance) simply is, the question of its being-other than it is does not arise, and thus the question of whether or not it is factual seems patently absurd. Conversely, in virtue of process facts never obtain. The continuity of real duration metaphysically precludes any non-artificial synchronic description of the state of affairs required for the determination of a fact as fact. In pure process, there are no states and so no facts. There is no independent 'thus and so' of a pure process. This is why, for example, Deleuze tells us

that pure becoming escapes 'the minimum of thinkable time.' That minimum is required for the establishment of a fact.

Where does that leave the event? Uncontroversially, facts are related to truth by virtue of a ground of truth. This ground, Deleuze and Wittgenstein, and others, call sense. Insofar as we take them as our point of departure, whatever may be claimed regarding the event is *a fortiori* true for sense as well. In describing sense, Deleuze strikes to the heart of its connection with the event as well as its connection with the metaphysics and logic of the TLP:

[Sense] ...does not merge with the proposition which expresses it any more than with the state of affairs or the quality which the proposition denotes. It is exactly the boundary between propositions and things. It is this *aliquid* at once extra-Being and inherence, that is, this minimum of being which befits inherences. It is in this sense that it is an "event": on the condition that the event is not confused with its spatio-temporal realization in a state of affairs. We will not ask therefore what is the sense of the event: the event is sense itself." (LS 22).

This may go a long way to explaining the absence of the term 'event', at least in any technical sense, in Wittgenstein's early work. Let us look then, first, for the candidates of a concept of the event in the TLP. The inaugural metaphysics of the TLP begins as a unique event in the history of philosophy:

- 1 The world is all that is the case. / Die Welt ist alles, was der Fall ist.
- 1.1 The world is the totality of facts, not of things. / Die Welt ist die Gesamtheit der Tatsachen, nicht der Dinge. (TLP 1-1.1)

These lines are often read as an early invocation of linguistic idealism in which the structure of facts will later be allied with the structure of the proposition and thus, in the end, with a

point of absolute solipsism, or an absolute 'correlation'. ⁵⁶ In general, this claim's evidence is supposed from the famous remark 5.6 in the TLP: "The limits of my language mean the limits of my world. / Die Grenzen meiner Sprache bedeuten die Grenzen meiner Welt." (TLP 5.6). And while it is undeniably true that there is a point in the TLP in which "solipsism coincides with pure realism" we would be hasty indeed if we did not understand the position from which this statement was issued. The idealist reading here depends on taking facts as mental events which are correlated somehow with the 'events' of the empirical world (or some variation of this form). But it is not at all obvious that the divisions are drawn up in the appropriate way. There is nothing to suggest in the picture theory, for example, nor even in the concept of the 'mirroring' of the world in language, that the relation between the proposition and the state of affairs is guaranteed by an a priori two-fold axial symmetry of resemblance by language of the world. On the contrary, it was from the beginning a matter of the structural priority of logic with regard both to the 'happenings', actualities, or situations of the world (as empirically realized of states of affairs) as well as to the development of propositions in language capable of possible denotations that would indicate those states of affairs. The boundary, as we have seen in Deleuze, is precisely between the proposition and the state of affairs: that is, it is sense itself. If language mirrors the world in the TLP it is not because of the resemblance of the

⁵⁶ Meillassoux understands Wittgenstein in the TLP to be articulating a version of what he calls "strong correlationism." I reject this formulation on the basis of Meillassoux's misunderstanding of the nature of 'showing' with respect to the thinking of being, and second from the basis on which Meillassoux draws out the difference being and thinking, one where thinking is still posed in an essentially representational or theoretical mode. Instead, I take a pragmatic approach to the subject of realism. Meillassoux, *After Finitude*, 28-49.

face in the mirror to the subject who gazes into it, it is rather because the mirror casts an "incorporeal double," to use Deleuze's term, in which only the *coordinates of the event* remain, only its insistence; it is precisely its 'realization,' its actuality, empiricity, or its existence which is missing. In this sense, logic is the tain of the mirror, not its reflection.

Here is the connection between the 'univocal communication of events' in the *Logic of Sense* and the preoccupation with the limits of language and the world of the TLP. Logic recapitulates the Event in which all other events are communicated. If the Event itself cannot be said (just as univocity may not be uttered without transcending itself) it is because logic—as sense, and as *eventum tantum*—means *articulation as such* (in the production of language on the one hand and in the state of affairs on the other). Logic means ontological articulation and there is thus no place from which it may stand out as an object to itself. In the limit, then, all is silence, not because one can no longer speak, but because everything is now enveloped in a single sense, and there is thus no metaproposition capable of denoting the expression—in other words, all is now *shown* in the 'static genesis' of the Event or of Logic.

Retrospectively, there cascades the whole panoply of great Deleuzian themes, in which one can witness, through Wittgenstein, a strange progenitor of the most unlikely kind: Deleuze does not resemble Wittgenstein in any way. Nevertheless, there is in the TLP, the induction of a 'virtual' field of sense which presides as the superior ground of truth (what Wittgenstein calls 'logical space'); this field is in turn populated by a multiplicity of both 'well-behaved' and 'degenerate' singularities around which the coordinates of the space articulate themselves (the Tractarian 'object' for the former, the 'metaphysical subject' for the latter); mirroring represents a non-arbitrary limen concatenating logical feature with

real determination (picture theory), the bottoming out of the system into an ineliminable nonsense within which the 'world', all signifying relations, and the subject of the event are developed and enveloped in the vertex of immanence rather than the horizon of transcendence. This is a process of thought out of which only silence emerges for itself as *showing* or *presentation*.

Of course, Wittgenstein's pathology lies precisely in the attempt to marshal this whole problematic and to bind it within the strictures of the 'total' sense of propositional and firstorder logic, to try to draw from totality something other than a profound nonsense, groundlessness, and so on. Indeed, from a psychological or biographical point of view, the involution of the system of the Tractatus was, in a very real way, the anguish of Wittgenstein, the person. However, what is nonetheless expressed, is that another articulation is possible in the displacement of good sense. Even if all-too-briefly and without sufficient consciousness of the event—the *Tractatus* shows itself as an articulation of the event of sense itself. But, perhaps it appears for Wittgenstein, through an uncanny Judeo-Christian torsion of logic, theology, and idealism, more explicitly that one may initially imagine. Insofar as Genesis is the Judeo-Christian Event par excellence, perhaps Wittgenstein invites us to read back, through the genesis of sense in the seven propositions of the Tractatus, the allegory of the seven days of creation. If all begins with the word (logos) then all must, in the day of rest, be silent.⁵⁷ The event, after all, is a matter, eminently, of the problem or paradox of the genesis of sense.

⁵⁷ On the connection between the propositions of the TLP and its relation to Genesis in the Bible, I am indebted to conversations had in Professor Kevin Mooney's course

1.3 The Metaphysical Subject and Logical Space

1.3.1 Background

Discussions of Wittgenstein's notion of solipsism in the *Tractatus* (TLP) have generally focused either on interpreting it in terms of *idealism* or in terms of *realism*, or some combination of the two.⁵⁸ Whatever their merit, these have not furnished a reason for the explicitly *point-like* character of the *metaphysical subject*, its relation to realism and the limits of language and the world. By understanding the relation between the metaphysical subject and logical space, we can ground the abstruse remarks on solipsism, and give substantive context to some conclusions of earlier commentators.

This will be done in three stages. First, by criticizing Jaako Hintikka's interpretation, one of the few that tries to configure Wittgenstein's solipsism in relation to the broader claims of the TLP. Second, by articulating the concept of *logical space* in homology to the *phase*

[&]quot;Words and Things" and especially those with Jeremy Arnott who brought these connections to light.

⁵⁸ For the idealist versions, see e.g. Tang's masterfully lucid "Transcendental Idealism in Wittgenstein's Tractatus." and Hacker's "Empirical Realism and Transcendental Solipsism." In *Insight and Illusion*, 81-107, which details Schopenhauer's influence in TLP and the *Notebooks*. For the broadly realist versions see chiefly, Hintikka's "On Wittgenstein's 'Solipsism'." but also Pihlström's "A Solipsist in a Real World." Pears' "Wittgenstein's Treatment of Solipsism in the *Tractatus*." stands somewhere between, though not exactly outside these poles. Floyd's "The Uncaptive Eye" escapes this division altogether and is the only so-called 'resolute reading' of this issue in the TLP, so far as I know, although it is not entirely in sympathy with other such readings of the TLP. We will return to many of these works in the course of the article.

space of statistical mechanics. This brings into the picture other of Wittgenstein's influences—Heinrich Hertz and Ludwig Boltzmann. Lastly, because the 'world' can be defined in relation to logical space, this allows us to work back to Wittgenstein's discussion of solipsism and gain traction on the point-like character of the Tractarian subject. Our contention is that the metaphysical subject behaves like a singularity in logical space—a problematic point where the ordinary coordination functions of the space (mirroring, correspondence, truth-functionality) are undefined, blow up, or become degenerate; and this because solipsism situates the boundary of logical space in a unique way. It is thus shown through the singularity that the metaphysics of sense is enveloped by an ineluctable nonsense with consequences for the relationship between sense and formalization as these collide in the elaboration of the genesis of sense.

1.3.2 Hintikka's Complex Subject

Without a doubt, what Wittgenstein does with the notion of solipsism is heterodox, and perhaps philosophically unique.⁵⁹ Accordingly, Jaakko Hintikka presents a formidable, if brief, account whose contention is that Wittgenstein's conception of solipsism remains

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⁵⁹ A full account of Wittgenstein's solipsism would need to consider the changes of his view from the *Notebooks*, as well as its relationship to some of Wittgenstein's early philosophical influences, which are almost entirely sublimated in the *Tractatus*. Chief among these influences on his notion of solipsism is Schopenhauer's idealism. Illuminating this connection has been done thoroughly by Hacker, in *Insight and Illusion*, 81-107, though we agree with Tang that Wittgenstein's use of Schopenhauer's nomenclature does not necessarily indicate any theoretical agreement. Also, Hacker's strategy for introducing the realist and idealist strands of the TLP has the unfortunate effect of splitting it up into its empirical and transcendental parts in a somewhat incommensurable way.

confused unless we recognize in what ways it differs radically from traditional solipsism and the problems related to it.⁶⁰ Instead of saying that language imprisons me within a private discourse, which I alone can understand and can articulate only to myself, Hintikka rightly reads Wittgenstein's claim that "the limits of my language mean the limits of my world" in terms of language in general.⁶¹ This is primarily how Wittgenstein's solipsism differs from the traditional view: the language which bounds 'my' world is publicly available, guaranteed by the necessary logical relationship inhering between language and the world, whose limit is given—in the case both of empirical reality and of the elementary propositions—by the totality of Tractarian objects⁶² (Hintikka 89). It is through this logical relationship, in its immanent limits, that Wittgenstein's concept of solipsism must be elaborated.

What is at stake in so construing the limits of language is Wittgenstein's notion of the 'metaphysical subject'. If the subject is not *in* the world, but its limit,⁶³ then we must cede the subject to the limits of language so construed. What makes it 'solipsistic' is that this limit cannot be transgressed; one must remain on this side of the limit.⁶⁴ The limit, then, according to Hintikka, is not said but shown in the totality (*Gesamtheit*) of elementary

⁶⁰ See Hintikka, "Wittgenstein's Solipsism", 89: "If I can say that something is mine, it immediately follows that this something can possibly be yours too."; and 91: "Hence, it appears rather far-fetched to see in Wittgenstein's 'solipsism' an anticipation of the troubles of the logical positivists about 'other minds'."

⁶¹ Perhaps it would be more precise to say Hintikka's interpretation involves *necessary* or *logical* language. Ibid., 89.

⁶² The status of Tractarian objects will become important in more than one way below.

⁶³ TLP 5.641

⁶⁴ TLP 5.61

propositions. Therefore, for Hintikka, in order that the metaphysical subject is associated with this limit it must be a complex—namely, the entirety of possible thoughts (*Gedanken*) given by the totality of elementary propositions.⁶⁵ Let us scrutinize this proposal.

First of all, the actual (*wirklich*) totality of elementary propositions (the subject-complex) cannot be constructed *a priori*⁶⁶—a totality which, in any case, may even be infinite.⁶⁷ Given that it cannot be constructed in advance, even if we agree that the subject is the limit of the world in relation to language in this particular sense, it seems hard to see what conceptual value this takes for the subject. The empirical limit, a given empirical totality of propositions, cannot but be accidental for Wittgenstein; it cannot be logically significant to a metaphysical notion of the subject.⁶⁸ Since the totality of elementary propositions cannot be given *a priori*, and could only accidentally be given *a posteriori*, it is difficult to see in what sense the subject is effectively limited—even if minimally.⁶⁹ So, it seems, there

⁶⁵ See Hintikka, "On Wittgenstein's Solipsism," 90. For Hintikka, Wittgenstein takes *Gedanke* in the Fregean (viz., public, objective) sense, as opposed to the private *Vorstellung*. The relationship between Frege and Wittgenstein for 'thought' and 'thinking' is nonetheless contentious: see, especially, Floyd, "Uncaptive Eye".

⁶⁶ See TLP 5.55. Although the necessity of the totality can be derived *a priori* on logical grounds, cf. TLP 4.2211.

 $^{^{67}}$ This is clearly dependent on the number of objects; see again TLP 4.2211 and 5.55.

⁶⁸ Cf. TLP 2.012: "In logic nothing is accidental..."; 6.1232: "The general validity of logic might be called essential, in contrast to the accidental general validity of such propositions as 'All men are mortal'; 6.41: "The sense of the world must lie outside the world. [...] For all that happens and is the case is accidental..."

⁶⁹ Both Pears and Floyd reach the conclusion that these limits are not 'true' limits, though for very different reasons. Floyd sees it as a methodological effect: denuding us of the traditional metaphysical presuppositions about limits to thought is part of getting us to see with an 'uncaptive eye'; Pears (1972), on the other hand, sees it merely as a theoretical consequence of the fact the subject is not part of the world, and thus that "...solipsism is not genuinely restrictive because it is a useless reference point.", 70. I am more inclined to the latter, although his account remains too negative in its determination,

is a stale mate: on the one hand, there is no empirical subject for Wittgenstein, and on the other, the metaphysical subject (*a la* Hintikka) is not manifest without some kind of construction of the totality—it remains to be seen how we could run up against these limits except through an in principle argument which is absent from his view.

Secondly, what is occluded in Hintikka's account of the subject construed as complex is that Wittgenstein allies it not only with the limits of language and world, but also ascribes to it a point, conceives it just as this point; and claims that 'the soul' (the subject) is not thinkable in composite terms. To work through this, we need to look at Hintikka's reading of propositional attitudes in the TLP⁷⁰ on which hinge his interpretation of the complex.

Hintikka is right to insist that when Wittgenstein states "A believes that p', 'A has the thought p', 'A says p' are of the form "p" says p'"⁷¹ this 'p' refers to a propositional sign which pictures a fact p, ⁷² however he errs when he then associates the complex of the proposition with Wittgenstein's concept of the metaphysical subject (and jumps from this intra-propositional complex to the complex of the totality of propositions): Wittgenstein's point is to show that there is no logically valid way to conceive of a complex (metaphysical) subject which "thinks or entertains ideas,"⁷³ since any complex whatsoever cashes out discursively only in terms of logical relations between propositions (or between names of

and strips even the *showing* of its truth from solipsism, not only our ability to *say* what it means.

⁷⁰ TLP 5.541-5.5421.

⁷¹ TLP 5.541.

⁷² Hintikka, "Solipsism", 90.

⁷³ TLP 5.631. The German reads: "Das denkende, vorstellende, Subjekt gibt es nicht."

objects in elementary propositions), not in terms of some thinking substance which maintains itself over above language, as the notation of the propositional attitudes makes it appear. The subject (the soul) for Wittgenstein is not complex, but unavoidably non-composite, "[i]ndeed a composite soul would no longer be a soul."⁷⁴ At the same time, it must clearly also constitute the limit of the world.

Finally, the most outstanding omission of Hintikka's embodies the crux of Wittgenstein's solipsistic view. The contention that the subject is point-like in the TLP seems unmistakable. This characteristic of the subject also provides the conceptual ground relating Wittgenstein's solipsism to the traditional (Cartesian) view most clearly—namely, that the subject is without extension: "[t]he I of solipsism shrinks to a point without extension, and there remains the reality [*Realität*] co-ordinated with it."⁷⁵

Such a point-subject, insofar as it must also be construed in terms of the limit, in my view, can only be understood as a *singularity*—a problematic or remarkable point—within the metaphysics of the logical space established by the *Tractatus*. In so construing logical space in its relation to the metaphysical subject, a positive account of Wittgenstein's solipsism is given taking into account both the *point* and the *limit*—one that also establishes what kind of 'subject' the *Tractatus* provides.

⁷⁴ Ibid., 5.5421.

⁷⁵ Ibid., 5.64.

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1.3.3 Logical Space and Phase Space

The term 'logical space' occurs on the first page of the TLP: "The facts [Tatsachen] in logical space are the world." But we also know that the world is not co-extensive with logical space, since "the world is all that is the case" and because logical space does not determine what is the case but rather, so to speak, the form of the world. That Tractarian objects imply, essentially, their possible constituency in states of affairs (Sachverhalten)⁷⁸ is manifest through the form-spaces of objects, which are specified by 'what is the case', or 'reality' (Wirklichkeit): "A spatial object must be situated in infinite space (a spatial point in an argument-place.) A speck in the visual field, though it need not be red, must have some colour: it is, so to speak, surrounded by colour-space." Logical space, then, is the coordination-space of the possible specifications of the form-spaces of objects, that is to say, of the possible concatenation of objects (into states of affairs): "The possibility of occurring in states of affairs is the form of the object" Each thing is, as it were, in a space of possible states of affairs."

⁷⁶ TLP 1.13.

⁷⁷ Ibid., 1.

⁷⁸ Ibid., 2.011-2.0122.

⁷⁹ Ibid., 2.0131.

⁸⁰ Ibid., 2.0141.

⁸¹ Ibid., 2.013.

As we know, this is the ground from which the picture theory is built. 82 However, Wittgenstein's injunction is not so much in formalizing a realist theory of logical correspondence in relation to valid forms of representation (roughly the business Frege and Russel were in) but, instead, to ask after the *necessity* of logic—to ask why there are formal sense-conditions on the implementation of signs at all. If they exist, then there *must* be limiting conditions (forms) related to that which the proposition pictures, otherwise there is no reason why propositions would ever have sense-efficacy with respect to the picturing of facts in the first place. Hence, from this point of view, *logic is that which inheres between the proposition and the state of affairs*. If an allegeds proposition does not satisfy the logico-pictorial form of that which it supposedly pictures, it is not a linguistic fact, but a fact among others. Propositional signs divorced from their symbols (in the Tractarian sense) are, so to speak, simply 'material' facts—e.g. physical marks on a substrate. Logical space is, then, the domain of formal inherence conditions between language and the world—it does not belong to language as such. 83

Given that valid propositions are not simply true by virtue of their validity, but are truth-functional, language does not pertain merely to what is the case—as the world, actuality (*wirklichkeit*) must—but to its possibility. And thus, the articulation of logical space is given in propositional form. Language can express *possible* states of affairs—this is a

⁸² For a concise introduction to the picture theory in the TLP, see, Kenny, "The Picture Theory of the Proposition." in *Wittgenstein*, 44-56. Although introductory, Kenny's elaboration of the theory has the strength of *explicitly* avoiding interpreting 'pictorial form' on the basis of resemblances.

⁸³ As we will see, the inherence of logic has widespread metaphysical and epistemological consequences that will come to ground the said/shown distinction.

requirement of its truth-functionality. The fact that it can do this, for Wittgenstein, means it is co-extensive with logical space, in principle. But logical space articulates the possibility of the world—whatever *could* be the case—its limits. Therefore, the limits of language mean the limits of the world.

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In the same way that a phase space is a quasi-geometrical space of possible states of a dynamical system, whose axes are the degrees of freedom of the system (e.g. possible positions and momenta of an ensemble of gas particles in a volume), logical space depicts possible states (of affairs), whose 'axes' are the form-spaces of objects, the possibilities of their connection in a state of affairs.⁸⁴ Harré confirms this in his foray into the extraphilosophical dimensions of the TLP:

As Boltzmann and Hertz emphasize the propositions of physics are differential equations, the domains of which are manifolds of numbers, representing

For the history of the emergence of the formal concepts involved and the invention of the term 'phase space,' see Nolte, "The Tangled Tale of Phase Space", 33-38.

Whether or not Wittgenstein was conscious of or intended an analogy with phase space is of little concern here, since we are only interested in thinking through Wittgenstein, not trying to ascertain his motivations, or even necessarily what L.W., the man, had in mind, but rather what the ideas and text of the TLP afford us. Nevertheless, even though Boltzmann himself never used the term 'phase space' in his own writing, the content of the idea was apparent in his writings from the 1870's on, and Wittgenstein we know was familiar with the ideas of Boltzmann, especially through Hertz's *Principles of Mechanics* and Boltzmann's *Populäre Schriften* (for the latter see, Boltzmann, *Theoretical Physics and Philosophical Problems*). For the biographical evidence see, Monk, *The Duty of Genius*, 26-7. Monk also claims that the Wittgenstein family had plans for the young Ludwig to study with Boltzmann in Vienna before the latter's suicide of 1906. He went instead went to Manchester. Hamilton in her "*Darstellungen* in *The Principles of Mechanics* and the *Tractatus*" also corroborates this.

possibilities which might or might not be realized by the development of real systems, represented by particular sets of values of the parameters that define their possible states. Physics, too, handles this routinely by the construction of phase-spaces, to represent all possible states of a system... What else is a truth-table representation of a proposition but a phase space in ultimate logical terms?⁸⁵

Truth-tables may be "displays of the detailed topography of logical space," but, of course, there is no developed formal or geometrical account of logical space in the TLP, so our analogy must here remain conceptual. Nevertheless, a tradition of intermittent secondary literature has fixed on the role of science, and of Wittgenstein's scientific training, in Wittgenstein's philosophy. No understand the connection to his concept of logical space, it is worth drawing attention to several recent works which aid our delimitation of the notion of possibility in the TLP.

Mark Wilson's investigation of 'Reuleaux developments' and Reuleaux's conception of 'machine essences' elucidates important aspects of the Tractarian view of logical states of

⁸⁵ Harré, "Wittgenstein: Science and Religion", 218.

⁸⁶ Harré, "The Tractatus and the German Interpretation of Physics", cited in Pârvu, "*Meine Grundgedanke ist...*", 268.

⁸⁷ There have been explicit formalizations the concept of logical space into a genuine quasi-geometrical space. These necessarily extend beyond the bounds of strict scholarship on the TLP. See, e.g. Turner, *The Facts in Logical Space*. Since Turner's and others' works in this direction are not strictly germane to the discussion of Wittgenstein's works, or to our philosophical concerns, we make no claims about them here.

⁸⁸ Of course, this literature reaches as far back as the Vienna Circle interpretation of the TLP, but the discourse of the stripe that holds our attention here begins from somewhat different motivations, and stems (in Pârvu's estimation) from Griffin's 1964 monograph, *Wittgenstein's Logical Atomism*.

⁸⁹ See for example, Wilson, "Wittgenstein: *Physica Sunt Non Leguntur*"; Hamilton, "*Darstellungen*", Kallenberg, "Rethinking Fideism Through the Lens of Wittgenstein's Engineering Outlook."

possibility; more generally, it points to the methodological role idealization plays in Wittgenstein's view of science. Although there is a great deal to admire in Wilson's essay on its own merits, he nonetheless misapprehends Wittgenstein's relation to transcendental philosophy (and thus the role of idealization) by privileging a form of physicalism in his analyses not necessarily in keeping with Wittgenstein's own view of science, metaphysics, knowledge and belief. On the one hand, Wilson is fairly straightforward about his disagreement with Wittgenstein's view and appraisal of science. On the other hand, he rather flippantly conflates the romantic (Coleridgean) view of scientific enterprise, with that of the critical view of ontological claims held by Hertz, et al., as with that of Wittgenstein's apparent dismissals of scientific discourse as philosophically irrelevant. These claims require more careful attention then is given by Wilson. 91

Kelly Hamilton's comparative study of Hertz and Wittgenstein addresses an essential correspondence between the two thinkers on their parallel conceptions of the 'object'. For

both, objects are eminently relational, ontologically primitive, but plural conditions of

⁹⁰ Alongside Wilson's work, Kallenberg in "Rethinking Fideism" has also interestingly shown how specific engineering concepts (the method of projection, dynamical similarity, satisfactoriness) generally affect Wittgenstein's (later) approach to philosophical problems, and specifically his treatment of questions of knowledge and belief.

⁹¹ That said, Wilson's interest in the difference of focus between Reuleaux's work and Hertz's—i.e., in the ends of "machine design" rather than "behavioral description per se"—is well worth further probing. Also, Wilson's notion of 'distributed normativity,' especially, and its use in the analysis of ends and means distinctions, is of emphatic interest and very general philosophical import. This is clearly beyond the scope here, however.

possibility of intelligible structure.⁹² Despite the integrity given to Hertz's and Wittgenstein's ideas, Hamilton does not countenance the point-like character of Tractarian objects (something shared with the point particles of Hertz's physical formalism), and thus this excavation does not cradle the Tractarian object within the broader logical and metaphysical coordinates of logical space.⁹³

Finally, Ilie Pârvu⁹⁴ conceives of the TLP as a theory of 'structural representation'⁹⁵ that pushes transcendental philosophy beyond the purview of Kant. Pârvu's exegetical strategy of 'rational generalization' employs two stages through which the concept of logical space is naturally implicated with phase space. The first is hypothetical extension, and the second is transcendentally real conditioning. The first stage involves the *extension* of the hypothetical elements implicit in some observed fact. Within it, the stipulated objects of

⁹² With this correspondence she gives a nuanced account of the relationships of priority between possibility and actuality (that is, between what she distinguishes as 'form' and 'structure') in the TLP.

⁹³ For all of the above see, Hamilton, "Darstellungen". Curiously, while Wilson sees Hertz's mechanics as overly ideal in relation to its claims (within which the Hertzian 'object' represents the unobservable in science par excellence), Hamilton understands the critical import, and theoretical dimensions of the object in both Hertz and Wittgenstein to stem from their resistance to abstraction, and their love of the concrete. How both of these claims can be entertained is not easily explicable. Though we are more tempted by Hamilton's proposal in understanding Wittgenstein's intellectual biography, both Wilson and Hamilton have, so to speak, partial views of the same problem regarding the status of the transcendental in Wittgenstein's corpus and its relation to naturalism. Part of a solution is hinted at through Pârvu below.

⁹⁴ See Pârvu, "'Meine Grundgedanke ist...'" In line with the above as it relates to the "German interpretation of physics," see also Harré, "Wittgenstein: Science and Religion."

⁹⁵ On the notion of 'structural representation' see Swoyer, "Structural Representation and Surrogative Reasoning."

some propositions (say, of point particles in physics) are ontologically extended by virtue of their ostensive role in the regularity, form, or lawfulness of that in which they appear. ⁹⁶ This stage translates the ontology of a theory from actually observed phenomena to hypothetically postulated, merely possible objects. 97 In this stage the 'object' is a methodological or epistemological artefact, a useful idealization. The second stage Pârvu calls metaphysical or transcendental: through it these mere possibles become the conditions of possibility for some actual state given in the extension of the theory (they move from ideal-extensions, or hypothetical entities, to that from which the observed actuality must issue). In the metaphysical second stage, this preliminary extension is no longer hypothetical or *ideal* (in the sense of a useful fiction), but instead is transposed onto a transcendentally real field on which its ensemble of possibilities rest. "The Ideal extension becomes the very basis or the condition of possibility for the real domain." 98 It is the second stage—that "subsume[s] both the real and the ideal"—which authorizes the isomorphism between logical and phases spaces, since logical space then becomes the whole virtual expression of all the possible states of affairs: "in the case of Hertz and Boltzmann, this moment is accomplished by the idea of 'phase space' by which all possible

⁹⁶ This is how the atomic theory of point-masses was used in the origins of statistical mechanics (for example in Hertz and Boltzmann), since the former had not yet been verified experimentally.

⁹⁷ Pârvu, "*Meine Grundgedanke ist...*", 264. In this sense they are useful fictions, or idealizations.

⁹⁸ Ibid., 264.

states of a system are represented. In the *Tractatus* we find 'logical space'."⁹⁹ Logical space—given that its scope goes beyond mechanics—is therefore the metaphysical generalization of the coordination of phase space.

* * *

Despite the isomorphism of coordination, there is a point of contrast between them, which we must now use to elucidate a paradox arising from Tractarian solipsism. An essential presupposition of phase spaces in statistical mechanics is that a system must be taken as closed. This presupposition allows the states of a phase space to be implemented in behavioral predictions. A more or less arbitrary spatial constraint, delimiting a certain volume as a frame for its elements, provides the ground of the measure and comparison of micro-states, as well as the evaluative map for the coarse-graining of the theory into macrostates, on the basis of like distributions of elements in the possible micro-states of a given volume. ¹⁰⁰ In this way, the *content* of the system in phase space is ignored in relation to

⁹⁹ Ibid., 265. There is much more to be said for the intricacies of Pârvu's delimitation of the Tractarian version of a structural metaphysics, especially as it is entangled with transcendental philosophy, which we, unfortunately, have no space for here.

¹⁰⁰ This presupposition is also necessary for Boltzmann's probabilistic understanding of entropy. The relative justification for this is the differential-geometrical derivation of the conservation of volume under possible changes of states in the distribution of the particles in that volume. See, Nolte, "The Tangled Tale", 35: "In the derivation of dynamical probability distributions, Boltzmann required the use of what we now know as conservation of volume in phase space." It nonetheless still requires the number of particles (and thus the number of possible states) to remain fixed, *a priori*.

the *limits* of that system. ¹⁰¹ No such equivalence can be found in relation to logical space, and no such exogenous presupposition can be given in relation to its limits (by virtue of the principle of relationality). If this *were* the case for logical space, then Wittgenstein should, in principle, be able to step outside his own theoretical frame and give us the totality of elementary propositions, but he cannot.

So, compiling our results, if it is true that logical space determines the possibility of the world—that is, the absolute limit—it follows that whatever those limits are *could not be otherwise*; since they represent the boundary of the possible itself, it thus becomes *impossible* to *say* how it is that they are the limits, at least from the point of view of a closed system, since there is no possible *punctum Archimedis* from which to anchor one's metaphysical lever: "[f]eeling the world as a limited whole—it is this that is mystical." Since logical space determines both the conditions of sense *and* possible states of affairs, how is it that we come to view logic as intelligibly able to fix rules for the implementation of signs, of saying, since in a sense, we could not err, i.e., logical form is already at work in everything and all possible propositions must occur within the bounds of the space they articulate? This is the signal conundrum—what I will call the *Tractarian paradox of*

¹⁰¹ Pears, "Solipsism in the *Tractatus*", 72-73, indicates that this is not the case with logic, that the contents of logical space themselves "fix the limits of the receptacle." This he uses to argue why showing the limits is possible, but not saying them.

¹⁰² TLP 6.45.

¹⁰³ This is also what is behind Wittgenstein's invocation in the *Notebooks*: "Logic must take care of itself.", 2e. See also, TLP 5.473.

immanence—which occupies the remarks of the TLP from the 5.4's until the end of the treatise. 104

1.3.4 Solipsism, the Metaphysical Subject, and Singularity.

Because logical space is the form of the world, or determines its possibility necessarily, and language is coextensive with that space, it is obvious that the limits of language mean the limits of the world. And since it is "the only language I understand" ("der Sprache, die allein ich verstehe")¹⁰⁵ it follows easily that "the limits of my language mean the limits of my world."¹⁰⁶ But we cannot countenance the empirical subject, so we are obliged to think the metaphysical subject in a non-trivial way.¹⁰⁷

¹⁰⁴ There is a related issue pertaining to the idea of a boundary which it seems it must have in order for depiction to work, in order for there to be anything like "logico-pictorial form". If there is a boundary, then, one would assume logical space has a shape, which Wittgenstein seems to gesture at in at least one place: "I also always find myself at a particular point in my visual space, so my visual space has as it were a shape.", *Notebooks*, 86; cf. TLP 5.6331. If logical space were formalized, it may be possible to specify the shape of its space immanently using relations within the space (by analogy to the way in which topologies can be determined from geometrical facts in the space), which may shed light on other logical relations that obtain. This is, however, beyond both my prowess and the scope of the issues here.

¹⁰⁵ Ibid., 5.62.

¹⁰⁶ Ibid., 5.6. It is not insignificant that Wittgenstein choses the verb 'to mean' here instead of 'to be'. This puts the limit in a referential relationship of language with the world since Wittgenstein has in mind here the Fregean sense of *Beteutung* as 'reference'. "A name means an object" (3.203) has the same indicative or indexical sense. This falls outside sensical truth-function, since it is (in the case of the relation of the names and objects) stipulated 'meaning'.

¹⁰⁷ Many commentators have given trivial accounts of Wittgenstein's solipsism for different reasons: the realist wants to make it trivial in order to save realism from well-known classical problems of solipsistic skepticism (cf. Hintikka), the idealist wants to turn it into a trivial (read: non-synthetic, non-contentful, or 'thin') form of Kant's "I

The I of solipsism shrinks to a point without extension, and there remains the reality coordinated with it.

...[T]he metaphysical subject, the limit of the world—not part of it. 108

Since we have established that logical space articulates the limits of logic, then we must assume that solipsism maintains some relation with logical space. Because the metaphysical subject is also associated with the limit, we know too that it is not a content of logical space in any ordinary sense—it is not an empirical content among others. Based on the assertion quoted above, we also know that the subject must be point-like. But solipsism cannot be attested to because it cannot have a sense which lies inside the world—this is to say no more than has already been said regarding the limits of language and its relation to immanence (*punctum Archimedis*).

The ordinary points of logical space—as is hopefully clear—are the objects of states of affairs. As we saw with Hamilton, these objects are never independent of, or isolated from, the possible states of affairs (complexes) which they constitute. The relationality of objects determines that sense only occurs at the level of logical relations in form spaces, or, put to the side of language, at the syntactical level of the proposition. Names, in-and-of themselves, have no sense; they are merely indicators or 'deputizing symbols.' Objects are, in themselves, simple. Because they are simple, they are points in the space. However,

think," the "transcendental unity of apperception" (cf. Tang, Hacker). 'New' Wittgensteinians want to make it theoretically trivial, but ethically or practically strategic, and they do so in various ways (cf. Floyd). All of these are unsatisfying accounts because they cannot provide any positive formulation of Wittgenstein's concept—this difficulty is in part, no doubt, because he says it can only be shown.

¹⁰⁸ TLP 6.4.

since objects can in no significant conceptual or functional way be considered the limit of logical space (even if they are elementary), and since these points are constitutive of its functions, we call these points regular or ordinary (merely possible or actually real). By contrast, the metaphysical subject, as a point, does not behave as the ordinary points do, but in a logically degenerate way. In some sense this point, by virtue of the limit, virtually contains all the coordinations and possibilities of logical space, but not in such a way as to be itself amenable to truth functionality (that is, amenable to empirical articulation). The metaphysical subject cannot be an empirical feature of the world, but it is nonetheless not hypothetical or ideal. ¹⁰⁹ The metaphysical subject is a transcendentally real point: I call such a limit-point a singularity.

* * *

A singularity in mathematics is a point in some system—often a coordinate system—whose function is undefined, or a problematic point in which an ordinary function behaves in a 'degenerate' way. "In general, a singularity is a point at which an equation, surface, etc., blows up or becomes degenerate." For example, consider the function f(x) = a/x, where 'a' is a non-negative real number, such that as x approaches x0, x1, is 'undefined' or blows up to infinity at the limit: x2, For this function, we would call the value x3 a singularity. Such a point is 'degenerate' insofar as it poses problems for the rules governing the ordinary operations of arithmetic.

¹⁰⁹ TLP 5.631-5.633.

¹¹⁰ Weisstein, "Singularity."

Geometrically, consider the geographic coordinate system of longitude and latitude on the Earth. Lines of longitude define the distribution of time-zones on the Earth, allowing us to determine, given the velocity of an object on a given path, how many time-zones will be traversed in a time *t*. However, at the poles of the Earth, these are undefined, leading to an output where we could traverse all time zones an infinite number of times, in an infinitesimal duration, for arbitrarily small velocities. Here the singularities of the poles pose problems for the metrical evaluation of distances over time; they are degenerate with respect to the functional specification of the time zone. These are, however, trivial examples—so-called 'removable' or 'non-essential' singularities.

The metaphysical subject, so it seems, is ineliminable or 'essential.' Nevertheless, the examples above serve a didactic purpose for us. We can see that, in some sense, the values or coordinates of the system as a whole are virtually contained in these singularities: informally, 'all' the numbers are 'contained' at infinity, all time zones are 'contained' at the poles, etc. If Tractarian objects in logical space are ordinary points, then the limit-point of the subject is a singularity in the sense in which all the ordinary results of truth functionality are virtually 'contained,' though they are not themselves truth-functional in the singularity. However, neither are they trivially *senseless* (*sinnlos* as opposed to nonsensical (*unsinnig*)) in the way in which tautology and contradiction are, since if they were contradictory the question of the limit would disappear, and if they were tautological they would be sayable as such. The metaphysical subject is the point at which the putative completeness or consistency of logical space breaks down. The metaphysical subject is a degenerate point in the coordination of logical space since it cannot be folded back into the statement of a truth-apt state of affairs; this is why it is 'metaphysical.' Nevertheless, from

this perspective, solipsism "coincides with pure realism", "...there remains the reality *coordinated* with it", since all the truth-functional mapping of propositions to states of affairs holds equally well for all ordinary points in logical space. Solipsism cannot be said, not because it is senseless, but because it is *nonsensical* (*unsinnig*) to try and determine the singularity of the metaphysical subject in the world (from which its determinations degenerate), which alone would allow one a truth-apt statement of a possible state of affairs. It is in this precise sense the limit of the world, and not part of it—it is nonsensical because singular and yet ineliminable, the point from which reality, as sayable, seems to spring. Thus, if the limit of the world and the boundary of logical space are equivalent, we could present this equivalence through the coordinates of the Riemann sphere: 112

¹¹¹ TLP 5.64, my italics.

¹¹² Of course, using the Riemann sphere is meant to illustrate quasi-geometrical ideas about the singularity—its use should be taken with a grain of salt when trying to elaborate a rigorous formal notion logical space, which is not within our purview here. For example, one would have to account for the south pole of the Riemann sphere representing the origin on the complex plane. The origin seems little more than a registration point and does not pose problems for the structure under transformation. Even if heuristic, the image is, I think, instructive.

To capture an intuition of the relationship between the Riemann sphere and projection onto the plane see the video illustration by Segerman, "Stereographic projection.".

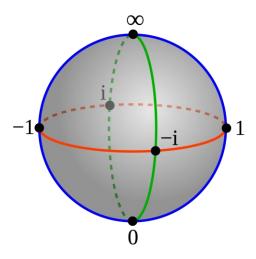


Figure 1 – Riemann Sphere (Klipp 2018)

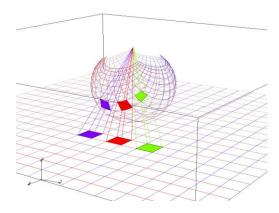


Figure 2 – Stereographic projection from the Riemann Sphere at ∞ to the complex plane (Xah 2015).

Let us assume that logical space is bounded but infinite as in the coordinates on the surface of the Riemann sphere. Here each point on the sphere can be uniquely projected to each point on the plane (see Figs. 1-2). The point at the north pole of the Riemann sphere is then projected radially—tangent to the sphere, and parallel with the plane—as a point at infinity

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¹¹³ Since logical multiplicity is determined by the number of objects, but this number is not given, there should be no objection to an assumption about the size of the space.

in any direction on the plane. Then the subject-point as the limit of the world (here articulated by the north pole in Fig. 1) appears as a singularity on the sphere, but as the boundary (at infinity) when projected onto the plane. And since, in some sense, the whole of logical space is 'contained' at this limit (since it virtually 'contains' the 'totality' of the propositions of logical space), credence can be given to its characterization as solipsistic, even if it is also, in another sense, not genuinely 'restrictive,' for reasons of logical necessity. This would explain why I never run up against the limit of the world (empirically), and why I am not even able to *say* what the limit is (because of course there is 'nothing' as it were, on the other side of the boundary). Neither could I rightfully *say* that the subject is the limit of the world; I could never rigorously attest to the truth of solipsism, except speculatively, which, for Wittgenstein, leads only to metaphysical confusion when articulated discursively.

Finally then, we can say that as a singularity in logical space, undefined in relation to truth-value, the metaphysical subject obtains concretely the *paradox of immanence* consequent to the inherence of logic necessary for the Tractarian theory of language—the very thing that precipitates the involution of the theoretical apparatus of the *Tractatus* itself.

1.3.5 Transcendental Singularities

Just as there are attractors in meteorological, economic, and population dynamics; centers of gravity where no body is present; points of resonance—positive and negative feedback—in sonorous and physical systems; and critical thresholds of temperature and other parameters in the phase transitions of the material properties of objects, there is also

the involvement of singularities in the genesis of experience. As we have already stated, our concern here has been to make sense of solipsism in the TLP, but solipsism (classically defined) relates a locus of experience (its partiality) to the conditions of its possibility (e.g., the objects of its 'knowledge'), while excluding those conditions as accessible to its perspective. If experience had no locus, if it weren't partial, there would be no grounds for skepticism about what appears in it (either about objects in-themselves or about other minds) since experience would amount to a simple adequation with what is real in toto, but if any given experience can be acknowledged as partial, then the apprehension of its own perspective must be possible from the outset, and thus, it must then have, internal to its own manifold, access to its conditions. Kant hatched upon this solution but required of it the form of the 'I' in the transcendental unity of apperception. This ensured the unity of the self, wherein experience as consciousness is said to be 'possible' and assumed that only the form of its possibility suffices to vouchsafe for all experience. My contention here is that Wittgenstein is the first—obliquely, obscurely, negatively, and unconsciously—to show in what way the collapse of solipsism with pure realism signifies nothing other than the genesis of sense, and gives realism back to experience, without recourse to the form of consciousness. 114 In a sense, the relation between experience and realism in the TLP was

This is liable to provoke confusion and ire in those who assume that the necessary use of consciousness in explanation requires explanatory recourse to the form of consciousness (e.g. the conceptually-laden character of experience) in order to avoid dogmatism or the myth of the given. It is our contention that, in our conceptual-ladenness, it is not possible *not* to make recourse in turn to its metaphysically real background in order to explain the effectiveness of the epistemic dimension of our activities—and that this is all we could ever mean by the term 'realism'. It is thus the job of a genetic account of sense to elaborate the structure of that metaphysical underpinning, without falling back on a pre-critical understanding of metaphysics. Thus, I maintain, it *is* possible at once to affirm the conceptually-laden character of experience without making

already dimly viewed by the Vienna Circle, who then tried to imprison a full-blooded notion of experience within the courthouse of philosophy, as they attempted, too, to adjudicate the validity of scientific enterprise through an ultimate appeal to logically pure notions of observation and verification. Science, in any case, had no need of the judgment of philosophy to verify its successes. In this interpretation, Carnap tragically misapprehended Wittgenstein's silence, the silence of the TLP, as a denigration of what cannot be 'said' in experience (metaphysics, ethics, aesthetics, etc.), that is, what cannot be given the overt and explicit empirical form through which natural scientific knowledge has flourished. Such denigration, of course, was anything but Wittgenstein's aim. Our claim is that in the relation between experience and the real, Wittgenstein's notion of the metaphysical subject entertains a subterranean alliance with Deleuze's dramatic ramification of the concept of experience, its entanglement with an equally ramified version of the transcendental, and his conception of singularities as they pertain to each of the former.

As we agreed, Hintikka is right to object to the interpretation of Wittgenstein's solipsism as a private language, or a form of linguistic idealism, in the personal or subjectivist sense

explanatory recourse to that character in a genetic account of experience, since presupposing it begs the question of the very thing we hope to explain. This does not mean we take there to be anything like an immediate datum of consciousness, or that thought is *epistemically* founded on empirically given non-conceptual contents, or that there is such a thing as a non-inferential knowing (taken in the sense of propositional deliberation). But, for all that, there is such a thing as non-inferential being, as well as legitimately articulatable, non-epistemic, non-conceptual contents of experience, which we can (and must) nonetheless countenance conceptually. These are what count in relation to a theory of the genesis of sense.

¹¹⁵ See, for example, Carnap, *The Logical Syntax of Language*.

of the term. But, as we have shown, the subject is not given by a complex of propositions constituting the limit of the world. This would make the subject both empirical and composite; it is instead transcendental and singular. This is why we have insisted on its characterization as a singularity: only a singularity constitutes both the limit and the point, and effectively renders the transcendental concrete in its abstraction. But what does this mean for experience? What kind of 'subject' is metaphysical?

If the solipsism of the TLP is heterodox, it is because it is not a personal solipsism (as for example one can imagine both in Cartesian rationalism and in the sense-impression-based Berkeleyan skepticism). Rather the metaphysical subject is impersonal. If it retains a nominal form of the 'I' in the sense in which "the world is my world" or in which "I am the microcosm," is this artifact not due to Wittgenstein's perspective being colored by the language he had inherited—namely, the language of the idealist who could not think outside certain forms of consciousness and agency (Kant's 'I think', Schopenhauer's 'will')? After all, "there is no subject which thinks or entertains ideas" and, "[i]t is impossible to speak about the will insofar as it is the subject of ethical attributes."

Given what we have already brought to bear against Hintikka's view of the complex and its empirical character, the subject-point (the singularity) is not only transcendental and impersonal, but also pre-individual. There is no 'empirical subject' just in the sense in which empirically constituted individuals are already composed of states of affairs

¹¹⁶ TLP 5.631.

¹¹⁷ Ibid. 6.423.

described at a certain level of propositional complexity (and which can be decomposed or analyzed). According to Wittgenstein, this is a problem for empirical psychology, but not for philosophy. Again, this relates to what we took issue with in Hintikka's view, its reliance on the notation of propositional attitudes, which Wittgenstein rejects in Russell. It presupposes a thinking subject, which appears at once empirical yet hopelessly transcendent (rather than transcendental), because it hovers over the proposition, that which articulates states of affairs, i.e. the facts of its own existence.

The characteristics of the metaphysical subject, on the other hand, as impersonal and preindividual, are precisely what constitute Deleuze's definition of singularities in a properly transcendental manner. Deleuze accounts for the genesis of experience within real experience itself, without for all that eliminating the genetic distinction between the transcendental and the empirical, but also without making of their difference a dualism:

We seek to determine an impersonal and pre-individual transcendental field, which does not resemble the corresponding empirical fields, and which nevertheless is not confused with an undifferentiated depth. This field cannot be determined as that of a consciousness... A consciousness is nothing without a synthesis of unification, but there is no synthesis of unification of consciousness without the form of the I, or the point of view of the Self. What is neither individual nor personal are, on the contrary, emissions of singularities...Singularities are the true transcendental events... Far from being individual or personal, singularities preside over the genesis of individuals and persons; they are distributed in a 'potential' which admits neither Self nor I, but which produces them by actualizing

or realizing itself, although the figures of this actualization do not at all resemble the realized potential. 118

It is certainly not our contention that Wittgenstein had an account of the productivity of the singularity as such or of the ways in which the transcendental and the empirical need not be categorically opposed to one another but, on the contrary, can be insisted upon as immanent and interrelated. Whatever the shortcomings of the TLP relative to Deleuze's program, did Wittgenstein not assemble an obscure and confused forecast of it? Aren't the metaphysical subject and logical space the coordinates by which the genesis of experience could be distributed in a potential? This seems to be hampered only by the fact that, for Wittgenstein, there is only a single singularity: he had not yet understood that singularities—and the paradoxical characteristic of their being at once limit and point, structure and genesis, neutrality and productivity—only occur in the plural. And that this plurality of singularities is distributed and constituted by its very empirical instantiation—just as the Tractarian objects must be, since they represent the genesis of *logical structure*

¹¹⁸ LS 102-3. We cannot stress highly enough the importance of Deleuze's notion of the transcendental and its relation to experience and the notion of the singularity, for—viewed carefully, perspicuously, uncaptively enough—it promises the greatest contributions to a univocal account of mind and matter, which suffers neither from spiritualism, nor from the ham-fisted thinking from which reductionism draws opaque conclusions about what is (and is not) possible in nature. It offers a metaphysical point of view whereby real differences in kind are *immanently* possible, and a stance from which it is possible, also, to imagine the genesis of experience from without, rather than by stifling its originary externality from within (e.g. in the form of consciousness). It can show us in many ways how most of the trenchant problems of analytic philosophy of mind (whether of the phenomenalist or of the reductionist) stem from poorly posed problems. Unfortunately, it cannot be our task to convince the reader here.

by virtue of the ineliminable concomitance of objects that is itself the individual *form of* the object.

For Deleuze, by contrast, singularities only exist in an open multiplicity of indefinitely coconstituted ontological expressions, not by virtue of an *a priori* closed set of objective possibilities—that is, not in the determinate totality of the 'limited whole'. Nonetheless, in the singular subject—which is, in the final analysis, his peculiar loneliness, his solipsism— Wittgenstein attempted to embrace the world entire.

1.4 Analysis and Synthesis

According to Kant, the central question of philosophy is 'How are synthetical judgments a priori possible?'. But antecedently to this comes the question how synthetical judgments in general, and still more generally, how synthetical reasoning is possible at all.

- C. S. Peirce, "Grounds of Validity of the Laws of Logic" (1869)

Are set theorists now discovering more about the universe to which Cantor showed them the way, or are they continuing the creative process? Perhaps they are wandering in a wonderland which is no more understandable and no more substantial than that in which Alice, in Lewis Carroll's Alice in Wonderland, found herself.

– Mary Tiles, *The Philosophy of Set Theory* (1989)

We may, perhaps, determine certain minimal conditions for a structure in general:

1) There must be at least two heterogeneous series [...] 2) Each of these series is constituted by terms which exist only through the relations they maintain with one another. To these relations, or rather to the values of these relations, there correspond very particular events, that is, singularities which are assignable to the structure. Moreover, it seems that the singularities attached to one series determine in a complex manner the terms of the other series. [...] 3) The two heterogeneous series converge toward a paradoxical element, which is their 'differentiator'. [...] This element belongs to no series; or rather it belongs to both series at once. [...] It is both word and object at once: esoteric word and exoteric concept.

- Gilles Deleuze, Logic of Sense (1968)

1.4.1 Background

The close historical association between set theory and the formal development of modern logic is well known. In fact, naïve set theory is operationally identical to first order logic, except that the former includes the addition of a single primitive relation between elements and sets called 'belonging' or 'membership,' denoted by the sign 'E', read as 'is an element of'. Tiles' suggestion, connecting the consequences of set theory 119 with the nonsensical world of Alice's adventures—though meant solely as a rhetorical framing of the impetus for the development of axiomatic set theory—may have a much more substantial underpinning than she likely imagined, especially if we take seriously the essential connection which the logic of sense maintains with paradox that Deleuze intimates, and which we have ventured to bring to light also in the metaphysics and philosophy of language of the early Wittgenstein.

We have already seen, through a structural realist interpretation of the TLP, how the configuration of Tractarian logical space—correlating the series of propositions with that of states of affairs—eventuated in the singularity or 'paradoxical element' of the metaphysical subject, which was both included as a point within logical space and at the same time *not* included in the world but understood as its limit. The two series meet where solipsism and realism converge, which is also the point at which the existence of the

¹¹⁹ E.g. the continuum hypothesis, the set of all sets, Russell's paradox, the Burali-Forti paradox, the Gödel sentence, the halting problem, etc.

