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A Logic of Multiplicities: Deleuze, Immanence, and Onticology

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Analecta Hermeneutica

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Immanence and Transcendence

Sometimes the concepts of immanence and transcendence will refer to a problem pertaining to consciousness and its relation to objects. Here immanence will refer to whatever is present or given to consciousness or experience, while the transcendent will refer to that which is outside or beyond consciousness.¹ This will give rise to the problem of how consciousness is able to relate to a world that transcends it.² Here the concepts of immanence and transcendence are primarily situated in the domain of epistemology and human experience. The question is, whether or not what is given in consciousness or experience (the immanent) shares any relationship to the world, is able to represent the world, or whether it is coherent to even talk about a world apart from the world as it is given in consciousness. As Husserl will remark, "the existence of Nature *cannot* be the condition for the existence of consciousness, since Nature itself turns out to be a correlate of consciousness: Nature is only as being constituted in regular concatenations of consciousness."³ Here it is said that nothing can be said of a world apart from the manner in which that world is immanent to consciousness. Any question of a transcendent world functioning as a condition for consciousness is, for Husserl, incoherent.

At other times, and in a much different tradition, the concepts of immanence and transcendence will be ontological, referring respectively to the worldly or what is of the world and that which is beyond, above, or outside the world. Within this framework, the immanent will refer to those entities or creatures of the world that mutually interact with one another and are capable of

¹ Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy: First Book*, trans. F. Kersten (Boston: Kluwer Academic Publishers Group, 1983), 110. ² See for example, Jean-Paul Sartre, *Being and Nothingness: A Phenomenological Essay on Ontology*, trans. Hazel E. Barnes (New York: Washington Square Press, 1984), part two, chapter three.

³ Husserl, *Ideas*, 116.

modifying one another. When an acorn falls from a tree the acorn does not merely *affect* the ground upon which it falls, but is also *affected by* the ground upon which it falls. Both ground and acorn can affect one another. The point here is not that *all* worldly entities *do* affect one another, but rather that worldly entities *can* affect each other. Worldly or immanent entities populate a plain, a field, in which it is possible for them to interact with one another.

By contrast, the transcendent refers to that which is beyond or outside of these worldly or creaturely interactions. Platonic forms, God as conceived within theistic traditions, and essences would all be instances of the transcendent in this sense. Here the point is not that there is no interaction between the creatures of the world and the transcendent, but that whatever the interaction that interaction is *unilateral*. Deleuze articulates this point nicely in the context of Neoplatonism: "The participated does not in fact enter into what participates in it. What is participated remains in itself; it is participated insofar as it produces, and produces insofar as it gives, but has no need to leave itself to give or produce."⁴ Let us take the example of Platonic forms. There is, on the one hand, that which is participated, and on the other that which participates. The participated is the form, while that which participates would be an individual worldly entity.

Here we might think of the relationship between a form like "Beauty" and a beautiful rose. The form of "Beauty," in Platonic ontology, is an entity that exists in its own right. It is not merely a predicate of another entity-"the rose is beautiful"-but rather is an entity that exists independently of all other substances. Even if there were no beautiful entities such as sunsets, tropical fish, and van Gogh's Starry Starry Night, Beauty, the form, would still exist. Beauty, the form, is the participated, while the tropical fish, insofar as it is beautiful, participates in this form. The form is an ontological condition for the beauty of the tropical fish. Without the existence of that form the fish cannot be beautiful, yet the form in no way requires the existence of the fish or any other beautiful things in order to exist. Moreover, the interaction between the form and the tropical fish is unilateral. The form bestows beauty on our tropical fish without itself being affected by the existence of the tropical fish in any way. It is for this reason that Deleuze says of "the participated" (the form) that it is in-itself and that it does not enter into what participates in it (the individual worldly thing) in any way. Put a bit differently, the transcendent *conditions* other entities in the world without itself being *conditioned* by these other entities. Moreover, the transcendent is so transcendent that it *cannot* be conditioned by other entities. Condition moves in one direction only.

It thus follows that ontologies organized around transcendence are *hierarchical*. For this reason we can refer to them as "vertical ontologies." In a vertical ontology some being or entity enjoys a privileged position or role with respect to all the entities that populate the world. The transcendent entities of vertical ontologies hover above all other entities, conditioning and surveying

⁴ Gilles Deleuze, *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone Books, 1992), 170.

them, without themselves being conditioned by the entities of the world. Here it is important to proceed with caution. It is not the idea of hierarchy as such that marks the essence of vertical ontologies, but rather the idea of hierarchy treated as a metaphysical essence of being as such. It is thus necessary to distinguish between ontological and ontic hierarchies. Clearly we live in a world riddled with hierarchies or inequalities. Some classes enjoy greater privileges than others, men enjoy greater privilege than women, whites enjoy greater privilege than other minorities, the sun influences the earth more profoundly than a single plant. Yet all of these hierarchies remain ontic insofar as all of those entities that enjoy a lower degree of power and influence nonetheless, in principle, possess the power to affect those entities that enjoy a greater degree of power. Ontological hierarchy, by contrast, inscribes "patriarchy" in the very fabric of being, transforming a contingent inequality of powers into an essential and ineradicable feature of existence. So vertical, so transcendent, is the "father" within ontological hierarchies that it enjoys the absolutely sovereign power to condition and survey without any worldly entities being capable of affecting it in any way whatsoever.

Plato provides us with a striking example of a vertical ontology, yet verticalities lurk all over the place in the world of philosophy and theory. "Verticality" does not simply refer to entities like the God of theistic theologies, forms, and essences, but can refer to a variety of different styles of theorizing. When Husserl claims that Nature cannot be a condition of consciousness, he treats consciousness, the transcendental ego, as a verticality that conditions all of being without itself being conditioned by anything else. When the Marxist treats all things as issuing from capital, the concept of capital has become a verticality that overdetermines everything else. When Adorno analyzes culture he seems to occupy a position above and beyond culture, such that he is able to survey culture without himself being conditioned by culture.⁵ When Kant treats the transcendental unity of apperception, along with the categories of understanding and forms of intuition as conditioning experience, he transforms these categories into verticalities that are conditioned without conditioning. The point here is not that concepts do not condition experience, that theorists cannot investigate culture, that consciousness doesn't condition experience in a variety of ways, etc., but rather that all of these terms are, in these frameworks, treated as unconditional conditions and surveillance agencies.

Onticology, Flat Ontology, and Immanence

Onticology, for its part, endorses an ontology premised on immanence or a "flat ontology." My aim here is not to *demonstrate* that being is characterized by immanence, but to articulate what immanence is and the consequences that

⁵ See for example, Theodor W. Adorno, *The Culture Industry: Selected Essays on Mass Culture*, ed. J.M. Bernstein (New York: Routledge, 2001).

follow from it in the work of philosophy. "Onticology"⁶ is my variant of objectoriented ontology⁷ and is the thesis that being is composed entirely of things or individual entities. Within this framework, rocks are objects, quarks are objects, corporations are objects, my cat is an object, and humans are objects. In other words, humans do not constitute a category radically distinct from other objects—though humans indeed have many unique and singular qualities—but are rather one type of individual or substance *among* other substances within being. In this regard, onticology and object-oriented ontology more generally refuses that gesture whereby philosophy must begin with an interrogation of the relationship between the subject and the object.⁸ Finally, onticology argues that while objects are capable of entering into relations with other objects, they are independent of their relations, in principle, in the sense of being capable of breaking with relations.

Without sharing all of his ontological positions, I draw the term "flat ontology" from Manuel DeLanda. As DeLanda puts it,

While an ontology based on relations between general types and particular instances is *hierarchical*, each level representing a different ontological category (organism, species, genera), an approach in terms of interacting parts and emergent wholes leads to a *flat ontology*, one made exclusively of unique, singular individuals, differing in spatio-temporal scale but not in ontological status.⁹

Such is an ontology of immanence. Within a flat ontology, being is composed entirely of individual entities, these entities are capable, in principle of interacting with one another, and there are no entities that are not themselves the

⁶ For an introduction to onticology, see Levi R. Bryant, "The Ontic Principle: Outline of an Object-Oriented Ontology," in *The Speculative Turn: Continental Materialism and Realism*, eds. Levi Bryant, Nick Srnicek, and Graham Harman (Melbourne: Re.Press, 2011), 261-278.

⁷ The term "object-oriented ontology" arose out of Graham Harman's "object-oriented philosophy" and denotes a body of realist ontologies that argue that the world is composed of objects. Philosophers as diverse as Harman, Whitehead, Bruno Latour, and Jane Bennett would be included under the label of "object-oriented ontology" insofar as they are all committed to the mind-independent existence of things and de-emphasize the centrality of the human in being. For a discussion of object-oriented philosophy see Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago: Open Court, 2002).

⁸ Quentin Meillassoux refers to this gesture as "correlationism." As he puts it, correlationism is "the idea according to which we only ever have access to the correlation between thinking and being, and never either term considered apart from the other." Meillassoux continues, "correlationism consists in disqualifying the claim that it is possible to consider the realms of subjectivity and objectivity independently of one another." Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (New York: Continuum, 2008), 5. Insofar as onticology refuses any transcendence or vertical ontology, the human and its relation to the world can no longer be treated as a privileged starting point for philosophical investigation. Humans are among beings, rather than a privileged point around which being is organized. For arguments justifying this gesture, see Levi R. Bryant, *The Democracy of Objects* (Ann Arbor: Open Humanities Press, forthcoming), chapter 1.

⁹ Manuel DeLanda, Intensive Science & Virtual Philosophy (New York: Continuum, 2002), 47.

result of a genesis from other entities. In short, within a flat ontology there are no "unmoved movers" or entities that condition without themselves being conditioned. Here there are no ultimate grounds or "firsts" that contain everything and out of which everything grows like a plant from a seed. Consequently, any entities or qualities that exist within being must be the result of a genesis or a production. Finally, insofar as such an ontology consists of individuals alone, there are no forms or essences over and above entities. To be sure, there are regularities or generalities; yet, as Darwin has taught us in the case of species, these regularities or generalities are the result of a genesis, of a production, and are not transcendent terms that stand over, above, and outside individuals.

At the heart of flat ontology is thus a principle of *ontological* equality. Deleuze will remark that,

Immanence for its part implies a pure ontology, a theory of Being in which Unity is only a property of substance and of what is. What is more, pure immanence requires as a principle the equality of being, or the positing of equal Being: not only is being equal in itself, but it is seen to be equally present in all beings. And the Cause appears as everywhere equally close: there is not remote causation. Beings are not defined by their rank in a hierarchy, are no more or less remote from the One, but each . . . participates in the equality of being, receiving immediately all that it is by its essence fitted to receive, irrespective of any proximity or remoteness. Furthermore, pure immanence requires a Being that is univocal and constitutes a Nature, and that consists of positive forms, common to producer and product, to cause and effect.¹⁰

It is necessary to distinguish between ontic equality and ontological equality. Ontically, of course, there are all sorts of inequalities among entities, substances, or things. Some beings affect other beings to a greater degree than other beings. This is ontic inequality. As Deleuze remarks elsewhere, "equal being is immediately present in everything, without mediation or intermediary, even though things reside unequally in this equal being."¹¹ Ontological equality, by contrast, asserts that whatever ontic inequalities might exist between substances or things, these things are equally beings and therefore, in principle, have the capacity or power to interact with other beings. Here, then, there are no superior beings such as forms or essences that possess the peculiar capacity of conditioning and surveying while remaining "unparticipated." As Deleuze and Guattari observe in their celebrated analysis of the game of Go, "a Go piece has only a milieu of exteriority, or extrinsic relations with nebulas or constellations, according to which it fulfills functions of insertion or situation, such as

¹⁰Gilles Deleuze, Expressionism in Philosophy, 173.