For an exploration of the philosophical consequences of some of these issues in set theory, especially of the paradoxes of self-membership in relation to Deleuze's theory of sense, see Livingston, "An Inquiry into Forms of Life" and "Deleuze, Plato, and the Paradox of Sense" in *The Politics of Logic*, 3-62, and esp. 95-112.

metaphysical subject implies the collapse of the truth-functionality of logical space, such that the metaphysical subject itself, or the 'truth' of solipsism, could never be attested to but only shown. Nevertheless, the metaphysical subject (of the TLP) is a singularity which also virtually 'contains' the whole of logical space in the cases where the values of the truth function are well-defined and are not degenerate (e.g. in ordinary empirical propositions); this is why it is configured as the limit of language and the world. Finally though, we saw how the TLP runs up against its own descriptive and theoretical resources, in that the bare singularity of the metaphysical subject cannot be explained by the system within which it appears—and this remains the case because of the insistence on *totality* as that which alone guarantees the adequate (i.e. complete and consistent) expression of sense, as the closure of what can be said. 120 This turns out to be equivalent to saying that any sufficiently expressive closed system of determination will run into the same formal problem, or again, that there must always be more than one singularity. Another model of logical multiplicity must come to replace the notion of a global totality of logical conditions of possibility. Of course, the collapse of logical space in the TLP rhymes with that of an 'undecidable' choice one must make in set theory between completeness and consistency. 121 In relation to this

¹²⁰ Coincidentally, this fact in part explains Deleuze's animosity towards Wittgenstein's philosophical legacy. See, WIP 140: "... [I]t is this sphere of the virtual, this Thoughtnature, that logic can only *show*, according to a famous phrase, without ever being able to grasp it in propositions or relate it to a reference. Then logic is silent, and it is only interesting when it is silent."

¹²¹ 'Decidable' here means, roughly, there is an effective procedure, or algorithm, which can determine the truth of one or the other alternative solutions of a problem. In set theory, every such procedure for this alternative begs the question of the choice between completeness and consistency itself. The term 'decision', in this technical sense, rests on an operational notion of binary truth-values (law of excluded middle) needed to get classical propositional logic off the ground.

choice, as noted by Paul Livingston (2012) in his formidable work, *The Politics of Logic*, many philosophers and mathematicians opt for consistency without completeness (among them Quine and Badiou), which has ultimately apophatic and apophenic consequences regarding Being and restricts discourse to consistent talk of beings. Deleuze, as well as the early Wittgenstein, make the opposing choice, opting in a peculiar way for 'completeness' without consistency—a choice Livingston labels the 'paradoxico-critical orientation' in philosophy. Supposing we follow Livingston's assessment, 'inconsistency' (i.e. ineliminability of paradox or nonsense) will be configured two-fold: once as the genetic ground of thought (as it corresponds to the confrontation with problems that cannot be exhausted in their solutions); and a second time as the differential ground of Being. However, such a double movement does not collapse Being into thinking and does not conflate thinking with Being as such. Rather, thinking shares in the same formal conditions as Being only insofar as the former is an instance of the latter, and further still, only as a particular species of 'non-being'. It is precisely at the locus of the inconsistent that a reconception of synthesis must supersede analysis if we are to get in touch with the genesis of sense without falling back on completeness as totality. 122 The 'complete' in this case, is not that of the One of totality; it is nothing but immanence—infinite non-finality, vertigo. Accordingly, the inconsistent is not the undifferentiated abyss of a voided chaos, but the

¹²² The idea of synthesis vouched for here comes very close to the standpoint of Schelling in *Ideas for a Philosophy of Nature*, at least with respect to the relationship between analysis and synthesis, though I take logic to have its own genetic purview, which Schelling denies, and Schelling thinks of synthesis only within the paradigm of the Kantian faculties, and thus projects the transcendental imagination into nature in a way I reject. On this score, see Grant, "Does Nature Stay What-it-is?".

necessity of the creative cause, or the ontological positing of difference as such. Only an unlimited synthesis can give us both the new and the means to think it in its own right, no longer pre-established in advance, no longer traced from the already formed subject. It is here that singularities gather their particular gravity and find their positive determination. Synthesis alone can give us the structural basis of the transcendentally real nature of the genesis of sense, at least in its ideal, formal, or 'static' aspect—that is, in its abstract expression.

Generically, a singularity is a point where the coherent order of the space within which the singularity appears is not allowed to continue analytically. From it nothing follows of necessity. Although, its appearance can be construed as both necessary and contingent at once: what is contingent is the history of the production of sense or the order which eventuated the singularity in question; what is necessary is the effect of the singularity as that which stands in need of a conjunction between two or more divergent series. In other words, singularities are problems of articulation which beg the question of the metaphysical status of creative causation within immanence (the problem of the new), what I have variably called vertigo or the paradox of immanence. Therefore, in order to better understand how the emergence of singularities constitutes the expressive power of the dimension of sense, it will be useful to render a distinction between analytic and synthetic structures via the seriality of language. In interpolating Deleuze through the logicometaphysical schemes of Leibniz, Kant, and Frege, we can come to a more concrete elaboration of the formalization and transformation of intelligible structure. In so doing, the implications of the emergence of singularities for the modulation of logical space as a whole (i.e. rational ampliation, real abduction) should be become apparent. This will then

position us to move from the register of the strictly endogenous, formal, or transcendental constitution of sense in its 'static' genesis into the register of the conditions of its dynamic social institution in common sense in Part 2.

* * *

One only locates singularities through the protracted laying-out of a structure, by following through the analysis of series to the limit, and by *prima facie* taking the ordinary elements and relations of the series—those items which are already individuated, subjectivated, predicated, and objectivated—as the putative primitives through which relations of structure in each case attach, accrue, and fill themselves out. We must always begin in media res. However, as has already been shown in the analysis of the dimensions of the proposition, one cannot denote or indicate an object without first signifying it (for example, picking it out among the manifold of experience via the concept). And again, one cannot signify without the manifestation of the speaker or the apperception of the 'I' on whose basis speech and concepts usher forth. And finally, one cannot locate the 'I' or the individual subject without appeal to an already-formed world capable of being denoted or referred to, without other objects and subjects against which the subject comes to consciousness and reality. Nevertheless, the circle of these three dimensions is not virtuous since each, in its appeal to the others, disayows the fact that this movement of circulation must itself be produced, and that in its circularity it acts as though each object denoted, each subject manifested, and each concept signified was cut exactly to the measure of that which it in each case grasps. It acts as though the targets of these dimensions were not themselves moving, not themselves moved by the exercise of language. In essence, this model acts as if the coincidence of map and territory is not the point of the map's

uselessness. But, in fact, a perfect representation is no representation at all. ¹²³ For let us make no mistake, thought is not a contemplation of Being so much as a navigation of its powers. The supposed circularity between these dimensions of the proposition resides in a frozen, hypostatic world, one which begs the question of its 'static genesis' in sense. Accordingly, it also begs the question of the traversal of worlds or of the transition from one world to another, since it is only by virtue of this that we are forced to think. Getting at this question requires us to follow the line of any form of consistency to the point at which the rule of its continuation is outstripped by what is brought to bear in its expression—whether on the side of the proposition or of things. The fact that these two series cannot be made un-problematically to coincide is not an incidental feature of language, but rather indicates that whenever we 'say what we mean and mean what we say' ¹²⁴ we are indeed stepping into the 'great outdoors' of inconsistency, nonsense. There

¹²³ This is, of course, the moral of Borges' parable, "On Exactitude in Science," 326. Perhaps unsurprisingly, the idea is already present in Lewis Carroll: "'That's another thing we've learned from your Nation,' said Mein Herr, 'map-making. But we've carried it much further than you. What do you consider the largest map that would be really useful?' / 'About six inches to the mile.' / 'Only six inches!' exclaimed Mein Herr. 'We very soon got to six yards to the mile. Then we tried a hundred yards to the mile. And then came the grandest idea of all! We actually made a map of the country, on the scale of a mile to the mile!' / 'Have you used it much?' I enquired. / 'It has never been spread out, yet,' said Mein Herr: 'the farmers objected: they said it would cover the whole country, and shut out the sunlight! So we now use the country itself, as its own map, and I assure you it does nearly as well."'.

See Carroll, *Sylvie and Bruno Concluded*, 645. In renderings of the problem within which a perfect map is inside the territory that it depicts, such as that in Royce's *The World and the Individual*, paradoxes of infinite regress akin to those of seriality and the self-membership of sets also occur, since a perfect map, drawn within its territory, also includes within it a perfect map of the map which is itself perfect, and so on.

¹²⁴ On the non-coincidence of these two locutions, see Lewis Carroll, "A Mad Tea-Party" in *Alice's Adventures in Wonderland*, 68-76.

we are forced to conjure the singularities of a structure. The development of structure leads us straight into an inescapable 'paradoxical' element, one which configures all those relations which obtain in concepts and assure us of the passage from the singular to the universal. As Livingston (2012) points out:

If it is indeed impossible to speak of set membership, of the relationship that links concepts to individuals or universals to particulars, then this paradoxical element does not exist and cannot ever appear in any presentation or presence. If, however, it is indeed possible to conceive it as manifest—although illegal in the normal order of signification—[...] then its own proper sense is precisely this general relationship of universals to particulars itself. Thus, by means of the fundamental paradox of signification that nevertheless took logic and the theory of signs two millennia to discern, something like a (problematic) solution is found for the problem that Plato already grasped as his most fundamental one: the problem of participation, or the link between the Idea and the particular that institutes the very order of language. (104-5)

* * *

As has been noted, Deleuze contends that because saying and showing never consistently coincide—or the expressed of a proposition, though inhering in the proposition, never coincides with the proposition which expresses it (except in the case of paradox)—this means in order to say the sense of the proposition, a second proposition must be invoked which then displaces its sense onto a third proposition, leading to an infinite regress of propositions, each of which says what is only expressed in the former. "In other words, I never state the sense of what I am saying. But on the other hand, I can always take the sense of what I say as the object of another proposition, whose sense, I cannot state." (LS 28).

This has two immediate consequences. First, this makes language infinite, as soon as language is granted the ability to refer to itself—implying that the fantasy of a total sense is just that, since to any series of propositions, still another proposition could be added whose sense is not included in any that have come before, even in the case where that series is itself infinite; this is something akin to a diagonalization argument for ordinary language. Second, it implies that at least two heterogeneous series must coexist within language (e.g. sense and reference (Frege), signifier and signified (Saussure), saying and showing (Wittgenstein), syntax and semantics (Tarski, et al.), signifying and picturing (Sellars), saying and doing (Brandom)) even if those series must also be put into an essential relationship with one another such that one does not exist without the other. However, this non-coincidence is ill-defined so long as we are content to oscillate on the seesaw of Russell's types, only ever defer the event of sense by displacing it in an infinite hierarchy of meta-propositions. 125

¹²⁵ Russell's so called 'ramified theory of types' was a way around the paradoxes of the self-membership of sets, which is deeply tied to the self-reference of language. Effectively, it sought to provide an infinitely nested hierarchy of classes (or 'types'), such that any recursively contentful naïve set (which fell prey to self-referential paradox) was interpreted as differentiated, or 'typed' in such a way to avoid problems of self-indexation (impredicative definition).

So-called, homotopy type theory (HoTT) has since become an alternative (constructivist) foundation of mathematics based on the so-called "Univalence Axiom"—combining (intuitionistic) type theory with the topological notion of a homotopy (roughly codifying the notion of equivalence under deformation, which treats types as topological spaces defined in terms of the relations between paths in them). AA Cavia has recently shown how HoTT may plausibly provide a dynamical and open model of logic and computation, better suited to a naturalist or immanentist philosophy of time, that appears to be compatible with, and perhaps capable of formalizing, a genetic, synthetic concept of sense as advocated for here. See Cavia, *Logiciel*.

While Deleuze does affirm the existence of such a regress within language, he is not content to render the consequent incompleteness of sense as the being of the negative. Non-being is not 'not-being'. Instead, 'inconsistency' is invoked as the binding of immanence and the unbinding of creation in Deleuze's radical re-orientation of the notion of synthesis. As we will see, the imperative which the appearance of singularities makes of synthesis is meant to contend with the rational ampliation of thought in its essential encounter with problems. Reason thus becomes, just as Whitehead suggests, the organon of the new, which is also the organon of the art of life in contrast with the mere survivability (reproduction) of the organism. 126

Nevertheless, this adventure of ideas is not achieved by the presumption that creativity is tantamount to emancipation from constraint or the championing of indeterminacy *tout court*. Inconsistency is not lack of determination. The necessity of inconsistency is nothing but the process of determination for Deleuze, and the emancipation of thought (perhaps emancipation in general) imposes the most severe constraints and requires the most rigorous training. Even the non-human actualization of the new (the formation of atoms, chemical structure, geological process, natural selection, sentience, sapience, etc.) emerges not through the removal of constraints, but precisely out of their amplification and reproduction as Deacon and others have shown.¹²⁷

¹²⁶ See Whitehead (1971 [1929]). It is through reason as the art of life, as opposed to the survivability of the organism, that we will entertain a minimally Hegelian notion of spirit or *Geist* in Part 2.

¹²⁷ Cashman and Deacon, "Steps to A Metaphysics of Incompleteness" and Deacon, *Incomplete Nature*. The development of boundary constraints on the dynamical relations of the underlying physics is in great sympathy with emergence of perception in Bergson's

Thus, if reason is taken as *calculus ratiocinator*, it must be in the way Deleuze understands the productivity of the differential calculus or the intuitionistic calculus of problems. ¹²⁸ It is this productive, or rather, synthetic orientation towards singularities which gives Deleuze's theory of language and thought a purchase over and above the mere diagnosis of the constitutive incompleteness or inconsistency of supposedly closed systems of determination. Language supervenes on inconsistency, which is given not solely as logical impotence (or metaphysical abyss) but constructed as *the very generative power of thought itself*.

1.4.2 Functions, Concepts, Logical Calculi

At this point, the relation between the notion of synthesis and the logic of series, as relates to the predicate calculus, completeness, and inconsistency should be clarified if we are to come to grips with the function of reason.

First, let us recall the mathematical function from before (sect. 1.3.4): f(x) = a/x, where a is a positive number. This and functions like it operate as machines, so to speak, for

image-ontology in *Matter and Memory*, 27. See also, C1, 68: "In perception thus defined, there is never anything else or anything more than there is in the thing: on the contrary, there is 'less'."

¹²⁸ For an account of Deleuze's engagement with intuitionism, see Dumoncel, "Deleuze Challenges Kolmogorov on a Calculus of Problems." Additionally, AA Cavia has embarked upon one of the most profound exercises in contemporary philosophy bringing together a naturalist metaphysics of information with an inferentialist theory of computation on the basis of an intuitionist logic which aims at a formal articulation of the intelligible (what he calls "the principle of encoding (POE)") via its relation with "the irreducibility of contingency (IOC)". See, Cavia, "Compression Artefacts."

producing series according to the values of the inputs of the function. As is well known from analytic geometry, the series of a continuous function can be represented as a curve, where a particular value of a function (supposing the input is defined within the domain of that function) determines the coordinate of a point on a curve. For example, on the real plane, such a value is represented by an ordered pair (a, b) on the x and y axes. This is echoed in Frege's famous discussion of functions:

The method of analytic geometry supplies us with a means of intuitively representing the values of a function for different arguments [i.e. inputs]. If we regard the argument as the numerical value of an abscissa [i.e. the x axis], and the corresponding value of the function as the numerical value of the ordinate [i.e. the y axis] of a point, we obtain a set of points that presents itself to intuition (in ordinary cases) as a curve. Any point on the curve corresponds to an argument together with the associated value of the function. / Thus, e.g., $y = x^2 - 4x$ yields a parabola... ¹²⁹

In certain cases, the domain of a function can be extended through analytic continuation where the extension of that function has a derivative everywhere and is itself continuous. This can be expressed geometrically by a smooth continuation of the curve, that is by a continuous and differentiable variation in the value of the function defined in terms of the limit of the function. ¹³⁰

¹²⁹ Gottlob Frege, "Function and Concept" in *The Frege Reader*, 134-5.

¹³⁰ For example, in the case of the complex plane, the Riemann zeta function $\zeta(s)$ can be extended to the whole of the complex plane via analytic continuation where $\zeta(s)$ is first defined for values s > 1.

It should also be noted that, more formally, analytic continuation can be defined in relation to the expansion of the radius of convergence of power series for some complex function. See, Weisstein, "Analytic Continuation." This is exactly the definition Deleuze gives for compossible worlds. See, for example, DR, 48: "... for each world a series which converges around a distinctive point is capable of being continued in all directions

However, as is also well known, the Fregean acceptation of the predicate calculus models *the concept* on that of the formal machinery of the mathematical function. Thus, logical series of statements can (and, according to Frege, should) also be modelled functionally in this precise sense.

Frege expressly ties his work on the extension of the notion of function to the field of analysis from the outset:

The first place where a scientific expression appears with a clear cut *Bedeutung* [meaning, reference] is where it is required for the statement of a law. This case arose as regards functions upon the discovery of the higher Analysis. Here for the first time it was a matter setting forth laws holding for functions in general. So we must go back to the time when higher Analysis was discovered, if we want to know how the word 'function' was originally understood.¹³¹

The 'concept' for Frege is to be understood in terms of predicative functions whose arguments in first-order functions are objects. In this case, an 'object' is defined as anything that can become the value of a variable in a function. ¹³² In other words, an object is anything that can be referred to (denoted). In this respect, the functionalization of the

in other series converging around other points, while the incompossibility of worlds, by contrast, is defined by the juxtaposition of points which would make the resultant series diverge."

¹³¹ Frege, "Function and Concept", 131.

Those familiar with Quine will recognize that this is already very close to his criterion of ontological commitment: "A theory is committed to those and only those entities to which the bound variables of the theory must be capable of referring in order that the affirmations made in the theory be true," or, as it is usually rephrased, 'to be is to be the value of a bound variable.' What 'binds' the variable is the quantifier. Quine, "On What There Is", 33.

concept rests on the connection Frege makes between mathematical functions and his formalization of the structure of declarative sentences:

Statements in general, just like equations or inequalities or expressions in Analysis, can be imagined to be split up into two parts; one complete in itself, and the other in need of supplementation, or unsaturated. Thus, e.g., we split up the sentence 'Caesar conquered Gaul' into 'Caesar' and 'conquered Gaul'. [...] Here too I give the name 'function' to the *Bedeutung* [meaning, referendum] of this unsaturated part [i.e., 'conquered Gaul']. In this case the argument [referent] is Caesar. ¹³³

However, the evaluation of a predicative function must be understood in terms of its truth conditions; its values are either True or False. This means that all 'conceptual' problems in Frege's sense are decision problems—those which restrict the answer to one among a binary; that is, to solutions which exhaust the problem. As was alluded to earlier, every such procedure for the alternative between completeness and consistency (in languages like those we use) begs the question of the choice between completeness and consistency itself. In other words, Frege's conceptual functions rest on an operational notion of binary truth-values (bivalence), which *cannot* hold in every case where the question of their truth can be rigorously syntactically formulated. Concepts, according to Frege, are functions of this sort and can only be 'meaningful', can only attach to the world through reference, insofar as they can *always* be evaluated in terms truth or falsity, yes or no. All concepts for Frege, then, are analytic truth-functions. Modern digital computers operate on the same foundation, and recognize only two primitive logical values, 1 and 0. But we know that the concept cannot describe reality completely any more than a Turing Machine (a universal

¹³³ Frege, "Function and Concept", 139.

digital computer) can completely model all possible programs needed to answer the question of whether any given program will give a result in a finite number of steps or run forever (the halting problem). ¹³⁴ In each case, which questions correspond to answerable problems—that is to say, figuring out which questions 'make sense' and which are nonsense—cannot be determined in advance according to any mechanical or algorithmic procedure. In other words, sense cannot rest completely on analytic judgment. In each case we must run up against what I am calling the paradox of immanence: the fact that language is part of what it describes, and no meta-discursive solution can be final; none can abscond from its own immanence without reproducing the non-finality, the non-halting, the vertigo of immanence itself.

As we've shown, and as Frege himself attests, equating the field of analytic truths with the branch of mathematics called analysis is not an analogical equivocation. They are literally and formally identical for Frege, as they were for Leibniz. This is why the foundations of modern formal logic and those of mathematics are so closely bound up with one another. In other words, the project of seeking foundations for thought on the basis of a logically pure understanding of the method of analysis is essentially wrapped up with, and therefore susceptible to, the results in set theory and mathematical logic which show that the system of analytic judgments cannot be both complete and consistent. This means that analyticity

¹³⁴ A negative solution to the *Entscheidungsproblem* (the 'decision problem')—that is, a proof which states that there is no decision procedure (algorithm) for determining the truth of arbitrary propositions in a first-order logic—was reached independently by Alonso Church and Alan Turing in 1936. For the former see Church, "An Unsolvable Problem of Elementary Number Theory." For the latter, Turing, "On Computable Numbers."

cannot provide a sure foundation for thought, at least in so far as we mean that pure thought can be completely and consistently analyzed according to logically primitive principles that entail the requisite expressive power of mathematics and ordinary language.

Of course, the notion of analyticity came under fire from Quine on empirical grounds in 1951,¹³⁵ a moment which marks the turn away from logical positivism and the beginning of so-called 'post-analytic' philosophy.¹³⁶ However, even earlier, in 1949, Irving Copi showed that the positivist anti-Kantian project of interpreting all *a priori* truth as analytic was destined to flounder because of the results in logic established by Gödel in the previous decade:

Given any reasonably rich language, there is a non-empirical, non-inductive proposition expressible within it which is not decidable on the basis of the syntactical rules of the language. / The implication of this result for the philosophical problem of *a priori* knowledge is clear. We have seen that if there is any non-empirical, non-inductive general proposition which is not decidable on the basis of the syntactical rules of the language in which it is expressed, then the analytic theory of *a priori* knowledge is false. [...] And this amounts to saying that there are synthetic *a priori* propositions. ¹³⁷

Here, then, is our present motivation for the reconception of the notion of synthetic reasoning, one which calls for an investigation into Deleuze's theory of synthesis in its

¹³⁵ Quine, "Two Dogmas of Empiricism" in *Quintessence*, 31-53.

¹³⁶ Of course, the change in Wittgenstein's philosophical orientation that marks his 'later' philosophy—and thus his repudiation of the strict project of analysis—was already present by 1933-34. We will investigate these consequences in detail in sect. 2.3.

¹³⁷ Irving M. Copi, "Modern Logic and the Synthetic A Priori", 243-245. Technically, Copi's conclusion is not deductively rigorous, unless one accepts that all *a priori* truths are either analytic or synthetic.

relation to sense. Pivotally, singularities lie at the heart of this theory and must likewise be articulated since they stand as the synthetic fulcra of the very (static) genesis of sense.

1.4.3 Infinite Analysis and Finite Synthesis: Individuals, Predicates, Worlds, Singularities

Deleuze understands the necessity of singularities for a genetic account of sense to lie in the way in which they overcome at once the infinite analysis of a complete concept of the individual (Leibniz) as well as the finite synthesis of the form of the person or the 'I' (Kant) (LS 106). Each attempts to provide grounds of sense, but each falters in its own way by presupposing all that was in question. In the case of Leibniz, of course, it is God who organizes all the possibles and realizes the best world in accordance with the predicates of each individual concept, optimizing for the maximum of compossibility, and hence maximum reality or perfection. Thus, the infinite comes into play, but precisely on the basis that all actualization is a pseudo-actualization since everything real is determined in advance by the Great Analyzer, even if "[e]ach and every substance is the true and real cause of its own immanent actions...". The Leibnizian world is in a very specific sense just the divine intellectual intuition of relations of compatibility between the completely analyzed concepts of each individual. In this way, concepts and individuals are, in the final

¹³⁸ Leibniz, *The Labyrinth of the Continuum*, 311.

analysis, strictly identical, for Leibniz. The world is, then, an analytic continuation of series of individuals, the logical effect of their being convergent, or compossible. ¹³⁹

On the other hand, Kant disposes of a metaphysical relation between God and World by appealing to the conditions of possibility of phenomena, not in the pre-established harmony of a perfectly calculating God, but in the pure forms of consciousness necessary for human empirical knowledge (space and time, the pure concepts of the understanding, etc.). Through the latter, as was already stated, the world regained on epistemological grounds is well lost on metaphysical ones, about which nothing meaningful can be said, including how it is that we in fact have the transcendental forms of experience we do. Kant's "Deduction" purports to tell us *that* the subject is constructed by an *a priori* synthetic categorial unity, without beginning to tell us *how*. Through it, then, theoretical knowledge stands fixed by a *horizon* of apprehension which admits of no modification. In each case it is a metaphysical subject (though each differing in kind) that stands at the gate of sense. As Deleuze says, what the "notorious immutability of God" is to the one the "limits of knowledge" are to the other (LS 107). In a sense, the TLP presents a hybrid of

¹³⁹ For an account of the relation between Leibniz's metaphysics and his logic in relation to the concept of the individual, possible worlds, and compossibility see, LS 100-118. For an in-depth critique of Leibniz's understanding of the concept in relation to infinite analysis, see, DR 42-50. See also Bowden, *The Priority of Events*, 56-94 for the influence of Leibniz on Deleuze's notion of the event.

¹⁴⁰ There is a crisis in Kant's critical project about just how it is that the formless matter of sensibility and the conceptual form of the understanding come to be necessarily related, and about their necessary distinction, that has not escaped the notice of very many readers from the 18th century on—from Maimon to Schelling to Peirce to Heidegger to P. F. Strawson to Deleuze to McDowell to Malabou on which this whole issue turns. However, I will not venture into an exegesis here.

the Leibnizian and Kantian worlds and confronts the limits of each: through the relational concept of objects as 'unalterable' and as 'the substance of the world' in the former, and 'feeling' the world as a transcendentally 'limited whole' in the latter. The task of transcendental empiricism is to settle this impasse between infinite analysis and finite synthesis by understanding the infinite without the sole procedure of analysis and understanding the synthetic without the sole procedure of a priori limitation. It is only at the juncture of the two, in an unlimited synthesis, that singularities become concretely articulable.

So, what are singularities? Are they physical, metaphysical, or logical primitives out of which the stuff of the world and thought are built? Or are they instead relational, formal, or functional indices—fissures, cracks, breakages, points of tension and differentiation around which systems of order separate, breakdown, and crash up against their own intrinsic limits? Are they fonts of Being or points of degeneracy? To answer these questions, we must first answer the question of what defines the notion of a *world*, relative to our notion of sense. The shortest answer to this question is: worlds are defined by the convergence of series over which removable singularities can be analytically continued, or between continuous deformations of spaces. Alternatively, we may say that a world is defined as a system of relations between entities (that is, individuals, objects, or concrete particulars), whose 'essences' are owed to relations amongst themselves, relations which concatenate the world and determine the individuals in question. That is, the individuality of an object (or subject) is predicated on its countenancing, via these relations, the other objects (or subjects) in a world. In other words, a world is a relational phenomenology,

where this latter term refers to the logic of appearing. 141 The selective test of the objects' (or subjects') co-countenancing one another is the taking of a limit of series—which is why analysis (in its mathematical sense) is the operation of world-constitution—whose convergence determines a co-constituted horizon of entities, or their belonging to a world, and whose divergence spells the failure of this test, thereby analytically determining no world and no horizon or implying instead another, incompatible, divergent, one. 142 As Deleuze says, "[t]his convergence defines 'compossibility' as the rule of a world synthesis. Where series diverge another world begins [...] [C]ompossibility is thus defined as a continuum of singularities, whereby continuity has the convergence of series as its ideational criterion" (LS 111). Nevertheless, in performing the analytic continuation of series and the predication of individuals it makes possible, we remain at the level, strictly speaking, only of individuals and their relations—which is, for Deleuze, the level of bodies and their mixture. In Peirce's terms, we remain at the level of the combination of qualities (Firsts) and relations (Seconds). A third thing is yet missing. An unlimited transcendental synthesis becomes necessary in order to account for the emergence of sense, but equally for the univocity, transformation, and transition between worlds. In other words, the genesis of sense as synthesis is necessary to avoid conjuring both a priori epistemic

¹⁴¹ Although I differ in detail and on the use of formal devices, this understanding of a world is in a basic affinity with Badiou's. See, Badiou, *Logics of Worlds*, 109-140, 199-230, 303-324; and *Second Manifesto for Philosophy*, 26-32. While there is much to say here, we leave a technical discussion of the differences for elsewhere.

¹⁴² It should also be noted that, in the social domain, this is consistent with Althusser's understanding of the subject within ideology as that being which can be interpolated. See Althusser, "Ideology and Ideological State Apparatuses" in *On the Reproduction of Capital*, 232-272.

limitation and *a priori* metaphysical totality, the specters of foundational notions of consistency and completeness.

Accordingly, for Deleuze, it is useless to *speak* about the actual existence and unity of a world, its individuals and their relations—in other words, useless to speak of phenomena and their appearing—unless there is something determinable (an 'object = x') which supplies the sufficient conditions for the *reality* of phenomena, not merely their *possibility*. We must not fail to notice that both Leibniz and Kant take reality for granted and account only for possibility. But in order to articulate this *something* determinable (this '*aliquid*' or 'object = x'), in order to articulate real conditions to ourselves, we must first enter into and articulate the proper domain of thought from within thought. We must enter into that through which,

the Ego as knowing subject appears when something is *identified* inside worlds which are nevertheless incompossible, and across series which are nevertheless divergent... Only when something is identified between divergent series or between incompossible worlds, an object = x appears transcending individuated worlds, and the Ego which thinks it transcends worldly individuals, giving thereby to the world a new value in view of the subject being established. (LS 113)¹⁴³

Sense appears only at the locus of a problem which cannot be dissolved in analysis. Singularities are such ideal-real conditions of phenomena, which Deleuze qualifies as signs of transcendental problems that act as grounds for the empirical realization of solutions, the contours of something determinable, an object = x. This is his first step toward a continuity thesis between thought and nature, attempting to empirically ground the ability

¹⁴³ Much is owed in our discussion here to Bowden (2011), 70.

of thought to 'rise above' relations of efficient causation while at the same time only existing within them. Thus, the transcendental ground, though always inhering in empirically constituted individuals, acts via the appropriate structural relations or functional roles in some system or multiplicity as its virtual modality. 144 The 'knowing' subject appears only at the site in which the confrontation with problems forces upon thought the establishment of a sense which supersedes the given order of the alreadyconstituted world and its fields of (analytic) implication or continuation. The world is indeed all that is the case, but the speculative subject (as Gabriel Catren puts it) is not content with the world. The experience of this subject cannot be reduced to what is the case: as we've already seen in Wittgenstein, the subject cannot even be reduced to the possibility of the world. The virtual therefore, as the modality of a multiplicity (or manifold) that characterizes the special status of singularities, *does not* have any extension independent of its actualization despite its being transcendental ground of that which is realized in a world. This ground, moreover, as below, beyond, and within actualization is, for Deleuze, equivalent to ontological ungrounding as becoming. Singularities only have what Deleuze calls 'extra-being', 'non-being', '?-being', the 'being of the problematic', etc. Singularities are not substances, even if they are productive of Substance. Moreover, Deleuze's view invalidates the dichotomy between substance and process, neither of which is fundamental with respect to the other. The emergence of qualities or substances is like

¹⁴⁴ In a similar light, we can think about the manner in which Terrance Deacon refers to the causal efficacy of "absential phenomena" in order to articulate a naturalist explanation of the emergence of mind. In several places he even characterizes such phenomena as "virtual". "Absential" here should be understood ontologically as 'non-being' or inherence, not as negativity. See Deacon (2013), 1-42.

the emergence of tone from rhythm or frequency—it is a 'persistence of vision,' so to speak, on the basis of the speed of a repetition—which determines a presented continuity as a block or flow. In this sense, we can think of any individuated entity as composed of a continuous process, which itself consists of a rate of repetition of individuations that are constituted in turn by another process, and so on—something akin to a continuous but nowhere-differentiable curve, such as the Weierstrass function (composed entirely of essential singularities, i.e., points at which the analytic continuation of the function for the curve would be impossible). However, such a metaphysical 'curve' is amenable to differences in kind which are scale-sensitive—unlike the self-similarity of the Weierstrass function. In other words, there are dynamical thresholds of emergence or ontological course-grainings between macrological appearings and micrological configurations. Here, for instance, we may think of temperature as phenomenological quality in contrast to the perturbation of particles; the apprehension of the whole of an ocean wave in contrast to the petites perceptions of the water droplets; elementary particles as points in some description in contrast to perturbations of fields in another, etc. This is why quality in itself (firstness, or the monad) is, in Peirce's terms, pure potential, since it cannot be given actual existence without it being nested in structures (thirdnesses, triads) and relations (secondnesses, dyads) which themselves must, in turn, appeal to firstness as relata or mediata.

Thus, ontologically, the multiplicity within which singularities operate may be construed as a system of differentials (incorporeals) around which the existence of some concrete particular (body) accrues. As early as *Nietzsche and Philosophy*, Deleuze defines the body as the product of relations of forces, which are always unequal in quantity and therefore differential in nature (NP 38-40). Logically, singularities are the points at which the

analytic continuation of a differentiation is no longer possible, and phenomenologically, they represent the points at which the transformation or transition from one world, one conceptual scheme, one orientation, one horizon to another becomes necessary. Essential singularities are cracks of differentiation between and within systems, 'topological solitons' or 'defects' situated at the boundary between homotopically distinct worlds, that of which are internally determined by relations between continuous functions. ¹⁴⁵ This is true even in the case where there is as yet nothing intelligible 'outside' the boundary of one's present scheme. For example, the singularities thought to exist at the centers of black holes wrought by the mathematics of General Relativity make the physical theory which gives rise to those singularities break down. Infinitesimals played the same role in analysis before Cauchy and Weierstrass tamed the calculus by defining the derivative and integral in terms of the limit of infinite series in the 19th century. ¹⁴⁶ These singularities must be

¹⁴⁵ Not surprisingly, the theme of the 'crack' is of major importance in LS to which Deleuze devotes an entire chapter analyzing the works of Fitzgerald, "Twenty-Second Series—Porcelain and Volcano." See LS 154: "The real difference is not between the inside and outside, for the crack is neither internal nor external, but is rather at the frontier. They are imperceptible, incorporeal, ideational."

¹⁴⁶ See, Amir Alexander, "A Brief History of Infinitesimals." For the ways in which this 'foundation' of analysis is one constructed option among many, see, Alexandre Borovik, Mikail G. Katz, "Who Gave You the Cauchy-Weierstrass Tale?

There has recently been interest in reintroducing a rigorous infinitesimal calculus (the so-called 'nilsquare infinitesimals' of the smooth infinitesimal analysis)—especially in mathematical physics—one which relies on an intuitionistic rejection of the law of the excluded middle and is grounded not in classical analysis via set theory but in synthetic differential geometry via topos theory. This would be in keeping of Deleuze's claim that "the many philosophical riches to be found [in the early interpretations of the infinitesimal calculus] must not be sacrificed to modern scientific technique" (DR 171). See, Bauer, "Intuitionistic Mathematics for Physics"; Bell, "Smooth Infinitesimal Analysis as an Axiomatic System" in *A Primer of Infinitesimal Analysis*; O'Connor, "An Introduction to Smooth Infinitesimal Analysis".

understood as insisting in actualized bodies (individuals), but only as the being of differentiation, points uninterpretable in terms of the self-identity of concrete particulars. In this sense, as Sean Bowden remarks, singularities must not be construed as bodies, i.e. concrete particulars, nor as universals in the ordinary sense, but as *abstract* particulars (Bowden 2011, 68). Because they are in this precise sense 'abstract,' singularities are in each case 'ideal' events: they are never reducible to the individuals they inhere in; they are not reducible to their spatiotemporal actualization, despite only existing because of such actualizations.

The World is expressed in the present continuous—thus, the translators of Heidegger are right to insist on the tortured locution of the disclosure of beings as 'worlding' for Dasein. On the contrary however, Being ($\hat{E}tre$) is expressed in the infinitive. By their articulation in thought through sense—through the device of the infinitive verb ('to cut', 'to green', 'to such-and-such'...)—singularities reside in the impassive or sterile time of eternal truth or Aion as "aleatory points", "ambiguous signs", or "synthetic predicates" across incompossible worlds, defined analytically. They are, in other words, the 'evental' coordinates of problems that can be multiply-realized in empirically diverse situations. 148

¹⁴⁷ Bowden (2011), 68. It is worth noting that the abstract particulars of Deleuze may be contrasted with the concrete universals of Hegel, and thus the apprehension of sense can equivalently be contrasted with the comprehension of *der Bregiff*.

¹⁴⁸ Take, for example, the relations of the cone to the equations of curves given by the conic sections, which Deleuze was fond of as illustrative of that between transcendental (virtual) problem and variable (actual) solutions. The cone is a virtual problem, but only insofar as we understand it not as an actual object (which it, in each case also is) but as articulating without actualizing the cases of the equations 'embedded' in its geometry. For an exploration of this theme in relation to the theory of problems see, Dumoncel

This is why Deleuze calls singularities 'pre-individual': they condition of the genesis of individuals (objects and subjects) as cases of solution, while at the same time these cases condition other problems in turn; but only under the right aspect—namely that of Aion, the aspect of eternity (*sub specie aeternitatis*). By the same token, singularities are the hooks of the determination of thought and its liberation from the mire of presentism. All this is to say is that sense, as infinitive, requires a strange, modally rich realization of thought and action which Deleuze calls 'counter-actualization', bypassing thereby actuality on the one hand and possibility on the other. ¹⁴⁹ In so doing, the non-being of singularities contrasts with the linearity of empirical time (Chronos), since the latter *converts* the (supposedly) possible future into the actual present and actualized past.

If it is true that the expressed world exists in individuals, and that it exists there only as [an analytic] predicate, it subsists in an entirely different manner, as an event, or a verb, in the singularities which preside over the constitution of individuals...These rules belong to a logic of sense and the event, and not to a logic of predication and truth (LS 111). 150

In accordance with the theory of singularities, then, as opposed to the orthodox empiricist or phenomenological theory of abstract ideas (as one can find in Locke, Hume, Peirce,

^{(2013).} And for a philosophical genealogy of Deleuze's theory of problems see, Bahoh, "Deleuze's Theory of Dialectical Ideas: The Influence of Lautman and Heidegger."

Deleuze sees counter-actualization as inhering in actualization and thinks of possibility as constituting a retrospective horizon of thought downstream from the actual (construed in Bergson's critical terms as the actual plus existential negation.) See Bergson, "The Possible and the Real" in *Key Writings*, 223-232; and BRG 18, and DR 211-12.

¹⁵⁰ This final sentence is very clearly a critical allusion to Frege's understanding of predication and truth-functionality in "Function and Concept."

Husserl, etc.), ¹⁵¹ the logic of the general (or rather the generic) is the derived *not* from the *particular* (taking their limit) but from the *singular*, since generic Ideas rely on the 'ambiguous signs' of the singularities-events, which cut across analytically defined (possible) worlds in order to gather together the properties and classes synthetically predicated of sets of particulars by the subject of knowledge or the transcendental Ego (LS 114-15). This is demonstrated nicely in Deleuze's example regarding the mathematical idea of a circle qua circle, which is neither particular nor general but differential or singular, understood, not in terms of general variables that can be given particular values, but in terms of the derivative of the curve for each point on the circle, constructing the curvature of the circle. (LS 123):

Bordas-Demoulin shows clearly the difference between these two expressions of circumference: $x^2 + y^2 - R^2 = O$, $y \, dy + x \, dx = o$. In the first, I am doubtless able to attribute diverse values to each term, but I must attribute to them one value in particular for each case. In the second, dy and dx are independent of any particular value, and their relation refers only to the singularities which define the trigonometric tangent of the angle which the tangent of the curve makes with the axis of the abscisses (dy/dx = -x/y)." (LS, footnote 3, "Seventeenth Series," 346)

¹⁵¹ We may want to distinguish generality from genericity as two modes of abstraction: the former is the limit or integration of the particular, whereas the latter is the limit or differentiation of the singular.

There is quite a motley crew conspiring on this first point. On the notion of generality in relation to the particular in Peirce, see Hookway, "… a sort of composite photograph" and Ambrosio, "Composite Photographs and the Quest for Generality." James Conant has also made connections here with Wittgenstein's notion of 'family resemblance,' and Goethe's understanding of Kant's idealism. See Conant, "Family Resemblance, Composite Photography and Unity of Concept." Finally, the same phenomenon, of deriving the general ideas from the particular by the procedure of a limit, is mentioned by Husserl in relation to the mathematization of nature, the Greek understanding of geometry, and Platonic *methexis*. Husserl, *The Crisis of the European Sciences*, 23-26.

This alone genetically warrants Kant's insistence on the objective or universal character of the concepts of the understanding in relation to the intersubjective basis of phenomena. Mere consensus of apperception between thinkers can never, in itself, suffice for a claim to genuine knowledge. Only consequential congruence of the practical effects of acts of constructive apperception supposed as directed at an object 'identified' between subjects can assuage legitimate grounds of doubt about the relative objectivity of a thought. 152 In other words, objectivity is ultimately a matter of registration of relational powers of affection, which are nevertheless not reducible to their appearance or manifestation. Thus, to the stage of passive synthesis within which the thinking subject emerges according to Deleuze, he ascribes the "formation of a principle of a 'common sense' as the function of identification" (LS 116), but it may be more accurate to ascribe to it a function of differential objectification, on the basis of which identification follows as a corollary. While Deleuze understands common sense rightly in terms derivative of a more profound nonsense which corresponds to a pure systems of singularities as impersonal, preindividual, transcendental problems, nevertheless, we will develop the lines by which common sense can be configured as the dynamic and aesthetic social instantiation of sense in Part 2 against its classical image.

For now, we are finally in a position to answer the two questions about the nature of singularities above. Because Deleuze is a philosopher of unlimited synthesis—in other

¹⁵² This problem of arriving at objectivity within thought, without dogmatically presupposing it, will be returned to obliquely via rule-following and communal practice in late Wittgenstein in sect. 2.3.

words, because he sees no *metaphysical* problem with an infinite regress of determination but only an epistemic or empirical one—there is no opposition between construing singularities as ontologically primitive virtual traits out of which the world and thought are composed, and construing them as always arising out of structural or functional supervenience begotten by multiplicities of relations, themselves cashed out in ultimately differential terms. In either case, reducing logical priority to causal origin mistakes singularities as states of affairs rather than as events. It confuses Chronological time with Aionic time. From its own perspective, according to Deleuze, the question of chronological priority is irrelevant to the 'static genesis' of sense. What singularities are as inhering effects of one system they are as real transcendental conditions of another. Since there is no first cause and no need of one, and so no origin, there are only movements of

¹⁵³ On related ontological questions see, Kleinherenbrink, *Against Continuity*; and Vaughan and Allen, "Review of Arjen Kleinherenbrink, Against Continuity". The view above is partially consistent with Arjen Kleinherenbrink's reading of the virtual and the actual as aspects of an entity rather than 'realms' within which the being of an entity is situated. Nevertheless, for Kleinherenbrink, part of the 'two-fold' structure of the virtual he elaborates marks the site of the withdrawn, non-relational essence of a being. According to him, this site locates the quiddity or haecceity of an entity, since he presupposes that any notion of ontological continuity makes drawing real distinctions, and thus articulating the uniqueness of any individual, impossible. I don't share this presupposition, since singularities preside over the differences between individuals (or what he calls machines), and so their individuation is not given in themselves, but only via relations with others. This in no way implies that individuation is lost. It may be objected that my deployment of the counterpossible or unmanifestible disposition elaborated below plays the same role. However, such a disposition would be nonetheless ontologically accessible through the modal structure of reality, even if it is not actualized as such. For us, the functional conversion of actual and virtual modalities is a matter of perspective— one relative to the encounter with the entities in question—not a matter of a distinction between essence and existence, or the ontological and the ontic. Nonetheless, this perspective is real rather than nominal because one cannot understand it without the positing of some real ontological structure of relations through which contact, access, or 'proximity' is established and unfolded.

grounding and ungrounding—and for Deleuze, this holds formally between both thought and Being since the latter must be immanent to the former. Of course, such movements in non-human physical and biological processes are the empirical condition for the origination of thought, which, is further susceptible to its own necessary (but necessarily contingent) social and historical conditions. Finally, reason, as organon of these contingent or aleatory points, these 'originative elements' in nature, finds its specificity in the 'transcendent exercise of the faculties' within which what is outside of thought gives birth to the genesis of thinking within thought itself by grasping what 'can only be thought'. These then are the points of problems expressed as singularities.

1.4.4 Formulas

If we are satisfied enough with the arguments above about function and predication, individual and world, singularity and problem then it may be time to try and express the three sides of this theory in more formal terms. The first two are simple enough, since a quantified modal logic (one which requires almost no modification of classical and modal logic) already provide us with tools to articulate the consequent forms: first, of individual objects and their analytic predicates or binary relations; second, of the synthetic predicates or the general classes to which individuals belong according to the subject of knowledge.

¹⁵⁴ Cf. DR 142. See also DR 194: "There is thus a point at which thinking, speaking, imagining, feeling, etc., are one and the same thing, but that thing affirms only the divergence of the faculties in their transcendent exercise. It is a question, therefore, not of a common sense but, on the contrary, of a 'para-sense' (in the sense that paradox is also the contrary of good sense)."

These, as we've seen, are partial at best and remain spurious in their abstraction insofar as they fail the test of genesis, fail to attest to the real conditions of experience. On the other hand, in the discussion of singularities, it is less obvious how we should understand their non-empirical modal and intensional properties—that is, their non-being—since, as we've seen, neither actuality nor possibility can be relied upon to articulate the important features of singularities within a problematic and transcendental conception of synthesis. For this, another category must be invoked: the counterpossible.

* * *

To begin with, as stated earlier (1.3.4), it is possible to distinguish between two types of singularities, determined with respect to analytic continuity or discontinuity. Everywhere singularities are subject to analytic continuation we can call them regular or ordinary points, or (more precisely) 'removable singularities'. This means that singularities articulable in terms of a derivative of some function can be seen to be equivalent to those susceptible to complete analysis understood formally in terms of an object or individual in a merely possible world, insofar as we (heuristically) take individuals as elementary in logical space. For Deleuze, all individuals must be understood in terms of pre-individual, impersonal singularities expressed in differential relations, not brute primitives. Nevertheless, ordinary points, just as in the TLP with respect to objects, are completely analyzed individuals determined in form by the totality of the possible relations they can entertain with other such individuals, and in structure by the actual relations that in fact obtain between them. In the former, the individual is said to be possible insofar as all predicates applying to an individual are consistent in themselves (i.e. the individual obeys the law of non-contradiction). In the latter, individuals are *compossible* or *real*, insofar as

there are no conflicting relations obtaining between individuals (i.e. they obey the law of the excluded middle). What is an analytic *predicate* of an individual to the one is a *relation* between individuals to the other. In other words, there is no dualism between substance and relation, only a difference of perspective. A possible world is given as a series of propositions, each proposition of which is composed of syntactic relations which correspond to relations between objects. Thus, a formula for a Leibnizian infinite analysis of the individual in a possible world may be gestured at as follows: 155

$$\Diamond \forall x \in W (\exists ! x) (\phi_1 x \cdot \phi_2 x \cdot \phi_3 x \dots \cdot \phi_n x)$$

This formula reads: For all possible x that are elements in W there is some unique x such that $\phi_1 x \cdot \phi_2 x \cdot \phi_3 x \dots \cdot \phi_n x$. Here x is a variable for possible individuals (or objects) in a possible world W whose predicates $(\phi_1, \phi_2, \dots, \phi_n)$ define some unique x by complete analysis of the predicate-concepts of x understood as functions whose values are modally alethic. In the case where ϕ_n is infinite, then the analysis is infinite.

Furthermore, this calculus of individuals can be elucidated by the example of a graph of a possible world W (see Figures 3 and 4). Any individual/object (indicated by any vertex x

¹⁵⁵ I am following the fixed domain approach—including the Barcan Formula—for quantifying over modals here, which is not without significant drawbacks and controversy regarding how to interpret the semantics of certain modal statements, but it allows the least modification of the classical predicate and quantificational logic and standard modal propositional logic, and my aim is only be illustrative, since I am ultimately rejecting infinite analysis and finite synthesis as insufficient to account for sense. I am no logician, so there very well may be more felicitous, efficient, or standard ways of expressing the ideas in these formulas and graphs. Hopefully they are good enough, nonetheless, to illustrate my point. I want to thank Paul Livingston for pointing out the flaw in my original notation.

of W) is defined uniquely in W by the sum of its analytic predicate-relations. An analytic predicate-relation is indicated by some edge ϕ of x in W (see Figure 3):

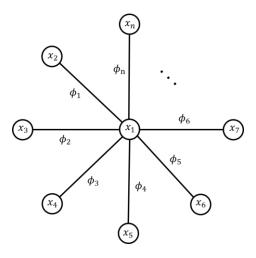


Figure 3 – graph illustrating relations

A predicate-relation ϕ is defined by a pair of objects $\{x_a, x_b\}$ which it connects. The nearness of an object x to another determines the clarity of the expression of the latter from the perspective of x, quantified by degrees of distance from a relation. For example, in Figure 4, x_I expresses x_3 with degree 2. This is meant to intuitively capture Leibniz's idea that each monad expresses the whole world but cannot express all of it clearly and distinctly. In other words (in Figure 4) the transitive relation from x_I to x_3 via x_2 contains a different perspective than that via x_4 . Finally, all other objects connected directly to some object x by relations define the neighborhood of x. As an illustration, let us consider a finite version of such a graph in Figure 4:

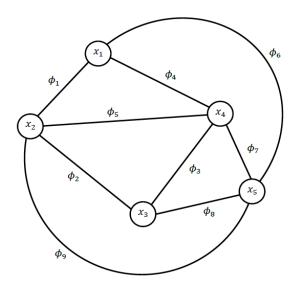


Figure 4 – finite graph of objects x_{1-5} and relations ϕ_{1-5} .

However, as we've also seen (1.3.4, 1.4.3), analysis is impossible without the imposition of a subject, an apperceptive 'I' that exceeds its own field of description. This recalls for us the idea that there is something 'identified' within a world which is nonetheless common across incompossible worlds—the synthetic predicates. Accordingly, the form for the synthetic predicates of the subject of knowledge (classes and general properties) can perhaps be modelled as follows:

$$\forall x \in @ (\diamondsuit \exists \psi)(\psi^n x_1 ... x_n)$$

This formula reads: for all x that are elements in @, there is some possible ψ such that $\psi^n x_1...x_n$ where $x_1...x_n$ is understood as a series of variables for actual individuals (objects) in a world @, such that there exists some n-ary synthetic predicate ψ^n for all objects x_1 , ... x_n . Such predicates are functions whose arguments are objects belonging to a set denoting

the domain of the function. A synthetic predicate can be illustrated in a simple finite example with the following diagram:

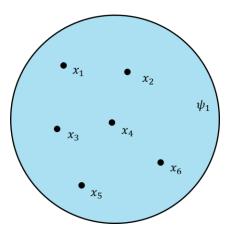


Figure 5 – hypergraph illustrating a predicate

Here (Figure 5) the predicate ψ_1 is a set, illustrated by the circle bounding the objects $\{x_I, \dots x_6\}$. More generally, the collection of synthetic predicates $\psi_1, \dots \psi_n$ relating the world @ can be illustrated by a hypergraph (a graph with edges capable of relating any number of vertices):

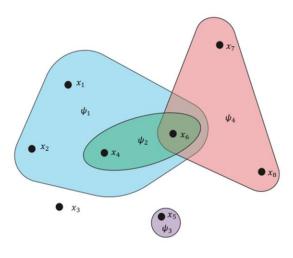


Figure 6 – finite hypergraph $@=(X, \Psi)$

Let us consider another finite example (Figure 6) in the hypergraph $@=(X, \Psi)$ where X is the set of vertices, and Ψ is a set of non-empty subsets of X called edges (denoted by colors), such that $X = \{x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_8\}$ and $\Psi = \{\psi_1, \psi_2, \psi_3, \psi_4\} = \{\{x_1, x_2, x_4, x_6\}, \{x_4, x_6\}, \{x_5\}, \{x_7, x_8\}\}$, and x_3 has no edge ψ associated with it. 156

Just as the analytic binary relations were defined by the edges in a graph, *n*-ary predicate-relations can be defined by a hyperedge on a hypergraph which connects all and only those vertices on the graph representing the individuals predicated by the general property or class given by some conceptual function in question. For example, the concept 'red' would amount to a set of all red things in the world, the predicate 'red' as a finite synthetic predicate is not understood as a relation between individuals. While the first aims at a real concept of the concrete individual (Leibniz's Predicate-in-Notion Principle), the second aims at a nominal concept of the general or abstract predicate, property, or class. While the first is infinite and analytic (relative to the intrinsic implications of the individual 'substance' or object), the second is finite and synthetic (relative to the extrinsic decisions and empirical experiences of the subject).