¹¹ Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), 37.

bordering, encircling, shattering. All by itself, a Go piece can destroy an entire constellation synchronically."¹² Here the inequality among beings is not an *intrinsic* feature of the entity, but is rather *situational*¹³ such that by going to its limit "the smallest [can become] equivalent to the largest."¹⁴ As in the case in Graham Harman's amusing example—"a pebble can destroy an empire if the Emperor chokes at dinner"¹⁵—that which might, for the moment, be insignificant in an assemblage or situation can become the deciding factor or critical agency that transforms the entire assemblage. Flat ontology thus suggests a profoundly ecological vision of being that emphasizes shifting and interacting relations among entities without any of these entities fully or completely overdetermining the rest.

It is sometimes suggested that like Spinoza, Deleuze's immanence is the thesis that only a *single* substance exists of which all entities are but variations without independent existence of their own. As Peter Hallward puts it in his controversial study, "Deleuze equates being with unlimited creativity. This means that all actual beings exist as facets of a *single* productive energy or force."¹⁶ While Deleuze certainly sees being as characterized by unlimited creativity, this is very different from claiming that being consists of a single substance of which all other substances are affections. Such a claim would reinstitute transcendence within the heart of immanence. Yet it is on precisely this point that Deleuze departs from Spinoza. Spinoza is praised for deepening our understanding of the univocity of being and immanence through an exploration of the affirmative nature of being; yet, for all this progress, his one substance is still treated as transcending the modes. As Deleuze puts it:

Nevertheless, there still remains a difference between substance and the modes: Spinoza's substance appears independent of the modes, while the modes are dependent on substance, but as though on something other than themselves. Substance must itself be said *of* the modes and only *of* the modes.¹⁷

In Spinoza, of course, the modes are bodies, things, or objects.¹⁸ If, then, substance (being), for Deleuze, is to be said *of* the modes and only *of* the modes, then this is equivalent to the claim that being consists only of *beings*, that each of these beings is a substance, and that there is no supplementary or transcendent

¹² Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 353.

¹⁴ Gilles Deleuze, Difference and Repetition, 37.

¹⁵ Graham Harman, Prince of Networks: Bruno Latour and Metaphysics (Melbourne: Re.Press, 2009), 21.

¹⁶ Peter Hallward, Out of This World: Deleuze and the Philosophy of Creation (New York: Verso, 2006), 8, my italics.

¹⁷ Gilles Deleuze, *Difference and Repetition*, 40.

¹⁸ See Benedict de Spinoza, *Ethics*, in *Spinoza: Complete Works*, trans. Michael L. Morgan (Indianapolis: Hackett Publishing Company, Inc., 2002), part 1, prop. 25, corollary.

substance in which these substances inhere. In short, being is not a substance transcendent to or supplementary to the many things or substances that populate the world, but rather being just is this variety. For Deleuze, being, as it were, is composed of chunks or units. There is not one substance but many substances. It is here and under this reading that Deleuze's ontology converges with onticology.

A Logic of Multiplicities

If we are to avoid falling back into a vertical ontology characterized by the transcendence of a single substance over all such that all other entities are but affections or modes of this one substance, we need a different sort of logic capable of both affirming the individuality and independence of the various creatures that populate being while also thinking their temporary relations to one another. Three conditions are thus required by flat ontology or immanence: First, being cannot be a supplementary instance that transcends beings or entities as a distinct substance over and above beings as in the case of Spinoza. Being must instead consist of a plurality of individual beings. Second, immanence or flat ontology must affirm the existence or dignity of individual things or beings without subordinating them to transcendent and supplementary entities such as forms, essences, or ideas in the mind of God. As Deleuze will put it when articulating the thesis of univocal being, "it is being which is Difference, in that it is said of difference."¹⁹ To be is to differ and to differ is to be a mode, thing, or individual substance. Difference here is not a negation in the sense of "x is *not* y," nor is it a difference *between* in the sense of "x differing *from* y."

Instead of something distinguished from something else, imagine something which distinguishes itself—and yet that from which it distinguishes itself does not distinguish itself from it. Lightning, for example, distinguishes itself from the black sky but must also trail it behind, as though it were distinguishing itself from that which does not distinguish itself from it. . . . Difference is this state in which determination takes the form of unilateral distinction. We must therefore say that difference is made, or makes itself, as in the expression 'make the difference.'²⁰

In other words, even if there were a single entity in all of being, this being or entity would still be a difference or would still consist of difference despite there being nothing else from which to distinguish itself. In short, difference is not a negation or what something is *not*, but is an affirmation in much the same way that the temperature at which water boils negates no other temperatures but is itself a positive and affirmative difference, with its own proper being and

 ¹⁹ Gilles Deleuze, *Difference and Repetition*, 39.
 ²⁰ Ibid., 28.

qualities, within being. The being of the boiling point is a difference that is what it is regardless of whether or not any other temperatures ever occur.

Finally, and as a consequence, third, it follows that insofar as immanent being is difference, because difference is affirmative rather than "difference-between," and because that which differs among themselves are substances or entities, relations cannot be *internal* to entities, but rather must be *external* to entities. We claim that relations are *internal* when we hold that: (1) entities *are* their relations to other entities; and (2) these entities cannot exist apart from their relations. This position is what is known as "relationism."²¹ By contrast, relations are *external* when the entity is capable of detaching from relations to other particular entities while still being that entity. As Deleuze remarks,

Relations are external to their terms. 'Peter is smaller than Paul,' 'The glass is on the table:' relation is neither internal to one of the terms which would consequently be subject, nor to two together. Moreover, a relation may change without the terms changing.... Relations are in the middle, and exist as such.... If one takes this exteriority of relations as a conducting wire or as a line, one sees a very strange world unfold, fragment by fragment: a Harlequin's jacket or patchwork, made up of solid parts and voids, blocs and ruptures, attractions and divisions, nuances and bluntnesses, conjunctions and separations, alternations and interweavings, additions which never reach a total and subtractions whose remainder is never fixed.²²

One will object that if a sadistic mad scientist places a fuzzy friendly rabbit in a vacuum sealed box, the rabbit will die, thereby indicating the *internality* of relations. Insofar as the rabbit can only live in and through its relations to the earth, the argument runs, relations must ontologically be internal. Yet this conflates distinct issues. The rabbit clearly changes (significantly and unfortunately) when it is placed in the vacuum. Yet does the rabbit cease to *exist?* No. The rabbit loses a quality or set of qualities (being alive) yet still exists. What is conflated here are the *qualities* of the rabbit and the rabbit in its *existence*. The rabbit, of course, can be destroyed as in those instances where it is torn to pieces or explodes. And these qualities or phases through which the rabbit passes will, in many respects, be a function of the *external* relations into which the rabbit as a rabbit. If we hold that being is difference and thereby affirm the existence of individual substances, then the externality of relations necessarily follows as a consequence.