Finally, then, this leaves us only with the issue of finding a precise expression for singularities in an unlimited synthesis necessary for sense.

¹⁵⁶ In this case of elements where no synthetic predicate is attributed to it, there may be a fruitful comparison between the concept of non-being in Deleuze, the sketch of the counterpossibility below, and the role of the 'inexistent' of a world in Badiou. See again *Logics of Worlds* and *Second Manifesto for Philosophy* as above.

1.4.5 Problems and the Counterpossible

As Deleuze insists, sense concerns both words and things: the expressed of the proposition and the logical attribute of states of affairs. Consequently, sense belongs to problems rendered both epistemically and metaphysically. Though the connections between these are complex, and will not receive a treatment here, it is enough for us to say by way of preparation that—just as with the TLP, though not in the same manner—logical space or the space of problems articulates each in turn.

Singularities are points of convergence and divergence in problems; they engender the complex structure of the space of problems within states of affairs and propositions. Convergent singularities are attractive points around which the possibilities of realization of actual cases accrue, divergent singularities locate the problematic character of structures themselves wherein points of paradox are formulated in and through actual cases. In other words, singularities characterize the multiplicities (as ideas-problems) in which they reside. According to Anna Longo, the global characterization of a multiplicity can only be achieved through a qualitative method (introduced by Henri Poincaré) through which the appearance of essential singularities act in such a way as to make the analytic continuation of a function on the surface impossible, since such singularities cause series to diverge and continuation "...requires the convergence of a point to the neighborhood in order to determine a function." By contrast with removable singularities, essential singularities are therefore "differential operators" which cannot be defined on or through a preestablished space, but are rather coeval with that space. In one sense, the operations

¹⁵⁷ Longo, "Deleuze and Mathematics".

themselves determine the space in question (they "define [its] dimensions and qualities"), and thus, ultimately also ramify the functions in question. The assumption of the *a priori* homogeneity of (logical) space is what gives rise to the theory of possibility as determinative, both in the context of the Kantian schematism and the transcendental aesthetic of space and time, as well as with respect to the "nomological character of differential models" of mathematical physics (as we've already seen regarding the phase space of statistical mechanics in 1.3.3). However, Deleuze's commitment to immanence entails that the space of problems cannot be taken for granted any more than the totality of empirical facts can be; and these are *not* accidentally related for Deleuze. This is why Deleuze insists on calling his philosophy a transcendental empiricism. Consequently, if concepts can still be said to be related to functions, they can no longer accord with the Fregean picture of conceptual functions sketched above. Concepts, instead, relate inextricably to the determination of logical space itself insofar as they express the contours of a problem by laying out the salient convergences and pregnant divergences of a

¹⁵⁸ Sarti, Citti, and Piotrowski, "Differential Heterogenesis and the Emergence of Semiotic Function" 5-6: "...The virtual is a distribution of differential operators and the actual is the solution corresponding to a differential problem. This distribution of operators is heterogeneous since the differential operators are all different one to the other. For this reason, they are called 'singular'...". See also, Sarti and Citti's work which attempts to formalize the notion of the multiplicity in relation to spatio-temporal dynamisms whose characterization must be immanent to its features. Sarti and Citti, "A Fistful of Differencials."

Finally, cf. Longo (2020): "...each multiplicity, as an idea, has a structure consisting of a topological space that is strictly dependent on the internal organization of its genetic elements; what is important is that each multiplicity 'is intrinsically defined, without external reference or recourse to a uniform space in which it would be submerged."

multiplicity without ever exhaustively determining it *a priori*. ¹⁵⁹ More than that, the space of problems itself is developed alongside the solutions it engenders. This is radically distinct from the Fregean understanding of concepts as analytic functions of judgments in the same way that the event is distinct from the predicate with respect to sense, as was shown. ¹⁶⁰ It is also distinct from the function of concepts with respect to Kantian judgment as well, insofar as both the formal logic of Frege and the transcendental logic of Kant share this same basic commitment, as for example, Robert Brandom believes they do:

[I]n a radical break with his predecessors, Kant takes judgments to be the minimal units of awareness and experience. Concepts are to be understood analytically, as functions of judgment—that is, in terms of the contribution they make to judgeable contents. To be candidates for synthesis into a system exhibiting the rational unity characteristic of apperception, judgments must stand to one another in relations of material consequence and incompatibility. ¹⁶¹

Of course, whether concepts are functions of some kind, and whether they stand in inferential relations, is not in dispute. How the relationship between concepts and judgments is specified, and how the determination of each comes about with respect to the other is another matter entirely. Generally speaking, the analytical closure of conceptual functions implied by the definiteness of conceptual content required by Leibniz, Kant and Frege entails that logical space is monotonic—i.e. new inferences cannot affect already

¹⁵⁹ Salience and pregnance are terms borrowed from René Thom's investigations into the links between psychophysics and cultural semiotics. See Thom, *Structural Stability and Morphogenesis*. See also, Wildgen, "Thom's Theory of 'Saillance' and 'Prégnance'".

¹⁶⁰ For more on the Deleuze's critique of Frege's notion of sense, see Voss, "Deleuze's Rethinking of the Notion of Sense."

¹⁶¹ Brandom, "From German Idealism to American Pragmatism—and Back."

made valid ones—whereas almost all thinking of any real purchase or genuine interest is non-monotonic, defeasible—therefore, always an existential wager—including mathematical and logical cognition and intuition in general. Following this question out, Peter Wolfendale describes the Deleuzian 'function' of the concept as capturing Ideas or events rather than predicates; in-so-doing concepts enjoy the peculiar adaptive power afforded by the activity of 'counter-actualization'. The counter-actualization of the concept finds its model again in a phase space—this time one with its own immanent transcendental or logical dynamics irreducible to (though insisting in) the empirical dynamics of states of affairs:

..[I]t is important to recognise that concepts are virtual multiplicities, even if not all multiplicities are concepts. This means that concepts are neither actual, nor are they processes of production of actual states of affairs. Rather they are virtual forms which insist (immanently) within processes of production, which are thus actualised in actual states of affairs. I think there is an interesting way of interpreting this, which [...] is to claim that concepts are the virtual forms governing reasoning. The actual states of affairs produced are the concrete instances of asserting, inferring and arguing, and the processes of production in which the forms insist are the wider distributed social interactions consisting in the use of the concept, which through both implicit and explicit reciprocal correction maintain the stability of the concept's usage (as well as allowing it to adapt).

¹⁶² For an elaboration of non-monotonic and material inferences see Brandom, *Articulating Reasons*, 52-55, 87-89. Brandom does not share my view about mathematical cognition being non-monotonic (he even suggests that fundamental physics is monotonic, which I reject). As far as mathematics is concerned, monotonicity is supposed because deduction from premises is taken to be purely hypothetical in mathematics (which I do not dispute, as far as it goes). However, those hypotheses can and do sometimes change—which I take to be a broader non-monotonic process which envelopes the particular deductions in question necessarily.

This promises a kind of bizarre synthesis between Deleuze and Brandom. [...] The interesting thing about thinking of concepts in these virtual terms is that you get something slightly different from Conceptual Role Semantics, which only treats concepts in terms of how they can [possibly] and must [necessarily] be used. Although the 'can' and 'must' here are obviously normative (one can use a concept incorrectly if one wants) we can basically assume that it is only through using the concept correctly that anything can be achieved. As such, we can see CRS as thinking of concepts in terms of their possibilities for use, or even, their capacities. What this Deleuzian alternative allows is for us to think of not only the capacities of concepts, but also of their tendencies. This allows for a similarly bizarre Deleuzo-Brandomian slogan: the space of reasons is a phase space (with all of the interesting topological terrain that implies (attractors and all)). If this seems too out there for you, think of a phrase we often use in an argumentative context: 'slippery slope'. This is used in cases where there is indeed a range of possible positions between two or more stable points (think of ethical debates about when a foetus counts as a person), but there is a marked pressure on anyone occupying the unstable ground in between to tend towards the stable points. (It is possible to claim that a foetus counts as a person at precisely 17.4573 weeks, but it is not easily occupied). This is just a very simple description of the virtual terrain of a certain kind of argument, as produced by the concepts involved. 163

Wolfendale, "Deleuze: Some Common Misunderstandings." While I think Wolfendale's insights are incredibly valuable, there are many points about the general commitments of Deleuze's philosophy where I diverge substantially from his interpretation. Most importantly is that although I accept one can plausibly read Deleuze as a panpsychist, this is not the only nor by far most fruitful way of reading his work. Further, one has to have a very precise notion of what kind of panpsychism is involved. For Deleuze, and this is where Wolfendale and I agree, thinking (human rationality, etc.) is a species of broader processes of production involving the articulation and solution of problems, understood not merely in (strictly rationally defined) epistemic terms. In this way one can attribute a simple form of intelligence or mind to non-sapient, and even nonsentient, entities, without collapsing the distinction between various vocabularies needed adequately theorize the processes involved in each case. If one wants to call this panpsychism, so be it, but then this means something quite different from what it means, e.g., in contemporary analytic metaphysical accounts of consciousness, and it is certainly opposed to the kinds of finalism that may also be grouped under the label of vitalism (e.g.

The point that these modal distinctions of concept use are normative should not be undersold. In this case, we must push further than Wolfendale in order to say that concepts are determining, not only of tendencies allowable within the horizon of possibility established by analytic functions, but also of those functions themselves in contexts where heterogeneous series are put into contact. Where this happens, singularities articulate the logical dynamics of the (phase) space of reasons. They do not simply show how concepts under certain initial conditions, with respect to the implementation of certain rules—can or must be used in order to specify something within an already established field of sense; they do infinitely more than provide rules for keeping score of inferences between players in the game of giving and asking for reasons, even if human rationality socially originated for this purpose (among others). With this in mind, hopefully, it begins to become clearer why properly theorizing the virtual holds out the promise of explaining the real conditions of experience and not merely its possibility. It is singularities which express the transcendental conditions of genesis of the real relations, apprehended in thought through sense.

As Deleuze maintained throughout his career, the virtual is not reducible to the actual or the possible, and the actual never resembles the transcendental conditions that give rise to it. In keeping with this mandate, the virtual is not to be construed as a realm or dimension of the object, but rather a modality expressed through singularities in multiplicities.

the kind one finds in German Idealism, the neo-finalism of Ruyer, much of new materialist and posthumanist vitalism, etc.). Arguably, it may even mean something quite different to the panpsychism attributed to Spinoza's attribute parallelism, though it may also be in some considerable resonance with it, in spirit if nothing else. Of course, establishing what's what involves complex exegetical issues which we leave to one side.

Echoing Meinong's ontology, sense then defines a minimum of Being "common to the real [actual], the possible, and the impossible" for Deleuze (LS 35). In this light, the virtual is a modality that cannot be determined in terms of candidates for realization (whether necessary, possible, or actual) but must insist, all the same, as a condition of them.

Necessities tell us how things *must* be, but we've seen—even posed at the level of purely deductive systems—questions can be raised about problems which necessity cannot satisfy. (Russell's paradox asks questions of Frege's Basic Law IV or the axiom unrestricted comprehension that cannot be answered within the axioms which give rise to it.) Possibilities tell us how things can be, but as we've seen, possibility can only provide for us conditions of signification which some (actual) state of affairs satisfies (if true). It leaves open the problem of the reality of the possible as such, as much as it is silent on how the selection of possibilities is itself realized, without the injunction of a preestablished harmony. Counterfactuals tell us about how things would be or would have been if they were or had been different from how they actually are. As such, they remain candidates for realization, only ones whose actuality is not the case. But even they cannot account for the epistemically and metaphysically viable conditions which are not candidates for realization. There is yet a remainder, this minimum of being proper to the virtual. Following recent work in analytic metaphysics, logic, semantics, and philosophy of science, we render the virtual as a counterpossible condition or an unmanifestable disposition characteristic of the structure of problems indicated by our analysis of sense. 164

¹⁶⁴ In the contemporary debates about these interrelated topics, the typical strategy draws distinctions between modal, conditional, and dispositional vocabularies, and there are *prima facie* good reasons for doing so in particular cases. However, we take the

Conditional statements take the form, 'if...then...'. Counterfactual conditional statements are used in common speech and scientific theorizing to convey the propositional structure of events when the conditions referred to have not been (or are not known to be) realized by facts. Let us take an example. When I say "if this pile of salt were put into a glass of water, then it would dissolve" it is implied by the grammar of the sentence that it is not about what is actually the case. The salt is not currently in a glass of water. However, it still makes predictions about what would happen in this event—namely, that the salt would dissolve if the condition of being in water were suitably realized (i.e. incompossible or 'non-cotenable' facts not withstanding). From this, it is not hard to see why counterfactual conditionals are often used to describe the properties of things as they relate to other things: they are used to express the dispositional structures of objects. In our example, instead of the explicit counterfactual phrasing, we could phase it in terms of a general declarative statement about an ability or disposition of salt: 'salt is a soluble compound.' Expressed in Deleuze's vocabulary, the disposition names an infinitive event, the logical attribute of a body in states of affairs: the 'to dissolve' of salt. (I will assume, though it is controversial to do so, that all counterfactuals (ultimately) have as metaphysical counterparts the dispositional properties of objects, and that all properties whatsoever are dispositional.)

dispositions of things (agents, objects, etc.) to express the modal structure of reality as time, which we render epistemically through (probabilistic or deterministic) counterfactual (and counterpossible) conditionals. We will not here offer a full justification of this framing, but hopefully in the following discussion it will at least be plausible to think of them this way. Minimally, certain cases can be obviated, it seems, where the counterfactual conditions are epistemically difficult to ascertain and the vocabulary of dispositions seems more natural because less stringent, by construing dispositional talk as a kind of probabilistic counterfactual conditional talk. For an examination of the distinctions involved and some cases in which it seems plausible to make distinctions, see Jenkins and Nolan, "Disposition Impossible."

Counterpossible conditionals are a type of counterfactual statement. Unlike ordinary counterfactuals, a counterpossible is one in which the antecedent of the conditional is not possible, even if the consequent is true. This means that the condition determining the statement is 'impossible', or more accurately, that it can never be expressed as a fact that would obtain (i.e. as an actual state of affairs). A trivial example of such a statement is the following: "If Hobbes had squared the circle in public, then he would have been a famous mathematician." ¹⁶⁵ In this case, squaring the circle is impossible, since we know π to be a transcendental number and hence it cannot be a root of a polynomial with rational coefficients. Nonetheless, if Hobbes had achieved this and made his results known to the mathematical world, he would have been met with considerable acclaim, since he would have solved a problem that had been outstanding since the time of the Greeks.

Remaining at the level of idle speculation about impossible hypothetical scenarios will not inspire much confidence for our task, we suspect. Interestingly though, these trivial cases are not the only kind on offer. Indeed, it seems that a deep part of the use of mathematical modeling in the empirical sciences rests on other such counterpossibles. Echoing what Deleuze already intuited in Leibniz and Lautman in developing his theory of ideasproblems, a suggestive connection between the metaphysics of counterpossibles and the use of calculus has recently been shown by Brian McLoone. In population dynamics, for example, a population modeled by ordinary differential equations (ODEs) is construed as

¹⁶⁵ This example is adapted from McLoone (which was itself borrowed from Nolan,

[&]quot;Impossible Worlds: A Modest Approach.") See McLoone, "Calculus and Counterpossible in Science."

a continuous quantity that can take on any real value, whereas we know from abundant experience that actual populations of animals (such as rabbits) only come in whole number solutions. There is no such thing as a fractional (living) rabbit; there can never be an actual population of π rabbits. Rabbits are necessarily physically individuated entities (at least according to the folk conceptualizations of the world needed to get the concept of natural number off the ground). Additionally, models of fluid dynamics rely on the Navier-Stokes Equation (another differential equation), which assumes that fluids (like water) are continuous, but we know that water is a compound (H₂O) whose structure is composed of discrete elements. What looks like a (continuous) wave phenomenon on the macroscopic level is discrete from a more basic vantage. Water is a mass noun for the manifest image, a count noun for the chemical image, but it is uncountable again from the hydrodynamical image.

The situation is even more catastrophic if we consider the application of probability. Let us consider a simple dice game, that of throwing a single die. We ordinarily say that there is a one-sixth chance of any single face of the six-sided die turning face-up after a single throw. However, to arrive at the probability, which we naively consider an empirical fact about the set-up of the game, we must suppose, in advance, an infinite series of trials within which the probability of any particular trial landing on some unique face converges at the limit to one-in-six. Yet, no such series could ever be empirically realized:

[T]he infinite sequence of random variables does not empirically exist, yet this doesn't stop us from leaning on Kolmogorov's strong law of large numbers in

¹⁶⁶ For all these examples, See McLoone (2021).

order to give probability its real objective meaning. As a matter of fact, the passage to the infinite limit is not the real obstacle standing in the way of making sense of the objective probability of the *next* throw of the die. The real difficulty lies in the incompatibility between the axiom of randomness and the *extensional* identification of the series of outcomes. (Ayache 2015, 980) ¹⁶⁷

Here, as Elie Ayache has shown in incredible detail, the problem of probability understood as the likelihood of the realization of possibilities (its "extensional identification" in outcomes) becomes unbearable—and points to the necessity of accounting for counterpossibles, simply to get any objective probabilistic inference off the ground at all.

In each of the examples above, then, the antecedents provide conditions of problems that do not and cannot correspond to its cases of solution. Since these counterpossible conditions could never be actualized—provided we accept the standard semantics for counterfactuals—they are true in no possible world. They are 'impossible' with respect to normal modal logic.¹⁶⁸ On the face of it, this is easily accepted in the standard approach to counterfactuals, since its adherents believe that all counterpossibles are vacuously true in

¹⁶⁷ Ayache, for his own part, is committed to very radical claims about the autonomy of price in the derivatives market which we would depose on the grounds of a more general theory of value begun by Marx, without necessarily disagreeing with the leveraging of price-claims in derivatives from the prices of their underlying assets. Nevertheless, the move from grounding the probability formalism in semantic interpretive theoretical frames (the empirical reading of frequentist or propensity probability based on hypothetical trials) to that of real practical activity (the contingency of concrete price claims producing the reality of the market) points to a pivotal transition linking Deleuze's insistence on immanence and real conditions in the theory of multiplicities, the intuitionistic logic of computation advocated by Cavia, and the fundamental role of practice in the later Wittgenstein's view of language and rule-following.

¹⁶⁸ Notice even the notion of 'impossibility' is still relative to actuality and as such is not completely adequate to our understanding of the virtual as counterpossible. This necessitates the augmentation of the formal semantics, but we cannot venture it here.

the same way that, in the classical context, via the principle of explosion, anything follows from a contradiction. That is to say, because the antecedent of a counterpossible is necessarily false in all possible worlds (according to Lewis, Williamson, and others) the truth conditions for all counterpossibles are necessarily equivalent. Against the orthodox position, it seems clear to many that some counterpossibles are non-vacuously true and some are false: we must be able to distinguish between things that, in terms of possibility, are necessarily equivalent. Such differences allow us to grasp the counterpossible, finally, as pure event.

The counterpossible is the precise domain of sense, purified of its denotations, manifestations, and significations. For, as Deleuze intimates in the paradox of neutrality (LS 32-35), the proposition is indifferent with respect to each of the Kantian categories, since these are exactly and only conditions of *possibility* of experience or empirical knowledge, just as possible worlds are always worlds that *could* be actual. "Sense is strictly the same for propositions which are opposed from the point of view quantity, quality, relation, modality. For all these points of view affect denotation and the diverse aspects of

¹⁶⁹ There are also grounds for rejecting the principle of explosion, at least in certain circumstances, but this is a different battle. Dialethism develops the formal tools that follow from non-vacuism about contradiction. See for example, Priest, "What's So Bad About Contradictions?".

¹⁷⁰ See Nolan, "Hyperintensional Metaphysics," 149: "The twenty-first century is seeing a hypterintensional revolution. Theoretical tools in common use carve more finely than by necessary equivalence: two pieces of language can apply to the same entities across all possible worlds but not be equivalent; thoughts can be necessarily equivalent in truth value but not synonymous." McLoone also cites the standard axioms of CLOSURE and EQUIVALENCE as semantically suspect with respect the cases of the good counterpossible reasoning he indicates in applications of calculus. See McLoone (2021), 12164.

its actualization or fulfillment in a state of affairs. But they do not affect either sense or expression" (LS 35).¹⁷¹ For example, the senses of p and not p are identical, even though their true values are opposing. Finally, through what he calls "Meinong's paradox," Deleuze argues that the events of sense must include the thinking of the 'impossible' (something the logician Graham Priest will later confirm).¹⁷² Deleuze again:

[T]he propositions which designate impossible objects themselves have a sense. Their denotation, however, cannot at all be fulfilled; nor do they have a signification, which would define the type of possibility for such a fulfillment... Nevertheless, they have a sense... Impossible objects—square circles, matter without extension, *perpetuum mobile*, mountain without valley, etc. ... pure, ideational events, unable to be realized in states of affairs. (LS 35).

Such an understanding of the counterpossible runs counter to the standard semantics—and the metaphysics it encourages—of discourse about possible (and impossible) worlds. The standard interpretation of the structure

$$\langle P, I, R, w, @ \rangle$$

where P is the set of possible worlds, I is the set of impossible worlds, R a relation of access between worlds, w a variable for worlds, and @ the actual world relies on the a priori delimitation of these sets, whose worlds in turn—understood as sets of propositions—are also given in advance, and whose functional mapping define modal operators on the basis

¹⁷² Priest, "Thinking the Impossible" *Philosophical Studies* 173 (2016): 2649-2662.

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¹⁷¹ These are the Kantian modalities (possibility, necessity, existence (actuality)) not, of course, the virtual.

of a preestablished homogenous logical space in which such operations are axiomatically fixed. In this respect, the set-theoretic basis of this semantics encourages a metaphysics in which the whole apparatus of the logical space and the functions which it makes possible are cast outside the ambit of the things whose logic they articulate. Instead, with respect to Deleuze, the counterpossible of sense (glossed by singularities and the virtual) has no reality, no 'location' outside the actualities which express it.

In order to flesh out our picture, let us return briefly to an earlier example. Solubility names a dispositional property of salt, a causal power or power of action/affection the modal structure of which is articulated by us in counterfactual propositions. In my view, all properties (and, in consequence, all predication) should be understood in terms of dispositions cashed out (ultimately) in terms of causal powers. It may be objected that there are nominal or phenomenal properties which do not correspond to real dispositions of objects. While we can't elaborate a full theory of how to account for this here, we can at least work through an illustrative case.

It is widely accepted that colors are phenomenal properties (qualia) not intrinsic in the material objects to which they are ascribed, but are instead contents of a certain kind of perception (e.g. color vision in humans and animals). In this sense, colors seem not to be dispositions of objects, and, in any case, not causally efficacious with respect to those objects. Nonetheless, colors are correlated with certain wavelengths of light interacting with objects, on the one hand, and with the visual systems of animals, on the other. The qualia are signs between intra-thingly relations—distributed by the dispositions of light and dispositions of the material objects—and powers of vision of creatures. These creatures enable the interpretants of the colors whose qualia are signs (sensations) which indicate to

objects—even if the creature in apprehending the sense of the color (or other sign) is unaware of, mistaken, or unconcerned about what it denotes, which it often is. Of course, the object of a sign is itself, at least partly, configured by the structure the semiosis—in this case, by how that object is taken by the interpretant of the sign (since, as I have suggested, all such properties ultimately connote causal powers and it is those powers which preside over the genesis of individuals). To paraphrase an adage of Goodman, we are star-makers by virtue of our being star-takers. But this in no way implies that stars are unreal figments of the imagination. The

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In a related way, Laruelle's concept of the One is precisely this hypostatized noumenon of the real, shorn of any possible determination since all determinations are ultimately inadequate to the purity of the in-itself, which itself is unilaterally determining-in-the-last-instance. For this reason, by our lights, Laruelle's program presents a profound regression in philosophy, obscured by the hermetic nature of his terminology.

¹⁷³ This is one reason why we cannot draw a hard line between sentience and sapience even if we do want to mark a difference between the instantiated abilities of 'merely' sentient creatures, from those with sapience or general intelligence—whether the former is strictly required for the latter is yet to be seen. We can imagine an artificial general intelligence (AGI) developing which has no capacity for sentience (at least as we understand natural organisms to have). On the other hand, we can equally imagine that all GI requires the complex interaction with its environment (however understood), of the kind that requires agency and sentience as ineluctable coefficients of higher order intelligence. The latter seems more plausible, and I'm tempted to make *a priori* arguments to the effect that the latter must be correct, on the basis of the metaphysics I'm suggesting above.

¹⁷⁴ The idea is that the boundary of individuation of the star is something we impose on a structure of relations between particles and forces, but it would be absurd to claim for that reason that there are no such things as stars, since, for the same reasons, we would be compelled to deny the reality of any object whatsoever. The point is that this criterion of realism, points to a hypostatic conception of the real and is representational to the core; it misses out on the fact that predication is a practical activity before being a theoretical one—it has to do with doing things, affecting things, i.e. causal powers. See e.g., Goodman, "On Starmaking," 143-150. Goodman himself calls his philosophy an 'irrealism' because he thinks the distinction between realism and antirealism is poorly posed and irrelevant for what matters.

Further, it must be recognized that color vision arises in order to capture natural events which are impossible without it. The act of vision gives rise to something new—chromatic qualia themselves.¹⁷⁵ But the emergence of color vision is also a response to certain problems of adaptation in a territory or milieu. In other words, the dispositions which realize the sense of color as qualia are already embedded in contexts where that experience is *significant* (pregnant) and not merely *apparent* (salient).¹⁷⁶ A sign is always more than a pure quality—and being enjoyed as such is probably a very late development (one, perhaps, requiring the much more elaborate cognitive powers that come into being first with the establishment of a certain animal territory, and again in the case of human reflective judgments.)¹⁷⁷ Colors are not only qualities (*icons*) but also *indices* (red denotes 'ripe' for certain primates about certain fruit; yellow and black denote 'poisonous' for certain predators about certain frogs, etc.), and *symbols* (yellow signifies 'cowardice', grey

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¹⁷⁵ This line of thought is similar to one Deleuze pursues in C1, 101. This account of things also shares several points in common with Kleinherenbrink's discussion of the relations, construction, and destruction of machines, though with the crucial caveats mentioned above which puts my account at odds with his cornerstone commitment. See, Kleinherenbrink (2019), 187-257.

¹⁷⁶ See again, Thom (1975) and Wildgen (2010).

WIP 183: "...[T]he territory implies the emergence of pure sensory qualities, of sensibilia that cease to be merely functional and become expressive features, making possible a transformation of functions. No doubt this expressiveness is already diffused in life, and the simple field of lilies might be said to celebrate the glory of the skies. But with the territory and the house it becomes constructive and erects ritual monuments of an animal mass that celebrates qualities before extracting new causalities and finalities from them. This emergence of pure sensory qualities is already art, not only in the treatment of external materials but in the body's postures and colors, in the songs and cries that mark out the territory. It is an outpouring of features, colors, and sounds that are inseparable insofar as they become expressive." We will discuss Kant's reflective judgments at length in 2.2.

signifies 'boredom', etc.). In short, colors (and all other such signs) are embedded in semiotically complex systems inescapably tied to the behavior, activity, or life of the receiver of the sign.

It turns out that thought and language (which are necessarily modally rich in the sense described throughout) by rising above conditions of efficient causation embed ampliative practical powers of action and affection within forms of life that—in virtue of their insisting in and expressing a temporal and modal structure superseding all that is the case or could be—unbind unprecedented causal efficacy relative to the dispositions of 'medium sized dry goods' and the stimulus-response mechanisms of non-linguistic organisms (more on this in 2.3-2.4). Finally, it is just because of these powers that thought strikes at the heart of Being and touches reality, not through a narrowly defined theoretical relation of representational adequation between mind and nature, but because of the construction of powers through which mind is always-already natural, and nature always-already artificial. The (speculative) maximum of such an exertion of powers is called Being, Becoming, Chaos, Pure Immanence, Difference in Itself, or Eternal Return by Deleuze, which is conceptualized in thought through the "pure and empty form of time" or the absolute of synthesis as the supreme principle of genesis, but equally as the sterility or stasis of the Event. But genesis in itself ('perpetual heterogenesis') is precisely what can never be actualized, it only ever insists concretely in actual cases of solution without being reducible them: virtuality is the counterpossibility of all possibility in the real. Counteractualization articulates the reality of the virtual in thought and action: it is itself the unmanfestible disposition which licenses all manifestation, it is manifestation (showing, expression) as such. It is that within logical space that can only be shown in its

concrete cases, never said. It is nothing other than actualization itself understood in its 'counter-actual' mode. It is Pure Immanence, immanent to nothing, no horizon—Universal Vertigo.

Singularities indicate the contours of its genesis and the necessity of moving beyond the givens of the empirical order to grapple with the real conditions of determination or experience. Having arrived at this metaphysics of properties and its modal character, if the 'naturalness' of properties is the metaphysical criterion for the reality of the universal (as David Lewis contends), then nature must be configured in no other way than as virtual. Naturalness cannot be maintained by possible worlds, only the counterpossible condition of a *natura naturans* has the requisite expressive power. The counterpossibility of the infinitive event (the unconditioned) is always 'to nature' without ever being natured (conditioned), just as the counterpossibility of sense is always to express without at the same time being expressed.

We cannot help but see in the standard possible-world semantics of counterfactuals the abode of transcendence. This semantics takes as a virtue the closure and equivalence that removes it from this world only by tracing itself from the latter. It takes actuality as (purely hypothetically) given while banishing the whole rest of the plurality it attributes to other worlds from the realm of existence. At the same time, it indexes the power of that plurality exclusively to a modally unique world (the actual world) which it cannot explain except in terms of an anthropic argument that must be vociferously rejected. It gets us no further than

¹⁷⁸ Lewis, "New Work for a Theory of Universals," 343-377.

the bare stipulation of the presupposition it began with: the actual world is the one 'we' happen to be in. Like Hegel's bad infinities, we can eliminate the spurious formal abstraction of possible worlds (and its cardboard cut-out of the actual-without-actualization) only with a superior abstraction: the immanent abstraction of virtuality embodying the joints of time with respect to each thing in relation to every other. These joints are singularities. They are the only joints at which nature can be cut. They articulate nothing but the movement of causal powers beyond their efficiency. We can understand actualization only by appealing to nothing outside of it, without for all that, reducing Being to the World, i.e., to what is the case. This is achieved in thought only through abstractive syntheses, practices compelled by the confrontation with problems which do not disappear in their solutions.

Whatever epistemic or analytic measures are gained by the standard semantics of possible worlds, they cannot hold in the face of metaphysics. In the end, possible worlds are unreal: they have no being whatsoever, not even the non-being of sense. Singularities, on the other hand—though not *actual*—are very real indeed. Ultimately, what there is consists only of powers concatenated in variably distributed relations, developing signs which 'flash across systems' through which processes of individuation and accretion dynamically unfold

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¹⁷⁹ DR 222: "Every phenomenon flashes in a signal-sign system. In so far as a system is constituted or bounded by at least two heterogeneous series, two disparate orders capable of entering into communication, we call it a signal. The phenomenon that flashes across this system, bringing about the communication between disparate series, is a sign."; and DR 223: "It is true that qualities are signs which flash across the interval of a difference. In so doing, however, they measure the time of an equalisation - in other words, the time taken by the difference to cancel itself out in the extensity in which it is distributed."

scalar variances determined at thresholds of transcendental problems giving rise to distinct existential strata or regimes of emergence. Counterpossibility marks the genesis of sense through and through since it shows in what way the modal structure of reality as time is articulated in thought by the alloplastic and immanent dynamics of logical multiplicity.

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What does this mean for the formal character of reason in logical space? As Sarti, Citti, and Piotrowski as well as AA Cavia have begun to demonstrate, the proper formalization of logical space will require the extrapolation of a theory of multiplicity that is not bound to a pre-established, fixed, and homogenous space of axiomatized operations (of which the standard semantics of possible worlds is one), but rather it must correspond to the production of a space of reasons from the acts immanent to it. One in which the operations themselves ramify the space and give rise to new operators or functions with the act of determination of a problem. "Heterogenetic composition is poles apart from universal laws, and lays the conditions for an immanent morphogenesis that is created time by time by the assembly of singular concatenations." This means, in our terms: reason must be capable of producing forms and not merely delimiting them, deducing consequences, or drawing their limit.

In this regard, much future work could be explored elaborating an alternative framework for the logic of counterfactuals and non-vacuous counterpossibles that take their point of departure from the insights of Sarti, Cavia, and others in the theory of multiplicities. We

¹⁸⁰ Sarti, et al. (2019)

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must, unfortunately, confine ourselves to these merely vatic utterances for now. Yet the task ahead may be sufficiently motivated that those interested in such obscure philosophical backwaters can begin to chart a worthy course.

1.4.6 Conclusion

As we've seen, the idea of truth rests on a set of logical conditions which satisfy the validity of that which they picture. But these in turn rest on factual conditions taken as given. Finally, though, we've seen that these are indeed insufficient, insofar as both rely on genetic conditions, without which the formation of these conditions, their postulation and matching, are impossible. While the first delineates the possibility of formal qualities of individuals in determining the proposition, and the second the actual content of relations between individuals determining states of affairs, the third stands as an expressive mediation without which the first two would not have been possible or actual. The first, infinite analysis, conditions the form of a merely possible world as a logical unity by virtue of the complete and reciprocal determination of the individual (complete in the individual's analytic predicates, reciprocal in the prehensive relations between individuals). The second, finite synthesis, conditions the selection of the actual world as an empirical unity via actually obtaining relations between individuals through a horizon of apprehension in the form of the person or the apperception of the 'I'. But, the third, unlimited synthesis, alone makes sense as that which inscribes the genetic conditions of a problem in each of the other two, gives them a reason to exist, and transcends the conditions of the world by creating, not only through a given form, but itself creating form—that which escapes a priori formalization by giving rise to it. The third case has no 'unity' whatsoever, only

differential univocity or immanence as its domain, what we have described in terms of the powers of things. 181 Its power is not of that which 'belongs' (i.e. the form of the set), but rather of that which is produced or expressed within form without belonging to it, and that which produces form without first being one. Not existence, but insistence—non-being. The third are not individuals or relations but singularities or paradoxical elements, by which the conditions of the problem, and the real, anti-nominal coordinates of contact between thought and being are established. From the standpoint of thought, these coordinates happen to be practical and aesthetic before being theoretical or formal. If the first two, in sharing their unity, uphold the monotonicity of the (actual or possible) world, the third fabricates non-monotonic immanence itself, twice—once in the belly of Being, and a second time on the surface of thought. With respect to this doubling, Catherine Malabou has distinguished two kinds of genesis. In the ontological case, there is ascribed a "hypo-genesis" deep underneath and independent of the level of cognition; in the logical case, there is an "epigenesis" corresponding to a "surface event" by which she demarcates the transcendental as such. 182 If the formal conditions are characterized by deduction, and the empirical conditions induction, the transcendental conditions of synthesis are characterized by a pure abduction of the incommensurable, which alone gives to commensuration the full extent of its expressive powers. Sense is always abstractive

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¹⁸¹ For an exploration of Deleuze's differential conception of univocity is not committed to unity or the One, see, Moore, "Being, Univocity, and Logical Syntax." This is in stark contrast with Badiou's (likely intentionally) mistaken interpretation of Deleuze's 'monism' as a philosophy of the One rather than a genuine philosophy of the multiple. See, Badiou, *Deleuze: The Clamour of Being*.

¹⁸² Malabou, *Before Tomorrow: Epigenesis and Rationality*, 35-39, esp. 36.

synthesis. In this way, the paradoxes of sense represent not just an internal negation or contradiction of a system of rules, but the active force of an abduction unhinging epistemology through an essential process of ungrounding which is nothing but real, practical, and metaphysical encounter with what is external to thought.

2 Common Sense

2.1 Introduction: Common Sense and Value-Form

The pragmatists' model and emblem for the faculty of reason is neither the Enlightenment's reflectively representational mirror nor Romanticism's creatively illuminating lamp, but the flywheel governor that is the flexible instrument of control for the engines of the Industrial Revolution.

Robert Brandom, "Some Strands of Wittgenstein's Normative Pragmatism, and
 Some Strains of his Semantic Nihilism" (2019)

Common sense is a not a kind of good sense, guaranteed in advance by the 'right' use of reason, whatever that might amount to. Common sense is not, for example, a Platonic rational compulsion toward the Good, brought about by one's unforgetting. The common cannot ascend to the good simply through its proper application, since the latter is only ever decided, in a complex manner, on the basis of the former in the first place. ¹⁸³ In this regard, common sense does not already lie in wait, to be exposed by the 'natural light' of the mind. When Descartes writes, "[g]ood sense is of all things the best distributed; for everyone thinks they are so well endowed with it that even those who are the most difficult to satisfy in all other things are in no habit of desiring more of it than they already have," it is difficult to read him unironically. ¹⁸⁴ Accordingly, common sense is not a

¹⁸³ This is a lesson of Wittgenstein's regarding rule-following, forms of life, and certainty to which we will return below in 2.3.

¹⁸⁴ Descartes, *Discours de la méthode*, 6. My translation.

prephilosophical pretext from which to uphold that train of "ancient and venerable prejudices and opinions" that Marx and Engels tell us have, in any case, already been "swept away" by the tide of colonial, industrial, global capitalism (Marx and Engels 1978) [1848], 476). Indeed, the so-called 'common sense' from which public figures speak in the name of their ideals, of the conservation of 'traditional' social values, of the former 'greatness' of nations, of 'naturalness,' etc. are aiming either to vouchsafe current modes of existence (e.g. the relations of production of capital, which are neither ancient nor venerable), or aiming to create a 'new' cultural imagination, one typically cloaked consciously or unconsciously—in a fabulous past that they seek to 'revive,' as it were, from never having been. Often, these two strategies are strongly coupled to one another; the latter typically obscuring the former. (Take, for example, the symbolic role played by the Enlightenment's neoclassical appraisal of the Greco-Roman past in the bourgeoisrepublican revolutions of America and France). Insofar as either appeal is made for a supposedly 'common sense,' to that extent we part company in our use of the term. However, that doesn't mean we escape the problematic of common sense as it implicates reason, history, or capital. With respect to the genesis of sense—insofar as it must always be considered in 'common' in its concreteness—common sense is itself a specter of modernism which crisscrosses the concept of reason on the one hand and the aesthetic on the other (as we will see). It is a specter upon which the ground of the social and the grounding character of sociality for sense is at stake.

If, in Part 1, the Idea of sense provided for us formal coordinates from which to articulate the static genesis of sense in itself—on the one end in the semiotic-logical-conceptual constitution of objects, subjects, and worlds, and on the other in its abstract-synthetic

relations with singularities and thus to an ineliminably inconsistent intralinguistic nonsense which internally motivates a language-exit transition of a very rarified and metaphysical kind (an encounter with what is unthought)—then common sense must substantiate those formal conditions through the articulation of the social, historical, and material determination of sense in its properly dynamic genesis, or what Deleuze also calls the 'spatio-temporal dramatization of the Idea.' This social account of the dynamic genesis of sense is not burdened primarily with the elaboration of an empirical casuistry of language acquisition in the individual (through what the analytics call 'I-thou' sociality) but is rather one in which *social form* is taken as structurally or transcendentally determining of the empirical situation of the psychological origination of sense (through an 'I-we' sociality of an extremely mediated kind). If the purview of static genesis was a

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¹⁸⁵ See DR 216: "It is the dynamic processes which determine the actualisation of Ideas. But what is their relation to this actualisation? They are precisely dramas, they dramatise the Idea. On the one hand, they create or trace a space corresponding to the differential relations and to the singularities to be actualised. When a cellular migration takes place, as Raymond Ruyer shows, it is the requirements of a 'role' in so far as this follows from a structural 'theme' to be actualised which determines the situation, not the other way round. The world is an egg, but the egg itself is a theatre: a staged theatre in which the roles dominate the actors, the spaces dominate the roles and the Ideas dominate the spaces. Furthermore, by virtue of the complexity of Ideas and their relations with other Ideas, the spatial dramatisation is played out on several levels: in the constitution of an internal space, but also in the manner in which that space extends into the external extensity, occupying a region of it. For example, the internal space of a colour is not to be confused with the manner in which it occupies an extensity where it enters into relations with other colours, whatever the affinity between these two processes. A living being is not only defined genetically, by the dynamisms which determine its internal milieu, but also ecologically, by the external movements which preside over its distribution within an extensity." See also Deleuze, "The Method of Dramatization" in DI, 94-116. For a discussion of the connection between the ontological and practical (ethical, aesthetic, political) valences of dramatization in Deleuze, see Scholtz, "Dramatization as Life Practice."

prima facie incomplete, solipsistic word-world relation which pertained to the ascription of the factual (socially underdetermined though it may have been), here the question of value becomes central for dynamic genesis. While the former provided a metaphysical-modal architecture for facts (and thus of causes), the latter will relay instead the genesis of norms. In this case, inducing common sense is pragmatic, based on practice: not first logical and semantic but social and axiological. The social model here is not maintained by mental relations between individual subjects (between self and other): it is not the psychoanalytic-symbolic law of the father nor of the sociolinguistic-grammatical law of the instructor or translator but first and foremost the political-economic law of value. It is in the question of value that we see the necessary overlap between the aesthetic and rational in the genesis of sense.

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If, in Part 1, between Deleuze and Wittgenstein our clandestine interlocutor was Peirce, and more particularly his semiotic-categorial scheme, in relation to Part 2 Marx, and in particular his theory of value, will play this role, though in a somewhat more overt fashion. In order to provide a gloss of the conditions under which common sense is thus to be

¹⁸⁶ For the psychoanalytic law, see Jacques Lacan, "The Function and Field of Speech and Language in Psychoanalysis" in *Ecrits*, 278: "It is in the name of the father that we must recognize the basis of the symbolic function which, since the dawn of historical time, has identified his person with the figure of the law." The roles of instructor and translator are often figures in analytic philosophy of language regarding language-acquisition (first- and second-language acquisition, respectively): for the former, Wittgenstein's commentators (especially Meredith Williams), for the latter, the likes of Quine (indeterminacy of translation) and Davidson (radical interpretation). We will return to the issue in Wittgenstein below.

understood, let us begin with an analogy of abstraction between the static and the dynamic, as it pertains to a grounding notion of form.

From the standpoint of static genesis, as was shown in Part 1, sense is a matter of abstractive synthesis—that is, according to Deleuze, a matter of the synthesis or commensuration of the heterogeneous series of a structure. Under this aspect, such series are understood, in one sense, as internal to the formally problematic structure of language itself, which we have qualified as the virtuality of logical space or the space of problems (these 'internal' series were: the signifying and signified, sense and reference, saying and showing, syntax and semantics, etc.). Through this, static genesis provided for us also the general coordinates for a metaphysics of modernism on the basis of a dispositional theory of powers wrought by a metaphysically immanent account of modality, within which counterfactuality and counterpossibility correspond with the inhabitation of time in thought as the deliberative capacity for the amplification of causal powers in general, taken as the motivating structure of reason in modernity and as the organon of the new. However, we left to one side the question of its concrete historical and social composition and, thus, in an important respect, its historicity—that is to say, its modernism—was adumbrated. It is with regard to the actualization of the Idea of sense, in its historical-material vicissitudes, that despite the depths of logic, time, and power manifested in the formal capacities of language-use, we show ourselves yet to be the sorcerer's apprentice "who is no longer able to control the powers of the nether world which he [sic] has called up by his spells." (Marx and Engels 1978 [1848], 478). This last point is the critical political observation from which the concepts of weak modernism and the patient must take their cues.

Nonetheless, just as Deleuze tells us that static genesis is a matter of the synthesis of heterogeneous series, so too does Marx insist from the outset of Capital that the value-form of the capitalist mode of production relies on the very same thing—namely, the commensuration, via exchange, of heterogeneous series of commodities through which emerge both the concepts of abstract labor and that of value itself. The question regarding the form of value becomes: How do we bring together the qualitatively heterogeneous usevalues of products and the qualitatively heterogeneous activities of producers under one and the same law of value?; How can we understand 20 yards of linen and 1 coat as equivalent values? (Marx 1990 [1867], 132). It is worth noting, in this connection, that Frege invents the concept of sense to deal precisely with the sign of equality. Frege asks: how can equality be other than tautological?¹⁸⁷ In this vein, Marx writes, "What does the equation signify? It signifies that a common element of identical magnitude exists in two different things... Both are therefore equal to a third thing, which in itself is neither the one, nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third thing." (ibid., 127). And just as we saw in Part 1, that sense is always and only 'the mode of presentation' of a referable thing residing in a tripartite semiotic relation of which it is itself the mediating term, and further that sense only comes about through the dimension of expression, so too, for Marx, value (as exchange-value) "cannot be anything other than the mode of expression, the 'form of appearance' of a content distinguishable from it." (ibid., my emphases). But this content does not point to the use-values of the commodities compared, since these relate to the qualitatively differing needs of people,

¹⁸⁷ Cf. Frege 1997 [1892], 151-171.

and thus the products in exchange cannot, insofar as their uses are concerned, be directly equivalent. If two products were qualitatively equivalent with respect to their use then their exchange would, of course, be utterly futile, since everything needed of the one could be gotten from the other (Ibid., 132). Hence, the content of exchange is not reducible to use since the heterogeneity of the two series under exchange is presupposed by exchange itself. Therefore, "clearly, the exchange relation of commodities is characterized precisely by its abstraction from their use-values." (Ibid.) And this is because, from the perspective of their uses, they are incomparable, incommensurable. For Marx, this leaves open the remaining question of what is then compared in the commensuration of the values of the heterogeneous commodities of society. It is, of course, *labor*, socially productive activity. But, concrete productive activities are as unalike in quality as any two use-values of commodities. Thus, it is not concrete and heterogeneous labors that are made equivalent, but rather *simple* (or homogeneous) abstract human labor which emerges only in the exchange of goods and services. ¹⁸⁸ This exchange renders all productive relations common

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¹⁸⁸ Lest the post-humanists, anti-humanists, post-Marxists, and eco-socialists begin raising pitchforks at the sight of the words 'human' and 'labor' in the phrase 'abstract human labor' it may be worth clarifying somewhat the philosophical commitments the term implies, since the status of humanism and the labor theory of value have been at the center of theoretical discussions of Marx in continental philosophy, critical theory, and political economy since before the 1960s. Firstly, it's my view that Marx's insistence on human labor is the product of a *de facto* observation about the creation of value in society relative to its forces of production. Human productive capacity has historically been at the basis of social reproduction in all previous social forms, and this was (and remains) the case for capitalism as well (in the historically specific form of abstract labor), even while other conditions are obviously also necessary (though not sufficient), such as (as things stand): the biologically reproductive capacities of the human body; the systematic use of animals, plants, and minerals; the material constraints of the environment (resource availability, ecological hospitableness, etc.); and so on. However, this observation of social fact does not entail the *de jure* commitment to some special metaphysical property with which the human (say, opposed to animals or machines) is endowed and which is

somehow expressed in human labor in particular. However, in virtue of the fact that value is a function of abstract labor rather than merely concrete labor, value is also normative, and thus subject to normative social constraints embodied in the social relations of the market, not simply to the energetics or thermodynamics of physical work (though this is clearly a condition of the efficacy of the realization of labor-power as real causal power, from which basis the reality of the abstraction of abstract labor springs—i.e. value is really valuable only in virtue of appropriation (or productive activity) being, in-the-lastinstance, causally efficacious). Value is therefore a normative organization and a distributive reservoir of real social forces: only those responsive to norms can be made responsible for them. This is why, although often unethical, the treatment and use of animals in capitalism is not 'exploitative' of those animals in the same sense in which it is exploitative of human beings, precisely because the very concept of a universal 'humanity' is historically predicated on the social possession of the common sense of abstract labor, as universal productive capacity, the genus-being of society to which everyone (collectively) has a right and everyone (collectively) is responsible. In its metaphysical standing, value as power runs up against entropic physical limits, but these are of little concern in principle except in terms of the cosmic-energy balance sheet, the 'in-the-last-instance' of the first law of thermodynamics. From a thermodynamic point of view, causal power is an energetically zero-sum game. Practically and locally, of course, energetic limitations are of constant concern for economic systems. For a survey of the relation between value, nature, and appropriation in Marx, see Foster, "Marx, Value, and Nature."

Secondly, there is the question as to whether the labor theory of value holds up in the face of market financialization and post-Fordist regimes of work. In this regard, the Autonomists and others post-Marxist theorists of the last few decades have taken local changes in the content or type of work in the so-called 'post-industrial' world as indicative of general and profound changes in the economy which point to the need for a new theory of value. These changes, however, underplay the degree to which the world market is still utterly dependent on industrial production for its reproduction as a whole in this case, they fail to pay due attention to the relation between intellectual and manual labor or the economic position of the 'global south' with respect to the world-system as a whole. All this not-withstanding, value for Marx is only generated to the degree that what counts as valuable participates in social production and reproduction. Insofar as this is the case, especially as that activity becomes itself a commodity through which surplus is extracted (undergoes 'valorization'), to that extent that activity is labor (the so-called 'materiality' or 'immateriality' of labor is irrelevant in this regard, since intellectual, emotional, affective labor, etc. are themselves already material). Regarding financialization, the labor theory of value needs to be understood as a two-way-street: the monetary mass of financiers only counts as value insofar as it can ultimately be cashed out for the blood, sweat, tears, feelings, thoughts, etc. of others or the objects they produce—that is, for real social power. Nothing in the algorithms of high-frequency traders changes essentially the character or necessity of money-exist transitions in M-C-M circuit as regards value, even if the terminal goal of the capitalist is, no surprises, the

with respect to their quantification by time. Abstract labor, accordingly, is seen only through the value of commodities in their exchange, since the socially objective (or public) character of value can only ever take the 'form of appearance' of one commodity exchanging for another (or, more acutely, of money in the money-form as the general equivalent in exchange). The language of value is, then—since it only appears through its circulation—an essentially indirect discourse. ¹⁸⁹ As such, value has all the hallmarks of a paradoxical element, what Deleuze calls 'an occupant without a place or a place without an occupant':

It circulates without end in both series and, for this reason, assures their communication. It is a two-sided entity, equally present in the signifying and the signified series. It is the mirror. Thus, it is at once word and thing, name and object, sense and denotatum, expression and designation, etc. It guarantees, therefore, the convergence of the two series which it traverses, but precisely on the condition that it makes them endlessly diverge. It has the property of being always displaced in relation to itself. (LS, 40).

Just as in the example of *Alice in Wonderland* in the Sheep's shop where a "large bright thing that looked sometimes like a doll and sometimes like a work-box... was always in the shelf next above the one she was looking at..." (Carroll, cited in LS, 41) we can only see abstract labor through the circulation of objects of social relations. Abstract labor looks

accumulation of money as capital. This is why, for Marx, the M-M' formula for interest-bearing capital is the one in which the fetish character of capitalism becomes explicit.