Immanence or flat ontology requires a concept capable of thinking all three of these conditions together and at once. It is precisely this that Deleuze

²¹ For a compelling critique of relationism, see Graham Harman, Prince of Networks, 124-134.

²² Gilles Deleuze and Claire Parnet, *Dialogues*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Columbia University Press, 1987).

provides with his concept of "multiplicity." Here I will not follow Deleuze in all the claims he makes about multiplicities, but will instead attend to those features of multiplicity most significant for flat ontology and onticology. Introducing the concept of multiplicity in one of his earlier works, Deleuze will write that,

A very important aspect of the notion of multiplicity is the way in which it is distinguished from a theory of the One and the Multiple. The notion of multiplicity saves us from thinking in terms of "One and Multiple." There are many theories in philosophy that combine the one and the multiple. They share the characteristic of claiming to reconstruct the real with general ideals . . . we are told that the One is already multiple, that being passes into nonbeing and produces becoming. . . . To Bergson, it seems that in this type of *dialectical* method, one begins with concepts that, like baggy clothes, are much too big. The One in general, the multiple in general, nonbeing in general. . . . In such cases the real is recomposed with abstracts; but of what use is a dialectic that believes itself to be reunited with the real when it compensates for the inadequacy of a concept that is too broad or too general by invoking the opposite concept, which is no less broad and general?²³

A multiplicity—and here it should be noted that it is used as a substantive or noun is not a unity of the One and the Many, but is rather a "heterosynthesis," an assemblage, of the many as such. A multiplicity is an organization of the heterogeneous, of different individuals and thereby consists of these discrete individuals plus their external relations to one another. "Multiplicity must not designate a combination of the many and the one, but rather an organization belonging to the many as such, which has no need whatsoever of unity in order to form a system."24 There is no unity in a multiplicity over and above these relations among the many, but rather these external relations between the many just are the multiplicity. A multiplicity is thus an organization that belongs to the many such that the terms or individuals that compose this organization retain their independence or the exteriority of their relations. Here there is no supplemental term that overdetermines the multiplicity by subsuming it under a concept, form, or essence, nor is being a milieu or transcendent medium in which substances inhere. Being just is these assemblages. Here the *plural* must be emphasized; for being is not a milieu over and above these assemblages, nor is there an assemblage of all assemblages, but rather there is a field of ever shifting and changing assemblages or multiplicities, a plurality of assemblages or multiplicities, where beings now relate, now separate, without being as such being anything other than these dynamics of separation and relation. Here, for example, we encounter the secret of Deleuze's critique of Leibniz's concept of

²³ Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1991), 43-44.

²⁴Gilles Deleuze, *Difference and Repetition*, 182.

compossibility and defense of being as a field of incompossibilities or beings and assemblages that endlessly diverge from another forming something like a Borgesian drama.

Everywhere Deleuze will emphasize the heterogeneity that composes these assemblages or multiplicities that constitute being. With Guattari he will write:

Contagion, epidemic, involves terms that are entirely heterogeneous: for example, a human being, an animal, and a bacterium, a virus, a molecule, a microorganism. Or in the case of the truffle, a tree, a fly, and a pig. These combinations are neither genetic nor structural; they are interkingdoms, unnatural participations. That is the only way Nature operates—against itself.²⁵

Except there is nothing unnatural about these couplings. There is only Nature or Being. As Deleuze and Guattari will elsewhere remark, "there is no such thing as either man or nature . . . only a process that produces the one within the other and couples the machines together."²⁶ In a multiplicity such as the one Deleuze and Guattari describe in the case of contagion or epidemic, there is a heterogeneity of different types of entities without any of these entities such as human beings serving a prime directing role. Rather, the states of the assemblage are a product of interactions of all these entities with one another in the assemblage.

Within flat ontology or immanence there are only assemblages composed of heterogeneous terms on equal ontological footing. There is no Subject, nor an Object that is opposed to a Subject. There is no Culture opposed to Nature or Nature opposed to Culture. Hence, an "assemblage, in its multiplicity, necessarily acts on semiotic flows, material flows, and social flows simultaneously....

There is no longer a tripartite division between a field of reality (the world) and a field of representation . . . and a field of subjectivity. Rather, an assemblage establishes connections between certain multiplicities drawn from each of these orders."²⁷ While there will be many assemblages that do not involve human beings or culture whatsoever, there will never be human beings that stand apart from and above the many material things of the world. As a consequence, these three orders, in a flat ontology, will no longer be treated as opposed to one another or as constituting radically distinct domains of being but will, rather, all populate a single plane.

Heterology, Parity, and Alien Phenomenology

The ontology of flat ontology or immanence is therefore necessarily a "heterology" or an assemblage of heterogeneous entities. This entails a different

²⁵Gilles Deleuze and Félix Guattari, A Thousand Plateaus, 242.

²⁶ Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*, trans. Robert Hurley, Mark Seem, and Helen R. Lane (Minneapolis: University of Minnesota Press, 1983), 2.

²⁷ Gilles Deleuze and Félix Guattari, A Thousand Plateaus, 22-23.

way of posing questions and approaching the world. Much contemporary theory fixates on a single agency within an assemblage or multiplicity (usually humans, signifiers, power, society, or some other mind-culture agency) and uses this agency to explain everything else within the assemblage. This form of theory is premised on a hidden or disguised verticality. Within vertical humanist ontologies of this sort, nonhuman objects are reduced to *vehicles* of human intentions, purposes, signifiers, power, and so on. Nonhuman objects are seen as contributing nothing beyond their status as a carrier of, for example, human significations. To analyze a nonhuman object and the role it plays in an assemblage is thus, in this instance, to disclose the veiled human significations it embodies and transports.

As Latour has demonstrated, modernity is founded on a sharp split between the world of culture and the world of nature. Each of these domains is treated as being governed entirely by their own principles.²⁸ The world of culture is thereby governed entirely by meanings, human intentions, norms, signs, language, and values; while the world of nature is treated as being governed entirely by physical and mechanical causality. Within what Latour calls "the modernist constitution" the two domains or kingdoms are never supposed to cross. Good social and cultural analysis will never refer to natural entities, but only ever human intentions, meanings, concepts, values, norms, ideologies, signs, and signifiers. When it does speak of nonhuman objects it will only be as texts carrying human significations, intentions, norms, or purposes. Good natural science will never be contaminated by the cultural, but will only ever refer to mechanical causes.

We can see this constitution at the heart of most contemporary cultural studies. As Brian Massumi observes:

Ideological accounts of subject formation emphasize systemic structurings. The focus on the systemic had to be brought back down to earth in order to be able to integrate into the account the local cultural differences and the practices of resistance they may harbor. The concept of "positionality" has widely developed for this purpose. Signifying subject formation according to the dominant structure was often thought of in terms of "coding." Coding in turn came to be thought of in terms of positioning on a grid. The grid was conceived as an oppositional framework of culturally constructed significations: male versus female, black versus white, gay versus straight, and so on. A body corresponded to a "site" on the grid defined by an overlapping of one term from each pair.²⁹

²⁸ Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge: Harvard University Press, 1993).

²⁹ Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham: Duke University Press, 2002), 2.

While the details of the various theories might differ, what Massumi here outlines is more or less the basic theoretical schema—what Foucault might call the "episteme"—of contemporary cultural theory. In this particular model, the point is to show that identities such as being male or female, black or white, straight or gay, etc., are not *natural* but are effects of signifiers in a signifying system. In *The System of Objects*, Baudrillard, for example, will subject the various nonhuman objects that populate the world to a *semiological* analysis, treating them as texts containing hidden or disguised human significations.³⁰ Here nonhuman entities are only of interest as being implicit texts embodying human signs. They are not full-blown agents contributing differences of their *own qua* objects. They are, rather, reduced to being carriers of *another* agency: human signs.

Psychologists speak of a phenomenon known as "depersonalization" where patients are unable to recognize their own image in a mirror. The image issues from *them*, yet they do not recognize it as *their own*. The basic and dominant matrix of contemporary philosophy and cultural theory could be described by analogy as "critiques of *cultural* depersonalization." What these theoretical orientations strive to show again and again is how something we take to be a feature of the *world* in fact issues from *our* language, concepts, intentions, meanings, uses, and values. The nonhuman entities of the world thus function as a screen like a mirror, while that which appears in the screen issues from *us*. In coming to see that what appears in the screen issues from *us*, that what we hitherto took to be a property of *the things themselves* is really our own doing, we hopefully gain the power to take charge over these things and change them. The world, it turns out, is our mirror. We just didn't know it. Everywhere a crypto-idealism thereby reigns, even where people refer to themselves as materialists and realists.

My aim here is *not* to take up the opposing stance and suggest that determinations such as color and gender are "natural." Rather, what I wish to draw attention to is the manner in which these theoretical orientations implicitly advocate a unilateral view of causation, reinstituting a vertical ontology wherein nonhuman objects are but vehicles or carriers of human intentions, meanings, significations, uses, and values. The world is treated as an alienated text. Causation here is unilateral. By contrast, the heteroverse of flat ontology and a logic of multiplicities demands a multilateral understanding of causation where no one agency is determinative of an assemblage in the last instance. Here, in multiplicities, we have an organization proper to the many as such, where some agencies perhaps play a more dominant role than other entities, but where no agency has the power or capacity to reduce others to mere vehicles or carriers of the displaced agency of another entity. No entity passes through the medium of another entity without that entity contributing, no matter how small, a difference.

³⁰Jean Baudrillard, The System of Objects (New York: Verso, 2006).

In her work in developmental systems theory (DST),³¹ Susan Oyama refers to the principle behind this logic of multiplicities as "parity," and speaks of a "democracy of causes."³² Oyama's target is the manner in which biologists tend to talk about DNA as already containing all the information that presides over the development of the phenotype of the individual. Her point is not that DNA does not contribute to the form the phenotype of the individual will take, but that DNA is only one developmental factor or variable among others. Speaking in the context of Bertalanffy's open systems or multiplicities, Oyama writes that multiplicities "include dynamic interaction between many variables"³³ Oyama goes on to remark that these multiplicities involve "heterogeneous, interdependent causal factors both inside and outside the skin; the possibility of more or less (sometimes *much* more or *much* less) orderly processes without a preformed plan; and the emergence of structure and function from specific causal interactions among very specific conditions."34 As a consequence, it "should go without saying that there is no constructor"³⁵ where multiplicities are concerned, because there is no centralized agency presiding over the development of the individual that contains, as if in a reservoir, information providing a map of what the individual will come to be.