¹⁸⁹ It is perhaps not peripheral to the increasingly mediated social relations brought about by the world market, and its consequences for the subject's relation to mental life itself, that Roy Pascal finds the free indirect style in the narrative of the modern novel—within which first- and third-person perspectives coalesce—emerging only in the 19th century. Pascal, *The Dual Voice: Free Indirect Speech and Its Functioning in the Nineteenth-century European Novel*, 1-33.

sometimes like a doll, sometimes like a work-box; sometimes like 20 yards of linen and sometimes like a coat. Mostly, it looks like a ten-pound note or a twenty-dollar bill. To see value or to speak its language is always to see with a sideways glance or to speak out of the side of one's mouth; it has no direct presence, no physical or corporeal existence as such. In a word, value is incorporeal 'common' sense: 190

We see that everything our analysis of the value of commodities previously told us is repeated by the linen itself, as soon as it enters into association with another commodity, the coat. Only it reveals its thoughts in a language with which it alone is familiar, the language of commodities. In order to tell us that labour creates its own value in its abstract quality of being human labour, it says that the coat in so far as it counts as its equal, i.e. its value, consists of the same labour as it does itself. In order to inform us that its sublime objectivity as a value differs from its stiff and starchy existence as a body, it says that value has the appearance of a coat, and therefore that in so far as the linen itself is an object of value, it and the coat are as like as two peas... By means of the value-relation, therefore, the natural form of commodity B becomes the value-form of commodity A, in other words the physical body of commodity B becomes a mirror for the value of commodity A. (Marx 1990 [1867], 143-44).

But precisely because of its only-ever-mediated and social existence via the circulation of commodities (and even more profoundly via the general equivalent of money), the circulation of value displaces the comprehension, mastery, and agency of any and all subjects, understood as individuals, onto the matrix of social relations of production taken

¹⁹⁰ In the process of writing this section linking sense with the value-form, we have encountered profound resonances with Sami Khatib, whose work has painstakingly demonstrated the connection between the linguistic sphere and that of economic value in Marx, through an analysis of the aesthetics of real abstraction. Khatib, "Sensuous Supra-Sensuous", 59-63.

as a whole: "We see here, on the one hand, how the exchange of commodities breaks through all the individual and local limitations of the direct exchange of products, and develops the metabolic process of human labour. On the other hand, there develops a whole network of social connections of natural origin, entirely beyond the control of the human agents." (Ibid., 207).

It is in this respect that the social powers unleashed by the common sense of abstract labor are also irreconcilable with the liberal and legal *persona* of the individual subject of rights (full of spontaneous self-possession and natural freedom) which is itself coeval with the emergence of the world market. Value, embodied as abstract labor in the exchange of commodities through the mediation of the money-form, is structurally determining for subjects who are nevertheless compelled to substantiate its form even while being socially constituted by it. In this regard also, any answer to a genuine substantiation of the common must contend with the means by which the modes of existence (or relations of production) produced by capitalism enable us to theorize its transformation in terms of the transformation of the practices which substantiate it. In what follows, this turns on the relation between structure and value in general via the problematic status of aesthetic judgment. This is because the aesthetic stands at the basis both of a transcendentalempirical ground of cognition and the self-affirmative character of life—life beyond its subsistence, engaging the essentially productive powers instantiated in the genus-being (Gattungswessen) of the human; that is, at the basis of an unbound normativity. But the problem lies in the fact that the modes of existence wrought by the value-form of the capital relation simultaneously bar the actualization of a common form of life taken qualitatively as *common*. In other words, as is often said, the relations of production in the world-market

are alienated from the subjects instantiating such relations; it is these relations which bind subjects together and separate them out at one and the same time. Instead of allowing the common to be taken up as such, these conditions pervert the necessarily social end of productive activity, transforming its appearance from a collective social power into the mere subsistence of the *person*, or, at best, one's comparative advantage as a competing individual.

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Along the lines of the axiological promises and risks outlined above, value creation as productive force and evaluation as the grounding creative activity for the construction of forms of life come together; aesthetics and reason are pragmatically unified in the genesis of common sense. In order to better articulate their connection, we will proceed in Part 2 to an investigation of common sense as the aesthetic ground of cognition in Kant, one which historicizes and empiricizes the transcendentality of mind and reason itself (2.2). Then we will continue to probe the social and aesthetic dimension of the normative through an analysis of the problem of rule-following in Wittgenstein, and its circumscription by forms of life (2.3). Next, as it relates to the second prong of common sense, its appearance as merely individual interest, we will articulate a political aesthetics for contemporary visual art, looking first to the elaboration of reason in the neo-rationalists, and then to a structural conception of aesthetic value, a platform aesthetics of generative entrenchment, decouplable from its purely monetary valuation, while remaining beholden to the historical specificity of its mode of production (2.4). We will then proceed by articulating the specificities of contemporary social form via the relation between recursion and valorization in language, art, and finance through the work of Marcel Broodthaers (2.5).

Finally, we will close Part 2 with a look into the technological conditions of perception in the informational and computational paradigms of *compression* and *noise*, especially as they effectuate a modal impoverishment of perception inhibiting an emancipatory program of the thought of the common, pertaining to the disclosure of history and time in the 'perceptual coding' of digital media in late modernity (2.6).

2.2 Reason, Speculation, and Speciation in Kant's Aesthetic Judgment

2.2.1 Background: A Metaphysical Problem of Experience

According to Kant, to understand reason is to understand judgment, but understanding judgment (in its transcendental dimension) requires understanding aesthetics. My contention is that aesthetics provides us with a continuity thesis between natural (causal) and normative (rational) vocabularies. The aesthetics of reason therefore allows the picture of reason to be taken up from a vantage which at once naturalizes, socializes, and aestheticizes the grounds of reason, and pushes toward still-speculative dimensions of the capacities of mind, their relation to aesthetic experience, and their implication in the conception of our collective futures as a *species* yet unfathomed.

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If, in keeping with the metaphysics of modernism already established, we wish to deny all empirically given practical/natural limits insofar as they are conceived as metaphysically immutable¹⁹¹ and we also wish to deny that there are any immanent global *a priori* limits

¹⁹¹ To clarify: we would deny all *de jure* practical limits except for perhaps 'absolute' physical limits such as the heat death of the universe, or the causal horizon of the observable universe due to the cosmological constant. These are not metaphysically absolute, but only absolute insofar as their mutability is not compatible with the continuity of existence of thinking beings to transgress such limits, so far as we know—i.e. such physical limits are practically absolute, since they determine the energetic and causal space which we inhabit. For example, the homeostatic organization required for life is predicated on thermodynamic differentials, which imply a (relatively) low-entropy state, one far out of thermodynamic equilibrium.

to the employment of reason (as there are in Kant), while, at the same time, taking seriously the local causal constraints on rationality, in situ, then it seems we would be compelled to abandon the Kantian picture of the faculties insofar as the faculties provide Kant with a stable, non-empirical horizon of apprehension from which to delineate the ostensible universality and necessity of the critical project. Such a picture has held philosophy captive since Plato made his distinction between aisthesis (eikasia), dianoia, and noiesis, ¹⁹² which was transcendentally re-grounded by Kant's distinction between sensibility (Sinnlichkeit), understanding (Verstand), and reason (Vernuft) in the Critique of Pure Reason. From the more or less Promethean conception of nature that denies such limits, the notion that we can give real formal constraints on the expression of rationality (even metaphysically sound a posteriori ones) becomes troubled from the standpoint of a critical philosophy by the fact that we cannot in turn take the givenness of those constraints for granted. 193 Given this, the re-evaluation of reason brings with it a double imperative, if we are to escape both unconditioned rationalism and foundationalist empiricism. We must think from a contingently transcendental position without which empirical contents are nonsensical, but at the same time, we must also think from a necessarily empirical position without which the existence of transcendental structure is not real but only ideal.

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¹⁹² Plato, *Republic* VI, 509d-511e. Plato, of course, does not use the term, *aisthesis*, but instead divides both the sensible (*eikasia*, *pistis*) and the intelligible (*dianoia*, *noiesis*) in two. Nevertheless, the inklings of the paradigm begin already there.

¹⁹³ Prometheanism will be discussed in more detail in relation to neo-rationalism in sect. 2.4.

Of course, we can always follow Gabriel Catren's (2016) tack about the multimodal concreteness of immanent experience, in which the faculties themselves might be thought of as functional abstractions. But then we must explain the *necessity* of these abstractions (if they are truly nominal) in the immanent continua from which they emanate. How does the division of experience into transcendental abstractions, for example, give us traction on that from which it abstracts? In other words, what is the natural imperative of intelligibility? In what sense can we hold effective *knowledge* in this respect to be *true*, in any traditional acceptation of that word? This is a redoubled question about the relationship of the passage between differences and the old mysteries of representation. To give a satisfactory metaphysical, naturalistic, and historical account of this question seems to me the chief problem with which any theory of reason today must grapple. A very partial contribution to it comes here through the role aesthetics plays in engendering the relationship between the natural and the normative, or between the factual and the valuable. 194

¹⁹⁴ The task to think of aesthetics as integrating the sensible and the rational was already taken up in the immediate aftermath of Kant by Schiller, who sees in aesthetic education a halfway point between our base instinct or inclination, and the disembodied ideality of fully rational cognition (morality, or the practical in Kant's terms) by elaborating a theory of drives (taken up from Reinhold), in particular through the role of the 'play drive' (*Spieltrieb*) as mediating between the 'form drive' (*Formtrieb*) and the 'sense drive' (*Sachtrieb/Sinnestrieb*). Schiller's formulation presciently precedes at once Nietzsche, Freud, and Benjamin. While our account differs substantially in detail from that of Schiller, it makes up part of an oblique tradition regarding this problem stretching from Kant, through Schiller and Peirce to Marx, Wittgenstein, and Deleuze. Friedrich Schiller, *On the Aesthetic Education of Man*, 54-55.

Peirce's own understanding of aesthetics as the basis of the normative sciences stems from his reading of Schiller—where instead of *Trieb*, Peirce opts for a theory of habit suited to establish a continuum between nature and normativity. For the influence of Schiller on Peirce see, Barnouw, "Aesthetic' for Schiller and Peirce."

* * *

Kant had already foreseen how a hierarchization of the faculties could have only a relative value, a value relative to the critique or the practical activity one engages in. Such a hierarchization could not, nevertheless, be given an absolute value since it remains effective relative *only* to the end to which the hierarchy is put. The *Critique of Judgment* is meant—at least in part—to provide the transcendental conditions in which this situation is to be thought, since it provides an analysis of an indeterminate auto-affection of the faculties, justifying in its course the place of art and the aesthetic judgment of nature in the breadth of the mind. But the problem is deeper and cannot be satisfied simply by the modulation of the relations between faculties. The proviso that the field of possible experience is not exhausted by the sovereignty of reason, and the corrective of another, freer, arrangement of the faculties is insufficient. This problem of the relations between faculties troubles, instead, the whole standpoint of the Kantian transcendental as such: that is, it problematizes the very transcendentality of the faculties themselves, since the faculties as entities must be no less dynamically, historically, genetically, and relationally constituted according to their undertaking than that of their relative systematic positions and order under a given arrangement. The trouble of the faculties is they are themselves conditioned by the undertakings and experiences for which they provide the conditions of possibility. In this regard, Deleuze is right to insist that it is not possible experience, but real experience which ultimately reigns supreme—since it is only the latter which escapes the particular institution of a given and puts us in touch with what is external to thought. The faculties in this respect are mutable-transcendental, or—to borrow from Deleuzetranscendentally empirical. ¹⁹⁵ It is not difficult to see that this affects the whole project of understanding the function of reason, including the relation between a putative sapience and sentience, and hence requires a renewed conception not only of rationality but also importantly of aesthetics in all its possible valences.

The doctrine of the faculties—so well entrenched it is almost invisible—is beginning to become untenable in light of the speed and depth of transformations in almost all provinces of contemporary intellectual and practical life. A new aesthetics with an appropriately robust conceptual nexus is not just advantageous but imperative for both the crisis of theory and practice which currently faces contemporary art, and for any philosophy of mind and nature—that is any metaphysics—worth the name. It is this imperative that contains the

¹⁹⁵ This problem seems also to be at issue through what Meillassoux points to in determining the 'facticity' of the correlation in relation to Kant's 'problematic' construal of the non-epistemic character, or conceptual contentlessness, of the thing in itself. Meillassoux 2008 [2006], 55-76. See also Brassier, "Correlation, Speculation, and the Modal Kant-Sellars Thesis." Deleuze, by contrast, in *Difference and Repetition*, insists on Kant's determination of the Idea as problematic, and of the conceptual contentlessness of the thing in itself (viz. that Ideas are not conceptual and that concepts are not adequate to the Idea), but rejects its noumenal character, insofar as the 'objective' character of the Idea is given, not in relation to the conditions of *possibility* of phenomena, but through an analysis of a matter-of-factual encounter in the genesis of thought. Thus, for Deleuze, transcendental synthesis pertains to real conditions (notably with respect to time), rather than to conditions of possibility, a priori—and this is why the subject for Deleuze is forged, not by way of spontaneity, but through a series of evermore profound passive syntheses that extend, not just to sensibility (as understood by Kant), but all the way to the end of thought (i.e. to the Idea itself). Therefore, for Deleuze, human thinking is a species of these syntheses (not their domain), and it is in virtue of its being the kind of thing that problems-Ideas are made of that thinking has ontological access to the real, and not merely epistemic access to phenomena. In other words, there is no nominal/real distinction in Deleuze insofar as the real itself is ontologically (and not merely epistemologically) problematic. What plays the transcendental modal role as the possible in Kant is played by the virtual/actual structure of differenc/tiation in Deleuze. That structure does without the equivocal, metaphysical distinction separating subject and object, even if the distinction, obviously, remains a functional one. DR 168-261.

promise of *literally* new forms of experience, a promise that almost all recent philosophical aesthetics rehearse (Rancière, Badiou, etc.), but none can so far supply. We gesture only at the grounds of the problem here and in this respect we cannot claim to be anything more than another well-wisher of these forms. Nevertheless, the concrete must continually be demanded of philosophy—even as it must also breach increasingly remote climes of formalization, speculation, and abstraction. For now, let us frame the Kantian problem of aesthetics with the problem of the faculties as we have delimited it.

2.2.2 Purposiveness and Common Sense¹⁹⁶

Kant, in part, saw the problem between the ends and means of rationality and that of functional roles of the faculties in establishing the former. Judgment in the first two *Critiques* appears as both the instrument and milieu of rationality; whether in 'determining judgments' or the 'interests of reason,' that is, whether allied to theoretical knowledge or the setting of practical ends (the two axes of reason) judgment acts as a liaison, performing operations in accord with a determining faculty (understanding as faculty of knowledge, reason as faculty of desire respectively). But it is uniquely in raising judgment up to its *a priori* principle that aesthetics, according to Kant, receives its due.

The rehearsal of the shift in perspective between the first two *Critiques* and the *Critique of Judgment* is hardly infrequent, but it aids the understanding of our problem here. The third

¹⁹⁶ We owe much of the discussion, both implicitly and explicitly, of the variable relation of the faculties in Kant's philosophy to Deleuze's excellent monograph on the critical project. KCP, 39-58.

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Critique no doubt pertains indirectly to the *problem* of the legislation of judgment by other faculties (understanding, reason), but it also opens up the system of transcendental philosophy (and its carefully administered theoretical subject) to a wide ambit of forms of experience, many of which appear ambivalent to any overt utility in terms of these other legislating faculties. This should shed a reflective light on the strict project of rationality. The transits which judgment makes between understanding and reason come to be assured by the ground of an aesthetical common sense. On the one hand, this ground faces the other cognitive faculties necessary for any Kantian conception of reason, and, on the other, represents a universal principle of aesthetic experience.

Judgment in the *Critique of Pure Reason* is that which subsumes the particular under the universal given to it by the understanding (CJ, Intro. IV; CPR1, A133-6/B172-5): it is the talent for employing the appropriate application of rules. In the *Critique of Judgment*, the situation is reversed: reflective judgments involve a given particular which must *find* its universal, though not in a category (CPR1, A67-79/B91-100). In the event of a determining judgment (subsuming the particular), judgments are actual and assertoric (Ibid., see footnote A75/B100). But reflective judgments, in their universality, involve forms of possible experience (CJ, §22 "General Remark").

This is because reflective judgments *do not* involve the relation of a judgment to an object of cognition external to it. It does not deal in concepts pertaining to their role in the possession of knowledge, even *a priori* concepts *in themselves*. Instead, reflective judgment "... has to do with no *concept* of the character and internal or external possibility of the object by means of this or that cause, but merely with the relation of the representative powers to one another, so far as they are determined by a representation [i.e.

by the apprehension of a particular phenomenon]" (ibid., §11). But this determination alone leaves the reflective judgment ungrounded. If the concept is not the ground of the judgment, then what is? Aesthetic judgments are bound up in the faculty of feeling, and are supposedly universal, but it is a matter of critique to determine just how this is so. The mistake of previous aesthetic theories (Baumgarten, Meier, etc.) is two-fold: first, they mistake the pleasantness attributed in the subject as the contribution of an object as such. This is how they attempt to objectively ground the universality of aesthetic experience. However, secondly, what is recognized as beautiful is registered falsely in merely subjective terms (pleasantness) (ibid., §11). On the one hand, they reduce the beautiful to the pleasant and they seek its ground in the *object* as cause of the beautiful on the other (ibid., §15-16). The satisfaction of the beautiful, however, is of another order, and this theory cannot account for the diversity of feeling experienced by subjects regarding the beautiful, nor can it account for the universally held feeling of the beautiful, even if it is subjectively differentiated in its apprehension. Thus, what we confront is the problem of the ideal of beauty (the ruse of aesthetic 'perfection' and the form of purposiveness), but also the problem of the grounds of reflective judgments of taste (aesthetic common sense). Purposiveness and common sense, as we will see, can be dislocated from their Kantian coordinates in the faculties—though not without them undergoing an essential torsion in conceptual valence. In this way they might aid in forming a new perception (a circumspeculation) complexly related to an 'expanded reason.' First let us determine both purposiveness and common sense in the *Critique of Judgment* from our vantage point.

We know that judgments of taste are not determined by interests (ibid., §1-5, "The First Moment"), since these vitiate the *aesthetic* character of a judgment as such. Ordinarily,

interests and judgments are syntheses mixed with empirical pleasures or pains—these syntheses constitute the field of mundane (empirical) purposes in the course of everyday life. But in their mixture, we are no closer to understanding purpose or purposiveness in its pure form. Following through, Kant says this about purpose from a transcendental perspective:

If we wish to explain what a purpose is according to its transcendental determinations (without presupposing anything empirical like the feeling of pleasure), [we say that] the purpose is the object of a concept, in so far as the concept is regarded as the cause of the object (the real ground of its possibility); and the causality of a *concept* in respect to its *object* is its purposiveness (*forma finalis*). Where then not merely the cognition of an object but the object itself (its form and existence) is thought as an effect only possible by means of the concept of this latter there we think a purpose. The representation of the effect is here the determining ground of its cause and precedes it. (ibid., §10).

Purposes are those thoughts for which the final cause is also ground of its formal and efficient causes. In other words, the act of conceiving of a purpose entails the bringing about of the purpose as the effect of its concept—this is how *the will* is constituted.

Purposiveness for Kant instead reflects, not any actual acts of will, any real purpose, but the transcendental conditions of our *intelligible apprehension* of the causal possibility of an object *according to* a will. It is, so to speak, a kind of aesthetical or reflective, rather than rational, 'analogy of experience.' In the case of judgments of taste (or what is the same, in 'purposiveness without purpose') it is important to note that "we do not place the causes of this form in a will..." but only conceive it *as if* 'will' were its cause (ibid). But this is merely the *form* of purposiveness itself (the causality of the concept with respect to its object).

Even if there are no real purposes in reflective judgments, the term 'purposiveness' should not dissuade us from its reality (opposed to its mere ideality). Indeed, it is tempting to read purposiveness—and Kant himself is tempted by this—simply as a kind of transcendental heuristic of the subject regarding the aesthetic operations of the faculties on phenomena. It is true that the purposiveness of aesthetical judgments of taste is only *subjectively* universal (they pertain to the purposiveness of the faculties themselves, and of judgment (through taste) as the faculty of free play amongst the subject's auto-affections) but this does not disqualify their reality. Not at all. It is hard for us to underestimate what Kant has hatched upon with the notion of purposiveness, and we would do well to dissuade the theistic tendencies of its interpretation, provoked by proximity to the idea of design. Instead, purposiveness without purpose is the ground of the intelligible as common sense. It is the constructivist or intuitionist directionality of sense as common (though differentiated). Aesthetics then is the condition of possibility of value as a social force—in other words, of normativity and community. We might say then that, with the notion of purposiveness without purpose, Kant invents the notion of Spirit: judgments of taste appear as subjective Spirit; the purposiveness of teleological judgment in nature appears as objective Spirit. Little wonder then, that the Romanticism of the Critique of Judgment has often been remarked upon. We hope to elucidate the speculative grandeur of this strange invention of Kant's through the naturalization of purposiveness in relation to rationality, in at least two ways according to the delineations above. But for now, we will content ourselves to discuss its ground in aesthetical common sense.

Judgments of taste are a subjective necessity, but a necessity shared by all alike. Nonetheless, since there is no conceptual *content* (e.g. no set of qualities of the beautiful), nor any empirical object on which the agreement of the judgment of the beautiful is obtained, we say that it is *conditioned*:

If judgments of taste (like cognitive judgments) had a definite objective principle, then the person who lays them down in accordance with the latter would claim an unconditioned necessity for his [sic] judgment. If they were devoid of all principle, like those of the mere taste of sense, we would not allow them in thought any necessity whatever. Hence, they must have a subjective principle which determines what pleases or displeases only by feeling and not by concepts, but yet with universal validity. But such a principle could only be regarded as a *common sense*. (ibid., §20).

This common sense is nothing other than the "free play of our cognitive powers" (ibid.) as we have mentioned, and it is the *communicability* of this free play as a state of feeling that grounds the judgment of taste. It is this *state* which we call beautiful, but which we attribute to the object—though not as a factual determination (i.e. not (rightly) as part of the empirical content of the object). Not only are judgments of taste grounded by the possibility of the state of relation between faculties in the subject, but so is cognition in general: "[f]or without this [state] as the subjective condition of cognition, cognition as an effect could not arise" (Ibid., §21).

Nevertheless, this subjective necessity is still *necessarily* represented as *objective* through the insistence on the institution of the normative judgment of the beautiful: my apprehension of the beautiful *ought* to be shared uniformly. It is precisely in insisting on this claim to aesthetic judgment as an 'indeterminate norm' that we breach into the nature of the faculties and what constitutes their endogenous distinctions.

2.2.3 Speculation and Speciation

In order to elucidate the meaning of our natural-transcendental speculation on aesthetic judgment, let us look at a long quote of Kant, one the great moments in his philosophy:

This indeterminate norm of a common sense is actually presupposed by us, as is shown by our claim to lay down judgments of taste. Whether there is in fact such a common sense, as a *constitutive principle* of the possibility of experience, or whether a yet higher principle of reason makes it only into a *regulative principle* for producing in us a common sense for higher purposes; whether, therefore, taste is an original and natural faculty or only the idea of an artificial one yet to be acquired, so that a judgment of taste with its assumption of a universal assent in fact is only a requirement of reason for producing such harmony of sentiment; whether the ought, i.e. the objective necessity of the confluence of the feeling of any one man [sic] with that of every other, only signifies the possibility of arriving at this accord, and the judgment of taste only affords an example of the application of this principle—these questions we have neither the wish nor the power to investigate as yet... (ibid., §22).

There is clearly an ambivalence here in the ontological status of the faculties. Kant speculates on two fronts: first, as to whether or not (aesthetic) taste is or could be a faculty properly so called, or whether it is merely beckoned into existence by virtue of the "requirement of reason for producing such harmony." This is an ambivalence between regulative and constitutive principles which signals the end of the picture of the faculties found in the *Critique of Pure Reason*, since any ambiguity in the division between the regulative and the constitutive destroys the ground upon which the (foundationally) justified use of reason stands. The *ends* of the first two *Critiques* could no doubt be salvaged, but no matter the outcome this ambivalence necessitates a reformulation of the critique of the faculties. By our own lights, regulation and constitution do represent two

poles of a system of capacities of reason and of cognition (or sapience and sentience) generally, but these two poles are distributed on a dialectical continuum of variable articulations which can only be addressed fully with respect to particular case histories. The passage of one to the other—the ambivalence which common sense opens up to us constitutes possibilities for transcendentalization; it shows us some conditions for the genesis of transcendental structures themselves. This is what makes aesthetics at once always a speculative pursuit, but one which is also objective in a qualified sense of the word—it produces transcendental conditions, and grounds the subsumptive role of judgment in relation to the understanding; it grounds the legislative pole of reason under at minimum this particular condition: aesthetic judgment is the "author of arbitrary forms of possible intuition." (ibid., 77, "General Remark..."). But this is precisely its purposiveness without purpose. A properly aesthetic directionality, unhinged from the realization of the concepts of the will (practical reason), and from all epistemic requirements pertaining to the fidelity to the putative lawfulness of empirical objects (theoretical reason). My argument here is that aesthesis is nonetheless constitutive of reason as such without falling into the myth of the given, precisely because one cannot abstract the ways something can stand as a reason for something else, from the ways in which those things appear (even at the level of non-conceptual content). Aesthetics names the place of genesis of value, that place where one rises above the interests of mere sentience, mere pleasure and pain (e.g. RDRDs) without yet being subsumed by knowledge or purpose (understanding or will), all the while motivating them each in turn.

Kant's second speculation regards the ambivalence of the universality of aesthetic judgment: whether the common sense resides solely in the subjective necessity of the

accord of the subject in relation to the particular state of feeling, or whether there is not a 'higher' unity among the principles of taste themselves. Remember that the universality of taste is only what Kant calls "exemplary": reflective judgments move from the particular to the universal, but its universal is *not* given in its particular case. This again points to its purposiveness without *purpose*. Aesthetic judgment is not 'moral' for this reason. The universality of taste here refers not simply to the conditioned, subjective necessity of the individual, but the speculative, objective necessity of the species—as such it is a special condition on the subjective necessity. Its 'ought' is not the epistemic tableau of the understanding, nor the moral projection of the will in advance of its effectuation, but the speculative image of an unknown universal maxim (a special condition), given in advance of its subsumption, by the particular, as the event of transcendentalization itself. In Deleuze's phrasing, all genuine aesthesis conjures 'a people to come'; in Wittgenstein's lexicon, it corresponds to the formation of a 'form of life', in Hegel's system it is that through which Geist gives itself concrete sensuous reality. Aesthetic judgments a priori, by virtue of their purposiveness, and in relation to the *state* of the faculties of the *subject*, represent, prima facie, the spiritual or experiential events of the individual. But in relation to their universality, they constitute the unknown promise of a real, but epistemically obscure speciation, not only the transitory state of the subject and the capacity or accord which makes possible each person's self-relation, but the speculative abduction of new transcendental capacities, and a critical glimpse at the configuration of the transcendentals of experience. Aesthetic judgments stand before the law of thought, in the gap between rules and their following. It is this fissure which gives them a genetic power in excess of the already constituted and the merely regulative. In this aspect, aesthesis is a spiritual

event for the species, and not simply an experience for the individual. Because of this aesthetics (as opposed to pure and practical reason) is genuinely futural, because in its indeterminacy it is necessarily speculative in its scope. It is also genuinely pragmatic for the same reason since it is creative of value and not just possessive of it.

2.2.4 Conclusion

Aesthetic judgment is not simply the ground of reason (and cognition), but also the fortuitous 'absolution' (Catren) of the rational faculties themselves. It exposes common sense not only as a *subjective* necessity conditioned in the particular state by the capacity of the accord of the faculties, it also presents an *objective* special, but speculative, necessity as the condition of the former. This latter, special, but speculative condition of common sense is complexly related to purposiveness—amplified as Spirit (*Geist*): ¹⁹⁷ it is the motor of the *actual* rational distillation of faculties (or what amounts to the same, the nexus or event of transcendentalization itself), and the speculative interest of a pure aesthetics. But, as a special condition, it should come as no surprise to us that for Kant it is *judgment* alone

The grounds for interpreting purposiveness without purpose as *Geist* in something like the Hegelian sense is as follows: (1) purposiveness is conceived as the "causality of a *concept* in respect of its *object*" (CJ, §10, my bold). As a 'final form', it indicates or determines the shape of a judgment, by virtue of its directionality, without implying a definite end, through reason or the understanding. In this sense, we can consider it a kind of 'labor of the concept'. (2) It contains the necessary ambivalence between the individual and collective and between the natural and the artificial. (3) It is conceived in reference to, so to speak, the *form of the will*, without its object being constituted by an actual will. This last point feeds back into the first two in myriad ways. (4) It is constituted by reflective judgments, just as *Geist* implies necessarily a form of reflexivity, coded as self-consciousness in Hegel.

that is capable of this profound exercise (judgment which is at the crux of all the rational faculties and is the faculty of rules itself.) We should not forget that 'critique' has its roots in the Greek (*krinein*) for judgment: in this respect, for Kant, the human being is 'zōon kritikon.'

We must save for ourselves, in Kant's aesthetics, the *effect*—if not the meaning and the formal apparatus—of purposiveness without purpose. What does this mean? Aesthesis (in its transcendental form at least) must necessarily include within it a directionality from which it cannot be removed. This is not however the positing of an end (just as it wasn't for Kant). Instead, let us view it as *perception vectorized*.

Appearing as such, from the perspective of life, aesthesis is the point at which fact, power, and value are consubstantiated in an indissociable pragmatic unity without finality. From the standpoint of human life, this unity is social. Pure aesthetic judgment, does not ground, warrant, or even endorse its directions, but instead provides a concrete counter-actual form of experience, one opposed to the subsumption of the particular by the general, and is for that very reason universal and 'exemplary'—something akin to what Nathan Brown has called an "exemplary exception." All originary values are singularities or events. What

¹⁹⁸ Brown, "Absent Blue Wax.", 89. Nathan Brown's notion of an 'exemplary exception' parallels what we have tried to describe in the relation between reason and vertigo, understood correctly via singularities of the problems-ideas of sense. He defines it thus: "Rather, an exemplary exception (in philosophy) would be an exception that exemplifies the positive power of a system of thought to intuit its outside from within its own parameters, while retaining the sense of that outside as a real exception: to encounter an outside within the movement of thought, without thereby either absorbing or collapsing into it." This is emblematic of a project he calls 'rationalist empiricism' which very closely echoes our ownSee also, Brown, *Rationalist Empiricism*.

aesthesis aims to produce is—by virtue of its lack of subsumption by the understanding a singularity, an abstract particular or concrete-abstraction, a living haecceity; what Klossowski following Nietzsche called 'a fortuitous case.' But this case is never confined to the individual, it is nothing short of the groundwork for forms of life, vectors of perception which sweep across and transform reason, carrying with them unforeseen movements of spiritualization and speciation. The circumstances for such an event must be inordinately propitious, and the criteria for success unprecedented and obscure. Such events are borne of a 'necessity' (contingent though they remain) which cannot be accounted for on the basis of an 'art of the possible,' gestating in histories of suffering, violence, cruelty, and struggle such that the attempt at anything other than this event becomes intolerable. But it is these experiences at the extreme, and not the humdrum attitudes of the commonplace, that are capable of giving birth to the common, in the genuine sense of the word. Common sense, in the genesis of value, has identification as a consequence (with all its terrifying dangers and pitfalls), but never as cause. Instead of aesthetic judgment subtracting out differences between people or between faculties, it is through its discontinuity with the already laid divisions and possibilities of world and mind that the lived dimension of common sense is realized in practices and forms of life, apprehended in the work of art.

¹⁹⁹ See Pierre Klossowski's superlative book on the eternal return, within which the refrain of the fortuitous case is of primary importance for the vision of the late Nietzsche. Klossowski, *Nietzsche and the Vicious Circle*, 45: "Now in a universe dominated by the inorganic, organic life is itself a fortuitous case - hence a possible 'error' in the cosmic economy." See also, ibid., 69, 94, 219 and throughout.

2.3 Norms, Practices, and the 'Spirit' of Aesthetics²⁰⁰

It is a great temptation to try and make the spirit explicit.

- Ludwig Wittgenstein, Culture and Value (1930)

What he [sic] says, how he acts, etc. That is aesthetics.

- Ludwig Wittgenstein, Lectures and Conversations (1938)

2.3.1 Background: Aesthetics, 'Meaning,' 'Use'

It is uncontroversial that Wittgenstein's appreciation for aesthetics was of profound importance to his life and his philosophical outlook. Any additional claim one may add to this, however, is bound to be met with considerable dissensus. This is, no doubt, in part because Wittgenstein's contributions to aesthetics, his view of the roles of aesthetic experience in philosophy, knowledge, and normative practice (whatever these turn out to be) are not easy to pinpoint. There is no extended elaboration of these matters, except in the relatively scant investigations to be found in his lectures, which only come down to us through the notes of the attendees (in 1930-33 by Moore, and in the summer of 1938 by Rhees and others). Apart from these, one must hunt down and amass the occasional occurrences of aesthetic topics in the numerous other manuscripts and now published 'works'. In the early work (up to and including the TLP and "A Lecture on Ethics") we

Practice. It has been unprecedented for me to find an intellectual interlocutor with whom I share such a breadth of theoretical interests; one in whom I also find my approach to problems echoed in so many respects. I can only hope he finds this proximity helpful.

²⁰⁰ Immense thanks are due to J.-P. Caron for the opportunity to continue research and discussion on this subject through his teaching at the New Centre for Research and

find Wittgenstein suggesting that nothing of real philosophical merit could be said of aesthetics (or ethics), in spite of its vital importance—a position he later softened on to some extent, but never fully relinquished. Thus, despite the almost religious solemnity with which Wittgenstein approached aesthetics, it presents readers with something of a discursive lacuna in his philosophical legacy, especially by comparison with his other recurring intellectual preoccupations. This lacuna is not, however, accidental; together with a reconstruction of what he did leave us, it provides holistic insights into his philosophical methodeutic (e.g. into the relation between description and explanation, the relation between saying and showing, etc.) and, through these, it points us toward the aesthetic constitution of linguistic practice in the social genesis of common sense.

What has been largely, though not entirely,²⁰¹ overlooked by those interested in Wittgenstein working in epistemology and the philosophy of language and mind is just *how* his aesthetic thinking is constitutive of, not only his approach to philosophical problems in these domains, but of the judgments themselves within these domains—indeed, of judgment²⁰² as such: the social and linguistic practices within forms of life which

²⁰¹ The literature on any topic in Wittgenstein is vast, but aesthetic readings of his work, especially regarding its relationship with language and forms of life, have generally not populated the mainstream of Wittgenstein scholarship, with the exception of Cavell. More pressing examples for our inquiry include: Johannessen, "Rule Following, Intransitive Understanding and Tacit Knowledge"; Escalera, "On Wittgenstein's Extension of the Domain of Aesthetic Education"; Desideri, "Grammar and Aesthetic *Mechanismus*"; Ben Ware, "Find it New"; and Zalamea, "Wittgenstein Sheaves."

²⁰² 'Judgment' is here taken as the minimal sensical deed through which we can act by virtue of inferences in a causally indeterminate, but not necessarily voluntary, way. While judgment in this sense does paradigmatically rise above the level of mere stimulus response at the level of sensory-motor reaction (RDRDs), it does not entail the fully consciously controllable manipulation of signs implied by the term 'cognition' in the

generate and engender such forms (including our capacity to articulate conceptual content to each other). Further, aesthetics shows us how the expression of spirit (*Geist*)—taken as the experience of our own ontologically and semantically complex, socially genetic, historically contingent, collective, apperceptive common sense—must remain, *as spirit*, implicit in the nexus of communal life. This is not to say that explicitation is impossible or undesirable in itself, but rather that acts of explicitation exercise exclusive criteria of determinate conceptual content on that which they explicate, such that they ramify the contents they seek to bring to light, and, second, that in order for the effects of explicitation to bear social-cognitive or apperceptive fruit in terms of forms of life, these effects must (in some respects at least) again be made implicit within them. We aim, then, to elucidate the place of aesthetics in (especially later) Wittgenstein's idea of linguistic practice, and then to stage its consequences for a theory of culture (*Bildung*), a collective picturing.

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strongest sense of explicit argument and definiteness of conceptual content (if 'cognition' in this sense is not indeed a fantasy when imagined as abstracted from, unalloyed to, its 'non-cognitive' background). Cognition, in that latter sense, would be the highest part of Peirce's Critical Logic. Here what Peirce calls 'perceptual judgments' abound in coordination with more primitive differentially responsive, more-or-less causally determined, dispositions (sensations, habits, fixed action patterns, etc.). And again, all these operate on a functional, historically and evolutionarily inflected continuum, even if they manifest themselves, in our *de facto* cognitive abilities, necessarily through series of nested formal hierarchies in which 'higher' functions are parasitic on functions lower down in the 'conceptual' cascade. Aesthetic judgment, as we will see, plays a specifically generative role in relation to normativity and conceptual change. For an exploration of such a conceptual hierarchy, see Brandom (2008b) and (2008a), 19-24.

The later Wittgenstein's view of language is often characterized by the slogan 'meaning is use.' Among the many philosophers carrying forward various meaning-as-use lessons out of the late Wittgenstein, Robert Brandom, following on from the philosophical program begun by Wilfrid Sellars, has elaborated perhaps the most complete theory of linguistic practice to follow in Wittgenstein's wake. Brandom's account is necessarily more theoretically complete (i.e. self-enclosed) than Wittgenstein's own view, whose late philosophy is a pure *problematics* rather than a *theorematics*. As is well known, Wittgenstein himself was resistant to the very idea of 'theory' in philosophy: "It was correct that our considerations must not be scientific ones. [...] And we may not advance any kind of theory. There must not be anything hypothetical in our considerations. All *explanation* must disappear, and description alone must take its place. And this description gets its light—that is to say, its purpose—from the philosophical problems." (PI 1, 109).

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²⁰³ See for example PI 1, 43. However, here it is interesting to note that Wittgenstein applies the meaning-use equivalence only to "... a *large* class of cases of the employment of the word 'meaning'—though not for all..." So, at the very least, 'meaning-use' needs to be suitably understood, and that understanding is not a simple adequation but requires nuance. Brandom (2019c), thinks of Wittgenstein as a 'semantic nihilist' because he supposes (erroneously) that Wittgenstein abandons the notion of any semantics in favor of use. Wittgenstein does abandon meaning as reference (in the strict Fregean sense) but not sense as indexed to practices (not all of which are linguistic uses *stricto sensu*).

²⁰⁴ We take these terms from Deleuze and Guattari, ATP, 362-374, and 554, note 21: "Greek geometry is thoroughly marked by the opposition between these two poles, the theorematic and problematic, and by the relative triumph of the former […] Mathematics has always been marked by this tension also; for example, the axiomatic element has confronted a problematic, 'intuitionist,' or 'constructivist' current emphasizing a calculus of problems very different from axiomatics, or any theorematic approach."

For his part, Brandom's view involves the practical attribution of normative statuses and inferential scorekeeping of the entitlements and commitments of those with appropriate statuses, in order to build a theory both of rational social bonds (a normative pragmatics), and a use theory of meaning (an inferentialist semantics). However, despite the way in which aesthetic concerns pervade the whole standard of sense-making in Wittgenstein's social declension of linguistic use and its diffusion in forms of life, Brandom's account hews strictly only to those 'practical vocabularies' which can be expressed in a suitable 'target vocabulary' amenable to elaboration in terms of explicit semantic-inferential formalization, the kind of theorematic logical formalization from which 'analytic' philosophy takes its name; the kind of formal languages and philosophy of language that sought to build up complex semantic structures from assuming the primitive character of the propositional and predicative variables employed in purely formal relations between logical constants or operators; the kind of logic that concerned Frege, Russell, the early Wittgenstein, Carnap, Tarski, and many others. Thus, Brandom calls his orientation, appropriately, an 'analytic pragmatism.' 205

While the following of explicit rules (for Brandom as for Wittgenstein) finds its ground, not in other explicit rules, but in the implicit performances to which the ability to 'follow a rule' counts as understanding that rule (insofar as one can in principle justify that performance in turn), for Brandom alone (not Wittgenstein) such performances can be expressed in terms of implicit *rules*, which determine the normative regularity of particular

²⁰⁵ For all the discussion of his view in this section, see Brandom, *Making it Explicit*, 1-198.

performances as such. These, in turn, are decided on the basis of inferentially reliable, counterfactually robust attributions and sanctions of performances (which are themselves performances). Such attributions and sanctions, finally, *can* be made explicit, according to Brandom, by virtue of inferential rules of the kind afforded by classical and modal logics, thus laying bare the practical content (read: semantic and conceptual content) of our ostensibly socially reciprocal rationality, the rationally norm-governed behavior without which use of our language, and thus our understanding of ourselves as sapient creatures, would amount to so much 'sound and fury'. Such is the animating idea behind Brandom's 'royal science' of linguistic practice.

Conspicuously, Brandom's meaning-use theory leaves out any articulation of judgments formulated in (what I would like to call) aesthetic terms; that is, any judgment *not* expressible in a propositional form the alethic and deontic conditions of which could be settled, in principle, by means of an explicit calculus (whether or not these have, as matter of fact, their ground in the sorts of practical vocabularies that are guaranteed by their performances). (More on this below.) However, since it is doubtful that Brandom would want to deny the significance of the aesthetic dimension of human activity, it is curious that, in the game of giving and asking for reasons, it seems no genuine articulation of aesthetics would be possible, beyond the logical implications provided by a set of pre-given or axiomatic normative attributions (e.g. premises, initial conditions, axioms, whether formal or material). Here, just as we've analyzed in Deleuze's critique the of argumentative form of demonstration and signification (1.2.2), a specter is haunting philosophy—the specter of genesis. Aesthetics provides us one way of thinking about the genesis of conceptual and normative content in the construction of 'common' sense. Thus, in the

myriad roads leading into and out of the City of Aesthetics in Wittgenstein's works, we also aim to problematize and criticize Brandom's conception of reasoning, and offer a way of thinking through an 'expanded reason' which gives aesthetics the role it deserves in any understanding of the concrete realization of spiritual (*geistige*) intelligence, one that should also have ample room for the epistemic-expressive power of advanced abstractions, whether these are artistic or scientific.

2.3.2 Aesthetics and the Early Wittgenstein

The most straightforward indication we get about the character of aesthetics from the early Wittgenstein comes from TLP 6.42-6.421:

It is clear that ethics cannot be put into words.

Ethics is transcendental.

(Ethics and aesthetics are one and the same.)

This pronouncement, starkly put, sits in the TLP without context, save for a few other remarks that bookend the discussion of value and its relation to propositional assertability. The basic argument is that because all propositions are of equal epistemological and metaphysical value, anything which counts as a proposition either says nothing (as in logical propositions: tautology and contradiction) or expresses some possible fact (true or false). All possible facts are on equal terms in relation to that which makes them available as sayable in propositions. This means: all propositions are equal in terms of their *truthaptness*. And since what propositions say is *that* things stand thus-and-so, according to the picture theory of language in the TLP, no question of value other than that of their truth (no question of good or bad, better or worse) can be raised with respect to them (cf. TLP

6.4-6.41). They either are or are not true according to the (possible) states of affairs they express. Lastly, ethics and aesthetics are the same, since both—as enterprises of non-alethic value, normative enterprises—lie outside logical space construed as the space of (possible) facts. In this respect, they lie outside the purview of natural science, empirical inquiry, and are therefore transcendental. So, we can see from the early work, through a positivist interrogation of the issue in the TLP, one reason for an aesthetic lacuna in the work of Wittgenstein. However, as has been well understood for a long time, the strictly positivist interpretation of this issue, even in the *Tractatus*, leads us astray if we do not consider Wittgenstein's non-positivist motivations for endorsing the view above. Less agreed upon is just what these motivations amount to, and how they might be related to the reformulation of his later philosophy—to the concept of forms of life and to its closest equivalent in the early work, the problem of life and its solution.

In later passages from 1929, Wittgenstein states: "What is good is also divine. Queer as it sounds, that sums up my ethics." And: "You cannot lead people to what is good; you can only lead them to some place or other. The good is outside the space of facts" (CV, 3e). Here, then, the divine is not outside the space of facts because it is divine or supernaturally special (i.e. transcendent). It is the reverse: being divine in this sense *just means* being outside the space of (possible) facts, which implies that it is outside the space of propositional content, as defined in the TLP, and thus outside of what is sayable or expressible overtly by the proposition. What is inexpressible though, in the sense in which it relates to aesthetics, is neither a nothing (empty nonsense), nor a mystical revelation (*mysterium tremendum*), even if Wittgenstein borrows from the language of the mystic or the apophatic theologian. Instead, a couple years later, Wittgenstein again varies his theme:

"Perhaps what is inexpressible (what I find mysterious and am not able to express) is the background against which whatever I could express has its meaning." (CV 16e, my emphasis). The grammar of the phrase is ambiguous. One reading is to assume that the inexpressible is the background precisely on account of its being inexpressible—that is, there is something about being inexpressible that lends the background of the sense against which what I say has meaning. On my reading, however, what is inexpressible is just the background against which what is expressible has sense, which cannot be the expressed of the proposition whose expression it affords. ²⁰⁶ While, at this stage, Wittgenstein had not yet moved into a full-blooded pragmatism regarding the relationship between 'meaning' and 'use,' as one finds in the *Philosophical Investigations* (PI), he nonetheless is already here insisting on a form of contextualism which, though without its social form, points to the extra-propositional character of language as a whole, one which we will argue has a definitively aesthetic character, especially as it comes into contact with the groundlessness of the chain of justifications (whether epistemically, ethically, etc.). ²⁰⁷ That same year Wittgenstein provides such a gloss connecting the epistemological or rational issue of justification with that of value and practice:

Nothing we do can be defended absolutely and finally. But only by reference to something else that is not questioned. I.e. no reason can be given why you should act (or should have acted) *like this*, except that in doing so you bring about such and such a situation, which again has to be an aim you *accept*. (CV 16e)

²⁰⁶ Cf. Deleuze's paradox of the regress of the expressible, LS 28-31.

²⁰⁷ For a discussion of contextualism in Wittgenstein's later work, see Michael Williams, "Why (Wittgensteinian) Contextualism Is Not Relativism."

There is something more than a mere truism here. In one sense, this seems to be an endorsement of the kind of spontaneity required of Kant's view of moral value; namely that the ground of action (moral action) is uncaused (and therefore also epistemically unjustified if this means empirically explainable). Thus, in relation to causes, the moral agent is *free* (that agent is *rational* only if this spontaneity takes the form of law). There may be something of this at work, but instead of freedom and spontaneity, Wittgenstein's imagination takes him in a different direction. Insofar as an explanation according to spontaneity leaves the immanent course of action and the causal genesis of norms completely mysterious, it looks as though ethical action could not be determined. We will see, instead, that Wittgenstein finds this *acceptation*, in the later work, in the practical value of what he calls 'custom' in forms of life as that which *cannot* be justified by the injunction of a rule (having the form of law) as in Kant, without pain of regress, but does constitute the genuine following of a rule, nonetheless.

2.3.3 Sense as Practice

In the development of Wittgenstein's thinking, the deepest transformation in his understanding of sense comes out of a shift in his attention away from the compositionality of propositions (and its correlation with non-propositional empirical states of affairs) towards the way in which linguistic signs gain semantic value through social practices. However, this transformation should not be construed as a conversion to mere conventionalism about language: the kinds of social practices involved are not simply social practices about or 'within' language itself (in a narrow sense) but are instead embedded in the whole complex nexus comprising what he will come to call 'forms of life'

(Lebensformen). In this shift, 'grammar' (replacing the reserve of 'logic' in the TLP) is no longer exclusively, or even primarily, confined to the syntactical structures of writing or speech, but indexed to the concrete contexts of use within which a particular linguistic act occurs (namely, to language-games, Sprachspiele)—contexts which themselves are relevant only within a complex background-pattern of relations with other iterations and contexts. Wittgenstein's view of 'grammar' reorients the philosophical study of language, how we think about what counts as language, the boundary between language and nonlanguage, sense and nonsense, 'mind' and 'world', etc. It offers a radically immanent or 'material', non-individualistic vision of mind or spirit (*Geist*); one that, while irreducibly social, also breaks the Hegelian spell of a teleological science of history and puts in its place a natural-historical investigation of socio-linguistic practice; one that I view as consonant with historical materialism in general and which we could venture to call its linguistic branch. In line with this thought, I want to offer in particular the proposal that Wittgenstein's investigations into the relation between norm and practice—and the specifically aesthetic dimensions of it we hope to bring to light—lead us into one of the most profound descriptions of the material basis of ideas ever undertaken, one which shakes to its core, in meticulous detail, the received view of subjectivity, thought, and agency of the liberal tradition, as well as the epistemic pretensions Deleuze diagnoses under the aegis of the 'good will' of the 'image of thought' of Western philosophy that come along with it. Yet, importantly, Wittgenstein does this without resorting to skepticism or global linguistic/cultural relativism, despite appearances to the contrary. ²⁰⁸ The skeptic

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²⁰⁸ On how Wittgenstein escapes relativism, see again Michael Williams (2007).

accepts the terms and criteria of knowledge put forth by the traditional theoreticist, theorematic, or intellectualist image of thought. Instead, Wittgenstein offers us, without theorizing it as such, another understanding of what it is to undertake the genuine genesis of sense, groundlessly, through the construction of the common within a form of life.

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To begin with, we need to understand how Wittgenstein dismantles the theoreticist or theorematic conception of rules and rule-following through consideration of the concrete practices of language. Rules are clearly important to every domain of human activity, so much so that the explanation of their nature and function in general seems to withhold the promise of an explanation of whatever constitutes the distinctiveness of human activity itself—i.e. what has most often been called *reason*. Opposing the theoreticist conception of language that came with his earlier concerns about logic, Wittgenstein sets out a problem for this conception, one which strikes at a central conflation of the (true) normative necessity of idealization in formal logic with a (false) metaphysical necessity about semantic determination in general. In this way he shows how the theoreticist is held captive by their own image of thought and their own *Weltbild*. In this captivity, they miss the essential practical embeddedness and exteriority of sense in its real and common existence. Let us survey connected passages to get to grips with the old picture and the problem Wittgenstein sets out for it:

Thought, language, now appear to us as the unique correlate, picture, of the world. These concepts: proposition, language, thought, world, stand in line one behind the other, each equivalent to each. (But what are these words to be used for now? The language-game in which they are to be applied is missing.) [...]

[Thinking's] essence, logic, presents an order: namely, the a priori order of the world; that is, the order of possibilities, which the world and thinking must have in common. But this order, it seems, must be *utterly simple*. It is *prior* to all experience, must run through all experience; no empirical cloudiness or uncertainty may attach to it. — It must rather be of the purest crystal. But this crystal does not appear as an abstraction, but as something concrete, indeed, as the most concrete, as it were the *hardest* thing there is (*Tractatus Logico-Philosophicus* 5.5563).

We are under the illusion that what is peculiar, profound and essential to us in our investigation resides in its trying to grasp the incomparable essence of language. That is, the order existing between the concepts of proposition, word, inference, truth, experience, and so forth. This order is a *super*-order between—so to speak—*super*-concepts. Whereas, in fact, if the words "language", "experience", "world" have a use, it must be as humble a one as that of the words "table", "lamp", "door". (PI 1, 96-97)

Wittgenstein's task here is to render logical abstraction concrete by elaborating the various practices constituting the language-games exhibited in the general social behavior of forms of life. In order to do this, Wittgenstein must definitively show that the theoreticist or intellectualist picture of rule-following on which the strong modernist conception of language (and reason) depend results in one the most profound stupefactions in the whole history of philosophy.²⁰⁹

²⁰⁹ Meredith Williams, *Blind Obedience*, 157 and throughout. What we have been calling the *theoreticist* (following Wittgenstein) or *theorematic* picture of language (following Deleuze), Meredith Williams, in her profound reading of Wittgenstein, calls *intellectualist*. In broad strokes, we echo much of Williams' reading in what follows, especially in Chapters 5-7 of her book focusing on considerations of rule-following in relation to its necessary social background. With respect to the intellectualist picture, both representationalist as well as inferentialist views of meaning can fall prey to it, depending on the concrete position taken, insofar as each attempts to explain language or

2.3.4 Definite Rules and Interpretive Regress

Wittgenstein's dismantling of this view begins with a passage from PI that problematizes the meaning-use interpretation offered by views of linguistic practice like Brandom's from the outset. The passage points us straight away to the diametrically differing motivations Wittgenstein has for unifying these themes, by putting into question the logicist conception of rules:

F. P. Ramsey once emphasized in conversation with me that logic was a 'normative science'. I do not know exactly what idea he had in mind, but it was doubtless closely related to one that dawned on me only later: namely, that in philosophy we often compare the use of words with games, calculi with fixed rules, but cannot say that someone who is using language *must* be playing such a game. —But if someone says that our languages only *approximate* to such calculi, he [sic] is standing on the very brink of a misunderstanding. For then it may look as if what we were talking about in logic were an ideal language. As if our logic were, so to speak, a logic for a vacuum. —Whereas logic does not treat of language—or of thought—in the sense in which a natural science treats of a natural phenomenon, and the most that can be said is that we construct ideal languages. But here the word "ideal" is liable to mislead, for it sounds as if these languages were better, more perfect, than our everyday language; and as if it took a logician to show people at last what a proper sentence looks like.

All this, however, can appear in the right light only when one has attained greater clarity about the concepts of understanding, meaning something, and thinking. For it will then also become clear what may mislead us (and did mislead me) into thinking that if anyone utters a sentence and *means* or *understands* it, he is thereby operating a calculus according to definite rules. (PI 1, 81).

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normativity, exclusively in terms of its relation to a privileged epistemic or theoretical vocabulary.

We already saw (sect. 1.4) how the picture of definite (bestimmt) rules of application in language—like those proposed in the functional formalization of predication by Frege runs up against problems in pragmatics regarding cases which outstrip the means of such rules beyond the analytic continuation of a function. That is, there are always cases to which the extension of some part of (a formal or natural) language is not given by any of the rules supposed to pertain to (justified) contexts of application. And, given the continuity established there between the Fregean paradigm of analysis and the extrapolation of the modal inferential role semantics of Brandom (as evinced in Brandom's reading of Kant and in the discussion of Wolfendale), such contexts point the way to which some notion of synthetic reasoning is needed that is not reducible to "operating a calculus according to definite rules," or—in the case of formal contexts of use looked at there—that the notion of reason or language as a calculus has to be radically reoriented away from the closure of a homogenous axiomatic space of operations with which a certain paradigm of mathematical cognition seeks to ground its apodicticity, and instead turned toward a constructive, intuitionistic, and dynamic view of logical space itself.

Here—in the context of the comparison between formal and natural languages—Wittgenstein warns us against the idea that what formal languages or logical calculi do is disambiguate, make precise, purify the logic of 'common sense' or the meaning of natural language—i.e. he rejects the idea that natural language involves a kind of *logica utens* that would behave like a *logica docens* if only we understood what we actually meant when we say the things we do say; that ordinary language would behave *this way* if only it could get things straight. But, as Wittgenstein says elsewhere in a famous remark (PI 1, 107), this view of logic presupposes the *requirement* that the semantic definiteness of rules of a

calculus be imposed on the practice of language from the outset. It is not something excavated from or discovered within the morass of everyday linguistic practice, but something demanded of it by the definiteness of rules once expounded in a formal system. In this regard, common sense is very far indeed from the 'ideal speech situation' of communicative agents, and good sense is not the best distributed thing among humankind, not because of some semantic lapse, but because there is no *a priori* ideal of communication and no general faculty of judging well. Each of these are cyphers for the fantasy of a storehouse of definite rules (the myth of the syntactic museum akin to Quine's semantic 'myth of the museum'),²¹⁰ a logically adamic language from which the appropriate use of language and thought should stream forth. But this is simply not how thought and language are actually engendered.

If the theorematic picture of the relationship between formal and natural language does not hold in general, this implies that such definite rules are, at least in part, irreducible to implicit regularities of linguistic performance, because the former act, not as clarificatory devices, but as presupposed criteria of intelligibility of formal language itself—i.e. norms of inferential correctness—imposed from without and in advance.

More to the point, they miss out the usefulness and rationality of everyday language in *not* abiding by the strictures of a calculus, and in not being an implicit instantiation of one. At least some implicit norms of linguistic practice are in nature unlike those of a calculus, or

²¹⁰ Quine, *Ontological Relativity*, 27: "Uncritical semantics is the myth of a museum in which the exhibits are meanings and the words are labels. To switch languages is to change the labels."

unlike the computational structures we find useful in the contexts of mathematical logic. In the context of transformation from natural to formal language, making such rules explicit means transforming the domain of their application or, perhaps more strongly, giving them a domain cashed out in terms of definite propositional content which they wouldn't have otherwise had. One important type of linguistic norms gains its importance by remaining implicit insofar as they are necessarily 'indeterminate' (*unbestimmt*) and even 'intransitive' with respect to explicit discursive transmission.²¹¹ And this type—which, following Kant's

²¹¹ PI 1, 78:

how many meters high is Mont Blanc – how the word 'game' is used – how a clarinet sounds.

Someone who is surprised that one can know something and not be able to say it is perhaps thinking of a case like the first. Certainly not like the third."

One may object to the above description of 'knowing' with respect to the sound of a clarinet on the basis that this is not properly *epistemic* (i.e. propositional) but rather mnemonic, but this is not how the concept of knowing is typically deployed, outside of its theoretical interpretation. Notice, too, that depending on how one 'knows' the height of Mont Blanc, for example, this may be (and most likely is) unjustified belief for most people (e.g. I have never measured the height of a mountain). The normativity of knowledge rests on a fallible but real sense of 'we' knowledge and not simply 'I' knowledge, since, on my own—within the most rigorous strictures of justification, itself social in nature—I, in fact, know very little of which I am nonetheless (justifiably) certain. But 'justifiable', as opposed to 'justified,' is a modal notion the epistemic conditions of which are not easy to specify. Sheer possibility is clearly not enough, since it is, in some sense, almost always possible for someone to have been in a position to have the knowledge about which they have none, but nonetheless possess justifiable belief (e.g. I could have measured the height of Mont Blanc, provided all possible, causally consistent, propitious conditions.) Regardless of our construal, these considerations do not affect the intransitivity of certain aspects of our forms of life. For a discussion of intransitivity and linguistic practice, see Johannessen (1990) and Escalera (2012).

[&]quot;Compare knowing and saying:

understanding of indeterminate norms, I pose in essentially aesthetic terms—is central to the categories of value and culture (*Bildung*).

As Brandom acknowledges, explicitation (in the form of vocabulary-practice (VP) sufficiency) is expressively weak relative to the domains of discursive practices-and-orabilities it specifies, even if it has a unique power in those places where definite rules apply. Because of this, the mereological composition of the comparison between formal and natural language implied in the theorematic picture sketched above is mistaken. Formal language can stand as a pragmatic metavocabulary of discursive practices only insofar as it is a subset of those practices themselves. Calculi, then, are not *models* of *languages* (outside of the technical definitions of 'model' and 'language' in mathematical logic); they are particular language-games with highly rarified uses. This fact comes with some important implications. It implies that language as practice—language in its 'living usage'—cannot be (fully) articulated in terms of a VP sufficient metavocabulary which is strictly pragmatically-expressively weaker than the one it specifies unless we first condemn ourselves to a treatment of language presupposing the idealization and semantic definiteness warded off by Wittgenstein at the outset. ²¹³ What appears as a meta-linguistic

²¹² This theorematic picture of language we might call the linguistic orientation according to model-theoretic sovereignty or the criteriological orientation. These connections were brought to light through readings of Hintikka, "Is Truth Ineffable" in *Lingua Universalis Vs. Calculus Ratiocinator*, 20-46 and Livingston (2012) by J.-P. Caron in his course, "Thinking Between Worlds and Forms of Life".

²¹³ For the relation between meaning and use as it relates to the connections between vocabulary and practice, and the especially important claims regarding VP sufficiency, see Brandom 2008a, 1-68, esp. 9-10, 15-30.

explanation of practice is in fact the surreptitious embedding of that which is to supposed to explain within that which is to be explained. The rules must be implicit from the beginning, so that they can become explicit without residuum or remainder—losslessly, as it were. But, Brandom confuses the map for the territory. The immense power and sophistication of the image makes this difficult to resist. "The idea now absorbs us that the ideal 'must' occur in reality. At the same time, one doesn't as yet see how it occurs there, and doesn't understand the nature of this 'must'. We think the ideal must be in reality; for we think we already see it there." (PI 1, 101).

Gathering this all together, this means that if we are to understand the study of language or logic as a 'normative science' in the Peircean sense alluded to by Ramsey above—and specifically, if we are to understand the relationship between norm and practice in the late Wittgenstein—we must take another road, one which, as we will see, relies for its picture of reason, not on a Kantian-derived theory of reason involving interpersonal rule-bound thinking and doing, but on the 'indeterminate norms' which unbind the ampliation of thought and reinvest the notion of sense in an aesthetic sociality not subsumed by intersubjective inferential scorekeeping and metalinguistic explicitation—though these latter do become particular language-games. We must move from I-thou normativity to I-we normativity, from the personal to the common, from social relation to social structure.²¹⁴

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²¹⁴ Meredith Williams (2010), and Danielle Macbeth (2019) converge on this point against Brandom, in light of the late Wittgenstein—Macbeth has provided a critique at length on this specific point. Macbeth, "Wittgenstein and Brandom on Normativity and Sociality."

If definite and explicit rules taken as a logically privileged model of rules in general are ruled-out by attending to the ways in which practices are not sufficiently captured by the vocabularies which make them explicit, there is still the question: from what position should we accept the following of a rule as a genuine activity? In other words, given that the definiteness of the semantic content of a metavocabulary cannot properly explain the practice of rule-following, how can we explain the efficacy of rules, outside of the constraints of determinate and explicit meaning?

Even in the cases where definite and explicit rules do seem to apply, there is still the famous problem regarding the gap between a rule and its implementation, a paradox of interpretation or rule-following which has rightly gained so much attention by Wittgenstein commentators.

Here it is supposed that an interpretation of the rule cannot justify the following of a rule, because the interpretation stands in the same relation to the outcome as that of the rule in the first place. There is the same discrepancy between rule and implementation as that between the interpretation of the rule and its implementation. An interpretation seems to be meta-rule applying to the rule, which therefore stands in the same need of justification as that of the original rule. Interpretations, as beliefs about rules, then cannot ground the normative process of 'following', any more than a pure configuration of rules. Likewise, as Meredith Williams has pointed out at length, neither can a formulation of rule-following as a purely causal process determined, for example, only by our operant conditioning to certain situations or stimuli. "Meaning is not a matter of word—object causal relations, even though certain of our language-games require such causal relations. Likewise with rule-following... Though causal factors are relevant to rule-following, a purely causal account

cannot make space for the basic normative distinction between correct and incorrect actions." (Williams 2010, 192).

Instead, rules must be causal and normative at one and the same time—our ability to follow a rule (and thus to use reason) hinges, individually, on our acquiring competence in what Wittgenstein calls a 'technique' in a training process (PI 1, 150, 199). Through this process, we are induced, perhaps by degrees, from causes to reasons, transformed (at the interpersonal level) from patients of forces to agents of norms. But the problems do not stop there. This practice-ensuring technique itself relies on the pre-existence of a form of life in the shape of a 'custom':

'But how can a rule teach me what I have to do at *this* point? After all, whatever I do can, on some interpretation, be made compatible with the rule.' —No, that's not what one should say. Rather, this: every interpretation hangs in the air together with what it interprets, and cannot give it any support. Interpretations by themselves do not determine meaning.

'So is whatever I do compatible with the rule?' —Let me ask this: what has the expression of a rule—say a signpost—got to do with my actions? What sort of connection obtains here? —Well, this one, for example: I have been trained to react in a particular way to this sign, and now I do so react to it.

But with this you have pointed out only a causal connection; only explained how it has come about that we now go by the signpost; not what this following-the-sign really consists in. Not so; I have further indicated that a person goes by a signpost only in so far as there is an established usage, a custom. (PI 1, 198)

Thus, the norm cannot exist independently of a causal history of inculcation of the individual on the one hand, or independently of the social realization of a practice, on the other. It is only in the unity of these two conditions that the individual is leveraged from

the automatic, mechanical, or differentially responsive behavior of brute causation. However, the genesis of normative behavior, the 'bedrock' practices of a form of life cannot be attributed to an explanation according to the poles of normative entry or exit: to causes or reasons. The genesis of the normative can only be described in terms of a qualitative leap coterminous with, but irreducible to, its causal origination on one end (speciation), and its rational ampliation on the other (spiritualization). This process of qualification is, I claim, the injunction of aesthetic judgment (affirmation for itself) as the ground of value, and the groundless basis of 'normative similarity' (Williams 2010).

To try and better understand this, let us return to a remark quoted above. The normative sciences to which Ramsey refers are theorized by C. S. Peirce. In Peirce's division of philosophy, these come in a nested hierarchical triple, organized in terms of their priority for one another. These are: aesthetics, ethics, and logic. For Peirce, they are the sciences of the Good: aesthetics is the science of affirmation (admiration) or the *beautiful*; ethics that of *right*; and logic that of *truth*. Aesthetics is the first normative science insofar as it is "the science of ideals, or of that which is objectively admirable *without ulterior reason*. [...] Ethics, or the science of right and wrong, must appeal to esthetics for aid in determining the *summum bonum*. It is the theory of self-controlled, or deliberate, conduct. Logic is the theory of self-controlled, or deliberate, thought; and as such, must appeal to ethics for its principles" (Peirce 1992b [1903], 260, my emph.). The material of aesthetic valuation

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²¹⁵ Elsewhere, in "The Three Normative Sciences" (1903), Peirce elaborates the way in which the aesthetic factors into the necessity of absolute valuation (*summum bonum*): "In order that the aim should be immutable under all circumstances, without which it will not be an ultimate aim, it is requisite that it should accord with a free development of the agent's own esthetic quality. At the same time it is requisite that it should not ultimately

is that which appears in experience, the study of which Peirce calls "phenomenology" (the science of appearance). But its role in normative activity is the generation of norms by which ethics and logic are constrained. Finally, as normative, its material cannot causally determine the 'objectively admirable' as such—even if that material serves as the basis of its existence and the contingent background constraint against which norms can be expressed—since it would then cease to be properly normative.

2.3.5 Causal, Aesthetic, Rational

It is only the aesthetic that has the power to ground the normative as such, straddling, as it does, cause below it and reason as *ratiocination* (practical and theoretical, ethical and logical) above it. While aesthetic judgement has a contingent *existence* only relative to its causation via habit—that is, by virtue of its origination in the faculty of feeling, according to Kant—it cannot have its *justification* there, since aesthetic judgments presuppose (in principle) the assent of (all) others in order to be properly *aesthetic* (as opposed to merely phenomenal). But this presupposition of assent also cannot be given rational support in the form of explicit argument, in the sense that that no strictly logical procedure can be supplied to explain or warrant aesthetic assent. The assent asked of by aesthetic norms is rather the

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tend to be disturbed by the reactions upon the agent of that outward world which is supposed in the very idea of action. It is plain that these two conditions can be fulfilled at once only if it happens that the esthetic quality toward which the agent's free development tends and that of the ultimate action of experience upon him [sic] are parts of one esthetic total." (Peirce 1992b [1903], 202-3). Interestingly, Peirce also terms the "special variety of esthetic goodness that may belong to a representamen... *expressiveness*" (ibid., 203).

condition of possibility of sense—as 'common' sense. But that condition is necessarily indeterminate, as it cannot coincide with explicit rules since it itself grounds the notion of normative similarity on the basis of which we adjudicate between correct and incorrect followings of a rule in the first place. Aesthesis is neither causally nor rationally compelled, though it does invent assessments of affirmation and negation, of goodness and badness, of correctness and incorrectness, which can be reduced neither to stimulus-response mechanisms, nor to deliberative calculations. It is because of this that it can ground normativity without pain of epistemic regress while avoiding being conflated with its raw behavioral indices. In this regard, aesthesis is a necessarily creative act—it is the act of creative abduction of value through which patients are transformed into agents from which inferential relations and causal realizations according to ends flow as its practical affordances. It is the bedrock of normative practice—the establishment of normative similarity, in Williams' sense—the connective tissue between our causally-embedded, socially-responsive, non-normative dispositions (our special conditions) and the robustly normative practices of rational ampliation (spiritual unconditioning). But, as genesis of the normative, aesthetics also sits at the founding of language, the institution of linguistic practice itself. This foundation historically happened behind our backs in unconscious and contingent causal processes which its emergence (reason) then, in turn, necessarily disavows. What is true of the species, in this respect, is then reflected in the individual learner upon their entry into language. For this reason, Wittgenstein is emphatic that "language did not emerge from some kind of ratiocination" precisely insofar as the latter is downstream of the genesis of norms, since deduction and induction cannot provide inferential premises, only the act of normative institution (in aesthetic judgement), by

which we can conceptually structure facts to be inferentially related—subtended by nonnormative patterns of behavior—can do so (OC, 475). This involution of the causal and the rational in the genesis of norms is also why, because of the historical conditions of their emergence, "it is so difficult to find the beginning. Or, better: it is difficult to begin at the beginning. And not try to go further back." (OC, 471). If in Kant, aesthetic judgment points to the free play of the faculties of cognition for themselves (irrespective of their epistemic or moral functions), it is because aesthetic judgment stands as the genetic act by which those faculties come into their own, that by which they are divided and constrained by function once leveraged from the instinctual behavior of the species encoded in the dispositional reservoir of the phenotypical body onto the common body-politic of Geist. This is what Fernando Zalamea, in his penetrating, experimental pseudonymous text on the late Wittgenstein, calls "transpecial thinking" (Zalamea 2017, 15): that which is a product of speciation but not itself determined by it. In a word, aesthesis is the genus-being (Gattungswessen) of the human as creative, universally productive animal. Alienation from this propensity is also, therefore, alienation from the capacity to create and engender forms of life.

2.4 Reason in the Expanded Field: Political Aesthetics and Neo-Rationalism

2.4.1 Background

In relation to capitalism, political neo-rationalism (PNR)²¹⁶ can be broadly construed as a rekindling of the Marxian idea that changes in the forces and relations of production are the principal vectors by which political transformation is brought about. This is coupled with the belief that capitalism not only exploits but fetters the material, cultural, and intellectual potentials of latent forces of production, which it demands serve the fixed, narrow, and socially deleterious ends of profit. As a political project, it aims at repurposing the material, technological, and institutional infrastructures (platforms)²¹⁷ of currently existing capitalism to ends which foster—rather than fetter—these potentials, aiming to lead us into what they see as a post-capitalist future of indefinite collective self-mastery, involving technical and intellectual improvement without intrinsic limits ('Prometheanism' and 'rationalism,' respectively). The most challenging claim of PNR to today's left is that a radical, universal, large-scale, programmatic politics is again possible and desirable; and they develop—accordingly—frameworks, strategies, and tactics to think

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²¹⁶ Neo-Rationalism (NR) is a term adopted by Peter Wolfendale, which I use to name a group of heterogeneous contemporary thinkers. They are bound by sociological ties and a certain spirit of inquiry, rather than by any doctrinal adherence to a concrete theoretical position about reason. It is a term of convenience, which its individual members may or may not endorse.

²¹⁷ The understanding of 'platform' as it is elaborated below in terms of generative entrenchment can be traced to philosopher William Wimsatt's work on complex adaptive systems (cf., Glass Bead 2016b).

and enact such a politics. Examples here include the Universal Basic Income (UBI), full automation of labor, and gaining collective control over cornerstone institutions of the economy whose advanced supply-chain management technologies present liberatory potentials for a non-capitalist society (e.g. 'platform' corporations such as Amazon, Walmart, etc.) (Srnicek, 2016). Although these strategies and tactics require careful consideration in themselves, I will have to leave them to one side for the purposes at hand.

In company with the above prerogatives, PNR unsurprisingly espouses a renewed exploration of rationality, which makes up part of its wider intellectual milieu. Neorationalism (NR) ramifies the definition of what rationality does, how it bears out its own concept in relation to what it thinks, and seeks a wider and more complex ambit of interactions in a variety of 'apperceptive' domains than its traditional namesake—including for example science, philosophy, politics, and art.

While PNR was criticized early on for the absence of aesthetic considerations in its conceptions of politics and thought—as well as for the absence of sensitivity to the

²¹⁸ With regard to its connection to this milieu, I will not draw any lines in the sand between so-called left-Accelerationism, Xenofeminism, and other so-called neorationalisms. The former is expressly concerned with political, economic, social and cultural theory, whereas others are interested in questions of metaphysics, epistemology, philosophy of mind, aesthetics, gender, race, and so on. They form a variable, heterogeneous, but nonetheless common intellectual enterprise.

²¹⁹ I use 'apperception' here in a somewhat less strict way then what Kant had in mind for the unity of reason, though it is nonetheless functionally analogous. The main difference is apperception—in this context—would be collectivized and would not, strictly, require the 'I think', though the matter of an absolutely unified reason itself no longer makes sense, since, as we've seen in Kant and Wittgenstein, the transcendental is subject to change in the direction of both speciation and spiritualization.

categories of experience, culture, and the production of forms of life more generally (see e.g. Gardiner, 2017; Shaviro, 2013)—a growing body of work is now being developed precisely along these lines, and along the lines of gender, sexuality, race, and so on. After schematically elaborating the positions of this politics and its contemporary rationalism, we will move into a discussion of their work on art and aesthetics. First, we will investigate Srnicek's and Williams' thought on aesthetics (see Srnicek, 2015; Williams, 2013; Glass Bead, 2016b). Then, in an analysis of the work of American artist Cheyney Thompson, we can situate the relation of aesthetics to political imagination, and to the apprehension of our political-economic situation as patients and undergoers, its relationship with the modernism of thought and its planetary consequences. These questions necessarily also ask after the institutional and disciplinary status of art, its independence or interconnection, its autonomy, application, and interest. Finally, by problematizing the crisis of value in contemporary art in its circuits and products, we aim to provide a partial solution to the crisis by speculatively elaborating aesthetic criteria for a program of visual art no longer in service merely to the legitimating factors of its commercial appraisal. In terms of the latter, we hope to liberate art's aesthetic value—at least in part—from its exchange value by giving it back endemic aesthetic criteria which the contemporary artworld has largely forgone.

2.4.2 Retributive and Distributive Justice

One way to understand the challenge PNR brings to today's left is by examining the difference between what philosophers call *distributive* and *retributive* notions of justice. One main criticism leveled against the current left in North America and Western Europe (at least in many of its forms) relates to its over-estimation of the value of retributive

justice. Clearly, no society can function without complex means of redress; nevertheless, when tied fundamentally or exclusively to realizations of a retributive notion of justice, radical political action is directed toward a reactive and negative political horizon, one in which active practice vanishes in the absence of a specific, historically and geographically locatable injustice to be corrected. Retributive justice thus gains its orientation from the past in a special way, and is constitutively unable, on its own terms, to construct a modally robust counterfactual future politics.

Sometimes, in the case of a specific retribution, what is being redressed is in our present, indexed to an ongoing or recent event. Sometimes it is addressed to a historical injustice in either case, retributive politics is centered around a structure of recognition. This recognition in turn is determined by the demands (or denials) entailed by the seeking of justice. Typically, these demands are made in relation to the State (and sometimes, but usually secondarily, in relation to an international governing body). In terms of the left, retributive politics takes a weak and strong form (or a reformist and a radical form). In its weak form, retributive justice refers to the ramification of, or reparation by, some currently existing institution, necessitating a change in its operation or practice, and sometimes (relative to a broader institution in which it functions as a change of practice) it demands the liquidation of an institution as it is currently instantiated. This is what is at play, for example, in the enlargement of rights (or other forms institutional inclusion) of the underrepresented or in demands for the abolition of particular oppressive institutions. Two fairly recent examples in North America of reformatory retributive justice are the inclusion of non-hetero couples into the institution of marriage and current calls for police or prison abolition or reform.

The strong form of left retributive politics involves a more radical conception of identity, one centered around an ostensibly un-includable (yet, in some sense, socially productive) structural Other, typically in contradistinction to the Western hegemon (viz. human, male, white, bourgeois, hetero, cis-gendered, able, over 30, procreative...)—appearing under varying historical guises and differing circumstances. The figures of the Other anticorrelate with the predicates of the Hegemon and have included: the proletariat, women, Jewishness, Blackness, the colonized, the subaltern, Indigeneity, LGBTQ2+, the disabled, children, animals, and so on. This form of retributive politics is radical insofar as it defines its theoretical stance in relation to a political aporia represented by the Other through which reconciliation with the current instantiation of society is categorically rejected (this aporia is couched in variable terms—contradiction, antagonism, differend, etc.). The structural injustice is determined so as to be irreparable. Although no retribution would be possible, this impossibility itself is nonetheless parasitic on the form of retributive justice it forecloses upon. Thus, without a constructive, positive politics allied to it, radical retributive politics stands no better chance at reconfiguring society.

While there is far more to say regarding the complexity of retributive justice, whether in its strong or weak forms, if unalloyed with a complementary political program, retributive politics stops short of the constructive imagination capable of overcoming the endemic, global structure of accumulation and universal equivalence constitutive of capitalism that 'legitimates' and perpetuates the systems of oppression and exploitation responsible for both the exclusion and envelopment of all currently threatened populations in their multifarious and diverse conditions (whose existential and symbolic threats are, it goes without saying, very unequally distributed, and remain historically entrenched). If theories

of retributive justice fail to grasp capitalism, it is because retributive justice is by definition topical (even when deeply historical) and related to the *effects* of a political system or situation, while the problem that determines the overlapping systems which make these injustices possible is not. Thus, another form of radical analysis and construction must be sought.

Capitalism is a global and causal problem rather than a topical and consequential one. This is what is aimed at by Marx's term 'real subsumption' with which so much recent critique of political economy and related cultural theory has been concerned. The structure of injustice in capitalism is not imposed from without but engendered from within. In other words, effectively every social relation is determined in the last instance by relations of production in which the valorization of capital—and not social production as such—is the terminal goal of the system. As it is sometimes put, 'there is no longer any "outside" of capitalism.' It would be more precise to say of real subsumption that there is no inside of capitalism. There is no locus of capitalism, no central structure or institution, only a social form which emerges from but constrains the concrete institutions and practices which substantiate it. That form is capital itself—and because it has no location as such, it cannot be augmented by any topical critique or transformation. The problem of real subsumption is, then, not retributive (despite the horrors that capitalism is the nonetheless the condition for)—it is a distributive problem. This is why the common is necessary. What real subsumption implies is that social reproduction itself (and thus our collective fate) is tied to the engendering of the very reproduction of the structure of injustice, one through which it appears as though no injustice has taken place since, in principle, everything is above board—after all, the worker 'volunteers' to sell their labor for money.

The capital relation (exemplified by the primacy of money over the commodity, or of exchange over use, to simplify greatly) is the form of this engendering structure, and it is the task of a radical political theory to think the situation in which the reproduction of subsumption is arrested without our real social reproduction capitulating in turn. The capital relation is thus the ur-structure of generative entrenchment (the platform of the economic base of capitalism) within which any conception of value, in any domain (aesthetic, ethical, political, economic), will ultimately be related in a capitalist society. How then are we to envision aesthetic value, and specifically contemporary artistic value, from the point of view of generative entrenchment in today's milieu?

2.4.3 Wolfendale on Reason

PNR is part of a larger intellectual project committed to re-invigorated concepts of universality, rationality, and Prometheanism about nature opposed to the classical versions of these ideas and their projects. Generally, neo-rationalism (NR) involves sensitivity to empirical, historical, and social contingencies; it theorizes historical and temporal processes rather than fixed constitutions; it recognizes social constructivism (complexly related to non-normative, physical and biological conditions) as well as pluralistic horizons and perspectival affordances according to a generic or global landscape of intellectual and political trajectories and contestations. In all the varieties that concern us, some version of

what Fernando Zalamea (2010 [2013], 107 [1])²²⁰ calls "an expanded reason" is formulated, however diversely.

Peter Wolfendale's (2016a) "Prometheanism and Rationalism," is exemplary in its clarity as an outline of this field and some of its paradigmatic problems and interests. In it, the relationship between the practical and theoretical aims of neo-rationalism are reflected with special attention to their political valences, the structures of political myths, and the inheritance of classical rationalism. Let us briefly elaborate his view.²²¹

Wolfendale begins with three holistic problems or crises facing everyone today—what he calls the 'three dehumanizations' of the environment, the economy, and the human being itself. In relation to our contemporary malaise—our perceived political impotence and our psychic exhaustion—in which it is assumed that the ebb and flow of neoliberal hegemony will go on indefinitely, Wolfendale claims whatever the future holds, these three problems are now inescapable and the future is sure *not* to be "more of the same" (Wolfendale 2016a). He puts three broad political tendencies beside each other, extrapolating their possible response to these dehumanizations: Fatalism, Messianism, and Prometheanism each respond in general, but characteristic, ways. ²²² For him, fatalism acknowledges our

²²⁰ In-text references to Zalamea (2010) in square brackets are to the English translation, all others are to the original Spanish.

²²¹ Wolfendale (2016b) is following on the heels of Brassier, (2014) and Negarestani, (2014) as well as recent Anglophone Hegelian interpretations of reason (in particular that of Robert Brandom), among other work in philosophy of mind, artificial intelligence, and cognitive science. The fact that his paper is less original than expository aids us here.

²²² These are not meant to express specific positions, but only diagnostic tendencies. They are, no doubt, extremely coarse divisions weighted in favor of his argument.

ability to understand what the future holds, though it denies our effective capacities to act on what we can understand; messianism, by contrast, denies our ability to understand what the future holds, and so employs a 'politics of anticipation' toward a potentially radically better but unknown future; finally, Prometheanism holds to a 'politics of intervention' between the present and the future, which denies neither our capacity to act nor to know (ibid).

The connection between Prometheanism and rationalism is given by means of an analogy: Prometheanism accepts no absolute limits to action, while rationalism accepts no absolute limits to thought. Both of these are related to our *causal efficacy*, and since, in terms of this causal power, the former is contingent upon the latter (Wolfendale presupposes effective action is predicated on effective knowledge), Prometheanism entails rationalism. The question then becomes: in what does reason consist?

Multiple Realizability – Firstly, for Wolfendale, rationality consists in what philosophers of mind call 'multiple realizability.' The functionalist thesis of multiple realizability

The concept of 'multiple realizability' has its origins in functionalist analytic philosophy of mind, such as that of Putnam, *Representation and Reality*; Fodor, *The Language of Thought*; as well as many other analytic philosophers around or after 1950. Functionalism is committed to the idea that certain physical, biological, and mental systems are describable behaviorally through the roles the individual parts play in a functional system. As it relates to thought, the thesis implies that any physical thing which instantiates the appropriate functional roles played by a mind can be said to have a mind or be mental. This has given rise to an alliance between functionalist philosophies of mind and that of the computer and cognitive sciences on the basis that the computational paradigm is understood to be capable of modelling intelligence. Functionalism in this sense can be said to correlate to some degree with the notion of structure, in the technical sense which structuralism gives the term, insofar as what counts in structure, for instance, is not the material of the sign-vehicle, but rather the semiotic role played by a sign in a system of signification. On this basis the

entails that rational forms, structures, or practices are not tethered to particular material states—although part of the process of reasoning involves the awareness of immanent material constraints, whether this is in relation to external obstacles or endogenous conditions. Nonetheless, whatsoever embodies the correct functional roles—defined by an abstract space of means and ends, principles and consequences, inputs and outputs, etc. (Wolfendale 2016a, 8-13)—should be thought of as rational. Thus, reason in general cannot be not tied to the constitution of any particular kind of subject (e.g. a human subject) and must therefore be considered essentially inhuman. Because functional structure is not tethered to its parochial instantiation it precisely *discredits* the universalization of all 'unmarked particulars' as constitutive of the subject of reason (Wolfendale 2016b). NR is accordingly an inhumanism, though it is not anti-humanist (Negarestani 2014, 427-9). Lastly, the realizability thesis compels the conception of rationality beyond both the ineluctably fortuitous contingency of emergent intelligence and the mythological image of reason as *bestowed* (naturally or divinely).

Un-Given – The issue of the rejection of the *givenness* (bestowal) of rationality, according to Wolfendale, cleaves the classical Enlightenment into its *radical* and *liberal* counterparts

generalization of formal structures across sometimes radically distinct concrete realizations is supposedly justified (e.g. deep grammatical structure across variable expressions in empirically distinct languages, homologies in mathematical structures, skeletal structures of myth across empirically distinct cultures, invariant psychical structures across individuals in psychoanalytic discourse, etc.). Thus, according to functionalism, the mental is never separate from the physical, but neither is it in principle reducible or bound to the ipseity of *this* body or the quiddity of *this* brain, since it *could be* realized by another substrate with the appropriate functional structure. Multiple realizability is also related to the idea of 'substrate independence' of the mental for the same reason. See, Wolfendale 2016b.

(exemplified by Spinoza and Locke respectively) (Wolfendale, 2016b). 224 What manifests itself through the theological residues of Descartes and Locke as the progressive differentiation between the 'gift' of freewill—understood as independence from the causal order—and knowledge of the body (knowledge of the causal order itself) through which we gain 'mastery' over nature, is patently rejected by Spinoza: "[H]e dissolves the opposition between human freedom and causal necessity: there is no free will, only acting in accordance with one's own essence. Freedom is causal power and causal autonomy, and it is given by nothing to no-one" (ibid.).

Universality – Through the understanding of causal power we drive into how universality proceeds on this conception of rationality. Here, the 'universal' is not 'that to which things apply without exception,' but rather that which can be extended, in principle, indefinitely. This is as true for activity as it is for thinking, since of course one implies the other reciprocally, on Wolfendale's view. The injunction of the universality of reason maintains that contingent contents can be thought in a global, or generic space of reasons (that is logical space, the space of problems)—which itself can be thought on various scales according to the realizability thesis. What the latter point entails is that rational 'agents' need not be individuated 'preference maximizing' egoists, as some game-theoretic economic modelers would have us believe: agents can be collective structures developed against the concept of atomistic collections of individual actors. Through the relationship

²²⁴ For this distinction Wolfendale draws on Israel, *Radical Enlightenment: Philosophy* and the Making of Modernity. Wolfendale's account of causal power in the figures of the Enlightenment is reminiscent of Deleuze's reading of "powers of action" in *Spinoza: Practical Philosophy*. See, SPP, 49, 97-104.

between the contingency and universal extendibility of the general intelligence required in navigating logical space (which is still always, only, done in relation to local conditions), one main conclusion of NR is that human thinking has literally 'understood' itself out of its strict cognitive dependence on the organic stimulus-response mechanisms of our biological heritage, all-the-while utilizing them locally as heuristic expedients. This echoes what Adorno says in Negative Dialectics with regard to the genus homo:

Something compulsive distinguishes animal conduct from human conduct. The animal species *homo* may have inherited it, but in the species it turned into something qualitatively different. (Adorno 1973 [1966], 345).²²⁵

This self-extirpation from compulsory, naturally determined animal activity—e.g. of the kind ethologists call the 'fixed action pattern' of an animal's behavior indexed to a sign stimulus in an environment—is a precondition of the epistemic division between the normative and causal orders. It is also what makes possible the production of spiritual (geistige) activity, such as the construction of forms of life. Of course, for Adorno (as for Brassier) this fact alone is never sufficient to put us on the path of emancipation. Under capitalism, the human subject has freed itself from natural necessity, only to be the unwitting and contingent accomplice of the putative social necessity of the value-form in the antinomy of progress. As Adorno says of the latter case, such a 'necessity' is a spell that intoxicates the 'free' activity of the individual: "The spell is the subjective form of the world spirit..."—perhaps the one alone through which the social reproduction of capitalism

²²⁵ On this see also Ray Brassier, "Final Repression."

can take place, often heedless (in those actors who carry it out) of its non-subjective, or non-individual, even non-human dimensions.

Integration/differentiation — The concrete activity of universalization in situationally engendered thought also overtly requires integration (or in Kant's language, apperception) in relation to logical space. Here the influx of additional occasions to thought augment the connections and cognizance of the boundaries of logical space. Such apperception is itself beneficially indeterminate for reasons which follow from the above. Although not requiring the "I think" of Kant, it nevertheless effectuates consistency conditions, immanently as it were. These turn out to be, in part, socially rather than individually transcendental and hinge on the institutional relation between norms, practices, and forms of life. Part Neither the consistency conditions nor apperception as such can be thought prior to each other. In other words, they represent reciprocally transcendentally determining operations that co-establish or co-form each other by way of these occasions and contents.

Recursivity – Lastly, the functional impetus for rationality is *self-correction* or *error* correction. Reason entails the aforementioned conditions in such a way as to plastically orient thought to its ends, even its absolute ends, those that are ends-in-themselves or 'terminal goals.' This entails the notion of recursivity. As we've already seen in relation to the proposition, recursivity, of a particular kind, is one of the essential features of language;

²²⁶ See sect. 1.4 for a formal elaboration of these conditions.

²²⁷ See sect. 2.2 and 2.3 above.

²²⁸ This thesis on the constitution of rationality Wolfendale regrettably also calls 'self-consciousness,' though he makes clear what he means in the course of his discussion.

in the practical register, this is what I will call, in what follows, *circumspeculation*: reason fashions its relation to itself in the midst of its practices, and fashions its own endeavor in relation to its current causal powers and constraints, not just instrumentally but absolutely. Here PNR re-enters the picture, since circumspeculation is precisely what is meant by Srnicek and Williams' concept of 'navigational' acceleration as opposed to mere *speed* (Srnicek and Williams 2014, 351-2). It is also from navigation or circumspeculation that we can derive tentative theses on the efficacy of political aesthetics regarding the expanse of reason.

2.4.4 Complexity, Politics, Aesthetics

What puts the issue of complexity on the center-stage of the PNR's paradigmatic concerns is that our contemporary historical situation presents us with a new kind of complexity. Of course, complexity *itself* did not emerge recently nor have humans only now struggled to come to terms with it, yet the signal feature of contemporary society's relation to complexity is that today, "we face...not just sensorial complexity, but also a properly *cognitive complexity*" (Srnicek 2015, 15, my italics). Our various long-standing historical and evolutionary, but more or less spontaneous cognitive endowments—structured to make

²²⁹ There are very close and fruitful parallels here with Gary Tomlinson's work on semiotic feedback and feed-forward systems in human cultural evolution. Tomlinson provides a specific semiotic mechanism that bears out the evolutionary consequences of our recursive augmentation in relation to logical space (Tomlinson 2017; 2018).

²³⁰ See also Mark Wilson on navigation and his concept of 'distributed normativity' in mechanical and linguistic iterative processes (Wilson 1997; 2006, 171-77).

sensorial complexity cognitively salient and to rationally adjudicate society in terms of I-thou social relations—do not seem especially suited to tackle the onslaught of data, information, technical knowledges, techno-social systems, and nonlinear geopolitical, economic, and climate dynamics, with which our conceptual, mnemonic, and correlated capacities are now confronted with and impacted by ubiquitously.

One of the weaknesses PNR sees in the anti-capitalist left of the global north is its inability to effectively deal with the complexity of these systems, leading to the further inability to shape and manipulate them in terms of ends other than those narrowly set by capitalist prerogatives. (Srnicek and Williams 2014, 356). In accordance with the demands and gains of these complex techno-social infrastructures, PNR advocates for the endorsement and mastery of high-level abstractions, developed technologies of rationality (e.g., formal logics and pure mathematics), mathematical and economic modeling, and other quantitative methods in order to build cognitive maps that can be set to anti-capitalist agendas. These, they claim, are tools with which we can reclaim the terrain of the social.

The usefulness of these advanced abstractions, via the complexity they make tractable, nevertheless pose difficulties for individual experience. Following a Jamesonian inspiration, *aesthetics* is for Srnicek, "what sensibly mediates between individual phenomenology and our cognitive maps of global systems" (Srnicek 2015, 7).²³¹ Instead

²³¹ I don't think Srnicek's use of Jameson's term 'cognitive maps' actually solves Jameson's original problem, since his was not an issue about our collective traction on these systems, but about the individual's cognitive capacity to understand their place in society (their class position, for example). It is a problem for Jameson precisely because this complexity gives *individuals* no ground from which to act politically, since they have no personal inferential account of the socially determining structures they are within from

of an aesthetics of the technical sublime, Srnicek advocates for what he calls an 'aesthetics of interfaces' which makes data "cognitively tractable" (ibid.). This, so claims Srnicek, is where political aesthetics ought to fix its attention. Yet, Srnicek's account of art is incredibly narrow and tenuous to say the least. On the one hand, it relegates the function of art to that of a social instrument, effectively intimating that artists today should become the affect-designers for left-political systems engineering—perhaps worthwhile, but obviously *epiphenomenal* work: "Design—as the conjunction of aesthetics, pragmatism and technology—becomes the key node for overcoming our current dystopia" (ibid., 17). On the other hand, he also provocatively implies that we are neglecting a politico-aesthetic opportunity in not studying the stimulus/incentive techniques employed by interfaces like those found in casino slot-machines (ibid., 17-8).

In general, Srnicek's view falls prey to the pervasive contemporary anxiety surrounding art's putative *usefulness*. Because contemporary (high) art does not seem to directly contribute political value, by means either of consciousness-raising or of intervening overtly in the social fabric, it is taken to exist in a state of social deficit, which must be overcome by setting the agenda of the activity of art from outside the normative concerns germane to aesthetics itself. But this general, largely unconscious, intuition—shared by many politically-minded artists, critics, and theorists today—is badly confused. It is not a problem of art's social deficit which must be compensated for by extra-aesthetic means, but rather, what must be remedied is a profound, ideologically-directed misunderstanding

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the basis of *their own* experience. Thus, for Jameson, any answer to the question must concern not collective cognition, but individual cognition—because effectively the latter is a condition of the former for Jameson (1989).

of the relationship between aesthetics and value altogether, as well as a seriously flawed understanding of what constitutes effective modes of political intervention and social change. However useful the design and study he points to may be, Srnicek clearly does not give aesthetics any pride of place in directing the actual ends of our circumspeculation in the rational 'game of ends and means' (Glass Bead, 2016a). Instead, he relegates the mobilization of sensations and desires to directing the means of these ends set at the level of ostensibly pure political acts.

In one sense, we would be correct to interpret art as ineluctably political, but the view sketched above inverts the hierarchy of axiological relations, since it confuses the fact that ends are socially determining in relation to proximate causes with the idea that instrumental ends ultimately socially motivate practical orientation, and thus value, in general. The aesthetics of reason sits at the genesis of common sense insofar as the value attributed to aesthetic experience represents the fruit (and therefore the seed) of *Geist*, the veritable *quality* of forms of life, as an end in itself. It is only through the latter that the politicization of art takes hold against the aestheticization of politics. The aestheticization of politics is always a product of the subordination of art to an instrumental conception of the political. In order that art become politicized, it must exercise itself in its own right—which does not necessitate quietism about the political. That art is indeed an end in itself, is an old truth, but one largely forgotten today.

While it is true that aesthetics does not set relative ends—and thus cannot pronounce any genuinely aesthetic determinate judgments on moral or political life—this is precisely why it is upstream of moral or political judgments in the order of axiological reasons (at the base of what Peirce calls the hierarchy of the normative sciences), while still downstream

in terms of causal (natural or social) *history*—it only appears when the life of the organism is not bound by its sheer subsistence and reproduction. Aesthetic judgment represents an affirmation, which cannot again stand in need of reasons in order to justify itself and found evaluation, yet, it is not thereby self-grounding in virtue of offering up a foundation. Moreover, while not being in further need of reasons, it is also not irrational, but represents always (in fundamental cases) a decision, a synthesis which sets reason in motion; one within which the whole of a form of life is an object for circumspeculation; one which, as Bento Prado Jr. tells us, is congenitally 'blind to rules' but yet subject to the effects of their realization. Sas

Aesthetic judgment (affirmation for itself) as the 'bedrock' of valuation is that without which reason itself has no *raison d'etre*. Aesthetics means *the in-itself of life* taken in its generic or common register. Its ungrounding is its power and its ridiculousness, its danger—a danger in which the threat of ethnonationalism lurks in attempting to bind the unmarked particulars of a people to the generic subject of the human. Even more than this, the parameters of capital attempt to bind this subject to the individual *person*. Marx is here again instructive in articulating the productive character of a form of life and the intrication of the aesthetic act with the founding of value, especially as these are played out and

²³² For an elaboration of the place of the aesthetic with respect to normative judgment and reason, see 2.2-2.3.

²³³ See Prado (2021), 94: "What does chaos mean for Wittgenstein? Nothing but a kind of 'experience' that is not supported by a system of rules and, at the limit, plunges into madness, which is defined, in contrast with both error and illusion, as a 'blindness to rules.' This seems to echo another remark of Wittgenstein's: 'If in life we are surrounded by death, so too in the health of our understanding by madness.'"

thwarted in the capital relation, estranging value from the productive activity that is itself nothing but evaluation (the genesis of use-values) in its primordially creative character. Let us look at a long and famous passage from the *1844 Manuscripts*:

... [E]stranged labor estranges the species [genus, *Gattung*] from the human [*der Mensch*]. It turns the life of the species into a means of individual life. First it estranges the life of the species and individual life, and secondly it makes individual life in its abstract form the purpose of the life of the species, likewise in its abstract and estranged form.

For labor, life activity, productive life itself, appears to the human in the first place merely as a means of satisfying a need—the need to maintain physical existence. Yet the productive life is the life of the species. It is life-engendering life. The whole character of a species—its species character—is contained in the character of its life activity; and free conscious activity is the human's species character. Life itself appears only as a means to life.

The animal is immediately identical with its life-activity. It does not distinguish itself from it. It is its life-activity. The human makes their life-activity itself the object of their will and of their consciousness. They have conscious life-activity. It is not a determination with which they directly merge. Conscious life-activity directly distinguishes the human from animal life-activity. It is just because of this that they are a species-being [genus-being, *Gattungswesen*]. Or it is only because they are a species-being that they are a Conscious Being, i.e., that their own life is an object for them. Only because of that is their activity free activity. Estranged labor reverses this relationship, so that it is just because the human is a conscious being that they make their life-activity, their essential being, a mere means to their existence.

In creating an objective world by their practical activity, in working-up inorganic nature, the human proves themself a conscious species-being, i.e., as a being that treats the species as its own essential being, or that treats itself as a species-being. Admittedly animals also produce. They build themselves nests, dwellings, like the bee, beavers, ants, etc. But an animal only produces what it immediately needs for itself or its young. It produces one-sidedly, while the human produces universally.

It [the animal] produces only under the dominion of immediate physical need, while the human produces even when they are free from physical need and only truly produces in freedom therefrom. An animal produces only itself, while the human reproduces the whole of nature. An animal's product belongs immediately to its physical body, while the human freely confronts his product. An animal forms things in accordance with the standard and the need of the species to which it belongs, while the human knows how to produce in accordance with the standard of every species, and knows how to apply everywhere the inherent standard to the object. The human therefore also forms things in accordance with the laws of beauty.

It is just in the working-up of the objective world, therefore, that the human first really proves themself to be a species-being. This production is their active species life. Through and because of this production, nature appears as their work and their reality. The object of labor is, therefore, the objectification of the human's species life: for they duplicate themself not only, as in consciousness, intellectually, but also actively, in reality, and therefore they contemplate themself in a world that they have created. In tearing away from the human the object of their production, therefore, estranged labor tears from them their species life ... (Marx 1988 [1844], 76-77, translation modified).

Just as young Marx appeals to the common character or genus-being (*Gattungswesen*) of productive life, so too must we see that aesthesis, as the genesis of value in the production of common sense, occurs only at the site in which the life activity of the human has shed its parochial, merely special character, but instead has become universal—i.e. has taken on its generic or common character *as* that *of* the species *in* the individual. It is only there where spiritualization and speciation meet that aesthesis can be said to play a primary productive or *formative* (*bildend*) role in directing or motivating life-activity, on the one hand, and can appear as a primary *quality* expressive of a form of life substantiated by that activity on the other, a quality from which genuine affects, images, or 'pictures' (*Bilder*) can be extracted in the experiences of individuals corresponding to acts of common

aesthetic feeling that constitute culture (Bildung). Such would be the inhabitation of a form of life, as opposed to mere subsistence in a mode of existence—the genus *homo* becomes the object of its future, directed first by the aesthesis of value conditioning productive life in general. But, under the conditions of capital, no such inhabitation of common sense is possible, and its realization is thwarted by the structure of social reproduction itself by contorting subjective spirit into the form of the person.²³⁴ The structure of narcissism, therefore, is not a contingent fact of the commodity form in its decoupling of individual desire from communal need, but the necessary outcome of the inversion of the relation between individual and communal life, in which society itself appears (falsely) only as the means to the furtherance of the individual. Thus, it is not *Oedipus* and the family which one must reject with every fiber of one's being today; it is Narcissus and the person which is the pure distillation and reflection of capital that we must hunt down everywhere—firstly within ourselves. The purview of aesthesis is not to be found in individual, merely subjective pleasure; it is first principle of common value, taken at the threshold of all rule.

Srnicek's establishment of the relationship between aesthesis and the social body, therefore, we must regard as extremely parochial at best, and profoundly historically myopic at worst. It lacks a dynamic articulation of the transits and consubstantiation of the

²³⁴ This line of thought has many points in common with Jonathan Hand's superlative exploration of the relation between subject and substance in Hegel's practical philosophy. But it also holds good, more generally, to the insights in Schiller's and Hegel's aesthetics, about the ability of aesthesis to give sensuous reality to mind—though it diverges from Hegel's claim that the stage within which its integration transpires has been superseded. This we reject, since as we have been arguing throughout, the 'indeterminate' norms of aesthetics are the basis of implicitation from which the notion of spirit (*Geist*) cannot be separated. See, Hand, "Reconciling Subjectivity and Substance."

historically distinct but permeable apperceptive domains purveyed by and generated in the generic space of thought (logical space) and lacks an adequate formal and genetic account of the place of aesthesis in its realization of the common or the generic.

2.4.5 The State of the Art

I doubt, in fact, that it is possible to give a serious definition of Art, unless we examine the question in terms of a constant, I mean the transformation of art into merchandise. This process is accelerated nowadays to the point where artistic and commercial values have become superimposed.

- Marcel Broodthaers, "To be bien pensant... or not to be. To be blind" (1975)

As Broodthaers points out (a quote to which we will return to at length in 2.5), the history of modernism, and through it the concept of contemporary art, is inseparable from its economic entanglements—entanglements which, in the 21st century, provoke doubt about the very future of the art. Contemporary art no longer has mediums or functions that appear peculiar to it. The sensible distributions, material-formal ensembles, technical delimitations, and even representational/ideational items which were once its stock and trade, which made up its culture and its right to production have been parceled out and appropriated. Design, fashion, advertising, so-called interactive and social media, cultural memes, and the production of 'experiences' (virtual, therapeutic, etc.) all now have some claim to parts of the social-material-perceptual assemblage which once determined the supposed autonomy of art. This redistribution of functions and sensible materials in the social body has corresponded equally to a crisis in the figures and institutions of art.

Today—much like the philosopher, in their alienated genus-being—the artist is a *factotum sine factum*. Or so it seems. In any case, art cannot help but respond. It is forced to move towards something, become something unknown and as yet unthought. No doubt, too, that this is a problem not just for art, but for culture generally. All value is riven through with the struggle regarding the seemingly ineluctable modes of existence engendered in world-integrated capitalism from which the crisis of the arts emanates.