The key point here is that in multiplicities there is not one central agency presiding over the form a multiplicity will take at the level of its phenotype, but a variety of interacting factors. As Gottlieb, another biologist working in the DST tradition, puts it:

The main point of my review was to extend the normally occurring influences on genetic activity to the external environment, thereby further demonstrating that the genome is not encapsulated and is in fact a part of the organism's general developmental-physiological adaptation to environmental stresses and signals: Genes express themselves appropriately only in responding to internally and externally generated stimulation. Further, in this holistic view, while genes participate in the making of protein, protein is also subject to other influences, and protein must be further stimulated and elaborated to become part of the nervous system (or other systems) of the organism, so that genes operate at the lowest level of organismic organization and they do not, in and of themselves, produce finished traits or features of the organism. The

³¹ For an excellent discussion of developmental systems theory as well as its social and political implications, see John Protevi, *Political Affect: Connecting the Social and the Somatic* (Minneapolis: University of Minnesota Press, 2009).
³² Susan Oyama, "Terms in Tension: What Do You Do When All the Good Words are Taken?" in

³² Susan Oyama, "Terms in Tension: What Do You Do When All the Good Words are Taken?" in *Cycles of Contingency: Developmental Systems and Evolution*, eds. Susan Oyama, Paul E. Griffiths, and Russell D. Gray (Cambridge: The MIT Press, 2001), 182-184.

³³Ibid., 187.

³⁴Ibid., 188.

³⁵Ibid.

organism is a product of the genes as well as many other supragenetic influences.³⁶

The form the phenotype takes—what I call its "local manifestation"³⁷—is not precoded within the DNA of the organism, but results from the dynamic *interplay* of elements both within the organism and in the environment of the organism. Change those "extra-organismic" elements and you change the form that the local manifestation or phenotype takes. As Griffiths and Gray observe:

In multicellular organisms the parental generation typically contributes extracellular resources. An ant in a brood cell is exposed to a variety of chemical influences that lead it to develop as a worker, a queen or a soldier. A termite inherits a population of gut endosystembionts by coprophagy.³⁸

The individual organism will thus not be the basic unit of analysis, but rather the organism plus its environment constitutes the elementary unit of analysis. By varying the genes in a *fixed* laboratory environment, the laboratory geneticist believes he is discovering the genetic determinants of a trait in the individual's phenotype. In a sense he is right. However, what he misses is that the fixed elements of the environment also function as attractors that play a role in which genes and how these genes will be expressed. The laboratory geneticist thus falls prey to a sort of quasi-transcendental illusion where genes appear to be the determinants of development, as if they already contained information, by virtue of not attending to the fixed environment. By contrast, as Lewontin elsewhere notes, farm geneticists understand the importance of growing genetically *identical* test crops in a variety of different environments (different soil conditions, altitudes, temperature, etc.) precisely because these test-subjects manifest very different phenotypal traits in different environments.³⁹ The brand of seed that is then selected is not the one that grows most robustly, yielding the most fruit, but rather the one that displays the least variation across environments. The niche in which the organism develops will play a key role in the form or local manifestation that organism takes and this phenotype will vary depending on variations in the niche. Indeed, many organisms even construct their own niches as in the case of termites, ants, and humans, such that these niches are themselves units of evolutionary selection.40

³⁶ Gilbert Gottlieb, "A Developmental Psychobiological Systems View: Early Formulation and Current Status," in *Cycles of Contingency*, 47.

³⁷See Levi R. Bryant, *The Democracy of Objects*, chapter 3.

³⁸ Paul E. Griffiths and Russell D. Gray, "Darwinism and Developmental Systems," in *Cycles of Contingency*, 195.

³⁹ Richard C. Lewontin, "Gene, Organism and Environment: A New Introduction," in *Cycles of Contingency*, 55-56.

⁴⁰ For an analysis of the evolutionary inheritance of niches along with the role they play in local manifestations or phenotypal development, see Kim Sterelny, *Thought in a Hostile World: The Evolution of Human Cognition* (Maldan: Blackwell Publishing, 2003).

The need for parity explanation in multiplicities is not restricted to rarified debates about the role played by DNA in the development of phenotypes or local manifestations, but rather is present in all assemblages and at all levels of being. Let us take some examples from the world of human culture to illustrate this point. A standard analysis of the smart phone from the standpoint of vertical ontology would explain the existence of the smart phone in terms of a set of human goals and purposes, responding to a problem posed by humans. Humans wished to be capable of talking to one another anywhere and to be able to access the internet anywhere. Hence we designed the smart phone to solve these problems. Here the phone is reduced to a vehicle for human aims and purposes such that these goals and purposes precede the existence of the cell phone and are the prime agency or mover that brings the cell phone into existence. As in the case of DNA, the point is not that human goals and purposes do not play a role in the development of the smart phone, but rather that this mode of explanation is thoroughly unilateral, failing to account for the differences that a smart phone contributes to us independent of our goals and aims. The specific properties of the smart phone as a smart phone are treated as entirely secondary in this mode of vertical explanation. What differences does the smart phone qua smart phone and not qua vehicle of human uses contribute to us? In a logic of multiplicities we get a multilateral mode of analysis premised on parity or a democracy of causes where humans are certainly involved, but where they no longer play the central and determining role in the development of the cell phone. On the one hand, in this multilateral mode of investigation there is what I call the "endology" of the cell phone, mirroring the term "ecology." Where ecology refers to external relations an entity entertains with other entities in the world, endology refers to the interaction between internal relational elements composing an entity and the tensions they produce in the development of a thing. As engineers set out to design a smart phone they discover that existing technologies (cell phones, internet, memory chips, cell phone towers, cell phone screen interfaces, batteries, computer chips, etc) do not entirely mesh with one another. There are tensions between them. Battery life, for example, might be limited yet internet browsing requires a deep draw on energy. How do we mesh battery life and size with the demands of internet browsing in a device that fits easily in the hand? Bringing together these diverse technologies leads the engineers to encounter *unexpected* technological exigencies that play a role in the eventual form or local manifestation the smart phone takes once it is developed. New things are discovered. Innovations take place. These exigencies do not come from without, nor were they originally intended by the engineers, but in much the same way that a discussion, dialogue, or conversation traces an aleatory course by virtue of involving more than one participant, technologies have an autonomous endological development that cannot be reduced to dynamics of capital, human purposes, signs, or signifiers.⁴¹ Here we cannot clearly determine whether it's the exigencies of the technologies or the engineers that are calling the shots.