Traditionally, the platforms of the visual arts in Europe were codified on the basis of distinct modes of plasticity, generated by individual mediums (mediums of painting, sculpture, printmaking, etc.) guaranteed by a bundle of associated techniques, developed over centuries-long explorations of clearly divisible artistic sites. The event of modernist abstraction—a period-length event decomposing the forms of representation and symbolic instrumentality that grew alongside these mediums—pushed the construction of new forms of sensibilia and perception as well as an increasingly radical form of disciplinary analysis that reached its apex in the discharging of these traditional mediums. The mediums were themselves seen as implicated hindrances to the production of new forms, overdetermined as they were with traditional meaning and by codified sets and sequences of expected technique.

One of the unforeseen consequences of the disposal of medium-specificity in visual art practices is that aesthetics, as a theoretical discipline, also lost any effective aesthetic foothold with which to articulate a culturally distinct domain of activity, and to evaluate its products in common. Because of the commitment of modernism to the avant-garde, art's lack of foundation or lack of a proper domain of expression manifested at first as a virtue (and, given the historical moment in which it emerged, it certainly was in some respects).

But, outliving its vitality, it now continues to do so through "the fetishization of indeterminacy" (Glass Bead 2016b, 4)²³⁵ in artworks as well as in its criticism and theoretical appraisal. Because of this history of critique, contemporary art has been systemically unable to produce new and valid, collectively-held generative, norm-laden material infrastructures (or platforms) (ibid., 6), a deficit which much of the art-world nevertheless champions as a 'critical' enterprise, in affirmation of what Amanda Beech (2014) calls the supposed 'lawlessness' of art, or else construes it as a social deficit related to its use which it attempts to compensate for by subordinating aesthetic value to an instrumental conception of the political (as analyzed above). Institutionally, this process of aesthetic divestment has dovetailed with the hegemonic ends of neoliberalism in an easy way, allowing for the cultivation of banal pleasures and 'placebo effects' (Negarestani), and encouraging the individualization of aesthetic value under the auspices of a supposed critique without horizon.²³⁶ All this has been set among growing international art markets and the inflation of artwork exchange-values in economic circuits—with 'major' works becoming an inert form of fixed capital among museums, banks, corporations, and the super-rich (Steyerl 2016). Furthermore, this is also coupled with the modulation of museum programing to effectively attract the public to an increasingly esoteric art milieu as a form

One risks a serious misunderstanding here, no doubt, because of the equivocal use of the term 'indeterminacy' with respect to the necessity of the 'indeterminate norms' of aesthetic judgment. There is a way for artworks to be perfectly singular, clear, or exact in their content without committing themselves to a prohibition on ambiguity, or the confining themselves to strictly (logically) determinate operations. Beckett (in 3.2-3.3) provides an exemplar of this with respect to combinatorial techniques, but we can see it in many works of any medium.

²³⁶ The idea of art as a critique without horizon is something I discuss in "*Questio tantum questionum*: A White Paper on Creative Instantiation," *XPNDR* (2015).

of 'educational' entertainment, mythically mediated by the 'open' possibility represented by the artwork and the cultural legacy of resistance supposedly germane to both modernism and contemporary art.

2.4.6 Platform Aesthetics and Generative Entrenchment

This crisis implies that the current instantiation of high art practices (production, exhibition, and sale) should be transformed. The re-articulation of the forms and contexts of artistic production contain both immanently aesthetic, as well as political concerns. According to Alex Williams, "[p]latform logic... is a matter of generative entrenchment" (ibid). Therefore, artmaking would proceed from the idea that platforms enable (rather than hinder) the production of variational structures, or "multiple realizations" (ibid) that nevertheless employ certain stereotypical architectures. "[T]hey feature building blocks that operate as relatively stable platforms for other entities to build on, and in doing so [...] they become entrenched, hard to shift" (ibid, 6). In other words, the generative affordance of a platform (however we evaluate its products) is, in some sense, correlated with its entrenchment.²³⁷ Such generative entrenchments exist in myriad forms of art: equal

²³⁷ The correlation between generativity and entrenchment is not necessarily (or even generally) linear. In many cases, the relationship between the generativity and the entrenchment of a platform are determined by a metastable dynamics according to a critical point or zone. This seems to be related to the measure of expressivity (or expressive power) afforded by a formal language on the basis of its restriction or relaxation of certain mathematical properties like: consistency, completeness, closure, definability, decidability, etc. If a platform is too restrictive it loses generativity, if is it too permissive it dissipates its generativity into inadequate intelligibility and differentiation.

temperament and the diatonic scale in Western music are examples; the classical 'laws' of visual proportion and composition in European representational painting and architecture are another; the internet meme template is yet another. But the point goes much deeper than a consideration of genre or even of formal period. Platforms actively enable and engender the generation of new forms and dissuade others, and they are found across radically distinct kinds of complex adaptive systems: 238 "They are literally fundamental, in the sense of being the ground on which practice occurs..." (Glass Bead 2016b, 4). Because of this, they become politically dangerous, and aesthetically stultifying when misunderstood as the ultimate arbiters of a closed horizon of intelligible possibilities (i.e. as 'the world')—something that the entrenchment of platforms intrinsically tends to encourage. The extent of the entrenchment of a platform will determine the degree of its 'naturalness' or 'neutralness'. 239

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²³⁸ See for example the connection with between Wimsatt's 'entrenchment' and the idea of state-dependent law-like accretions in complex systems (cf. Paul Davies on life), implying that the 'laws' of complex systems cannot be deduced *a priori* from simpler systems. This seems to pose a problem for Hegel's deduction in the *Science of Logic*, in which differentiation is derived from the movement of division, one where moments of the dialectic are insensitive to the problem of scale because of their formal self-similarity—what I have called elsewhere, Hegel's "scalar indifference."

²³⁹ J.-P. Caron has an excellent exposition of Henry Flynt's artistic practice, which is holistically motivated by exposing the artificiality of such entrenchment through a practice of what Caron calls 'world-unmaking' by exacting procedural techniques involved in Flynt's 'concept art'. These techniques are not unlike those of Beckett as discussed below (3.2). See Caron, "On Constitutive Dissociations." This kind of entrenchment is also something expressly outlined by Goodman in his examination of counterfactuals, in terms of the selection of predicates (for example, that of the static predicates of 'blue' or 'green' instead of his invented predicates of becoming 'grue' and 'bleen' ('grue' is green before time *t* and blue after; the reverse is true of 'bleen') each set of which can be defined in terms of the other). Goodman 1983 [1946], 72-81.

Thus, there is a systematic caution to observe in the implementation of platforms. Widely generative platforms—in some concrete domain—tend to appear neutral relative to their contents, despite their being *precisely* the enabling conditions of those contents. This has already been gestured at in relation to the semantics of logical space (1.3-1.4), but it is equally true of politics and aesthetics. The caution is entailed by their neutrality and ubiquity—"[b]eyond a certain tipping point, they become difficult not to use" (ibid)—precisely because the contents generated are not independent of the platforms from which they come. ²⁴⁰ This is as true of social institutions, technological infrastructures, and the faculties of mind, as it is for artistic forms. Thus, there are widespread political considerations in every attempt at the production of a platform.

There are two positive rules that the artist or the political agent must adopt accordingly, in the utilization and building of platforms. On the one hand, platforms are enabling grounds for practice; as such, critique or transgression of the norms that platforms institute is ultimately insufficient, "[o]nly the building of new, better, [platforms] will suffice" (ibid). On the other hand, one should be intensely *circumspect* about which platforms we adopt since entrenchment is endemic to the appearance and adoption of a platform. Normative inertia is consistently underplayed, on the part of the left, in relation to the rhetoric of

²⁴⁰ Here the obvious examples are technological ones. After a certain critical threshold of technological adoption, it becomes difficult to socially participate without their use, even if they are not trans-historically necessary. No one, at the very least in the global north, can be considered a full social participant without access to the internet, a smartphone, an email account, a credit card, etc. More recently, the so-called social media are becoming entrenched in similar ways, such that one will find it increasingly difficult to feel belonging in any particular social group without their use. All these phenomena, it goes without saying, carry with them vast economic, social, cultural, and experiential consequences which affect what it is to have a mind.

voluntarism and possibility about political agency and action. It is true that our social institutions are constructed, but this does not imply necessarily that we control them. Nor does it imply that our (often unconscious) directing motivations for construction are identical (or even compatible) with our conscious intentions. Lastly, production of a platform does not guarantee our (inferential or material) mastery of its consequences, effects, or implications. Moreover, 'construction' should not be taken as a metaphor: mentality and subjectivity are *literally* nothing without socially binding institutions, and they are not energetically free enterprises, in either the direction of their dismantling or implementation. (This is what Marx means when he says the productive life of a society is its essence.) Nevertheless, while being rigorously circumspect, we should motivate the widest conditions of speculation for their invention. Taken in tandem, I call this a practice of aesthetic *circumspeculation*. The use of platforms, in this sense, seems fruitful both for the production of novel artistic forms and as an analytical or critical tool for understanding our aesthetico-social history.

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Today's most effective aesthetic platforms are no longer related to the legacy of high art: these are cinema, television, video, and videogames.²⁴¹ While this isn't something I consider here for itself, it is relevant insofar as visual art (as it has been conceived through the high art tradition of the West) presents modes of perception which cannot be developed

²⁴¹ VR represents yet another nascent platform, whose ultimate future is still somewhat uncertain, and its distinction from the sociology and aesthetics of videogames is also yet to be determined.

through the material means of the platforms mentioned above. That is, each of the above relies exclusively on the medium of light projection (and sound) of one kind or another, as well as narrative, and these in turn present constraints which eliminate the degrees of affection and the modes which enable the apprehension of these degrees found in visual art. Just as dynamical range in music—appropriate to the performative aura and site-specificity once required of musicking—is being overtaken by a paradigm of compression (within which dynamical range is minimized in order to stabilize the legibility of music in its new settings), one which eliminates integral degrees of affection within entrainment and proprioception, there is an equivalent loss in visual art of the 'dimensionality' in perceptual or aesthetic space. This of course, presents new affordances, as well as extinctions, but it is precisely here that a kind of forgetting on the level of cultural perception can happen behind our backs and against our wills. This is why we must insist on the most rigorous circumspeculation about new structures of generative entrenchment.

With respect to the visual arts, a long time ago Riegl, Worringer, Wölfflin and others following them identified one such mode in the plastic arts as "haptic perception," present in forms of architecture, painting, sculpture, and so on through which tangibility comes into play as visual phenomenon with dramatic conceptual consequences for how we live and act in the world. This mode represents one of the great achievements of art of any era and it is threatened by the current 'distribution of the sensible'. Very little of real aesthetic merit is concerned with its continued articulation except a certain dwindling legacy of high art, and a nostalgic luxury goods industry centered around artisanal modes of manufacture that sit at the boundary between art, craft, and fashion (pottery, jewelry, clothing, etc.). Of course, Walter Benjamin, following partly in the Rieglian mold, diagnosed the most

profound changes in modes of perception brought on by the advent of film, and the worldhistorical gravity of its politics. Yet as he already rightly saw, despite the precarity of this mode and others, we cannot seek a return to a previous aesthetic regime. Regimes are necessarily implicated in the specific historical-material conditions (entailing their dominant modes of perception) that enable any sensuous expression of aesthetic enterprise; conditions the latter cannot help but express to one extent or another. To put this problem in an imperative rather than descriptive light, the question could be posed as follows: How must artworks be related back to our social texture so that they become genuinely aesthetically productive of Geist (public modes of perception, common sense), without falling into the pitfall of becoming yet another pernicious theater of opinion—a temptation to which much of contemporary art today has already succumbed? It is an important question because aesthetic value must be decouplable from the exchange value of artworks. The emergence of genuinely productive, binding aesthetic norms, including semi-binding implicit standards of application wrought by practices is, in my view, the only thing that could give an answer to the crisis in value for art, in and of itself. The emergence of such norms requires both non-empirically realizable ideas as well as appropriate material and institutional infrastructures which satisfyingly compel the generation of new forms of sensibilia and their objects in relation to those ideas. All this is, of course, immanently political. Nonetheless, the more we try to make art do political and communal work which is not itself intrinsically aesthetic, the more its own value will continue to become suspect (or at best, a mere mode of capital), since it will inevitably fail to do this work on either its own terms or the terms of the polis or community to which it is supposedly addressed. None of this is to say that art has no political or communal value, per se. Nothing could be

farther from the truth. But the trajectory of art's arrows, its vectorized perceptions, is oblique. Like that of Nietzsche's archer, the target of the value of art is not easily assignable because it lies—not in the mists of a mythological prehistory to which it nonetheless has ties—but in the always-circumspect future of a common sense.

2.4.7 On Cheyney Thompson

The artist has become the mere executor of his [sic] own intentions, plus: intensities, which do not belong to him.

Jean-François Lyotard, "Adorno as the Devil" (1973)

...a predilection for the idea of artistic critique, not only of itself but also of the social and economic systems that have all but swallowed it whole, like Jonah and the Whale, or Alice down the rabbit hole.

Ann Lauterbach, "On Cheyney Thompson: The Task of Art in the Age of Information" (2012)

Cheyney Thompson is a mid-career US artist, born in Louisiana, based in New York but represented by galleries in the US and across western Europe, working primarily in painting (broadly conceived) whose trajectory encapsulates some of the promise and risk of the intentional implementation of generative structures of entrenchment as aesthetically productive. The structures deployed in his work circulate around both the formal parameters of the production of painting (with scrupulous sensitivity to and incorporation of the history of painting) as well as the economic circuits (within and without the art world) in which the dissemination of painting occurs. To frame his overall project, it is

worth looking at a quote taken from the artist statement on his US gallery's website which articulates common concerns we've expressed about platforms:

Central to Thompson's practice is an inquiry into the production, distribution, and exhibition of painting. His projects, which often span several years, impose structures and constraints onto the making of his work. These limitations are in turn generative, resulting in exhaustive investigations into the medium of painting and the problems that surround it. Tying his works to mathematical and economic formulas, his own labor as an artist, and the architecture that his paintings occupy, Thompson enacts a tension between their formal qualities, and the larger systems of circulation they inhabit. (Kreps 2017)

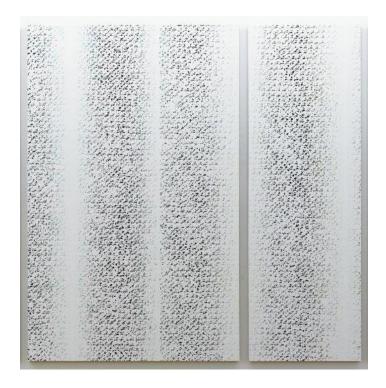


Figure 7. Cheyney Thompson, *Chronochrome Set 10*, 2011, oil on canvas, 47×75 " and 25×75 ".

The *Chronochromes* series implicate Thompson's labor, rendering visible, through an indexical field, the time in which the artist was painting. The paintings realize values of a three-dimensional phase space using the coordinates of the Munsell Color System, determining a unique color for a given moment by correlating hour, day, and year with the dimensions of the color-space (these are hue, value, chroma).

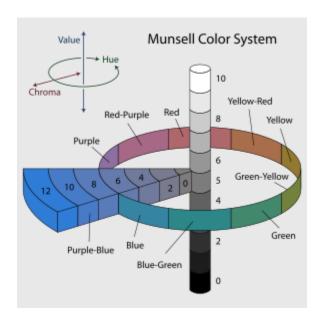


Figure 8 - Munsell Color System (Jacobolus 2007)

The *Chronochrome* is thus a rigorous temporal record of its own materialization from inception to completion. Using a scanned photographic image of the tooth of its canvas as source, superimposed back onto that canvas as painted, it redoubles the substrate and renders the ground of the painting into a figure of its own temporal coming into existence. In this sense it attempts, partly sincerely, partly ironically, to overcome the fetish of the commodity by being nothing but the depiction of its own labor process. That is the quantification turned qualification of its own labor-time.



Figure 9 – Installation shot of Cheyney Thompson, "Black (3.51ml, 2.13ml, 2.12ml, 1.99ml, 1.02ml, 2.54ml, 2.12ml, 2.03ml, 1.25ml, 0.94ml) [19.64ml]", "Blue (3.51ml, 2.13ml, 2.12ml, 1.99ml, 1.02ml, 2.54ml, 2.12ml, 2.03ml, 1.25ml, 0.94ml) [19.64ml]", "Red (3.51ml, 2.13ml, 2.12ml, 1.99ml, 1.02ml, 2.54ml, 2.12ml, 2.03ml, 1.25ml, 0.94ml) [19.64ml]", "Yellow (3.51ml, 2.13ml, 2.12ml, 1.99ml, 1.02ml, 2.54ml, 2.12ml, 2.03ml, 1.25ml, 0.94ml) [19.64ml]", "White (3.51ml, 2.13ml, 2.12ml, 1.99ml, 1.02ml, 2.54ml, 2.12ml, 2.03ml, 1.25ml, 0.94ml) [19.64ml]" in *Somewhere Some Pictures Sometimes*, 2017. Acrylic on canvas, 5 parts: 23 13/16" x 19 7/8" each.



Figure 10 - Cheyney Thompson, "Storage," in *Somewhere Some Pictures Sometimes*, 2017. Slat wall, cardboard, polyethylene foam, dimensions variable.

An exhibition of Thompson's (entitled *Somewhere Some Pictures Sometimes*) shown in 2017, features an installment of a series called informally his 'quantity' paintings. Replicating the setup of an exhibition of the same title from two years previous, Thompson took the canvas dimensions and installment arrangement of his previous paintings, producing five iterations of each of the original paintings, reproducing a series in black, white, blue, red, and yellow. He then orchestrated their daily, randomly permuted installation by means of a biometric punch clock used by gallery staff upon 'clocking in' each morning. The paintings themselves are made using a fixed volume of paint (proportional to the size of the canvas) which is then divided into distinct proportions determined by a "random walk algorithm" used to model changes in stock prices in finance. These volumes are then applied in succession, with the aim of covering the surface of the canvas as efficiently as possible. The unhanging paintings are stored in a rack made

especially for the exhibition. Rigorous limitations and the incorporation of stochastic processes conspire to eliminate personal decision in every intellectual aspect of the production and exhibition of the painting: in this way, the twin legacies of conceptualism and abstraction reach a limit of self-effacement in the imposition of structure.

Now that we have sketched a description of Thompson's practice it is worth problematizing its somewhat uneasy position between political economy, the legacy of High Modernism, and conceptual practices of aesthetic reason. Rationalizing the processes of painting, in this case, leads away from the subjectivism inherent in production (and allows Thompson to analogize political economy without didacticizing or moralizing it), but the work still lets subjectivism in at the level of reception, since it is not proposing a selection by the artwork as an aesthetic norm (perfection), but only as a norm of production. In addition, Thompson relies on a mode of generative entrenchment which is quasi-totalizing, to the point that any choices made undictated by the set-up become indefensibly arbitrary. And there is no exception-free policy of production that could guarantee the absence of such choices. Arbitrariness in the non-law-determined degrees of freedom of the platforms (for example: the gestures made in the quantity paintings or the 'random' cuts of the canvas from the loom in the original instantiation of the *Chronochromes*), belies Thompson's interest in the relinquishment of artistic authority. To put it plainly, it is fear of authorship which accords weight to the random or arbitrary, at a moment when the idea of artistic subjectivity (or subjectivity itself as conceived in the liberal tradition) has become eminently questionable. This fear has, to be sure, a complex relationship with contingency, authority, and history, but it still demurs at any *positive* notion of artistic creation adequate to the task of our time, even if we grant that it is an understandable desire for escape, given the provincial grasp

of any person on the network of inconsolably impersonal and nonlocalizable forces that direct our lives. Nevertheless, Thompson's work shows that platforms, viewed as closed systems of determination, cannot be productive of aesthetic forms of life, *Geist*, since it is in the inevitable gaps of totality where collective life can be seen most readily, and any genuine generative entrenchment must point the way, not just to the letter of the aesthetic or political law, but to the *Spirit* of the law left uncodified, tacit. It is this latter which deserves the name of social substance, common sense, and, finally, it is the true name of tradition.

2.5 The Derivative Avant-Garde: Self-Appropriation and the Recursive Readymade in Marcel Broodthaers' *Tractatus-Logico Catalogicus*

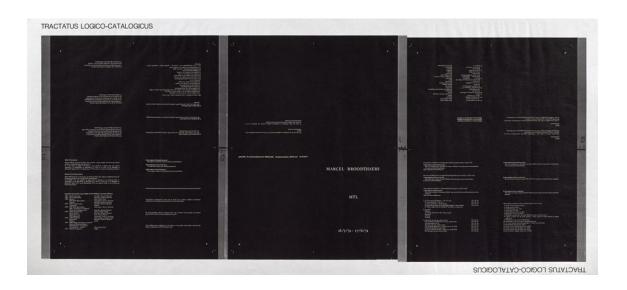


Figure 11 - Marcel Broodthaers, *Tractatus Logico-Catalogicus – Art or the Art of Selling*, 1972

Tout se résume dans l'Esthétique et l'Économie politique.

– Stéphane Mallarmé, *La Musique et les Lettres* (1895)

2.5.1 Background

If appropriation art finds its prototype in the readymade with Duchamp's *Fountain* (1917), responding—as Stiegler (2017) notes—to the serialized production of mass industrial manufacturing in the first half of the twentieth century, then appropriation enters into a new 'post-industrial,' financial phase in the work of Marcel Broodthaers. In 1972,

Broodthaers produced an exhibition entitled, *Tractatus Logico–Catalogicus – Art or the Art of Selling*. This exhibition included as its centerpiece a framed print-reproduction of a catalogue from his own earlier exhibition of 1970. The new print was positioned upsidedown and in printed in negative, sharing the title of the new exhibition.

I argue that Broodthaers is engaging in a form of self-appropriation through a readymade, one entertaining the recursive logic at work at the heart of modern language and art which mirrors the way the contracts of the financial derivatives market derive 'value' not the from the goods of the real economy but solely from speculation on the volatility of price differentials. Just as derivatives putatively hoist themselves from their material base in order to generate greater profits from the second-order dynamics of price, so too Broodthaers sardonically offers its reflection in the volatilization of aesthetic value determined by the second-order exhibition value of the catalogue, substituting itself for the primary cult value of the sensuous art object. As his own title suggests, he thereby interrogates the crisis of social form at work in both contemporary art and finance.

* * *

The act of appropriation, at its most basic, involves a relation with something alien, something external to oneself—taking it as or making it one's own, making it 'proper' to oneself in such a way that one then claims it by right. The genus of 'property' (not to be conflated with its modern species, *private* property), in this broad sense, is a ubiquitous phenomenon found in all human social groups—and even, arguably, in many animal species, both social and solitary. In this regard, distinguishing property from the locally negentropic metabolic processes endemic to life in general, as well as within a general

typology of the animal territory is a genuinely difficult task for any formal philosophical account of selfhood and normativity as well as for any historical materialist account of the genesis of the social from the natural. Given the basic definition above, the idea of 'self'-appropriation, then, would at first glance seems to be an oxymoron, a contradiction, or, at best, a kind of tautology.

In the generation of artists for which the term 'appropriation art' first gained notoriety and recognition (I refer to the Pictures Generation, and before them to artists like Sturtevant), 'appropriation' gained the connotation of taking as one's own what was, in effect or explicitly, someone else's private property—their intellectual property, to be precise. Examination of these cases is already a very complex topic—implicating the ontology of the artwork, the residence and status of artistic value, the institutional complex within which artists or artworks are constituted, the cultural and legal politics of entitlement and property, and so on—but one about which I will say nothing here.

In North America today, relative to that history, it is perhaps most natural to think of appropriation art, as a social phenomenon, in terms of cultural appropriation. However, I would like to focus instead, on an alternative social dimension of appropriation—namely, the link between artistic appropriation in contemporary art and economic appropriation within financial capitalism. This is because at the intersection of these two more or less coeval phenomena lies a deep connection expressive of what Peter Osborne (2022, 37-8) calls "crisis as form"—which he takes to underwrite both contemporary social form as well as the generic artistic form characteristic of post-conceptual contemporary art practices as such. In relation to the formal nature of the crisis or the critical nature of form (both 'crisis' and 'critique' share the same Greek root, *krinein*, 'to judge, to decide') I would like to

begin with a quote from Marcel Broodthaers' sphinxlike 1975 text "To be *bien pensant...* or not to be. To be blind." In it he says,

I doubt, in fact, that it is possible to give a serious definition of Art, unless we examine the question in terms of a constant, I mean the transformation of art into merchandise. This process is accelerated nowadays to the point where artistic and commercial values have become superimposed. If we are concerned with the phenomenon of reification, then Art is a particular representation of the phenomenon—a form of tautology. We could then justify it as affirmation, and at the same time carve out for it a dubious existence. We would then have to consider what such a definition might be worth. One fact is certain: commentaries on Art are the result of shifts in the economy. (Broodthaers 1987 [1975], 35).

Here, Broodthaers first gestures toward the fact of the emergence of the 'autonomy' of the so-called 'fine arts' from its premodern religious, state, or utilitarian functions is a product of its newly engendered role in the general market of commodities—i.e. the world market of industrial capitalism. The autonomous artwork is therefore from the beginning the artwork as commodity—it is only in virtue of its embodying value as capital that it leveraged itself from the theological, political, and practical values which it previously served in favor of a value peculiar to the 'aesthetic' as such. This is the "constant" Broodthaers attaches to the modern and contemporary artwork. In relation to the art of his day, and to his own work in particular, the idea of artistic value becoming a tautological expression—something that is only an expression of itself—is of the utmost importance for the formal connection between art and finance with respect to what Marx calls "self-valorization" (*Selbstverwertung*).²⁴² We will return to this point in a moment. First, let us

²⁴² See Marx (1990 [1867]), 255: "For the movement in the course of which [exchange] adds surplus-value is its own movement, its valorization is therefore self-valorization

elaborate the function of the derivative in the context of contemporary finance, in order to better contextualize the depth of Broodthaers' work.

2.5.2 The Derivatives Market

Derivatives are the emblematic financial instrument of contemporary finance. According to AA Cavia (2015), citing 2013 data from the Bank of International Settlements (BIS), "The circulation of capital through financial derivatives outstrips that consumed in the exchange of real commodities at a ratio of 10:1." But what are derivatives? They are fundamentally written contracts between two or more parties regarding the future price of some asset(s), called 'the underlying'. Basic types of derivatives include futures, options, forwards, and swaps. These can in turn be compounded into more complex forms of derivative within which other derivatives are themselves the underlying, or with other financial instruments (such as debt) packaged and taken as their own form of asset to be traded. Collateralized debt obligations (CDOs), like those involving sub-prime mortgages during the 2008 financial crisis, are of this second type.

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[[]Selbstverwertung]. By virtue of being value, it has acquired the occult ability to add value to itself. It brings forth living offspring, or at least lays golden eggs. / As the dominant subject [ilbergreifendes Subjekt] of this process, in which it alternately assumes and loses the form of money and the form of commodities, but preserves and expands itself through all these changes, value requires above all an independent form by means of which its identity with itself may be asserted. Only in the shape of money does it possess this form. Money therefore forms the starting-point and the conclusion of every valorization process."

In terms of their function, the 'value' of a derivative is determined by the difference between the current known price of the underlying and the speculative, adversarial claims of traders betting against one another about its unknown future price. Arjun Appadurai has shown that these contracts should be understood in fundamentally linguistic terms, specifically in the form of promises, a type of illocutionary speech act called a 'performative':

What the derivative is and what it does are closely tied. The derivative is an asset whose value is based on that of another asset, which could itself be a derivative. In a chain of links that contemporary finance has made indefinitely long, the derivative is above all a linguistic phenomenon, since it is primarily a referent to something more tangible than itself: it is a proposition or a belief about another object that might itself be similarly derived from yet another similar object. Since the references and associations that compose a derivative chain have no status other than the credibility of their reference to something more tangible than themselves, the derivative's claim to value is essentially linguistic. (Appadurai 2016, 4).

In sum, a derivative is a performative act, a written financial promise, based on an arbitrarily long recursive valorization of the difference between the known present and the unknown future. It is because the pricing mechanism of the derivatives market relies on this differential that the market itself is understood to be performative—in the sense that the value of the derivative itself appears to derive from the wagering act of the promise, rather than the actual value of 'the underlying' it is a promise about. In this sense, derivatives appear to be self-valorizing. But, because the future is unknown, volatility is central to the pricing of derivatives: it weighs the risk of (potentially broken) promises via the contingency of the underlying price. This is why Elie Ayache calls the derivatives market a 'medium of contingency' where the future is (performatively) written (Ayache

2011, 2014). Here, the notions of performativity, tautology, and volatility are shared in common by the value both of the derivatives market and that of contemporary art.

2.5.3 Self-Valorization, Tautology, Performativity

Let us return now to the question of valorization. For Marx, self-valorization, in general, is the process by which a society produces more value for itself than it uses in its reproduction: self-valorization is the production of surplus value. However, in the capitalist mode of production, surplus appears only through the trading of commodities in the form of profit, within which profit is understood (erroneously) by the capitalist to be generated simply through buying or producing a commodity at a lower price than that at which it is sold. Profit thus appears in the capitalist world economy as miraculously self-generating and recursive in nature. It is only through the constant reapplication of trade in the M-C-M' circuit that the movement of capital valorizes itself. This is the fulcrum around which the superimposition of artistic and commercial values formally articulates itself. Selfvalorization, as recursive, is always tautological in structure—at least, when looked at purely from the perspective of what is taken to be the proprietary domain of the value in question. Tautological self-valorization is not only economic or artistic, in this respect, but also existential. For example, the affirmation of life—in other words, of the whole sphere of value writ large—was absurd for the existentialists; an absurdity, moreover, whose acceptance must then be championed for itself in choice (deciding the undecidable). However, while self-valorization from the point of view of 'meaning' (whether semantic or existential) is tautological, from the perspective of practice (pragmatics)—according to sociologists of finance such as Callon (1998), MacKenzie (2006, 2007, Bamford and

MacKenzie 2018), and others—it is instead a *performative* utterance or act: something that makes itself true by being uttered or acted out. The statement, "I now pronounce you legally wed," when uttered by a certified officiant at a wedding ceremony is such a performative: it does what it says it does simply by saying it. Performatives, in this regard, are closely tied to the institution of normative statuses. Nonetheless, against reading performativity as the sui generis enacting of value—whether through the act of freedom of the existential individual, the pricing mechanisms of the market (as Ayache (2014) and Roffe (2014) do), or in the deontic stipulations involved in forms of post-Duchampian and post-Cageian conceptualism ('it's art because I said so')—I argue it is rather the very hypostasis of performative self-enclosure by which artistic and social form become emblematic of a generalized crisis of value. This is because performatives depend sensitively on the contextual felicity conditions from which their normative substantiation flows.²⁴³ On the one hand, this crisis confronts the claim of contemporary art to produce a uniquely artistic or aesthetic type of value, independent of other domains of value (autonomy); on the other, it confronts the financial market's recursive valorization of financial instruments as independent of the real economy.

2.5.4 Broodthaers' Tractatus

Broodthaers exhibited *Tractatus-Logico-Catalogicus – Art or the Art of Selling* in 1972, in the middle of the period of transition to the current system of finance. The work was made

²⁴³ Wittgenstein has demonstrated this at length with respect to rule-following. See 2.3.

the year after US President Nixon's abolition of the gold standard for the US dollar in 1971, and a year before the adoption of free-floating fiat currency as the *de facto* monetary system of international banking in 1973, bringing an end to the Bretton Woods system established in the post-war period (within which international currencies were indexed to the gold-backed US dollar at fixed rates). The 'value' of fiat currency, by contrast, is established only through its differential exchange-rate with other such currencies. In this way, it is no longer understood to be tied to the value of any commodity other than money and, as a result, is itself traded as a financial instrument. We know this transition was of interest to Broodthaers, who in 1971 produced his own 1kg gold ingots, to be sold as part of the "Financial Section" of the "Department of Eagles" of his sprawling *Museum of Modern Art* exhibitions.

Tractatus-Logico-Catalogicus – *Art or the Art of Selling* (TLC) is a large-scale, single-page, screen-print reproduction of a catalogue from his own earlier exhibition of 1970 (the prosaically titled *Exhibition at the Gallery*). ²⁴⁴ The new print was positioned upside-down, printed in negative, and relabeled with the new title of the exhibition.

The title of Broodthaers' work, of course, apes Wittgenstein's *Tractatus Logico-Philosophicus* (TLP). But, like much in Broodthaers, what appears initially as simple

²⁴⁴ This is according to the details provided about the artwork from the Tate Modern. MoMA's information somewhat conflicts with this (though not in a way that threatens our interpretation), as do the details regarding the specific medium of the work. See Bradnock (2004), and Unknown (2008). Given the specificity of the Bradnock's information, and the fact that the research was supported by the AHRC Research Centre for the Study of Surrealism and its Legacies, we take it to be authoritative.

parody, also has a serious dimension hidden behind layers of humor and enigma, the latter of which he associated with the historically magical function of art (Broodthaers 1987 [1975], 35). In the TLP, Wittgenstein distinguishes between propositions with empirical content and those that are strictly logical. Purely logical propositions, according to Wittgenstein, are understood from the symbols and their ordering (syntax) alone, without reference to non-logical states of affairs or facts. In this respect, all logical propositions are tautological for Wittgenstein (contradiction being a special case of tautology). "The propositions of logic are tautologies. / Therefore the propositions of logic say nothing." (TLP, 6.1-6.11). By tautology, Wittgenstein means a proposition whose truth conditions are always (or never) satisfied regardless of empirical circumstances and whose content is vacuous. In other words, a tautology is always true because it is trivially true—it expresses nothing other than itself. (TLP, 4.46-4.466). For example, the proposition 'It is raining' is empirical in the sense that it depends on circumstances not determined simply by the meaning of my words—that is, it is possible that it is sunny, or snowing, etc. On the other hand, the proposition 'It is either raining or it is not raining' is a tautology insofar as "I know nothing about the weather when I know that it is either raining or not raining." (TLP 4.461). However, despite their empirical uselessness, tautologies expose the form of our language, its logical form:

The fact that the propositions of logic are tautologies *shows* the formal—logical—properties of language and the world. The fact that a tautology is yielded by this particular way of connecting its constituents characterizes the logic of its constituents. If propositions are to yield a tautology when they are connected in a certain way, they must have certain structural properties. So their yielding a tautology when combined in this way shows that they possess these structural properties. (TLP 6.12).

In the same way, Broodthaers, by making the content of his work redundant because recursive—relating only to the catalogue of his previous exhibition—attempts to show the *form* of artistic value itself through the performative act of self-appropriation, even though, in the precise sense of Wittgenstein, the explicit content of the artwork '*says* nothing'—it is tautological. The artistic form thus shown in recursion is the volatility of the autonomous artwork as the crisis of contemporary artistic and aesthetic value itself. The autonomy of the artwork, in this respect, is the mode of presentation of the generalized alienation of forms of life in the commodity-form. Self-appropriation only becomes possible in the milieu of alienation made possible by the law of private property.

So much for the first half of the title. Now we must match the somewhat Pyrrhic victory of the autonomy of art to the Delphic subtitle of Broodthaers' work: "... Art or the Art of Selling." Here, it should be remembered that the originary function of the exhibition catalogue (in the context of the private gallery), was to serve as an index of artworks as commodities; the gallery is a marketplace, lest we forget. In this way, the catalogue becomes a synecdochal substitution for the market as a whole. ²⁴⁵ In the context of the TLC, the symbol of the catalogue as pure exhibition-value takes on the role of ostensive content of the artwork. The content of the TLC is now only about the commercial value of the underlying—in this case, the works from the previous exhibition. In this respect the TLC reiterates the same relationship to the sensuous art object as does the financial derivative with respect to the 'tangible' goods it is (ultimately) a speculative promise about. The

²⁴⁵ Barbara Reiss has pointed to metonymy as a general feature of Broodthaers' interest in visual and verbal language (cited in Compton 1980, 17).

derivative reproduction of the catalogue and the original art object become vortically enveloped in one another in Broodthaers' piece. Through this envelopment, artistic value and commercial value become literally superimposed in such a way as to become indistinguishable. Through this zone of indiscernibility of value, Broodthaers cynically seems to give the ('noble') lie to any artwork whose ideal rests outside of the economic relations which make it possible, thereby exposing a parallelism between the increasing volatility of artistic value of contemporary art as such—stripped of the demands of any exogenous didactic, sensuous, or expressive function in the process of its autonomization—and the volatility of the derivatives market—hoisted from the value of its underlying assets onto the nexus of promises regarding their future prices.

Following out this superimposition, Broodthaers also foreshadowed the deep institutional imbrication of the global contemporary artworld with that of international finance. A relationship through which works of art function as a decentralized and unregulated network of financial hedges wherein art "become[s] a proxy for the gold standard." (Steyerl 2016). However, the more exorbitant and stable the exchange-values of major works are in the hands of global financiers, the more volatile contemporary artistic value becomes in relation both to the definition of art and the social subsidization of the artworld itself by those excluded from the surplus-value stored in the works of our collective aesthetic heritage (Vidokle as cited in Steyerl, 2016, para. 18). Because of this, our most valuable assets are used against us and against the (now broken) promise of art itself: we pay for the surplus stored in these works through our (justified) belief in art; our affirmation of it in the distributed normativity and performativity of the practices and actions which give

concrete institutional existence to the maintenance of that value.²⁴⁶ But this volatilization leads us necessarily to the problem of contemporary art's "dubious existence"—to the question of what art, so defined, is worth (Broodthaers 1987 [1975], 35). As noted by Osborne, "In this respect, we might say that contemporary art is a broken 'promise of happiness' not merely of art, but of capitalism itself." (Osborne 2022, 20).

More astutely than anyone before him, Broodthaers' saw the implications of form for the generalized crisis in value characteristic of modernism, operating in the recursive processes of self-reference, self-appropriation, and self-valorization, expressed in language, art, and capital—through which the social metabolism of the present establishes itself—exposing the critical form of contemporary artistic practice as an abiding problem about the future of aesthetic experience and the position of art in late modernity.

²⁴⁶ For the concept of distributed normativity see Mark Wilson (2006)

2.6 Compression and Noise

2.6.1 Background

Compression is a technique for reducing the load of information systems, ubiquitous at the level both of computational infrastructure and in direct experience with contemporary media. Beyond any particular technical implementation, though, compression names the peculiar perceptual regime of late modernity—it is our percepteme, our episteme—the form of appearance of the alienated common sense of the value-form reacting against itself as externalized.

Yet, if compression designates the essence of experience today, it is precisely in response to a complementary concept of *noise*. Noise is the lived affect of our material conditions which cannot be made significant to us: not only the literal acoustic noise of late modernity (the waste-product of technologies which hang over perceptual spaces like smog hangs over cities) but, perhaps more critically, compression emerges to cope with a new, properly "cognitive complexity" embodied in the unprecedented entanglement and mediation of social relations through the technical/computational unfolding of the value-form of capital. Such complexity—lying beyond the grasp of any human individual—is logistically offloaded onto the nootechnical exteriorizations associated with, for instance, AI algorithms. On the other hand, it is individuated in experience as *noise*. Because such noise is perceptually-cognitively intractable, compression becomes the necessary shape of our *aesthesis*—the reactive experience of the patient—one that rigorously flattens the available modalities of experience/value—yet giving birth to new forms of abstraction, perception, and thought. Compression and noise are, then, interconnected phenomena determining

current aesthetic regimes and modes of perception in the computationally mediated experience of late modernity.

* * *

In Capital Volume 1, Marx diagnoses the money-form of the value of commodities as implying the mutual alienation of the social relations through which commodities get produced and exchanged. Because money is an intervening factor in exchange, the participants in the process of exchange in capitalist markets are generally unaware of, and indifferent to, any part of the circuits of exchange in which their own money, goods, or services do not enter.²⁴⁷ Unlike direct exchange, in which money does not enter and through which the terminal good of consumption is acquired more or less immediately and reciprocally by both parties, the money-form establishes a mediation of social relations: money is the medium of exchange and acts as a universal equivalent of the value of commodities. In its role as intermediary, money also thereby becomes a reservoir of social power. Just like 'the spice melange'—the highly addictive drug, prescient tool of strategy and navigation, and emblem of universal political control in Frank Herbert's Dune money too allows for the folding of time and space: it compresses the duration of the labortime of the commodity and the distance of trade, having at its disposal the total productive power of society implied in the value of the commodities for which it will eventually be

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²⁴⁷ Marx, *Capital* Vol. 1, 207. Readers of Marx will notice, of course, that my illustration relies only on an outline of the simple money-form of commodities, not on the analysis of money as capital proper (the form in which the social complexification of modernity actually took place), but nothing in our example is affected by this substitution, which is made for the purposes of illustrative clarity.

substituted.²⁴⁸ But, the seller of a commodity is under no obligation to immediately use their money to buy another commodity and this delay puts the relations of production expressed in that quantity of money at a remove from their origins, and thus at a remove from the spontaneous experience of the subjects entertaining these relations in future activity.

This mediation of social relations, through which the whole world is entangled in ways that are not subject to conscious presentation, in turn gives rise to a new regime of complexity in human life, one with unprecedented epistemic and aesthetic ramifications, the effects of which are constantly being renewed and transformed, and which are therefore in continual need of qualification. As Srnicek notes, following Jameson, this is a regime not of our perennial sensorial complexity mastered in cognition by the appropriate use of our faculties, but rather a "properly cognitive complexity" of increasingly indirect and non-linear dynamics, of opaque relations of production that are spread diffusely in variable processes across the surface of the earth. ²⁴⁹ These outstrip the capacities of any individual

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²⁴⁸ Herbert, *Dune*, 361. "Paul felt the drug beginning to have its unique effect on him, opening time like a flower. [...] The sensation mingled with the work of the drug, folding future and past into the present..." For more on the concept of time-space compression in modernity, see Warf, *Time-Space Compression*, esp. 78-212; and Harvey, "Between Space and Time," 418-434.

²⁴⁹ Srnicek, "Navigating Neoliberalism," para. 26. Srnicek frames the term 'cognitive complexity' via a problem of aesthetics regarding Jameson's concept of 'cognitive mapping,' namely how one understands the relation between individual experience or phenomenology and its position and formation within a global social whole. See Jameson, "Cognitive Mapping", 346-60; and *Postmodernism*, 45-54, esp. 54: "An aesthetic of cognitive mapping—a pedagogical political culture which seeks to endow the individual subject with some new heightened sense of its place in the global system—will necessarily have to respect this now enormously complex representational dialectic and invent radically new forms in order to do it justice. This is not then, clearly, a call for a

to 'naturally' comprehend them. Information and computation processes—and, increasingly, artificially intelligent systems—stand as the exteriorizations of the complexity brought about by the mediation of social relations through capital. This complexity, occluded by the money-form, is also compressed by it in the form of a novel kind of abstraction—one taking place, not in the mind of the nominalist or the Platonic heavens, but through the real material relations of society. It is, to borrow a term popularized by Sohn-Rethel, a "real abstraction." This section aims to elucidate the aesthetics of that abstraction by looking at its paradigmatic experiential avatars today: compression and noise.

While it is not our concern here to detail the relation between capital and its technological and epistemic superstructures, it is only within this regime of cognitive complexity, which real abstraction brings about, that the concepts of compression and noise come to dominate the perceptual and phenomenological registers of life in the late modernity of the twenty-first century. Before detailing the stakes of these concepts for specific domains of aesthetic activity, it will be useful to place compression and noise within their theoretical contexts in order to better understand, on the one hand, how they are co-constitutive phenomena

return to some older kind of machinery, some older and more transparent national space, or some more traditional and reassuring perspectival or mimetic enclave: the new political art (if it is possible at all) will have to hold to the truth of postmodernism, that is to say, to its fundamental object—the world space of multinational capital—at the same time at which it achieves a breakthrough to some as yet unimaginable new mode of representing this last, in which we may again begin to grasp our positioning as individual and collective subjects and regain a capacity to act and struggle which is at present neutralized by our spatial as well as our social confusion." I would add historical and temporal confusions to this list as well.

²⁵⁰ Sohn-Rethel, *Intellectual and Manual Labor*, 18-47. See also Khatib (2017).

dependent on one another, and, on the other, what their ubiquity means for the modal impoverishment of experience, or what Bernard Stiegler calls the "proletarianization of sensibility."²⁵¹

2.6.2 Compression

Compression is an essential technique used across diverse information systems, one in which supposedly redundant or superfluous information is minimized or eliminated in order to make the storage, transmission, or reception of other information more legible or efficient. Compression is involved in everything from computer data storage (encoding) and efficient computational processes (floating point arithmetic) to the formatting of media (telephony, radio, MP3, digital streaming) or the engineering and circulation of sound and image (dynamic compression of volume, JPEG resolution). Compression is also a concept gaining increasingly wide extension in various fields beyond its origins in communication and information theory. For instance, the language of compression is finding its way into biology, to the extent that AI research, computer science, and cognitive science overlap—e.g. in the way that light, taken in by the retina of the eye, is transcoded and compressed into the electro-chemical signals processed by the neuronal activity of the brain. ²⁵² It has also found its way into epistemology through the mathematician and computer scientist Gregory Chaitin, and into media historiography and cultural theory through the likes of

²⁵¹ Stiegler, "The Proletarianization of Sensibility."

²⁵² Haken, "Information Compression in Biological Systems"; Plumbley and Abdallah, "Information Theory and Sensory Perception."

Jonathan Sterne as well as Alexander Galloway and Jason LaRivière (the latter three we will return to in detail below). It seems that compression names a historically characteristic process undergone by all levels of experience in contemporary life. We are told the dimensions of our lives under the conceptual and mediatic ubiquity of information and computation technologies are being compressed; our experience itself—whether in hearing, vision, or thought—is now recollectively understood as always having been a species of compression. Its framing as an episteme also justifies itself by virtue of its own concept. The transdisciplinary effectiveness of compression as a frame becomes epistemically justified (according to Chaitin) on the basis of its theoretical parsimony—that is, on the basis that this frame itself compresses the information needed to articulate a 'system of the world' better than those that have preceded it. Theory success is itself an Ockhamian function of compression. 254

The question then becomes how we should characterize compression. In general formal terms, compression can be understood as any encoding of data—that is, any mapping from one set to another—in which the two sets involved are not isomorphic and in which the codomain (the output) of the mapping is strictly smaller than the domain (input)—compressed information is smaller, it is comprised of fewer bits than uncompressed information. In technical terms, compression is a surjection of a base set to a target set. Lossless compression is then a transcoding (a 'translation' from one encoding to another)

²⁵³ Chaitin, "Epistemology as Information Theory"; Sterne, *MP3*; Galloway and LaRivière, "Compression in Philosophy".

²⁵⁴ Chaitin, "Epistemology as Information Theory," footnote 2.

in which the operation of compression can be 'reversed' in order to recover the original data. ²⁵⁵ One obvious example of a lossless compression is a ZIP file—often used to compress multiple files into a single package which is smaller in size then the original collection of files. This makes the transmission and storage of such data more efficient. In an informal sense, one can think of lossless compression of this type as containing the instructions needed to construct the original data, rather than as containing that data itself. By performing those instructions, one decompresses the ZIP data into the original configuration of data. Another analogous form is the DNA code of an individual's genome used to replicate the cells of the organism. Assuming everything 'goes according to plan' in the case of cell replication, the new cell should be molecularly identical to the old (putting considerations about evolutionarily advantageous base mutation rates to one side).

Lossy compression, on the other hand, is one in which the original data cannot be retrieved by reversing the operation. As its name suggests, then, lossy compression loses data: it deletes it, conflates it, forgets it, etc. File types such as MP3s and JPEGs are common forms of lossy formatted media that we widely circulate on a regular basis. But even before the

²⁵⁵ There is a technical nuance here which is liable to provoke confusion without elaboration. The process of 'reversal', in the case of lossless compression, is not an inverse mapping of the surjection from base to target sets (an injection), and this is why the output of a lossless compression is not isomorphic with its input. In the analogy with a ZIP file, moving from the base data to the instructions, so far as I understand it, is not the inverse of moving from the instructions to the target data, since inverting the surjection would mean that the two sets were strictly isomorphic (bijective), and this means they would be equal in size, and, therefore, each set would entail the same number of bits. As a toy example, one can map the numbers 1, 2, 3, 4, 5 to I, II, III, IV, V or to A, B, C, D, E and each of these is isomorphic with the others, but they are not compressions, since each requires the same amount of information—i.e. each requires five symbols (disregarding specific considerations about the encoding efficiency of each notation).

advent of personal computing, lossy compression was widely used in a variety of media, for example in telephony, where compression is used to better isolate the frequency range of the human voice, and to eliminate unwanted variation in the dynamic range of volume—both of which make it easier to understand speech through a noisy channel, like a telephone line with low fidelity microphones and speakers. ²⁵⁶ As Sterne notes, "Compression history cuts a wide path through technological history" including, pivotally, the techniques of 'perceptual coding'—types of compression developed around models of human perceptual experience in digital media, beginning in the 1970s and 1980s. ²⁵⁷

Lossless compression operates solely by the removal of redundancy in the information being transferred, while lossy compression inevitably introduces a margin of uncertainty in non-redundant information itself, within which the information deleted, forgotten, or conflated is understood to be superfluous or irrelevant in the contexts of its use. Both, nevertheless, leave themselves in an ineliminable relation with noise, though in different ways.

2.6.3 **Noise**

In a broad and important sense, the concept of noise designates the lived affect of our material conditions which cannot be made significant to us. This is in keeping with the literal meaning of acoustic noise, but it is equally true of the use of noise in the information-

²⁵⁶ Sterne, *MP3*, 61-91.

²⁵⁷ Ibid., 6, 92-127.

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theoretic sense, which responds directly to the problem of cognitive complexity, which conditions our inquiry about aesthetics and provides the concrete coordinates for the experience of the patient. As Cécile Malaspina contends, "[n]oise no longer characterizes only entropic processes related to mechanical work, but increasingly conditions information networks, and even, if differently, the co-emergence of cognitive labour, characterized by information overload and even the 'mental state of noise." With respect to the technical understanding of information given by Shannon, noise represents the randomness or uncertainty in a signal through which information is transmitted—the greater the noise in the channel, the smaller the probability of accurate transmission; i.e. the predictability of the 'message' decreases. However, although noise is accidental, it is also essentially unavoidable—so much so that it is baked into the theory of communication from the start. "In the process of being transmitted, it is unfortunately characteristic that certain things are added to the signal which were not intended by the information source. All of these changes in the transmitted signal are called noise."259 As such, "Inloise has become a concept intrinsic to the statistical analysis of the variability of data in almost every domain of empirical enquiry."²⁶⁰ In virtue of its centrally problematic position, noise is circumscribed by redundancy on the one hand and by that of information on the other, and it is through these that noise coexists alongside compression.

²⁵⁸ Malaspina, An Epistemology of Noise, 93.

²⁵⁹ Weaver in Shannon and Weaver, A Mathematical Theory of Communication, 7-8.

²⁶⁰ Malaspina, An Epistemology of Noise, 1.

As Shannon and Weaver have shown, the information content of a message is a function not of its actual (semantic) meaning or even its definite (syntactic) configuration but of its possible configurations. Information is a function of what they call the "freedom of choice" in selecting (or interpreting) a message. Such 'choices' encode the number of binary 'decisions' that are possible in the message. ²⁶¹ The more of these 'decisions' there are (the more 'binary units' or 'bits'), the more information—in the technical sense of the term is contained in the message. What this implies is that a message which is completely redundant, i.e. one where certainty is absolute, contains no information because there is no "freedom of choice"—i.e. no randomness or uncertainty—in its possible selection. This means, on the other hand, that uncertainty is necessary in order for a message to be informative: it must be able to surprise us, tell us something new. As a consequence, for Shannon, information is a function of information-entropy, a measure of the randomness or uncertainty of the coding of the message. If information relies on a probabilistic relationship with uncertainty, then, as Malaspina has exhaustively shown, there is no principled distinction between information and noise itself from the strict standpoint of its quantification through information-entropy—though there are of course, real practical differences between uncertainty which becomes informative and that which persists as mere noise. "What we call complexity is a correlate of low redundancy, in other words, of

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²⁶¹ Shannon and Weaver, *A Mathematical Theory of Communication*, 8-16. See also, Malaspina, *An Epistemology of Noise*, 51-70.

a low level of pre-knowledge about a system. [...] Greater complexity of information denotes greater uncertainty."²⁶²

Finally, then, it seems compression is meant to contend directly with noise, as an index of the complexity and uncertainty we are confronted with readily. However, in making itself more informatic (by virtue of eliminating redundancy or supposedly superfluous information) compression also becomes vulnerable to noise. While redundancy eliminates uncertainty precisely by limiting potential information, it is also widely used to codify the intended or existing information by a process of repetition that ensures its encoding across contexts—it provides sign-posts, markers, or duplicates which indicate where the information is, or how it should be interpreted. Error correcting codes, for example, often rely on redundant information as sources of checking in order to correct a message where some randomness has entered the signal. Lossless compression minimizes such redundancies, and thus opens itself onto noise in a particular way. Further, lossy compression can introduce randomness into the non-redundant features of its data. A common example is the way in which artifacting occurs in low resolution compressions of images like JPEGs; additionally, lossy compression can remove or 'round off' information that might otherwise inform in ways not established by the criteria set by the engineer. All of this points to a profoundly ambivalent philosophical problematic that pervades the concepts of compression and noise as well as the relationship we have to them. This

²⁶² Malaspina, An Epistemology of Noise, 55.

problematic needs to be laid bare, since how one understands current regimes of perception will hinge on one's philosophical comportment toward this problematic.

2.6.4 On Abstract vs. Generic Compression

In "Compression in Philosophy" Alexander Galloway and Jason LaRivière make a distinction between two philosophical orientations toward compression: "abstract compression" and "generic compression." These orientations allow the authors to read the history of philosophy and the relation between thought and what it thinks, not from the early modern standpoint of *representation*, but instead from the informatic and mediatic standpoint of *compression*. Abstract compression, on which they spend the majority of their analysis, is determined by a relation between a putatively "superlative" nature and its selective reduction in the appearance of phenomena. This reductive compression is understood as a nominal act of abstraction at the level of language or the mind. On the other hand, generic compression proceeds by means of what they call a "material" and later a "physical indifference" rendered through the "positive tactic" of opacity. According to them, the avatar of the latter orientation is Melville's Bartleby, who disrupts the workaday rationality of the law office where he is employed as a scrivener by refusing the binary encoding of decision with his iconic phrase: "I would prefer not to." 265

²⁶³ Galloway and LaRivière, "Compression in Philosophy," 127.

²⁶⁴ Ibid., 127-8, 135.

²⁶⁵ Melville, as cited in ibid., 135.

On the surface then, abstract compression seems to be aligned to a negative, nominalist, or idealist disposition toward a noumenal conception of nature, while generic compression seems to be aligned instead with a lived and thus—for the authors—a real or material indifference. "We label this the tradition of generic compression in which deletion of data happens at the level of real material life, not at the level of mind, language, spirit, essence, or totality." While it is easy enough to understand their characterization of the transcendental metaphysical disposition of abstract compression—even if it is itself reductive of the actual positions it describes—it is less obvious what the metaphysical upshot of the tactical position of generic compression brings to bear on the concept of compression itself. For example, they claim that

Bartleby's opaque indifference to work and his refusal to order the real make him an ideal model for withdrawal from the representational contract. Through a kind of productive unworking [the line of *désoeuvrement* which they follow from Bataille and Blanchot through to Agamben and Esposito], Bartleby gestures toward new forms of life and revitalized potentials for living in a community. / Bartleby's peculiar affect of opacity thus links him in our minds to various projects interested in forcing a compression of the subject toward the generic. ²⁶⁷

While the potential political usefulness of a tactical withdrawal—especially regarding labor—as well as an affect of psychological opacity relative to certain mechanisms of power or structures of authority is not in doubt, it is not clear how such tactics can open anything more than the possibility of political leverage for a strategy which itself cannot in

²⁶⁶ Ibid.

²⁶⁷ Ibid., 137

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its essence be opaque or indifferent. Such a refusal doesn't gesture concretely "toward new forms of life or revitalized potentials for living". but at best toward the abstract possibility for such forms to develop. These tactics themselves do not seem to constrain the qualification of new forms of life in any meaningfully material sense. Such tactical opportunities should not be overlooked, but they cannot vouchsafe for the real end of their own activity—an end which stops at nothing short of the transformation and reorganization of the total productive powers of society. Nonetheless, the very modes of existence, the cognitive complexity giving rise to the compression of perception itself, in its mediatic leveling, may in fact be the basis of a renewed *aesthetic* conception of the generic subject or—to use the term of the young Marx—the genus-being (*Gattungswesen*) of society in the twenty-first century. However, we are at present a long way from the proper organization of the generic, which I have argued for throughout Part 2 under the rubric of the common: its establishment is a question determinable only by a great many historical and geo-political contingencies of which there is, as yet, no clear way through.

Leaving aside the sweeping problems of political organization and aiming instead at the level of the theory itself, the two orientations presented by Galloway and LaRivière are posed at least in certain respects as mutually exclusive and in consequence as exhaustive of alternative philosophical paradigms of compression. Yet, it is not clear whether they are

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²⁶⁸ Ibid.

²⁶⁹ Marx, *Economic and Philosophic Manuscripts*, 76-77 and throughout. Ray Brassier has also attempted to develop the theme of genus-being in relation to the concept of the human in a recent seminar. Brassier, *Capital: Form of Flow?*

appropriately drawn up or whether their features are allocated correctly. Between and through these alternatives, there seems to be at least a third way and likely many more besides.

One serious problem for their categorization stems from the substantive theoretical differences collected under the umbrella of 'abstraction' around the relations they impute of abstraction toward nature or the real. This has consequences which attenuate their discursive extension of the concept of compression into metaphysics.

The main issue with Galloway and LaRivière's diagnosis is that they presume abstract compression to be responding to the demands of an essentially incompressible nature, which is converted into a transcendentally intelligible form through the process of compression, one which implies a harmfully reductive paradigm of encoding. "[W]e conclude that encoding is synonymous with the above-labeled abstract compression. Encoding is thus synonymous with the metaphysical tradition itself, in which existence appears as a specific encoding of matter." However, the dyad nature/compression misses its mark precisely because compression only ever refers to an already encoded milieu of information. As Weaver says in his introduction to Shannon's original landmark paper, "[t]he information source selects a desired message out of a set of possible messages (this is a particularly important remark, which requires considerable explanation later)." It is particularly important because, in order for a 'message' to be transmitted, it *must* first be

²⁷⁰ Galloway and LaRivière, "Compression in Philosophy," 141.

²⁷¹ Weaver, in Shannon and Weaver, A Mathematical Theory of Communication, 7.

encoded. And in order for a message to be compressed it must be transmitted since, as we've shown, a compression (as a mapping operation) is itself a kind of transmission. When we send a message in English, for example, we are implicitly selecting from the available symbols of the alphabet, punctuation, etc. as well as from the rules of syntax for those symbols and so on. This set of symbols and rules delimits a set of possible messages. What a process of compression reduces in such a context is either the redundancy or supposedly superfluous data concomitantly constructed or induced by that encoding. Nonetheless, noise is an invariable concomitant to encoding; it is a perspectival or relative mode of presentation of contingency peculiar to information, one against which information itself is measured in terms of its entropy. In other words, as was shown earlier, information content is a factor of its uncertainty, its surprisal or its inability to be predicted.²⁷² Compression does not reduce a superlative or superabundant nature, but the supposedly non-informatic noise subsequent to the act of encoding. And there is no finite or intelligible operation, no practical activity, and no tactical orientation of refusal or indifference without the presumption of any such encoding. Yet it is precisely this encoding Galloway and LaRivière see universally refused in generic compression. It "refuses to order the real."²⁷³ In such a case, it is difficult to understand how such a generic refusal, unqualified as it may be relative to any encoding, can count as a type of compression, since

²⁷² Malaspina, *An Epistemology of Noise*, 41: "Information presupposes as essential the structural and operational synergy between context and individual message, as between the uncertainty of 'freedom of choice', and the progressive modulation of certainty during the evolution of the individual message. Information, then, is the progressive unfolding of this relation between uncertainty and certainty."

²⁷³ Galloway and LaRivière, "Compression and Philosophy," 137.

a generic indifference to encoding in information-theoretic terms is equivalent to entropic equilibrium—that is, it is equivalent to the inability to detect differences in states with a random distribution of elements. In this sense, the fully lossy compression of a generic refusal of decision is utterly indistinguishable from noise.

The more important point, then, is not one of drawing a Manichean ontological distinction between nature and abstraction, within which any reduction is bad, only to uphold a generic compression which attempts to circumvent or "think around" the synthesis of abstract intelligibility altogether. Rather, the point is a much more difficult and much more patient one: it is one of qualifying abstract compression in its concrete contexts, of deciding between good and bad compression in terms of the practical, aesthetic, and experiential dimensions afforded by those contexts of compression. This is not relative to formal schemes of fidelity to a noumenal metaphysics, but instead relative to the dimensions which are dissuaded, obscured, deleted, or conflated within various practices of compression. More acutely, for us, it is a question of the distribution and impoverishment of perception.

Galloway and LaRivière are of course correct to insist that all compression involves an essential forgetting; "compression" they say, "forget[s] the details." But the real question is not about the fact *that* compression forgets, but about *what* in each case is forgotten. It is this latter question which allows us to avoid a facile and alarmist rejection

²⁷⁴ Ibid., 138.

²⁷⁵ Ibid., 130.

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of compression which is nothing but the obverse of a mysticism about nature, without resorting to the complicity of labeling any critical attitude toward cognitive and sensorial impoverishment in the use of technology as politically reactive. The opacity advocated for by Galloway and LaRivière—as illustrated through Warhol's detached, mask-like artistic persona²⁷⁶—may be a valid individual coping strategy expressed as a cultural position responding to late capitalism, but it will never amount to an effective political program which could collectively construct forms of life we deem adequate—something they seem to expect of opacity. Instead, it shutters itself to its causes in lieu of its effects and does so as a putative act of survival in the harsh perceptual jungle of cognitive complexity and the modes of control and surveillance peculiar to it.

2.6.5 From Generic to Constructive Compression

Opposed to Galloway and La Rivière's reading of abstract compression—which supposes a hypostatic, natural, a priori, and metaphysical infinity, within which finite epistemological acts are coded as reductive—but also against the finitist "prophylactic ontology"²⁷⁷ of generic compression, I advocate here for an unlimited project of *constructive compression*—what I have called above "unlimited" or "abstractive synthesis"²⁷⁸—a version of perceptual and cognitive encoding which takes abstraction as

²⁷⁶ Ibid., 138.

²⁷⁸ See sect. 1.4

²⁷⁷ Ibid., 143.

essentially mediated, incomplete or inconsistent, but nonetheless *real* in the full-blown sense of the word. Constructive compression is related not to the "representational" or "metaphysical contract"²⁷⁹ but to the concrete deployment of defeasible thought within the sphere of real aesthetic, practical, and social life—the only sphere in which thought can be understood in the material terms Galloway and LaRivière seek for the generic.

Constructive compression is much closer to AA Cavia's understanding of encoding and compression expounded in his two principles: the Principle of the Irreducibility of Contingency (PIC) and the Principle of Encoding (POE). Through these, Cavia champions a constructivist or intuitionist logic of real indeterminism which entertains an ineliminable relation with contingency (or noise) against the axiomatic deployment of an *a priori* encoding—that could be called 'philosophical decision'—which Galloway and LaRivière associate with the 'metaphysical tradition.' Cavia's proposal escapes bad metaphysical infinities by accounting for the in-principle unlimited but contingently finite (and thus defeasible and revisable) nature of thought, even at the level of rules of inference. For Cavia, real indeterminism is a consequence of the fact that a supposedly perfect physical encoding of information about future states implies an infinite information storage capacity in the present—a supposition which is rejected as an empirically untenable metaphysical speculation.²⁸⁰ The upshot of this rejection is that the future cannot be completely and

²⁷⁹ Galloway and LaRivière, "Compression and Philosophy," 137.

²⁸⁰ Perfect (Laplacian) physical encoding implies, for example, that causation is instantaneous and therefore that the notion of simultaneity is physically unproblematic—however, Einsteinian mechanics invalidates both of these assumptions. So, even if the universe were infinite in size (which would be required for infinite storage capacity in the present) it would have no instantaneous causal order, and thus no perfect global encoding

consistently encoded, not even at the level of physical law itself. If nature is no longer superlative in this sense, then time is essentially indeterminate, and the future is at best only statistically predictable—that is, the future is ontologically in a process of "becoming real." Encoding fails to capture the whole of Being, not because of the noumenal plenum of an incompressible nature, but precisely because of a universal and entropic forgetting which pervades immanence itself. Being forgets itself at infinite scale-lengths:

From the computational perspective, these infinities represent non-terminating procedures that enact an encoding of infinite time. It is this specter that subsumes them under a vector of entropy which, in Gisin's rendering, tends toward contingency. This does not serve to undermine decision procedures as such, but rather, as Fazi remarks, 'to enhance the possibility of an open-ended—or indeed of a contingent—understanding of them.' 282

Seen from this light, what Galloway and LaRivière take to be a problem about the metaphysical relation between nature and mind entailed by a nominalistic conception of abstraction and its supposedly hubristic belief in its own sufficiency is actually a problem about the integration of the discrete and the continuous within nature itself under the auspices of the physical limitations of computability and its consequences for the nature of physical law and time. Cavia's proposal makes inroads towards this integration by

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of future states. In other words, there would always be some part of itself that 'didn't know' what was going on with some other. This is even more the case with the uncertainty principle in quantum mechanics.

²⁸¹ Cavia, "Compression Artefacts," 140: "This essentially Brouwerian interpretation of time—conjectured by Gisin as the creation and destruction of information—allows computation to refigure the continuum in its own mold as a process of becoming real".

²⁸² Ibid., 142

undertaking a constructive computational understanding of time and the physical themselves. ²⁸³

The aim then cannot be the generic rejection of encoding *tout court*, but instead must entail the charting of the dialectical topography of compression and noise in contemporary life in its concrete effects.

2.6.6 Perceptual Coding and Modal Poverty

Let us return to our initial framing. Information and computational systems, downstream of industrial production, are developed to deal logistically with the effects of the increasing mediation and complexity of social relations. Nonetheless, these technical exteriorizations, built to cope with myriad contexts of the complexification of society, individuate the experience of that cognitive complexity as noise, since these become the recalcitrant coefficients of a perception unable to concretize this complexity in intuition or to comprehend its totality in cognition. The inability of the first indexes our current sensorial distance from the contexts for which our natural perceptual faculties were adapted; the second, our current social distance from the traditional contexts within which interpersonal cognition originated. While many things are trivially incomprehensible (i.e., epistemically un-totalizable) in their complexity, the fact that the basis of the organization of our social relations is among those things cannot be made trivial: it implies that we register the ways

²⁸³ For a fuller understanding of Cavia's picture of the relation between computation and physics see, Cavia, *Logiciel*; and, "Shannon's Demon."

in which it has real consequences for us without thereby gaining practical traction on them. It is the tension between society's structurally determining character for us and its obliqueness to experience that characterizes what Malaspina, following Sands and Ratey, calls "the mental state of noise." Compression then—as a peculiar problem for perception—corresponds to this dissonance by deploying itself across the technologically mediated contexts of experience in the form of a perceptual coding which 'masks' or subtracts from the modal variety of perceptual domains, while opening up the space of new modes to emerge, albeit those already circumscribed by the convergence or flattening of mediatic and, therefore, perceptual space. Compression becomes the shape of our aesthesis precisely by withstanding, diminishing, hiding, or utilizing noise.

The term 'perceptual coding' originates from work done in the fields of psychoacoustics, audio engineering, and computer science in the 1980s, whereby models of human auditory perception were used in the formatting of digital media, such as the MP3. ²⁸⁶ Interestingly, perceptual coding was immanently concerned with noise from the outset. As Sterne insists,

²⁸⁴ Malaspina, 169.

²⁸⁵ See Sterne, *MP3*, 96-106. 'Masking' is a phenomenon and a technique in psychoacoustics wherein one set of frequencies is hidden 'behind' another louder set of frequencies within the same critical band of hearing. The human ear is sensitive to certain ranges of certain frequencies, and insofar as one such range (or band) is 'occupied' with a predominant sound, other simultaneous sounds within that band are not consciously registered. Once this quirk of our auditory perceptual system was mapped, it was then used as a form of compression in digital audio, to hide noise behind a predominant signal, rather than attempting to eliminate it altogether. Here we are extending the idea of masking metaphorically across the relevant perceptual domains.

²⁸⁶ Ibid., 92-127.

[h]istorically, noise had been understood as something to be eliminated, the object of abatement. But a group of approaches developed over the twentieth century that sought to domesticate noise in one way or another, either to render it useful—in environments like manufacturing, avant-garde music and sound art, dentistry, or office work—or irrelevant, as was the case in communication engineering. The domestication of noise is perhaps the biggest shift [...] because it recontextualizes [...] the theory of critical bands and computers' emergence as potential sound media. 287

Sterne is concerned with sound, yet the domestication of noise is equally true of visual media, such as the JPEG or video codecs used in contemporary digital media. Further, the circumscription of perception in techniques of perceptual coding—which we use here as a term not limited to any particular sense-modality—has itself generated novel modes of perception as well as new artforms, including the meme and other artworks invested in the incorporation of the low-res, noisy artifacts of digital media. Prominent visual artists investigating aesthetic modes emergent from noise and compression in digital media include Hito Steyerl and Cory Arcangel, among many others, and interest extends to the genres of glitch art and glitch pop, noise music, so-called 'deep-fried' memes, as well as the technique of 'datamoshing' in video.

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²⁸⁷ Ibid., 94.

²⁸⁸ For more on the general cultural use of noise (compression artifacts) in compressed images, see Hito Steyerl, "In Defense of the Poor Image"; and for an understanding of JPEG compression see, Cory Arcangel, "On Compression."

However, the emergence of such modes come only as a consequence of the convergence of mediation in general onto that of digital computing. ²⁸⁹ In this convergence, the means of perception in almost every relevant domain become reliant on the technical criteria needed for the implementation of digital media for their existence—perception becomes compressed by the conditions of possibility of more-or-less rigorously delimited and practically closed platforms. Modes of perception in general are always reliant on the limitations of the media through which they are expressed, yet the perceptual ecology changes when mediation itself is convergent in the way described above. There is a hard limit of differentiation in terms of what counts as digital computational encoding and what does not, and consequently of what is afforded digital mediation and what is not. Anything outside it is threatened with extinction or, at least, irrelevance. This brings to bear the situation of modal subtraction. In concluding, I want to briefly overview this situation in three perceptual domains: sight, sound, and time.

With respect to sight, computation is of course mediated through the frame of the screen. The screen produces a powerful optical mode of vision at the expense of others. Film, television, and videogames are perhaps the most dominant visual aesthetic platforms today, all of which can easily be developed through the technical reproductive capacities of digital computers. The hegemony of optical perception was nonetheless in many ways already in place with the emergence of reproducible media (such as photography and film) and the

²⁸⁹ Kittler, "Real Time Analysis." Friedrich Kittler has tracked this convergence in considerable detail—from the alphabet, to analog recording, to digital processing—especially with respect to what he calls "time axis manipulation."

exhibition-value they gave pride of place to, as detailed in the 1930s by Benjamin, but digital computation represents something like the culmination of this tendency. 290 However, there are equally important, historically inflected modes of visual perception that have no digital analog, and that are not equally amenable to reproduction and digitalization (at least not yet). Besides the auratic perception and cult-value to which Benjamin counterposes film from the outset, there are also haptic and hodological modes of perception which attend to the dimensionality of real space. The first relates a cross-modal connection between sight and touch—one which occurs as a phenomenon peculiar to vision that was the focus of the studies of Riegl. 291 In the case of the haptic, the materiality of objects becomes a focal point of the experience of vision itself, wherein one 'touches' with the eye, grounding the substance-character of objects in three-dimensional space. This gives phenomenological texture to the visual field, which, so far, optic-digital frameworks

²⁹⁰ Benjamin, "The Work of Art."

²⁹¹ Riegel, *Late Roman Art Industry*, 22: "The particular sense organ, which we use the most for the perception of the external objects, is the eye. Yet this organ shows us the objects only as colored planes and by no means as impenetrable material individuals; this optical perception especially makes the objects of the external world appear to us in a chaotic mixture. Definite knowledge about the enclosed individual unity of single objects we obtain only with our sense of touch. It alone procures us knowledge about the inpenetrability of the borders, which enclose the material individual. These borders are the haptic [haptische] surfaces of the objects. Yet what we touch immediately are not expended planes, but only individual points. Only through repetition of the perception of impenetrable points, one and the same material individual following quickly another and located in proximity, can we arrive at the notion of an extended plane with its two dimensions of height and width. Hence, this notion is no longer obtained with immediate perception by the sense of touch, but rather with a combination of several perceptions which pre-suppose necessarily the intervention by a process of subjective thinking. Consequently, the notion of the haptic [haptischen] impenetrability as an essential precondition of the material individuality is already no longer based on the sensuous perception, but is achieved with the aid of the process of thinking." Translation modified.

are unable to develop. The second, hodological perception, pertains to vision as it relates to embodied movement through space; the way in which we perceive space by construing paths through it which appear to us pre-consciously, as aspects of perception. With hodological perception, several psychological factors—understood as forces in a topological field space—are integrated, thereby determining the path set out by an agent. This too—although related in advance to perceptual, psychological, and social systems other than vision—is an essentially visual process, one which does not occur in the stationary and flat environment of screen viewing. 293

With respect to sound, the problems are analogous. Recorded sound generates a perceptual field akin to that of the screen and deploys compression in similarly modally subtractive ways. What we might call *audionic* perception—that is, perception related to the coding of sound in analogy with the optical coding of vision—reduces or inhibits dynamical, frequential, as well as environmental perception in sound. The dynamic compression of volume and associated gain boost are used actively in audio and musical engineering—so much so that dynamic compression has come to define the 'modern' digital mix, even as opposed to music recorded to tape as recently as the 1980s. This is because with analog means of compression, distortion is introduced into the tape signal, whereas in today's digital audio workstation (DAW), producers and engineers have access, in principle, to

²⁹² See Deleuze, C 2, 127-8. The concept is developed at length by Kurt Levin, *Principles of Topological Psychology* and other works.

²⁹³ Augmented reality technologies, like VR, may be able to overcome some of the limitations of the screen in this second regard, but so far, they have been met with limited adoption and success.

unlimited replication without distortion and gain channels with unprecedented headroom. These digital compression techniques are now ubiquitous, contending with the noise and output quality of settings like the car stereo or the smartphone. These settings also have similar consequences for audible frequencies in the higher and lower registers of perception which are less likely to matter for the entrainment of music or legibility of the voice. Lastly, in the context of reproducible sound, with few exceptions, the dimensionality or spatiality of sound—sound's importance for the establishment a perceptual environment—is diminished by the manner in which speakers (and headphones) localize sound, a situation substantially different from the setting in which human hearing originally developed. This has the effect of compressing, not only our sense of sound, but also of space, much as optical media and the screen flatten the dimensionality of our sight and its space.

Finally with respect to the perception of time, the contraction of attentional economy, as well as the re-formatting of historical record through the convergence of computing in relation to language, image, and sound, have radically reoriented our perceptual field of action (what Benjamin calls our *Spielraum*), so much so, that it may call for the revaluation of the notion of agency altogether.²⁹⁴ It is often said that linear time distinguishes modernity from the cyclical time of the ancients. However, even within the classical project of modernity, linear time was still wed to a universal notion of teleology—a secularized transformation of the eschatological time of Abrahamic religion and of Christianity in

²⁹⁴ It was, of course, partly in light of the changes in subjectivation (and agency in particular) in the 20th century that Deleuze and Guattari developed their theory of 'assemblage' (*agencement*). See ATP.

particular. Notions of progress and the supposed purposefulness of history are relative to this way of orienting temporal linearity. Linear time is supposed to align also with the subjective apprehension of time (linear because related to the ends or purposes of the subject), while objective apprehension is the province of the circle (cyclical time was a product of natural regularities such as seasonal change and celestial movement). However, neither of these seems to describe the spontaneous perception of time relative to our own material conditions. Instead of the circle or the line, we seem instead to inhabit a compressed contractional time of what Deleuze calls the "living present": a durational time dilated or contracted on the basis of our captivation. ²⁹⁵ Our current time corresponds increasingly to the capture of experience and action, the correlate of which is an economy of attention and occupation. ²⁹⁶ With regard to the presentism of current regimes of time perception, both the circle and line are transformed and redeployed; compressed in the service of a seemingly ineluctable present. Through this compression they are wedded, no

²⁹⁵DR, 76: "The synthesis of time constitutes the present in time. It is not that the present is a dimension of time: the present alone exists. Rather, synthesis constitutes time as a living present, and the past and the future as dimensions of this present. This synthesis is none the less intratemporal, which means that this present passes." For Deleuze, the ontological dimension of the 'living present' rests on habit, contemplation, or contraction. However, today, in the subjective lived-time of the person, Benjamin's understanding of the transition from contemplation to distraction seems apt—in this case, contraction as contemplation is substituted with capture or captivation. Benjamin, "The Work of Art," 39.

²⁹⁶ Celis Bueno, *Attention Economy*, 42-44. Interestingly, Celis Bueno, following Alquati, understands the induction of information in the process of valorization as a force independent of (though necessarily interrelated with) both variable capital (labor) and fixed capital (machinery). In part, according to Celis Bueno, this gives the attention economy the position it has in late modernity, though its exact role in the process of valorization remains somewhat oblique in his treatment.

longer to the collective structures of ancient cyclical or modern progressive time, but to the personal structure of routine. The circle does not extend beyond the day or the week—or at least not beyond the fashion or news cycle. These repeat as incessantly as the 'anyinstants-whatever' of the homogenous quantified time underlying Newtonian mechanics and the wage earner's workday. ²⁹⁷ There are no longer auspicious days, points of privilege, ruptures in ordinary time. There is no longer any calendar at all except the one that marks the sheer passage of time, the number of days, and the personal obligations one must fulfill within it. The line is now comprised of agglutinated segments of task-time that are contiguous without ever being integrated into what we might want to call 'a life.' In this respect, today's 'living present' no longer organically composes a modally rich inhabitation of time (no longer extends meaningfully in the direction of the past or the future). In this sense, there is no longer any dwelling in time. Time has become empty, abstract, and so we must fill it with the capture of our experience. In this respect, the present alone is possible.²⁹⁸ In this capture, not only have cyclical and linear perception become transformed, but finally, a temporal mode contrary to fact—a time that might stand the chance of breaking through the homogeneous time of capital and its narrow field of possibility—that is, a counterfactual and counterpossible time in which history and the future reside are no longer presented to perception as salient features of experience in the

²⁹⁷ For the concept of 'any-instants-whatever' see Deleuze, C1, 1-11.

²⁹⁸ Perone, *The Possible Present*, 13-30, 87-102. Perone's contention is that the present becomes *possible*, i.e. modally rich, only on the basis of its inhabitation, what he calls its 'lingering'. It seems such lingering or dwelling, if it ever existed in the way that Perone or Heidegger had hoped, is now barred by our material conditions. We will return to these concerns in sect. 3.2.

present. In this respect, the more thorough the capture of attention is, the more contracted cultural memory and imagination become. The inhabitation of an unoccupied time, within which a counterfactual reflection on the state of the present might take place is an increasingly rarified opportunity. The inhabitation of history, of a time greater than oneself, greater than of one's own time seems to be on a death-march as inexorable as the increase in precision with which we can scientifically delineate timescales, from the Planck-time to the cosmological time of the universe. This contradiction between the knowing-that of time and its knowing-how should not be lost on us.

Stiegler defines "the proletarianization of sensibility" as a loss of knowledge, of *savoir-faire* (knowing-how-to-do) and *savoir-vivre* (knowing-how-to-live), "through apparatuses for the canalization and reproduction of perception." The masking, subtraction, or inhibition of these several modes of perception enacted by the implementation perceptual coding is a process of compression corresponding to the noise of cognitive complexity. It is one without a corresponding emergence of other qualitatively distinct modes which might be suitable to our moment; one that signals an unprecedented modal poverty of phenomenological and aesthetic life. The evident consequences are drastic for what we can do and how we can live. Such poverty has its potential reflection in the possibility of a new commons of experience wrought by the convergence of perceptual modalities. Compression and noise therefore also name the generic conditions of experience of late modernity around which a new form of life may yet be constructed. *But we cannot live on*

²⁹⁹ Stiegler, "The Proletarianization of Sensibility," 5.

possibility. A life not "unworthy of what happens to us" must live by the reality of compression and noise, if only so as to produce its counter-actualization.

2.6.7 Coda: Aesthetic Prescriptions

What follows, gathering together all of what we have said in Part 2 are a series of speculative criteria for a platform of the (visual) arts:

- 1. The platform must be circumspeculatively plastic; one must always seek clarity regarding the ultimately provisional character of all structures of generative entrenchment, but this includes perspicuity about the inertia of such structures, and their defining role with respect to the connection between aesthetic value and aesthetic content. This means that creating institutions does not come after their critique; instead creation and critique are coterminous (Deleuze), and they take time, effort, and resources to make and unmake. What is at stake here are always forms of life, never a matter of mere administration.
- 2. Any aesthetic platform should employ modes of intelligibility available to it by means of a peculiar set of modes of perception (it would ideally originate these in its great works), which are articulated non-discursively. Art's relation to discourse is a complex question involving what is required *from* art *of* the background norms of a culture at a given time, and thus what can be assumed without need of explicit (discursive) warrant is historically contingent.

³⁰⁰ Deleuze, LS 149.

(Compare the symbology of classical painting and sculpture with that of the discursive supplements of conceptual and contemporary art. In the latter these already point to the lack of the common). Implicitation is an essential, but constantly negotiated, criterion.

- 3. Specifically *visual* art (coming out of, but not condemned to, the modern Western art system, of which global contemporary art is a precipitate) should cultivate modes of perception in its formats which cannot be redoubled in 'optical' frameworks. A rich field of multi-modal experience (optical, haptic, tactile, auratic, olfactory, proprioceptive, hodological, etc.) is necessary for any form of life. Sensorial dereliction is unacceptable, even and especially in the so-called, 'life of the mind'. The current regime of the interface is both sensorially excessive (optically) and sensorially derelict (in terms of other modes). This doesn't amount to a prohibition in the sphere of production on optical perception, only that art countenances and helps fabricate a field of experience which digital arenas are, as yet, constitutively incapable of realizing (this will be elaborated in detail in 2.6). Finally, the question of modes of perception is not simply, or even chiefly, a question of biological endowments but is more profoundly a question of historical formations.
- 4. Artworks should be the objects of a new conception of perfection from which no work is exempt. This perfection cannot however be the object of a *telos* and cannot be fulfilled by determinate conceptual content—it is, in this respect unlimited. Strict teleology (finalism) is definitively closed to us, both by political history (e.g. by the nineteenth century's belief in Progress) and by the

- genuine (ultimate) teleological nihilism of natural science, and we cannot try to resuscitate it. Instead, the artwork always represents the mere form of purposiveness (see 2.2).
- 5. All the above must be *elucidated* first from within the sphere of art production itself (as in line with Prescription 2) if the criteria are to be genuinely spiritual (geistige) or life-formative; criticism, insofar as its aim is explicitation, is strictly secondary (see 2.3). This is akin to the difference between a musician who invents and plays melodies, harmonic relations, and rhythms, and the one who writes them down. Again, as in the case of various traditions, various practices will ensue: it may be edifying (and generative) to make what one is doing explicit to oneself as an artist, but it may also present disadvantages by privileging certain affordances. Self-consciousness itself is not a lossless enterprise; it eliminates possibilities of working in a semiconscious way which entail their own modi operandi. Whatever the case, it will not be strictly necessary to 'comprehend' a work, from the standpoint of its production (unless prescribed by a tradition), nor will a notation or explicitation exhaust the reality of a given work once achieved. In this regard, formalization and explicitation may not necessarily coincide.

3 Nonsense

3.1 Introduction: Ideal Games and Real Conditions

Such is the fright that seizes man [sic] when he discovers the true face of his power that he turns away from it in the very act—which is his act—of laying it bare.

 Jacques Lacan, "The Function and Field of Speech and Language in Psychoanalysis" (1953)

Do not shy away from talking nonsense! Only you must listen to your nonsense.

– Ludwig Wittgenstein, *Culture and Value* (1947)

As mentioned from the outset (1.1), sense only gains traction in language by rising above relations of efficient causation and becoming superior to the truth. For instance, sense articulates truth conditions in such a way that: 1) it must be possible to say what did not happen (or the false); and 2) that sense is not equivalent to the conditions of possibility giving rise to the true and the false, but rather these latter are themselves subsumed in real conditions (the counterpossible conditions of counteractualization) that 'intend' beyond their actualization or extension. It is only in virtue of such intension that language can articulate natural (causal and corporeal) and normative (rational) law, but it does so at the very instant in which—while insisting within them—it is leveraged from their taking course or their force of application. At the same time, however, because of this, we are confronted inevitably with the priority of a nonsense which both inheres within the domain of sense and represents its absolute outside.

When we assume that nonsense says its own sense, we wish to indicate, on the contrary, that sense and nonsense have a specific relation which cannot copy that of the true and false, that is, which cannot be conceived simply on the basis of a relation of exclusion. This is indeed the most general problem of the logic of sense: what would be the purpose of rising from the domain of truth to the domain of sense, if it were only to find between sense and nonsense a relation analogous to that of the true and the false? (LS 60).

Given this, the question becomes: how could nonsense be articulated within sense beyond the confines of an already codified common sense, beyond the normal language-games constitutive of forms of life without residing there as a merely nominal entity, in other words, as yet another name for the noumenon?

* * *

If philosophy, art, mathematics, and politics constantly emerge and reemerge in society as games with a universal or absolute purview, it is because all four represent a special kind of game with respect to life which each, in their own way and with their own means, express as a whole. Because of this, these games represent a danger to their players, and are open to a radical form of *ridicule* to which normal games are immune.³⁰¹ As Plato

³⁰¹ The essentially ridiculous aspect of the artwork, for example, was of deep concern for Adorno. For him this aspect is expressed most deeply in terms of the contribution of ridiculousness to reason and its spiritualization. This is perhaps why, for instance, self-serious works consistently fail to live up to their aspirations, thereby becoming cartoonish, while unserious works are quickly absorbed entirely into forms of gimmickry, diversion or entertainment. Adorno, *Aesthetic Theory*, 118-19: "The divergence of the constructive and the mimetic, which no artwork can resolve and which is virtually the original sin of aesthetic spirit, has its correlative in that element of the ridiculous and clownish that even the most significant works bear and that, unconcealed, is inextricable from their significance. [...] [T]he more the artwork's own organization assimilates itself

already knew in the *Sophist*—where he attempts and fails to distinguish in principle the game of the philosopher (the method of division) from the rhetorical games of the sophists—the danger of such language-games lies exactly in their proximity to nonsense. That danger should not be underestimated. As Meillassoux confirms, "philosophy is the invention of strange forms of argumentation, necessarily bordering on sophistry, which remains its dark structural double." (Meillassoux 2008 [2006], 76). Sophistry, then, is the art of nonsense; the philosopher, the artist, the mathematician, and the revolutionary, like Deleuze's fortunetellers, are the players of abnormal, nonsensical, or 'ideal' games. On the pejorative side of such games, thought borders on a pure and empty formality or rhetoric and action on a nightmarish realization of the ideal; on the superlative side, they border the absolute.

In these ideal games "one begins when one wishes, and stops at will", the rules change with each move, and there are no winners (LS, 58). In courting the ridiculous and the sublime, the ungrounded and the unconditioned, philosophy, art, mathematics, and politics are also games that articulate an absolute relation with contingency (or chance) and

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to a logical order by virtue of its inner exactitude, the more obviously the difference between the artwork's logicity and the logicity that governs empirically becomes the parody of the latter; the more reasonable the work becomes in terms of its formal constitution, the more ridiculous it becomes according to the standard of empirical reason. Its ridiculousness is, however, also part of a condemnation of empirical rationality; it accuses the rationality of social praxis of having become an end in itself and as such the irrational and mad reversal of means into ends. [...] The ridiculous, as a barbaric residuum of something alien to form, misfires in art if art fails to reflect and shape it. If it remains on the level of the childish and is taken for such, it merges with the calculated *fun* of the culture industry. [...] All the same, the ridiculous elements in artworks are most akin to their intentionless levels and therefore, in great works, also closest to their secret."

distribute the aleatory or fortuitous coordinates of the patient as an affective locus of thought through which the ampliation of reason becomes synonymous with the decentering of any 'well-constituted subject' in the vertigo of immanence. These games give voice to the patient which they articulate as a proper 'subject' only at the limit of the world, at the moment of the overcoming of the Kantian triumvirate of unities: self, world, and God. It is, therefore, only in light of the experience of the patient—inscribed within such ideal games—that the genesis of sense can be fully elaborated. "It is thus pleasing that there resounds today the news that sense is never a principle or an origin, but that it is produced. It is not something to discover, to restore, and to re-employ; it is something to produce by a new machinery." (LS 72).

The general nonsensical potential of the language-game was already well-known to Wittgenstein:

Doesn't the analogy between language and games throw light here? We can easily imagine people amusing themselves in a field by playing with a ball like this: starting various existing games, but playing several without finishing them, and in between throwing the ball aimlessly into the air, chasing one another with the ball, throwing it at one another for a joke, and so on. And now someone says: The whole time they are playing a ballgame and therefore are following definite rules at every throw.

And is there not also the case where we play, and make up the rules as we go along? And even where we alter them as we go along. (PI 1, 83).

Here, as we have described at length (2.3), Wittgenstein is at pains to show that linguistic practice is not reducible to any set of pre-given and definite rules (cf. PI 1, 84). But his remark above echoes precisely the description of Carroll's 'caucus-race' with which Deleuze opens his own analysis of games: "[s]uch a game—without rules, with neither

winner or loser, without responsibility, a game of innocence, a caucus-race, in which skill and chance are no longer distinguishable—seems to have no reality." (LS 60). It is in the lack of fixed rules, which stabilize and apportion reality in accordance with instrumental or operational results, that the ideal game appears *ideal*. Without these rules, such games are nothing but pure abstractions, since it seems the procedure of their realization is missing. How could one play such a game? Indeed, because of its abstraction or ideality, "[t]he ideal game of which we speak cannot be played by either man [sic] or God. It can only be thought as nonsense. But precisely for this reason, it is the reality of thought itself and the unconscious of pure thought" (Ibid.).

In contrast to this movement of unconditioning which necessarily attends thought (or reason) as its essence in the ideal game (the 'unconscious of pure thought' is this movement itself), Deleuze has identified several general operational principles according to which ordinary games must proceed:

The characteristics of normal games are [...] the preexisting categorical rules, the distributing hypotheses, the fixed and numerically distinct distributions, and the ensuing results. These games are partial in two ways: first, they characterize only one part of human activity, and second, even if they are pushed to the absolute, *they retain chance only at certain points*, leaving the remainder to the mechanical development of consequences or to skill, understood as the art of causality. (LS, 59). ³⁰²

³⁰² It's possible that Deleuze chooses the term 'normal' here to connote a similarity between the characteristics of these games with those found through the so-called 'normal distribution' of the central limit theorem of probability theory, involving a process of regularizing (rescaling) the distributions of independent variables in probabilistic trials or experiments.

Normal games, then, are bound together in their operational structure through the way in which, in virtue of that structure, they regularize, relativize, or circumscribe contingency (chance) by realizing certain outcomes. First, categorical rules are those without which we cannot play this game or distinguish it from others (encoding). Second, in consequence of these rules, hypotheses can be formed in conformity with possibilities afforded by the encoding of the rules (selecting). Third, iterations are then divided or apportioned on the basis of these hypotheses (distributing). Fourth, the outcomes or results test each iteration on the basis of its reinforcement of the distinction between the means and ends of a process set up by the operational structure (realizing or achieving). It is, therefore, only on the basis of their iterative, recursive, and combinatorial capacities that normal games exert control on the phenomena and regulate the movements transpiring within the game. In this sense, normal games are both cybernetic and informatic in nature. From these principles, then, a whole logic of signification, probability, information, or agency can be built. Such a logic would nonetheless be subsumed by the priority of the logic of sense, enveloping an irreducible contingency in the form of nonsense appearing at the threshold of sense.

With respect to this absolute logic in Deleuze, nonsense appears in *language* through two paradoxical figures, each which arrest a certain classical law of thought. In the case of the figure of the 'esoteric word' which denotes its own sense, the law of regressive synthesis of the proposition (the said-shown distinction) is arrested (cf. 1.2.1-1.2.2). The iterations of the regress (codified by the distinction between representing and represented, signifier and signified, or between sense and reference in its Fregean valence) are collapsed in on themselves. In the case of the figure of the 'portmanteau word', two alterative senses are combined, arresting the law of (exclusive) disjunctive synthesis by which the true and the

false exhaust and exclude one another and decision procedures become operable. "Nonsense thus has two sides, one corresponding to the regressive synthesis, the other to the disjunctive synthesis." (LS 67). In its involution, the esoteric word is like the liar paradox ('this sentence is false') and is as such self-contradictory; the portmanteau word (e.g. 'frumious'), by virtue of its inclusion of alterative senses, ambiguates the binary allotment of truth conditions—it is semantically indefinite. The first paradoxical figure, by rejecting the law of noncontradiction $(\neg(p \land \neg p))$ can be developed in the direction of dialethism $(p \land \neg p)$ while the second paradox, by rejecting the law of the excluded middle $(p \oplus \neg p \text{ is defined as } (p \vee \neg p) \wedge \neg (p \wedge \neg p))$ can be developed in the direction of intuitionism $(\neg(p\oplus \neg p))$. "The interest of the determinations of signification lies in the fact that they engender the principles of non-contradiction and the excluded middle, instead of these principles being given ready-made. The paradoxes themselves enact the genesis of contradiction and inclusion in the propositions stripped of signification." (LS 69). With respect to the latter (exclusive disjunction), Beckett's combinatorial prose finds its purchase precisely in a logical method of exhaustion enacted by *inclusive* disjunction, short-circuiting the realization of possibilities presupposed by the normal games of means and ends (see 3.2). With respect to the former (noncontradiction), Beckett finds at the threshold of language in Hamm's esoteric phrase ('fuller and emptier'), which moves in two contradictory directions at once, the thought of a First Nature where at last, "all is absolute." (see 3.3).

It is precisely because these sides of nonsense correspond to the genesis of the classical laws that Deleuze insists, despite the abstraction inherent to the ideal game, that it nonetheless plays an absolute role in the constitution of thought—it is even the *mode of*

being of thought itself (as counteractualization). In this sense, while it 'realizes' nothing—unlike the results of normal games—the ideal game is their unconditioned reality and real condition, setting everything in motion.

If one tries to play this game other than in thought, nothing happens; and if one tries to produce a result other than the work of art, nothing is produced. This game is reserved then for thought and art. In it there is nothing but victory for those who know how to play, that is, how to affirm and ramify chance, instead of dividing it *in order to* dominate it... This game, which can only exist in thought and which has no other result than the work of art, is also that by which thought and art are real and disturbing reality, morality, and the economy of the world. (LS 60, translation modified).

The ideal game can be played only at the threshold marking a zone of indistinction between sense and nonsense which is nothing but genesis. Accordingly, but perhaps surprisingly, the genesis of sense can be witnessed most clearly at the site of the dissolution of sense itself—the moment of contact with that which is unthought, the moment of thought's unconditioning.

We can find no better expression of the genesis of sense in its dissolution than in the work of Samuel Beckett. It is for this reason that nonsense is pursued in Part 3 with a unique regard for his work. Beckett is the 'exemplary exception' whose entire corpus enshrines the dynamic between sense and nonsense and the movement of unconditioning from one to the other—from the nameable to the unnamable—moving from the singular to the generic and, finally, from the generic to the absolute.

3.2 Exhausting the Possible: Deleuze and Beckett on Existence and Time

Only what is switchable is at all.

- Friedrich Kittler (1990)

Turing should be added to that list of humiliations inflicted on the human, which we call modernity, traced from Copernicus to Darwin, Freud to Marx. With each humiliation comes its own unique trauma, but the decentering of our own rationality represents the endgame of enlightenment.

- AA Cavia, "The Inclosure of Reason" (2017)

3.2.1 Itinerary

What follows is an exploration of the metaphysics of time and existence in Deleuze and Beckett. It pays particular attention to the importance of the conception of exhaustion in Deleuze's late text on Beckett "The Exhausted"—defined as both an affect of late modernity and a linguistic or logical procedure for criticizing the category of possibility from an existential perspective. I begin by surveying Deleuze's arguments against the "false problem" of the possible in Bergson via his own notion of the virtual. I then continue, comparing the linguistic and literary configuration of time and existence in two directions: first through the language of narration in Ugo Perone's *The Possible Present* (which associates temporality with the narrative formulation of the "I as me"); and, second, via Deleuze's understanding of the way the exhaustive series of Beckett's combinatorial prose

outstrips the subjective "initialness of time" in Perone, ending instead in an impersonal and singular "pure and empty time" of existence.

3.2.2 The Possible as False Problem

Deleuze sets the possible and the real in relief against the virtual and the actual. His investigation and criticism of the notion of possibility has a long history in his thought, one bearing directly and extraordinarily on the delineation of his concept of exhaustion. Our final aim is to make clear the nexus of time and existence at stake in the affect and procedure of exhaustion and its attendant critique of the possible, but it will be prudent for us to begin by overviewing Deleuze's investigation and its inheritance from Bergson.

Logically, the possible is a modal category, which is often understood temporally. We often think of possibilities as available for realization, aligned with a future which serves as the reservoir of the possible. According to this view, once future possibilities that were not realized in the appropriate present and are no longer available for realization, they are no longer possibilities *stricto sensu*; they belong to the category only of what could have been but can no longer be. In this way, possibility resembles reality but needs realization in order to exist. The possible appears as less than the real, as a non-being which is less than being. For Deleuze, however—for whom the possible is locatable, not in the future, but from the outlook of a subjective present on the basis of a known past—this understanding of possibility bears the mark of a false problem, one which shares in metaphysical misapprehensions wrapped up in the affirmation of ontological negativity. That is, problems spurred from the consideration of the possible are 'false' because they rest on an

operation of negation, which mistakes the more for the less and involves a supposed course from non-being to being or from the inexistent to the existent. 303 Although emanating in reality from the present on the basis of the past, the possible is supposedly related to the realization of the future in the present. 304 In other words, the possible should be seen as a psychological, epistemological, or practical operation resting on the logical negation of existence in the concept, but is taken instead as a metaphysical condition of existence or reality itself. It is in this way that practical life comports itself according to a specific temporal logic legislated by rules of induction, interpretation, and selection. 405 However, if the real existence of time and the real time of existence is to be upheld, one must push past this false problem. Of course, Deleuze cannot surmount the problem of negation by abandoning existence to a strict presentism or actualism—a chronectomy of the possible. To exhaust the possible cannot mean removing time from existence.

³⁰³ BRG 17: "To illustrate the first kind of problem Bergson cites the problems of nonbeing, of disorder or of the possible...[T]hey consist in showing that there is not *less*, but *more* in the idea of nonbeing than that of being, in disorder than in order, in the possible than in the real. In the idea of nonbeing there is in fact the idea of being, plus a logical operation of generalized negation."

³⁰⁴ For Bergson, this has a psychological root, exposed when one is confounded by the realization of a possibility which one did not predict or imagine, evincing the fact that indeed besides involving an extra operation on being in its concept, the illusion of the possible is maintained by the expectation or motivation of the subject, who in their confusion, mistakes a difference (something other than what was expected), for a lack (the possible, non-being, remained for whatever reason, unrealized.) This and the previous point taken together constitute the argument of "The Possible and the Real." Bergson (2014 [1930]), 223-232.

³⁰⁵ Here it is worth noting how close Bergson and Hume are, though Hume does not get very far in the way of a solution, since he is unable to think radically about duration, instead grounding the problem in habit, which only displaces the question of induction to a deeper level.

How is it accomplished then? In the first place, through the imperative that Being is (differentially) positive, Deleuze is constrained to show that time does not exhort the determination of existence through negation (i.e. by the realization of some possibilities and the negation of the rest). In the second place, he is concerned to show that the maintenance of ontological positivity does not eliminate the ontological function of time but necessitates it. This is because a strict actualism would ossify completely the determination of things, reifying them absolutely. However, existence as we experience it is manifestly based in duration, within which temporal relations of priority explain the essence of things as we understand them. Relations, in this sense, would cease to obtain at all if everything were merely actual—in such a case, each thing would be tantamount to its own 'universe' or else there would only be one thing. Actualism, when followed out strictly, also implies the collapse of scalar difference—for instance, parts-wholes distinctions—which bottoms-out in the annihilation of analysis in general. Speaking in terms of parts, is also to speak of relations; and this already implies a vantage point from which we sequentially order things—we must first speak of one part before another. Thus, any appeal to actualism in language or thought is involved in a performative contradiction with respect to which we then have no basis for justifying our initial ontological claim. Following this out, it would then be impossible to ask the after the constitution of entities, tout court. If strict actualism makes everything transcendent to everything else, severing all ontological connections, the existence of time implies, thirdly, immanence as an additional ontological condition. Immanence is not the hypothesis of the unitary totality of all there is (One-All), but the principle of "absolute proximity" and complete ontological

communication which is also the principle of an unassailable vertigo: 306 that which assures that a can come into some relation to b and b with a, for any a and b (and for n variables: a, b, c, ...). These are the poles of determination for existence, according to Deleuze: "reciprocal determination" on the one hand and "complete determination" on the other. 307

So, we arrive at the poles of determination in immanence through a *reductio ad absurdum* regarding actualism, in the thought of the surgery of time. If this is correct, then immanence itself must be temporal. Thus, begins what Deleuze calls the 'perplication' of time as virtual.

While it is not our concern here to draw out a complete theory of the virtual, it behooves us to consider a few salient features. First, the possible and the virtual must not be confused since in their discernment the category of existence is precisely at issue:

The possible is opposed to the real; the process undergone by the possible is therefore a 'realization'. By contrast, the virtual is not opposed to the real; it

³⁰⁶ For a discussion of "absolute proximity" see DR 37: "There, however, where they are borne by hubris, all things are in absolute proximity, and whether they are large or small, inferior or superior, none of them participates more or less in being, nor receives it by analogy. Univocity of being thus also signifies equality of being." The term 'equality' in this passage should be taken as a convenience rather than a term of art since it is precisely in *inequality* or difference that univocity is maintained. For what I'm calling 'ontological communication' see, DR 118-119, 145, 222, and esp.277. See also, LS 169-176, 177-180, esp. 180, "…one and the same Being for the impossible, the possible, and the real."

³⁰⁷ Complete and reciprocal determination make up the scaffolding of the conceptual schema provided for Deleuze's theory of Ideas in DR and elaborate his notion of the 'problematic' or 'multiplicity'. See DR 168-221. I am obviously presenting these thoughts in an impoverished form; Deleuze's work on this subject presents some of the most punishing philosophical pages ever put to paper so far as the strain on intuition is concerned. What I have tried to show is some of the implicit argument that justifies its conceptualization.

possesses a full reality by itself. The process it undergoes is that of actualization. It would be wrong to see only a verbal dispute here: it is a question of existence itself. (DR 211).