⁴¹ For something approaching an analysis of the endological development of technologies, see

On the other hand, there is also the ecological dimension of technologies. As Timothy Morton has argued, "ecology" does not refer to "nature," but rather to the manner in which things, human and otherwise, are imbricated with one another such that ecology is everywhere.⁴² Ecology is thus not the "over there" of a Nature apart from human beings and culture, but is the manner in which entities are entangled with one another in assemblages everywhere. Therefore, this ecological dimension will, in the case of smart phones, of course, include all sorts of human selective pressures that play a role in the form the phone takes. There will be the role that aesthetics or taste plays in the appearance of the phone, human biological and cognitive constraints such as how well the design meshes with the hand and ear, as well as how easy its interface is to navigate; there will be the dynamics of capital pertaining to the availability of material resources such as lithium needed for long lasting batteries, international relations pertaining to where these resources are located (lithium predominantly comes from China), what the market can bear in terms of demand and the ability of people to purchase these devices, and so on. In addition to this, symbolic values will come into play insofar as these devices will be markers of status where the aesthetics and appearance of the phone will encounter selective pressures in line with tastes corresponding to different social groups. The smart phone develops in an entire ecology of human social relations that play an important role in the form it eventually takes. There will also be the existence of other technologies exercising selective pressures on the phone. If, for example, the internet currently has only very limited existence, proliferation, and use within a society or multiplicity, the smart phone will have a difficult time gaining position within the assemblage because it meshes with a technology that is largely unavailable to most people.

However, in a logic of multiplicities it is important to, above all, recall that it is not simply smart phones that exist in an ecology defined by various anthropocentric determinations such as power, economy, language, meanings, and uses, but that *humans also exist in an ecology where smart phones exercise selective pressures on us.* As Kim Sterelny has taught us, we inherit the niches constructed by those that preceded us and those niches play a role in how we develop.⁴³ It is not simply that we *begin* with a set of *pre-existent* uses and then design the smart phone to solve the problem of these uses, but rather the smart phone begins to *change* our own goals and aims, our own ways of relating to one another, our social relations, and the very way we think, act, feel, and do things. I did not begin with the goal or project of checking my email hundreds of times a day, constantly texting with other people, constantly being available for communication with my colleagues, or twittering. Indeed, when I only had a cell phone, I barely carried it around at all. Yet with the appearance of the smart phone in my life, I now find that these activities are constants of my daily life. However, these activities are not just constants of my daily life, but are, in fact,

Bernard Stiegler, Technics and Time, 1: The Fault of Epimetheus, trans. Richard Beardsworth and George Collins (Standford: Stanford University Press, 1998), part 1, chapter 1.

⁴² Timothy Morton, *The Ecological Thought* (Cambridge: Harvard University Press, 2010).

⁴³ Kim Sterelny, *Thought in a Hostile World*, part 2, chapter 8.

requirements. As the saturation of smart phones in human culture increases, one becomes socially *required* to be this linked or wired in much the same way that one is required to have a wrist watch or some sort of time piece to function in the world today. Finally, with constant use, the very nature of my cognition becomes dependent on the ready accessibility of the information stored and available through my smart phone. As Andy Clark playfully suggests in the context of his laptop, losing his laptop was "the cyborg equivalent of a mild stroke."⁴⁴ My smart phone becomes an indispensible component of my thought or cognition, generating a new style of thought not previously available to me or other human beings.

As a feature of our ecology, we cannot clearly determine whether these aims come from *us* or the *smart phone*. These technologies change the very nature of our existence. Nor is this phenomenon restricted to society-changing technologies like smart phones and the Internet. As Jane Bennett notes, for example, food has a dramatic impact on how we think and behave as in the case of omega-3 fatty acids where "recent studies suggest that [omega-3] fat... can make prisoners less prone to violent acts, inattentive schoolchildren better able to focus, and bipolar persons less depressed."⁴⁵ Here we are the vehicles of these nutrients rather than the nutrients being a vehicle of our intentions and meanings.

If the logic of multiplicities required by flat ontology or immanence requires a democracy of causes, and if, as Susan Oyama argues, there is no centralized controller of multiplicities, it follows that we can no longer privilege human points of view in the unfolding and development of assemblages. Many assemblages will, of course, involve humans as components and contributors, yet there will never be centralized control. As a consequence, it becomes necessary to analyze assemblages in terms of what Karen Barad calls "entanglements," where we attend to the heterogeneous and mutually interacting components of assemblages without privileging any of these components.⁴⁶ As Latour remarks:

Action is a property of associated entities.... The chimp plus the sharp stick reach (not reaches) the banana. The attribution to one actor of the role of prime mover in no way weakens the necessity of a composition of forces to explain the action. It is by mistake, or unfairness, that our headlines read "Man flies," "Woman goes into outer space." Flying is a property of the whole association of entities that include airports and planes, launch pads and ticket counters. B-52s do not fly, the U.S. Air

⁴⁴ Andy Clark, Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence (New York: Oxford University Press, 2003), 10.

⁴⁵ Jane Bennett, Vibrant Matter: A Political Ecology of Things (Durham: Duke University Press, 2010), 41.

 ⁴⁶ See Karen Barad, Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning (Durham: Duke University Press, 2007).

Force Flies. Action is simply not a property of humans *but of an association of actants*.⁴⁷

Insofar as humans act in a multiplicity, we cannot treat agency as residing in them alone, but must rather see agency as distributed among the various entities involved in the assemblage or multiplicity.⁴⁸

However, parity does not end with recognizing the role that nonhumans such as smart phones play in the development or emergence of human aims. Rather, it requires us to develop what Ian Bogost has called an "alien phenomenology" where we take seriously the perspectives nonhuman agencies play in assemblages or multiplicities.⁴⁹ Richard Dawkins has taught us how to think about design without a designer or the existence of pre-established plans.⁵⁰ There is no reason to restrict these aleatory evolutionary or developmental processes to biological organisms, but rather they can be extended to technologies, institutions, practices, language, and so on. As a consequence, it becomes necessary to see humans as entangled in evolutionary trajectories or vectors that very much exceed and are at odds with our own aims or ends.