The effective difference between the two is that the virtual, while being fully real, does not resemble the actual, as the possible resembles the real. This difference allows Deleuze to give a genetic account from the one to the other, grounding the actual by the virtual while inhering the virtual within actualization.³⁰⁸

By contrast with the individuals constitutive of the actual, the virtual consists in the "prepersonal individuations" and "pre-individual singularities" of problems, multiplicities, or Ideas. These individuations and singularities are not overridden by their actualization or solution but nevertheless subsist, insist, or inhere in their existence. They have the non-being, not of negation, but of difference or structural genesis. They subsist within and between systems of individuals, without being reducible to them, all the while presiding over the genesis or determination of such individuals or particulars. These conditions of determination provide rules for actualization, locally in space and time, where the space and time themselves are characteristically "differenciated" in accordance with the conditions of the multiplicity being actualized. The actualizations, as well as their spaces and times are localized but not ultimately constrained to their localization. Space is not ontologically constrained to its extensity, nor time to its direction, speed, or unit (i.e. no generic duration or simultaneity of all things), nor order to its organization. This is what allows the doubling between the virtual and the actual without "a brute eruption, a pure act

³⁰⁸ This is elaborated in detail in 1.4.

or leap" of existence, "which always occurs behind our backs" (DR, 211), preventing their envelopment from falling into the ineluctable rift of an ontological dualism.

3.2.3 "Time Will Break the Word"

Now that we have a sketch of the difference between the possible and the virtual, let us return to our primary concern, the relation between existence and time through exhaustion in Deleuze's Beckett. According to Deleuze, the possible must be exhausted in order to arrive at existence (Deleuze 1995 [1992], 3). But, the exhaustion of the possible is also the exhaustion of language; it means exhausting words and things, voices and others.³⁰⁹ It is precisely this exhaustion which makes way for a distillation of the experience of time in existence and its special connection to language and narration. The conspiracy of time, existence, and language would seem to be confirmed, not only by Deleuze, but also by philosophers of time such as Ugo Perone, who recognize that narration "[is] a form of making present within the conditions of finitude" (Perone 2011 [2005], 103) and moreover that philosophy (in its history) is "the great tale of time", "a tale that exhibits the very conditions of narrating" (ibid). Thus, as the 'diction' of time, philosophy as 'tale' "founds the possibility of narrating" (ibid). So, if "what [philosophy] says is time" (ibid), what then does it mean to extinguish the tale and exhaust the possible? Here it is prudent to set the terms of exhaustion.

³⁰⁹ Ibid. The first (words and things) Deleuze refers to as Beckett's "Language I"; voices and others he calls "Language II. It is only in "Language III" that time and existence come to the fore of experience in their own right after having exhausted the previous two.

In "The Exhausted," the dyad real/possible takes on an existential valence through activity; as such, it is connected directly to the idea of realization insofar as practical life is understood as the sphere of the realization of ends. As is obvious, all practical realization of human projects is finite. Thus, our finitude is exhibited in relation to its realization, "[w]hen you realize some of the possible, it's in relation to certain goals, projects, and preferences" (Deleuze 1995 [1992], 3). The same cannot be said of the possible itself; it cannot be exhausted in its realization. In relation to realization, the possible is inexhaustible. "Possibility remains, because you never realize all the possible, you even bring it into being as you realize some of it" (ibid., 3). Thus, the practical dissymmetry between the possible and its realization is manifested through an ethics of choice, one of means and ends, in accordance with purpose. We choose either 'this or that' in virtue of purposes, respecting the space of inferences regarding modal material incompatibilities. In this regard, "... [1] anguage states the possible, but in preparing it for realization" according to a logic of implication wrought by exclusive disjunction (ibid., 3). The first technique of the exhaustion of the possible is a movement from exclusive disjunction (either/or, p XOR q) to *inclusive* disjunction (and/or, p OR q): the extinguishing of preference. The logic of exhaustion is then, not an 'implicature' of 'achievement' (or what Luigi Pareyson calls realizzando) set by ends, but a combinatorics of 'accomplishment' according to nothing (ibid., 3-4). 310 Exhaustion, for Deleuze, achieves nothing but accomplishes everything.

³¹⁰ 'Achievement' (*realizzando*) is taken from Luigi Pareyson, who looms large in the background of Perone's work; see for example Valgenti, "Luigi Pareyson's Vindication of Philosophy" in Pareyson (2013).

In Beckett there is consequently a denial of or resistance to realization, to achievement, in favor of the serialization of possibles, the permutation of possibles in exhaustive series wrought by inclusive disjunctions. Beckett's characters are not 'can-doers' but, as he himself suggests "non-can-ers." Therein lies the comedic universe of exhaustion. This comedy is brought to its climax in the oppressive arithmetic of Watt's self-reflections. Deleuze again: "Watt is the great serial novel, where Mr. Knott, with no other need than to be without need, does not reserve any combination for a singular use that would exclude others whose circumstances are yet to come." (Deleuze 1995 [1992], 4).

Watt is the combinatorial novel *par excellence*. Most of the novel is made of up Watt's logical investigations, which are composed almost exclusively of various exhaustive series. Some individual permutations last several pages. Already here, there is a near complete abandonment of narrative, though there remain characters, situations, places, images, and so on. Here is one example, almost picked at random:

Mr Knott ate this dish with a little plated trowel, such as confectioners and grocers use, and tea-merchants.

This arrangement represented a great saving of labour. Coal also was economized.

The term 'implicature' is owed to the English philosopher of language H. P. Grice, and elucidates the pragmatics of interpretation, in virtue of implicit conversational statements. This is related to Deleuze's elaboration of the possible in language by the implicit order dictating the pragmatic function of exclusive-disjunctive propositions: "When I speak, when I say for example, 'it's daytime,' the interlocutor responds, 'it's possible...,' because he is waiting to know what purpose I wish the day to serve: I'm going out because it's daytime" (Deleuze 1995 [1992], 3).

³¹¹ See Knowlson, Damned to Fame, 352-353.

To whom, Watt wondered, was this arrangement due? To Mr Knott himself? Or to some other person, to a past domestic perhaps of genius for example, or a professional dietician? And if not to Mr Knott himself, but to some other person (or of course persons), did Mr Knott know that such an arrangement existed, or did he not?

Mr Knott was never heard to complain of his food, though he did not always eat it. Sometimes he emptied the bowl, scraping its sides, and bottom, with the trowel, until they shone, and sometimes he left the half of it, or some other fraction, and sometimes he left the whole of it.

Twelve possibilities occurred to Watt, in this connexion:

- 1. Mr Knott was responsible for the arrangement, and knew that he was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 2. Mr Knott was not responsible for the arrangement, but knew who was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 3. Mr Knott was responsible for the arrangement, and knew that he was responsible for the arrangement, but did not know that any such arrangement existed, and was content.
- 4. Mr Knott was not responsible for the arrangement, but knew who was responsible for the arrangement, but did not know that any such arrangement existed, and was content.
- 5. Mr Knott was responsible for the arrangement, but did not know who was responsible for the arrangement, nor that any such arrangement existed, and was content.
- 6. Mr Knott was not responsible for the arrangement, nor knew who was responsible for the arrangement, nor that any such arrangement existed, and was content.

- 7. Mr Knott was responsible for the arrangement, but did not know who was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 8. Mr Knott was not responsible for the arrangement, nor knew who was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 9. Mr Knott was responsible for the arrangement, but knew who was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 10. Mr Knott was not responsible for the arrangement, but knew that he was responsible for the arrangement, and knew that such an arrangement existed, and was content.
- 11. Mr Knott was responsible for the arrangement, but knew who was responsible for the arrangement, but did not know that any such arrangement existed, and was content.
- 12. Mr Knott was not responsible for the arrangement, but knew that he was responsible for the arrangement, but did not know." (Beckett 1994 [1953], 74-75).

In this way too, the characters of Beckett's works abrogate the laws of interpretation and selection according to criteria of judgment in favor of rules of combination which permit of no *formation* of the personal or preferential procedures engendered in the supposedly rational choices of a utility function or the interpretive procedures limiting the information-entropy of a 'message'. These permutations instead tend toward formlessness and the decomposition of the ego, not irrationally but through superabundance of logical operation carried out in the method of exhaustion: "What Blanchot says of Musil is equally true for Beckett: the greatest exactitude and the most extreme indeterminacy; the indefinite exchange of mathematical formulations, and the pursuit of the formless or the unformulated" (Deleuze 1995 [1992], 5). This method wrests a minimum of existence from

the logical exhaustion of series and their limits. It is, granted, not the self-certain Cartesian minimum of the 'I think' but a problematic minimum of time laid out in repetition. In this minimum there is a whole existential ethics of combination opposed to that of choice in Beckett. The 'finality' of such an ethics (the limit) is the *accomplishment* of the minimum, of *having done with* the possible, ending in what can be said *solely of existence as such*, without recourse to any of the erstwhile accourrements of instrumental reason. Beckett repeats ceaselessly this pure and grandiose 'impoverishment' of life.

The combinatorial 'nonsense' of Beckett is often associated with the existentialist concept of the absurd. But as has been shown, in Beckett, there is strictly no choice to justify, no preference to ground: as such any existential decision between one or another term of a disjunction is not just ungrounded, without ultimate justification, but pushed beyond the necessity of choice itself. The combinatorial is precisely undertaken to *have done with* the injunction to choose, in this respect—to have done with the double bind of freedom and anxiety, of choice and its absurdity. In short, it is to have done with the fabulous agency of the liberal subject, in favor of the patient apprehension of contingency and necessity. However, exhaustion of the possible is by no means an act of resignation, giving oneself over to the melancholy of undecidability, or even to affirm a never-ending deconstruction or deferral of meaning and finality. This is why the possible must be *exhausted*.

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³¹² See, of course, Esslin's influential (1960), "The Theatre of the Absurd," and Adorno, "Trying to Understand Endgame." Deleuze, of course, distinguishes nonsense from the absurd. LS 58-73.

In contrast to the method of Beckett, post-hermeneutical philosophers like Perone, proceed to a solution of the dilemma of choice, exclusive disjunction, or the groundlessness of existential decision other than that of exhaustion; they proceed by a retrograde movement of recollective rationality which narratively re-consolidates the existential moments of the past in order to circumvent the dilemma without eschewing the groundlessness which gave rise to it. 313 For Perone, the "I' as me" is always in the process of remembering itself through its own narration. In contrast to such recollections, Beckett's characters can never remember anything (recall, for example, Molloy, who in trying to return to his mother, cannot remember where she lived or why he is seeking to return). The circumvention of the dilemma, in Perone and others, is achieved by an ineluctable recuperation of the ego in making 'myself' present through my narration. The 'I' becomes the other existential minimum, the Cartesian minimum of the cogito. In its relation to Descartes' ontological proof, 'I' become the principle of derivation of existence—via the presentation of finitude, in the possibility of the infinite—in the non-decomposable, asymmetrical difference imposed by this derivation. For Perone, the tale of the I as me is the interpretive narration of this difference between the finite and the infinite—between what I realize or achieve, and the possibilities that are behind and ahead of me. I 'achieve' or realize a frail, liminal coincidence of existence and essence by filling time in with my narration, my tale, making it inhabitable. As interpretation, in relation to the formation of a self, a person, or me,

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³¹³ With respect to the use of narration in the construction of recollective rationality, there is little, formally, that separates the individualistic existential hermeneutics of Perone from the social-historical jurisprudential hermeneutics of Brandom's Hegel. Each attempt to construct the present in light of the past in the same manner. See Brandom (2019a, 2019b).

experience relates itself to the inexhaustible through the "the initialness [inizialità] of time" (Perone 2011 [2005], 10)—the "once upon a time" (ibid., 90) of the tale that I institute as the present of my apperception in the 'I think'. In this Kantian conditional manner, 'I' make possible the present, and the present possible. "In modernity, having anchored oneself to the principal of the minimum and setting out from it, one seeks a new *beginning*, and one dilates it until it discloses the whole" (ibid., 59, my emphasis). But we have already seen in Wittgenstein (1.3) how the limit of such a solipsistic whole cannot take us all the way to the end.

By contrast, exhaustion works orthogonally to such a beginning, to the initiation, or 'once upon a time' of narration. Exhaustion works not by *beginning* but by *ending*. It works by carrying the exhaustion of the possible all the way to the end, so as never to be reborn in a new beginning. Beckett's works are ceaselessly about ending and having done. To show the *How It Is* (*Comment c'est*)³¹⁴ of existence is therefore precisely *not* 'to begin' (*commencer*). In this light, we must juxtapose Perone's personal "tale" of time narration with the impersonal, singular "chronicle" of Hamm in *Endgame*. Hamm—blind, bound to his wheelchair—incites the chronicle of exhaustion even with Clov's opening lines: "Finished, it's finished, nearly finished, it must be nearly finished" (Beckett 2006 [1957], 159).³¹⁵ Notice too that the term 'chronicle' is no accident, since it alone, after a life-long

We allude to the play on words implied by Beckett's French title of *How It Is*.

³¹⁵ See also the interchange between Clov and Hamm later in the play, ibid., 211: "CLOV: I'll leave you./ HAMM: No!/ CLOV: What is there to keep me here?/ HAMM: The dialogue. [Pause.] I've got on with my story. [Pause.] I've got on with it well. [Pause. Irritably.] Ask me where I've got to./ CLOV: Oh, by the way, your story?/

utterance, of saying and failing to say, finally exhausts language and has done with the possible, so as to make way for that other minimum of existence—the "in the end..." of the chronicle rather than the "once upon a time..." of the tale. While the "once upon a time" of the tale enables the interpretive construction of a fabulous ideal ego; the "in the end" of the chronicle is the pure description of the event of existence as time. In the end, exhaustion *just barely accomplishes a pure and empty time* and does so only through the destitution of the sphere of the personal—the I as me:

[F]or Beckett, immobility, death, the loss of personal movement and of vertical stature... are only a subjective finality. It is only a means in relation to a more profound end. It is a question of attaining once more the world before man [sic], before our own dawn, the position where movement was... and where light, always propagating itself, had no need to be revealed. Proceeding in this way to the extinction of action-images, perception-images and affection-images, Beckett ascends once more towards the luminous plane of immanence, the plane of matter and its cosmic eddying of movement-images. (C1, 68).

While this absolute apprehension of existence is already there in *Endgame* (to which we will return below through the figure of extinction), time is brought to expressive purity in Beckett's final play, *What Where*. The play involves a protracted interrogation of four generic subjects (Bim, Bem, Bom, and Bam) who are only locally, relationally, or quantitatively, but not intrinsically, distinguishable. These characters themselves are generic patients of the set-up, the all-pervasive interrogative social structure of a world wholly determined by the terrorizing form of the Question (and thus, the Problem)—one

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HAMM: [Surprised.] What story? / CLOV: The one you've been telling yourself all your ... days. / HAMM: Ah you mean my chronicle?"

which incessantly imposes itself on the subjects. The characters extinguish the roles of the dramatis personae, just as they allegorically depose the legal persona of the liberal individual—exhausting the personal, becoming the any-subjects-whatever of modernism. In this case, the existential minimum arrived at is not derived from the transcendental and existential guarantee of the 'I think,' nor does it proceed by the subjective choice of the exclusive disjunction. In the play, we are abandoned with respect to Descartes' cogito and Kierkegaard's either/or. Instead, in What Where, Bim, Bem, Bom and Bam form an integrated circuit of questions and answers, orchestrated by a completely impersonal informational combinatorics of 'decision,' rather than the determination of preference—a Turingian ethics of the *entscheidungsproblem*, about which 'Yes' or 'No' become the only acceptable answers for Bim, Bem, and Bom to the questions posed by Bam. Between each run of the suite of Bam's questions, there is interposed a refrain—a double temporal refrain, marked, on the one hand, by the linear (or polynomial) time of exhaustion of each character in succession; and, on the other, by the cyclical time of the seasons (moving from spring to winter).

It is only within the severe minimization of the conditions of existence imposed in the oppressive set-up of the routine—the daily routine of Hamm and Clov in *Endgame*, the interrogative routine of Bam and V in *What Where*—that the full and personal tale of narration is extinguished in favor of the empty and impersonal chronicle of language as nonsense. Here, the switches, the 'Yes' and 'No' of the language of decision make way for what cannot be filled in by the possible or its presentation, but this is accomplished only by exhausting the former. This impersonal existential minimum of immanence is monumentalized in the whole of Beckett's oeuvre expressing that which one cannot say

but must always be shown in exhaustion. In this solitary, desolate minimum, only time and existence remain; the pure and empty *formlessness* of time made actual—the absolute time of modernity:

Good.

I am alone.

In the present as were I still.

It is winter.

Without journey.

Time passes.

That is all.

Make sense who may.

I switch off. 316

³¹⁶ Beckett 2006 [1983], 476.

3.3 First Nature and 'Last Humans' in Beckett's Endgame

'Tis all a chequer-board of nights and days where Destiny with men for pieces plays; hither and thither moves and mates and slays and one by one back in the closet lays.

– Omar Khayyam (~1048-1131)

3.3.1 Summary of the Play

Endgame, first performed in French in 1957 and published in English in 1958, is a play with four characters—two main characters and two supporting (Hamm, Clov, Nag, Nell)—set in a single room, in one act, with a running time of about an hour and a half. There is a single window on each side of the room, an armchair with casters fixed on its legs, in which Hamm sits in the center, and two "ashbins" in the corner, one containing Nag and one Nell. Hamm is confined to his makeshift wheelchair, unable to stand, and blind. Clov, Hamm's servant or caretaker, who was taken in by him as a child, has a permanently stiff leg and a limp, and is unable to sit. Hamm's father, Nagg, and his mother, Nell, have no legs and live in the corner of the room in the "ashbins."

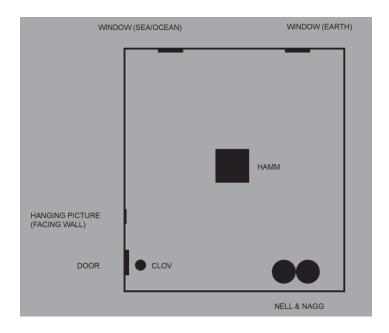


Figure 12 – Diagram of set of *Endgame*

The play has basically no plot: the activity of the play consists entirely of a series of mundane and repetitive tasks carried out by the only mobile member of the group, Clov, at whom orders are barked by Hamm; orders which Clov bitterly and impetuously obeys. These tasks make up the rudimentary daily routine of the characters (including feeding, Hamm's tour around the room, and Clov's report after having looked through the windows). Besides these, the play consists almost entirely of a bickering dialogue between Hamm and Clov, with soliloquys interspersed intermittently from each character. Throughout the play, Hamm, located center stage, recounts what he calls his "chronicle" (the story of how he came to take in a boy, presumably Clov); he commands Clov to do his bidding, asks frequently whether it is time for his daily painkiller, and begs Clov repeatedly to put an end to his life. Nagg and Nell reminisce about the past, (including a fond recollection of the tandem bicycling accident in France that precipitated the loss of their limbs), each speaks past the other while maintaining the simulacrum of a dialogue. Finally,

Clov, moving back and forth from the kitchen (off stage), threatens to leave Hamm behind, to sever his bond once and for all, while carrying out the tasks beset him by Hamm, including taking Hamm around the room, up to the windows, and inspecting the outside through the windows with an old telescope.

Outside the confines of the walls (what is called "the without" in the stage directions), it is inferred that there is more or less total desolation, with the sea to one side and the land ("the earth") to the other. Little else is explicitly described. Presumably, the situation is one of complete ecological catastrophe, one likely also borne of human destructiveness precipitating the impending and inevitable extinction of humanity. Nag and Nell already have one foot in the grave; both Hamm and Clov are male, so no one is capable of sexual reproduction. The figures inhabiting the room—within the diegetic space of the play and the physical space of the stage—are all that is left of the human stock; they are all that remain or will be.

3.3.2 Endgame/Fin de partie

We should say a few words about the title: *Endgame*. This will bleed into the rest of our discussion, no doubt. Of course, 'endgame' refers to a phase of a chess match and opposes both the opening and the middle game. The endgame of a chess match is often distinguished by the queens coming off the board. Usually, by the endgame, many of the other pieces and pawns have also been captured or traded, typically leaving only one or two pieces per side, some pawns, and the kings. Not infrequently, the endgame consists of as few as three or four pieces: for example, kings and pawns. If there are only the two kings left on the

board, then the game is automatically drawn through an 'insufficient mating material rule' otherwise each king would be doomed to roam the board forever without being able to attack the opposing one (given that in order for a king to attack another king, it would have to put itself in check, which would be suicidal, and is not a legal move).

The phase of the endgame is often understood to be the 'essence of chess' and is also the considered the most positional and 'machine-like' portion of the game. It's been said that one should "play the opening like a book, the middle-game like a magician, and the endgame like a machine."317 Because much of the positional complexity of the middlegame is already resolved before the endgame, this leaves less margin for error or inaccuracy in moves, and fewer tactical chances. Given this, the move order, the individual capacities of the pieces left on the board, and their relative positions, make the endgame phase of a match one that is far more calculation-driven, restrained, combinatorial, and often necessarily repetitive. Finally, with regard for the metaphorics of chess, as Adorno (1982) [1958]) does not quite say in "Trying to Understand *Endgame*," one never actually finishes a match of chess: a checkmate symbolizes, not the death of the king, but the point of its inevitability. With respect to the end of a game of chess in general, it is often the case that this inevitability precedes an actual checkmate by some distance, so that the losing opponent sees the moves which compel their demise well in advance, which prompts the losing opponent's resignation. All of this, it seems to me, speaks to the situation of the

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³¹⁷ This maxim is attributed to the late-romantic Master Rudolf Spielmann, known for his sacrificial play.

play.³¹⁸ Everything is orchestrated around the imminent end of things, however we may construe this end. Thus, the play is also about dying, in many senses—and we will return to a few. Yet, one must not fail to see that the continuance of the play, and by extension life (since they are the only ones left alive), somehow originates from this dying, though, not in the Heideggerian manner of anticipatory resoluteness (being-towards-death), not by virtue of the possibilities thereby constituted (for the Heidegger of *Being and Time*, death is Dasein's 'own-most possibility' (*eigenste Möglichkeit*)). While it is indisputable that, to paraphrase Wittgenstein, no one can die my death for me "in the way no one can don my hat for me" (CV, 2e), nevertheless, the characters of *Endgame* do not stoically await their

For the friendship and influence of Duchamp on Beckett, see Hugill, "Opposition and Sister Squares: Marcel Duchamp and Samuel Beckett."

Additionally, it should not escape our notice that one of the things peculiar to the game of chess, and chess-related abstract games, is that the rules accord with the capacities of different *types* of pieces (unlike go or checkers, for example). The collection of legal moves of a piece determines that piece (e.g. bishops move continuously in a diagonal for any number of squares on their color complex not obstructed by another piece, rooks move either vertically or horizontally on each turn in the similar way, etc.). The inverse is true of the characters of the play: their incapacities of movement in some respects inform their relations to each other and determine their roles. The analogy of their movements with that of chess pieces also speaks to the play's articulation of a first nature. They are in some sense determined to move in accordance with the roles or routines or repetitions they engender, even when the situation is doomed.

³¹⁸ Besides being warranted by the title of the play, and the direct attestation by Ruby Cohn of Beckett's own description of the work ("Hamm is a king in this chess game lost from the start"), interest in the metaphorics of chess for the themes of the play also seems to be supported by biographical facts. Beckett's interest in chess, in following the games of great players, and of his friendship with Marcel Duchamp (himself a chess Master and author of a book on endgame theory, *L'Opposition et les cases conjuguées sont réconciliées*, which Beckett owned and may have read) attests to the plausibility of Beckett thinking about the themes of the play in relation to chess in a more-than-titular capacity. This to say nothing of the appearance of chess in other works, notably in *Eleuthéria* and *Murphy*, where in the latter, it has been contended that Mr. Endon is based at least in part on Duchamp.

own inevitable deaths, and certainly do not own the possibility of death as by which individual human authenticity is gained. Rather than through possibility, from the perspective of the play, life's originary relationship with death emanates through what Deleuze calls in relation to Beckett's work, "the exhaustion of the possible" (see 3.2 above). The repertory of moves—the life, character, and behavior of the players—is not given by the grace of possibility, but by an absolute fallenness of a compulsion to move—

Zugzwang—even a compulsion to repeat. It is as if, in Endgame, Eros as life-affirming were the epiphenomenal emanation of Thanatos as death-drive—this is supported again by the death-wish of Hamm and the general repetition of trauma within the interactions between Hamm and Clov. We need only witness the reversal which the thought of the end—the thought or experience of extinction—establishes in the first and last lines of the play. In a typically Beckettian inversion, Endgame begins by finishing and ends by

³¹⁹ Freud, *Beyond the Pleasure Principle*. See also, DR 103-122. The death-drive, first formulated independently by Sabina Spielrein, is of course one of the most important themes in Freud's later work, which he arrived at by studying the repetition of traumatic experiences of patients with "shell shock" who had fought in World War I. It is used by Freud to try and explain the maladaptive behavior associated with several psychopathologies. It is also taken up explicitly by Deleuze in his theory of repetition in relation to his ontological interpretation of Nietzsche's eternal return, as it relates to "the pure and empty form of time" in DR. Deleuze criticizes Freud for making an opposition or a dualism of Eros and Thanatos, and instead sees Thanatos as primary and immanent in Eros. DR 111-12: "In any case, determined as the qualitative and quantitative return of the living to inanimate matter, death has only an extrinsic, scientific and objective definition. [...] This reduction of death to an objective determination of matter displays the same prejudice according to which repetition must find its ultimate principle in an undifferenciated material model, beyond the displacements and disguises of a secondary or opposed difference. In truth, the structure of the unconscious is not conflictual, oppositional or contradictory, but questioning and problematising. Nor is repetition a bare and brute power behind the disguises, the latter affecting it only secondarily, like so many variations: on the contrary, it is woven from disguise and displacement, without any existence apart from these constitutive elements."

remaining. The first line reads: "Finished..."; the last line: "You ...remain". This reversal is even encoded within the first line of the play. Laid out through its refrain, like a crystal of doubt, it grows out of the edges of its certainty, the repetition of which carries with its unfolding the development of a backwards persistence. Each new clause elongating the one before it, the line moves from the assertoric to the imperative in desperation: "Finished, it's finished, nearly finished, it must be nearly finished."

Let us backtrack here and add another small point: it is worth keeping in mind that Beckett originally wrote *Endgame* in French and translated it himself into English. In French the title of the play is Fin de partie, which, although meaning the same thing relative to a chess match, has other associations than the English. Among them, the word partie is also what one could use for a part of a whole, and thus can be extended to the use of a part in a play (though the typical word here would be $r\hat{o}le$). It's as if Beckett took Shakespeare's "all the world's a stage..." from the "Seven Ages of Man" monologue (As You Like It) in a terribly literal fashion: not that everyone in the 'play of life' has a part on the stage of the world, but rather that the whole world has been reduced to the space of a stage. Thus, Endgame is also a post-apocalyptic story, a story about extinction: the world without is ended, the world within to follow. The whole is already ended, and the play is about the end of parts (la fin des parties). The connection with the theatre is what bolsters the ironic association of Hamm with the figure of modern tragedy, the figure of modern narcissism, par excellence, Hamlet—giving Hamm center stage: "Me... to play" is one of Hamm's refrains. This refrain also combines with another piece of chess terminology, which indicates who's turn it is to move: 'white (or black) to play'.

3.3.3 Dead Nature/Still life

At the outset of the play, the stage-set and the initial positions of the characters collectively configure a pareidolic image of a skull: the two windows are the eyes of the skull which look out on the world without, Hamm, in his chair under the drop cloth that covers him, is its nasal cavity, and the two ashbins in the front corner are the teeth that remain in its dental cavities. As a kind of vignette-image of death, it recalls the composite 'portraits' of 16th century painter, Giuseppe Arcimboldo—assembled of the objects typical of a still life, according to what/who the painting portrays (plants, vegetables, seafood, roast fowl, books, etc.)—as well as the genre of the *vanitas* still life.³²⁰

The image of the skull discloses an aspect of the within/without relationship, namely that between private inner sense and public outer sense; and through the evident extinction of the latter, it conjures up a reflection on the ultimate relationship between mind and nature—or between so-called second and first natures—in the context of the thematic backdrop of a narrative of human oblivion. This is because the pareidolic image suggests that the space of the stage, and therefore the diegetic space of the narrative, allegorically unfolds within the head. The inside of the skull is a clear metonym of mind, as opposed to 'the without' which is extra-mental. Even the very existence of the pareidolia of the skull is suggestive of a theory of mind with regard to the concept of sense in its relation to an extra-mental, extra-linguistic nonsense which is only indicated via nonsense of the intra-linguistic/symbolic kind. This is because pareidolias rely on 'seeing aspects' under

³²⁰ For a reading of Arcimboldo's composite portraits, see Roland Barthes, *The Responsibility of Forms*, 129-147.

conditions where there is a poverty of stimulus. But this is not only true of seeing faces in clouds, it is essential to perception in general.³²¹ It is in fact true of mind itself as non-actuality (as functional, structural, or virtual): Mentality is nothing but its seeming so. Thus, with respect to sense, when you get there—much like Stein's childhood home, existing only in memory—"there is no there there" (Stein 1985 [1937], 251). There is only what Deleuze calls, following Samuel Butler, *erewhon* (nowhere/now-here). Non-being. Just as there is no 'person' in the portraits of Archimboldo, only arrangements of vegetables, etc., there is no 'mind' in first nature, only objects assembled in a certain way, but the inherence of mind, and of sense itself hinges on a kind of apophenia. It hinges on our not-being-able-not-to-see a mind there where things are so assembled.

Here is our second figure, then, which deals with the relation between the 'within' and the 'without'. Or again with the relationship between the living (that is, the dying) and the dead, or between life and nature. This relationship I characterize by a genre not of the play, but of *still life*, or as it's called in Romance languages—*dead nature (nature morte)*. Both lines can be taken up here.

The play begs us to consider a world *after* nature: "There's no more nature" says Clov (Beckett 1990 [1957], 97). More generally, it begs us to ruminate on the oft-repeated refrain, "there is no more ______" (no more nature, no more painkiller, no more pap, etc.).

³²¹ 'Seeing aspects' is an important theme in Wittgenstein's later work, one which there is much more to say with respect to the connections between language, perception, mind, picturing, and sociality then there is space to elaborate here. See PI 1, 63, 129; PI 2, 113, 118-273, etc.

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But, in the wake of the apparently total and (at least non-diegetically) unknown ecological catastrophe, there is still as it were a "nature *after* nature." To paraphrase Iain Hamilton Grant: physiocide is never a complete affair.³²² Hence, in response to Clov's declaration about the end of nature, Hamm critically retorts, "You exaggerate...". And Clov follows with the qualification: there is no more nature "[i]n the vicinity." (Beckett 1990 [1957], 97). Such a thought, of a nature after nature is the thought or experience of extinction. But this thought can bring no solace of any kind, a consolation that many ecocritics and posthumanist theorists nevertheless seek to extract from it.³²³ The experience of extinction is that of nature after nature as *primary* nature, thought in a strange counterfactual temporal mode, of a time after us, which nonetheless precedes us, that of *anterior posteriority*: 'We will have been mere nature after all!'. Hamm again: "We breath, we change! We lose our hair, our teeth! Our bloom! Our ideals!" (ibid). Primary nature perdures in the face of the loss (or the end) of the world; it precedes our birth and persists after the nature from which we are born.

On the other hand, the deification, sacralization, or conceptual reification of nature as 'world,' or more specifically as 'earth', (in short, as *oikos*, inflected as both 'home' and 'economy') is, as it were, the product of an all-too-human (second) nature, even if its effects are all-too-real. Such a lesson comes at the very price of extinction, and at the moment in which it is desirable to end, as such, for the characters of the play. "No one that ever lived

³²² See Grant, "Nature After Nature, Or Naturephilosophical Futurism."

³²³ Among them Claire Colebrook and Isabelle Stengers.

thought so crooked as we," says Clov, faced with the final self-inflicted humiliation of the human in the experience of extinction, to which Hamm responds, "[w]e do what we can" and Clov responds, "[w]e shouldn't" (ibid). Thus, we are constitutively denied the hypostatization of nature as environment, home, resource, sacred space, or deified alterity. Because of this, the world of the play—and Beckett's literary universe more broadly—is a thoroughly amoral one, with the fiat of a singular, humorous, original sin—to wit, origination itself, having been born. "Accursed progenitor!" Hamm shouts invectively at his father Nagg (ibid., 96).

We see the interplay in the form of still-life here by way of impairment (blindness, paralysis, loss of limb or speech), as well as by way of design (as in Clov's vision of a still order, of everything in its final place), with that of a dead nature (a Primary or First Nature), which is prior to but proceeds second nature in the experience of extinction. Thus, as configured in *Endgame*, the death-drive takes on a properly chthonic, inanimate motivity consonant with Freud's original estimation of the drive at the organic level of the cell (Freud, 1990 [1920]). According to this rendering, it is not the act of death, but the *unborn* which the death-drive aims at, from which the drive of life emanates in pareidolic fashion.³²⁴ Though mistaken about its end, it is also the unborn to which all transcendent 'eternal truth' aims abortively. Timelessness as Truth is a function of the thought of First Nature. "Death, if that is what we want to call this non-actuality, is of all things the most

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³²⁴ DR 111-12, esp. 112: "Death does not appear in the objective model of an indifferent inanimate matter to which the living would 'return'; it is present in the living in the form of a subjective and differentiated experience endowed with its prototype." See the footnote about the death-drive in Freud and Deleuze above.

dreadful, and to hold fast what is dead requires the greatest strength. [...] [Geist] wins its truth only when, in utter dismemberment, it finds itself." (Hegel 1977 [1807], §32). The unborn is as First Nature the always already dying of second nature: it is, in a twist of words, a naturing nature, Natura naturans.

It is the unborn to which, bizarrely, Beckett's work addresses itself. This corresponds well to what Deleuze says about Beckett's Film in Cinema I, that the extinction of the images of subjective finality lead us toward a time of matter, a time 'before us' without need of revelation and reflection in the subject (C1, 68). We should understand why, then, Beckett is not so much an anti-vitalist, as, so to speak, a 'mortalist': 'life', so-called, is a transcendental illusion when it is opposed to the 'event' of death as an inherent but most extreme and negative horizon. The positive reality of living, by contrast, is synonymous with the process of dying. We can hear here, not only the retorts of Hamm and Clov, but also the cry of "From an Abandoned Work": "No, I regret nothing, all I regret is having been born, dying is such a long tiresome business I always found." (Beckett 1995 [1957], 158). That First Nature is, at least in one of its attributes, indistinguishable from a universal productive principle as well as from the dying of second nature seems to be confirmed, insofar as locally negentropic complex self-organizing and self-replicating systems increase the global entropy of their environments by capturing otherwise thermodynamically free energy and binding it in work used through the cycle of its own realization. 325

³²⁵ See, England, "Statistical Physics of Self-Replication."

However, such an apparently moribund attitude need not be taken in the self-serious way that the tenor of these words suggests. Black humor is just that—*humor*. As Clov reports on the status of the desolation while looking out the window—out towards an outside which is nothing but First Nature as *Natura naturans*: the *without* is "[l]ight-black. From pole to pole." (Beckett 1990 [1957], 111).³²⁶ Thus, what Adorno says in *Negative Dialectics* of philosophy, here we could echo of life: "[It is] the most serious of things, but then again it is not all that serious" (Adorno 1973 [1966], 14).

3.3.4 Automata/Zugzwang

The interplay of life and nature, now, points to a peculiar collapse of the well-formed subject, not from the standpoint of its disunity (though this is certainly empirically the case as well), but from its compulsion to repeat, from repetition itself. This is our third figure: *automation/Zugzwang*.³²⁷ Automation obviously dovetails with the amorality of the universe of *Endgame*. It is exemplified in the neutrality of Clov's repeated phrase, "Something is taking its course." (Beckett 1990 [1957], 102, 111). This 'Something' (which Deleuze frequently invokes as an *aliquid*)³²⁸ is the unconditioned, the nature after

³²⁶ Perhaps, this is what Badiou alludes to in Beckett with what he calls the "grey-black of being." Badiou, *On Beckett*, 48-60.

³²⁷ The use of the term 'automation' in reference to *Endgame* is not entirely new, though I highlight its relation to Freud's *Beyond the Pleasure Principle*, Klossowski's notion of the 'automaton' in his *Nietzsche and the Vicious Circle*, Deleuze's notion of repetition, and perhaps it can be related to the recent and increasing developments surrounding automation in political economy.

³²⁸ Deleuze borrows the Latin synonym for something (*aliquid*) from the Stoics to get at the unconditioned within sense. LS 7: "For the Stoics, on the other hand, states of affairs,

nature which precedes and proceeds the subject: it is the unborn of life, of the inorganic in the space of human existence. It is absolute nonsense. But here we must be precise. We must not see First Nature in this regard simply as a condition, a material or biological backdrop, on top of which human meanings, values, norms, cultures, or forms of life are built. On the contrary, these too are equally 'automatic' in a specific sense—which is not to say, mechanical or pre-determined, but rather devoid of the traditional voluntarism of the enlightenment and idealist concepts of freedom—it is something compulsory. It is precisely because the automaticity or the compulsion to repeat cannot be simply projected back onto a bare matter, but must itself already be witnessed within life and mind that Deleuze in DR rejects the notion of a 'bare' material repetition and instead insists that the more profound repetition is necessarily cloaked in masks which it throws off only to the reveal yet other masks. These masks are exactly the non-beings of second nature which in themselves necessarily tend toward the unconditioned pole of First Nature, but only insofar as that nature is itself the eternal return of the former, as its dying. This is why Being is always enveloped in relations and structures, in signs between entities, such that one never arrives at the 'bare' being of an entity outside of such presentations which are only ever manifest in the differenciation of multiplicities. Nonetheless, it is also this confrontation with the unconditioned determination of First Nature which rightly inspires terror when it confronts us with our own false images of ourselves.

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quantities, and qualities are no less beings (or bodies) than substance is; they are a part of substance, and in this sense they are contrasted with an extra-Being which constitutes the incorporeal as a nonexisting entity. The highest term therefore is not Being, but Something (*aliquid*), insofar as it subsumes being and non-being, existence and inherence."

Automation in this sense is as true of bodily functions as it is of duty, or the rejection of duty, and even accomplishment of one's duty despite great 'instinctual' or 'psychical' resistance, weakness of the will, and so on. Thus, Clov obeys as much as he threatens to put a stop to Hamm's mastery over him: "Then I'll leave you..." Clov incessantly repeats. Hamm is equally compelled to repeat his domination, as he is to plead for his own murder. Anyone who has watched a friend with a genuine compulsion or a loved one with dementia knows that the putative 'autonomy' of human life is but a meniscus of the causal fluid and social structures which constitute it. The repetition of gestures, phrases, and actions essentially marks the subtractive style of the play, establishing its poetic rhythm and the mode of existence of the characters. This automaticity, which is often called farcical in Beckett's work by commentators, displays its logic not only through the social roles expressed in the action (master, slave; father, son, etc.), not only in the refrains of the dialogue—what Adorno calls its "protocol sentences"—this automaticity also manifests in the movements and gestures of the characters, as well as in the circuits, routines, and subroutines (in both the domestic and computational senses) they are bound to perform. They are bound or compelled in their repetitions sometimes by virtue of their various impairments, sometimes by the mandates of the action, by the demands or obligations of the characters, sometimes by virtue of its resistance or rejection. Even if by compulsion these actions are in some sense farcical, the repetitions of the characters as well as the social bonds and suffering that result are nonetheless completely genuine. It is true that there is genuine cruelty between Hamm and Clov, but there is also genuine attachment: "Hamm: I am obliged to you, Clov. For your services. / Clov: Ah pardon, it's I am obliged to you. / Hamm: It's we are obliged to each other." (Beckett 1990 [1957], 137). The chief hermeneutic mistake poetically, and the chief metaphysical mistake, philosophically, is to think that compulsion and freedom are incompatible.³²⁹ The whole of the mind-body problem is wrapped up in such a mistake. With respect to Beckett, one must realize that the farce (as a pareidolic image of Geist) itself is the very social and spiritual substance of the relations, because he is the first modern writer to categorically reject meaning and teleology with absolute rigor and with no compensatory consolation (either by mourning the loss of the soul or through its replacement with another mythico-subjective panacea). This leaves only one alternative: affirmation of meaninglessness. In Beckett's universe (which is also utter reality) one is completely unable to denigrate these repetitions in relation to something which is freely-chosen, subjectively substantial, ultimately fulfilling of all worthy ends, and which—in the last analysis—does not exist. Despite many insensitive readings of Beckett's work along the pole of the negative, the 'pure immanence' of life in *Endgame* saves Beckett's humor from reactionary negativity and nihilism. Or put another way, humor saves life from transcendence. In humor, immanence is its own pathos-—one which, like Zarathustra's, laughs with and dances over all things.

Furthermore, such humor, such farse connects Beckett to the deep theatrical traditions of Europe: the ineluctable mixture of inevitability with the *pathos* of 'something taking its course' in contingency and necessity was called in ancient times *tragedy*—a mode of

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³²⁹ A reflection on these concepts can be found in Brassier, "Unfree Improvisation/Compulsive Freedom." The critique of voluntarism is also a prominent feature of François Zourabichvili's readings of Deleuze and Spinoza. See Zourabichvili, *Deleuze: A Philosophy of the Event*; "Les deux pensées de Deleuze et Negri: Une richesse et une chance"; and "Deleuze and the Possible: On Involuntarism in Politics."

apprehension which seems increasingly alien to the contemporary view of life mediated by the images of capital in the insubstantial forms of recognition offered to the contemporary 'person.' Through the position of *zugzwang*, automaticity or the compulsion to move drives the game of the end on and produces its very persistence. "We're getting on..." delights Hamm on several occasions, implying all at once the love and friendship between Hamm and Clov (their getting along), their continued perdurance however futile (their getting on with it), and their ageing, their living-dying (their getting on in years) (Beckett 1990 [1957], 99, 102, 115, 130).

3.3.5 Absolution

In the end of *Endgame*, we do not see Clov leave (though he has prepared himself with suitcase, coat, and hat). We do not hear Hamm's farewell speech (though he rambles on into nonsense and finally into silence). We do not know the status of the unknown 'boy' outside, whom Clov reports to Hamm just before the former's ostensive departure, whom Hamm immediately thinks of killing. We do not know whether the boy represents a hope for the regeneration of a second nature, in terms of both the species and society (perhaps the boy has others with him). We do not know whether Hamm, Clov, Nagg, and Nell represent Nietzsche's 'last humans' (*letzter Menschen*) or rather some other 'first humans' of an unredemptive, but perhaps still blessed kind of people to come—not the 'Übermenchen' of which Nietzsche dreamt, but the 'Hintermenchen' of an anterior posteriority which is soon to extinguish them. The characters of *Endgame* have hung up their projects, and with them their tales, leaving only Hamm's chronicle of nonsense. As hintermenschen they are, perhaps, perversely blessed in precisely the sense of Spinoza's

beatitudo—knowing each particular thing intuitively in its essence by looking upon nature sub specie aeternitatis. Such a way of seeing is not, as typically understood, a stationary vision, but rather a vision at the absolute genesis of sense, and of the genesis of the absolute within sense—as nonsense. As Hamm pronounces in the opening of the play, after trying and failing to compare his own suffering to that of others: "...All is absolute. The bigger a man is the fuller he is, and the emptier." Thus, Hamm's 'crooked thought' conspires with Alice's 'adventure' in Deleuze's very first characterization of sense: that of a pure becoming which moves paradoxically in both directions at once. "Good sense affirms that in all things there is a determinable sense or direction [sens]; but paradox is the affirmation of both senses or directions at the same time" (LS 1). Such an absolution could only come with the abandoning of the relative, and with it, the rationality of the instrumental, in favor of a higher Reason or Intuitive Science. It is a very special kind of aspect-seeing, a unique kind: seeing under the aspect of eternity, seeing things "sub specie aeterni" (TLP 6.45). "It is of the nature of Reason to regard things as necessary and not as contingent. And Reason perceives this necessity of things truly, i.e., as it is in itself. But this necessity of things is the very necessity of God's [Nature's] eternal nature. Therefore, it is of the nature of Reason to regard things under this species of eternity [sub specie aeternitatis]" (Spinoza IIp44). This absolute necessity, however, is the necessity to affirm chance, to affirm the always-already dying of second nature as the irreducibility of contingency. Only the thought of extinction can make such an experience actual, can make its abstraction concrete, and can turn us toward the horizonless abduction of a contingent, necessary, involuntary coexistence which must then be produced.

In *Endgame*, we do not know whether or not such blessedness continues or ends, but neither do the characters themselves know: just as in the endgame of chess, just as in death, just as in the experience of extinction, they themselves hesitate between *finishing* and *remaining*. But this is true of all who are subject to the truth of modernity, who know themselves subject to nature—this truth is the universal vertigo of the patient as the subject of reason. The standstill of the final scene of the play, thus, seems to articulate breathlessly (without inspiration or enthusiasm) the spirit of the sideways glance we give to our own wavering futures—we, the hesitating witnesses of ecumenical tragedy and farce.

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- Zourabichvilli, François. 2002. "Les deux pensées de Deleuze et Negri: Une richesse et une chance" Multitudes 2.9 (2002), 137-14." *Multitudes* 2 (9): 137-141.

Curriculum Vitae

EMPLOYMENT

NSCAD University, Halifax Instructor, winter 2020 – present

OCAD University, Toronto Instructor, fall 2020 – present

EDUCATION

Western University, Ph.D., Theory and Criticism, (anticipated April) 2023.

Dissertation: The Metaphysics of Modernism and the Aesthetics of Reason in

Wittgenstein, Deleuze, and Others.

Supervisors: John Vanderheide and Kevin Mooney.

Cornell University, Certificate, School of Criticism and Theory, 2019.

Western University, M.A., Theory and Criticism, 2014.

Minneapolis College of Art and Design, B.F.A., Drawing and Painting, 2010.

RESEARCH

Specialization: 20th Century Philosophy and Critical Theory, Art/Literary Theory and Aesthetics, Modern and Contemporary Art, Modern English Literature, Cultural Theory, Marxism

Competence: Black American Philosophy and Theory, Decolonial and Indigenous Theory, Feminist Philosophy and Theory, Critical Theories of Information and Computation, Media Theory

UNIVERSITY COURSE INSTRUCTION

Aesthetics (multiple sections) (fall 2022, summer 2022, fall 2021, summer 2021, fall 2020)

Introduction to Art Theory and Criticism (winter 2022, fall 2021)

Survey of 19th Century Art (multiple sections) (winter 2023, summer 2022, winter 2022, fall 2021, winter 2021, fall 2020)

19th Century: Art and Revolution in France (winter 2020)

PUBLICATIONS

Peer-Reviewed Journals:

"Compression and Noise"

Journal of Aesthetics and Phenomenology (forthcoming 2023), Eds. Tina Röck, Natasha Lushetich, and Dominic Smith.

"Review of Arjen Kleinherenbrink's *Against Continuity: Deleuze's Speculative Realism*" *Deleuze and Guattari Studies* (2021), co-authored with Dylan Vaughan, link: https://www.euppublishing.com/doi/abs/10.3366/dlgs.2021.0450.

"The Metaphysical Subject and Logical Space: Solipsism and Singularity in the *Tractatus*"

Open Philosophy (2018), Eds. Paul Livingston and Jon Cogburn, doi: https://doi.org/10.1515/opphil-2018-0020.

Other Publications:

"Editor's Introduction: Disenchantment and Forms of Life"

Chiasma: A Site for Thought (2020) link: https://chiasma-journal.com/issue-6/.

"Editor's Introduction: To Be a Body?"

Chiasma: A Site for Thought (2019) link: https://chiasma-journal.com/5-to-be-a-body/.

"Quaestio tantum quaestionum: A White Paper on Creative Instantiation" XPNDR (2015), Eds. David Frohlich and Kelsey Olson.

"What is an Event? Or, the Hawk"

WOPOZI (2012) link: https://www.wopozi.com/cerulean.

CONFERENCES AND PRESENTATIONS

Conferences and Symposia:

"Counter-Actuals and Counterfactuals: Tense and Modality in Deleuze's Theory of Senses-Events."

Cosmology Between Philosophy and Science: Deleuze, Guattari, and the Rest of Us. Laurentian University (forthcoming, May 2023).

"The Derivative Avant-Garde: Self-Appropriation and the Recursive Readymade in Marcel Broodthaers' *Tractatus Logico-Catalogicus - Art or the Art of Selling*"

- "Appriopriation After Appropriation" Panel. *Universities Art Association of Canada (UAAC/AAUC) Conference*, University of Toronto (Oct. 2022)
- "Logical Space, Phase Space, and the Paradox of Solipsism in Wittgenstein's *Tractatus*" *International Ludwig Wittgenstein Symposium*, Dept. of Philosophy and Religious Studies, University of Zagreb, Croatia (Online) (Dec. 2021)
- Participant, New Perspectives on Wittgenstein on Expression Workshop Pardubice/Dalhousie Universities (Online) (Jan.-Mar. 2021)
- "Philosophy, Vision, and Science in the Aesthetics of Non-Photography"

 "Non-Aesthetics" Panel, *Universities Art Association of Canada (UAAC/AAUC)*Conference, (Online) (Oct. 2020)
- "Platform Aesthetics: Contemporary Art, Cognitive Complexity, Political Agency"

 "Accelerating Art, Accelerating Culture" Panel. *Universities Art Association of Canada (UAAC/AAUC) Conference*, Quebec City, Quebec (Oct. 2019)
- "Expression and Aesthetic Thought in Dewey, Adorno, and Deleuze"

 Universities Art Association of Canada (UAAC/AAUC) Conference, University of Waterloo (Oct. 2018)
- "Senses and Events in Wittgenstein and Deleuze"

Summer Symposium in Contemporary Philosophy, International Centre for Philosophy, NRW, University of Bonn, Germany (Jul. 2018)

Guest Lectures and Invited Talks:

- "Mechanism, Modernism, Beckett's *Endgame*"

 Guest lecture in the Department of English and Cultural Studies, Huron
 - University College (2019)
- "First Nature and 'Last Men' in Beckett's *Endgame*"

 Theory Session, Centre for the Study of Theory and Criticism, Western University, (2019)
- "Gesture, Context, and 'Abstraction' in the Figural"

 Guest lecture in the Department of Visual Arts, Western University, (2018)

Responses and Discussions:

Guest respondent, "What Is the Point of Theory?"

The New Polis 'Critical Conversations' series with Jonathan Fardy and Andrew Weiss (2021), link: https://thenewpolis.com/2021/02/21/critical-conversations-8-theory-in-action-the-art-of-doing-theory-with-jonathan-fardy-announcement/

Guest discussant, *Theory and Philosophy* podcast.

Hosted by David Guignion. Deleuze and Guattari's "Apparatus of Capture" Pt. 2 (2019), link: https://theoretician.podbean.com/

Respondent for Nicholas Birmingham, "Icon/Intuition: The Diagrammatic Thought of Kant and Peirce."

Theory Session. Centre for the Study of Theory and Criticism, Western University (2019).

Guest discussant, Theory and Philosophy podcast.

Hosted by David Guignion. Deleuze and Guattari's "Apparatus of Capture" Pt. 1, (2018), link: https://theoretician.podbean.com/

HONOURS AND AWARDS

CSTC Sponsorship, Cornell School of Criticism and Theory, 2019.

Nominee, Graduate Student Teaching Award, Western University, 2018-2019.

Nominee, Graduate Student Teaching Award, Western University, 2016-2017.

Western University Graduate Research Scholarship, 2016-2020.

Western University Graduate Research Scholarship, 2012-2014.

Entrance Scholarship, Western University, 2016-2017.

Honour Roll Scholarship, Minneapolis College of Art and Design, 2007-2008.

LEADERSHIP AND SERVICE

Peer Reviewer, International Ludwig Wittgenstein Symposium, 2022-present.

Peer Reviewer, Chiasma: A Site for Thought, 2021-present.

Head Editor, Chiasma: A Site for Thought, 2017-20.

Deputy Head Editor, Chiasma: A Site for Thought, 2016-17.

Founding Deputy Editor, Chiasma: A Site for Thought, 2013-14, 2015-16.

Student Referee (Letters), 2022-present.

Teaching Assistant Referee, 2022-present.