If we take the rather slapstick example of cows to illustrate this point, it is not enough to speak of humans domesticating cows, but insofar as humans belong to a multiplicity involving cows we must also speak of cows domesticating humans. What is required here is an alien phenomenology that is able to shift from the perspective of humans to cows. From the evolutionary standpoint, the aim of biological organisms is to reproduce. To do this cows need to minimize the impact of predators such as wolves while maximizing plains or grasslands to fatten up and render themselves desirable to their partners. Cows can be thought as enlisting humans in their aim of fighting predators and woodlands by "seducing" us with their taste and fat. As humans become more entangled in this bovine drama, selective pressures are exercised on human beings, such that our social relations change (we live differently to raise and cultivate livestock).⁵¹ Furthermore, as our diets became more dependent on beef,

⁴⁷ Bruno Latour, "A Collective of Humans and Nonhumans: Following Daedalus's Labyrinth," in *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge: Harvard University Press, 1999), 182.

⁴⁸ For a rigorous development of this distributed, extended mind thesis, see Andy Clark, *Supersizing the Mind: Embodiment, Action, and Cognitive Extension* (New York: Oxford University Press, 2011).

⁴⁹See Ian Bogost, *Alien Phenomenology* (Ann Arbor: Open Humanities Press, forthcoming).

⁵⁰ See Richard Dawkins, The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe Without Design (New York: W.W. Norton & Company, 1996).

⁵¹ For an excellent example of such an analysis, see Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W.W. Norton & Company, 1999). Among other things, Diamond shows how the shift from hunter gatherer society to agricultural society had a dramatic impact on both the nature of our social relations and our very genetics. On the one hand, agricultural society led to the development of distributed labor and hierarchical social systems insofar as we required many hands to work the fields and leaders to organize farming and storage of food. Farming also resulted in chronic famine as a result of poor yields and bad harvests. On the other hand, as a result of humans living in close proximity with livestock, epidemic diseases

those who had biological constitutions able to handle beefier diets were selected in human populations whereas those that did not perhaps had lower reproductive and survival possibilities. The point here is not that cows domesticated humans making human civilization what it is today, but rather that the trajectories of humans and cows are entangled with one another and that these vectors or trajectories might not be in line with one another. Thus, for example, humans have evolved in such way that we have a profound hunger for fat. In a society or assemblage where cows have come to dominate the food industry such that fatty beef is now ubiquitous in restaurants on every street corner, humans face a health crisis that arises from a biological drive to eat meat coupled with the ubiquitous availability of that meat. The massive reproduction of cows rendered possible through industrial farming benefits cows (recall that from an evolutionary point of view all that is important is whether genes are carried on or transmitted), yet this farming presents both a serious problem to both our climate and human health (not to mention the cruelty it exercises on our bovine friends). What is true here of bovines can be seen equally at the level of technologies, institutions, groups, language, ideas, and practices. Everywhere in multiplicities we see a variety of different vectors of development and entanglements, exceeding and involving humans, many of which might be at odds with our own aims. But so it is in a heteroverse characterized by immanence.

Ecological Enlightenment

In his essay "What is Enlightenment?" Kant remarked that

Enlightenment is the human being's emergence from his self-incurred minority. Minority is the inability to make use of one's own understanding without direction from another. This minority is *self-incurred* when its cause lies not in lack of understanding but in lack of resolution and courage to use it without direction from another. . . . Have courage to make use of your *own* understanding! is thus the motto of enlightenment.⁵²

For Kant, enlightenment entailed learning how to think for ourselves, to use our own reason, rather than relying on the word and commands of authority in the form of kings, church leaders, and sacred texts. Kant dreamt of a form of absolute autonomy where humans are purely self-directing independent of any

intensified due to evolutionary adaptations on the part of microorganisms and viruses in the animal world. These diseases, in their turn, exercised selective pressure on human evolution. One reason peoples in the Americas were so decimated by the diseases of the Europeans and not the reverse was that there were very few domesticatable animals in the Americas. As a result, the peoples of the Americas had not developed immunities comparable to those of Europeans, i.e., they had not been domesticated by microorganisms and livestock.

⁵² Immanuel Kant, "An Answer to the Question: What is Enlightenment?" in *Practical Philosophy*, trans. Mary J. Gregor (Cambridge: Cambridge University Press, 1996), 17.

outside or heterological determinants. To be free is to direct myself and to be completely directed by myself. A little over a hundred years later, Freud speaks of three blows to human narcissism: the Copernican which reveals that humans are no longer at the center of the universe, the Darwinian that reveals that humans are not distinct from animals or above animals, and the psychoanalytic that reveals a strange and alien agency within us that directs our actions behind our backs.⁵³ Immanence is a fourth blow to our narcissism in that it reveals that we are not sovereigns of being but are rather *among* beings. Much worse, immanence reveals that our autonomy is limited and that much of our action is heteronomously influenced by processes taking place in our bodies beneath the awareness of consciousness and as a result of entities outside us such as cell phones. In a world of multiplicities we find ourselves entangled in all sorts of agencies that capture us within a field of the aleatory that we cannot entirely master.

However, this limitation of mastery should not be seen as ringing the death knell of enlightenment. Rather, we must find it within us to envision a new type of enlightenment. Reason is of little value if it continues to harbor narcissistic fantasies of absolute autonomy borne out of ignorance of the manner in which we are entangled in multiplicities. If enlightenment consists in rising above our self-incurred immaturity, then part of this enlightenment must consist in taking the various agencies that populate the heteroverse seriously. This entails overcoming that way of viewing the world that sees it as a depersonalized mirror of our own intentions and learning how to think seriously about our entanglement with nonhuman agencies. Only once we begin to understand our entanglements and how heterogeneous agencies act with and against one another can we begin to engage in wise action with respect to the world in which we dwell.

⁵³ Sigmund Freud, "A Difficulty in Psycho-Analysis," in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 17, trans. James Strachey (London: Vintage Books, 2001), 139-141.