The Problem: The Theory of Ideas in Ancient Atomism and Gilles Deleuze

Ryan J. Johnson

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THE PROBLEM: THE THEORY OF IDEAS IN
ANCIENT ATOMISM AND GILLES DELEUZE

A Dissertation
Submitted to the McAnulty College & Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By
Ryan J. Johnson

May 2014
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Ryan J. Johnson

2014
THE PROBLEM: THE THEORY OF IDEAS IN
ANCIENT ATOMISM AND GILLES DELEUZE

By
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ABSTRACT

THE PROBLEM: THE THEORY OF IDEAS IN ANCIENT ATOMISM AND GILLES DELEUZE

By

Ryan J. Johnson

May 2014

Dissertation supervised by Dr. Daniel Selcer

Deleuze and Guattari famously defined philosophy as the “art of forming, inventing, and fabricating concepts.” This, however, is not the whole story of philosophy. For concepts, according to Deleuze, are formed or invented as solutions to problems. If concepts are the solutions to problems, then there is a philosophical task prior to the creation of concepts: the selection of true problems. The value of a philosophy is thus not located simply in the concepts it creates, but also in the problems that it selects. Deleuze values philosophies that focus on true problems and create interesting concepts. According to this criterion, one philosophy that Deleuze values particularly highly is Lucretian atomism. While Deleuze’s relationship to Lucretius has been almost completely ignored, De rerum natura homes in on at least one significant problem: to think of nature in the form of a problem. To be more exact, thinking of nature as a problem eventually sparks the emergence of thought itself as a product of the natural world. This insistence on thinking the world under the form of a problem, I claim, is the site of the Deleuze-Lucretius encounter. It is through this encounter that the particular selection of
problems for philosophical and ethical thinking deployed in *De rerum natura* eventually came to reverberate through, and actually structure, many of Deleuze’s texts. I claim, in sum, that Lucretian atomism produced many essential features of Deleuzianism.
DEDICATION

I dedicate this work to my mother, Claudia Johnson. She is the best person I have ever met. I am lucky to be her son.
ACKNOWLEDGEMENT

I would like to acknowledge the advice and encouragement given to me throughout this project by my dissertation advisor, Dan Selcer. It was his hard work and tolerance that allowed this dissertation to assume its current form. I cannot thank him enough. I would also like to acknowledge the helpful contributions offered by the two other members of my dissertation committee, Kelly Arenson and John Protevi. In addition, I must thank and acknowledge the entire philosophy department at Duquesne University. My years on the bluff in Pittsburgh were among the best of my life. Finally, I would like to acknowledge the assistance of some of my fellow Dukes – Clancy Smith, Matt Lovett, and Jacob Greenstine – who looked over drafts of certain chapters and offered dangerously facetious advice.
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ABBREVIATIONS


WP Deleuze, Gilles and Félix Guattari. *What is Philosophy?* Translated by. Citations to this work will be accompanied by pagination to Deleuze, Gilles and Félix Guattari. *Qu’est-ce que la philosophie?* Paris: Les Éditions de Minuit, 1991.
Introduction: The problem and the minor tradition

Deleuze and Guattari famously defined philosophy as the “art of forming, inventing, and fabricating concepts” (WP, 2). This, however, is not the whole story of philosophy. Concepts, according to Deleuze, are formed or invented as solutions to problems (WP, 80). If concepts are the solutions to problems, then there is a philosophical task prior to the creation of concepts: the selection of true problems. The value of a philosophy is thus not located simply in the concepts it creates, but also in the problems that it selects. Deleuze values philosophies that select true problems and create interesting concepts. According to this criterion, one philosophy that Deleuze values particularly highly is ancient atomism. While Deleuze’s relationship to atomism has been almost completely ignored, *De rerum natura*, the central text of this tradition, selects at least one significant problem: to think of nature in the form of a problem. To think of nature in a problematic form means that thought emerges out of nature. To be more exact, thinking of nature as a problem eventually sparks the emergence of thought itself as a product of the natural world. In this dissertation, we will argue that this attempt to think the natural world under the form of a problem is the conceptual site of Deleuze’s encounter with atomism. As we will demonstrate, it is through this encounter that the particular selection of problems for philosophical and ethical thinking deployed in *De rerum natura* eventually came to reverberate through and actually structure many of Deleuze’s texts. Our claim, in sum, is that ancient atomism produced many essential features of Deleuzian philosophy.

Our means for investigating this provocative encounter will be the Deleuzian theory of immanent problems or ideas. Deleuze characterizes ideas in many ways. In one sense, ideas are the problems structuring the world and the various actualized individuals of the natural world are the divergent solutions to these problems. In a more technical sense, ideas are the differentially
structured ontological fields of genetic relations and singularities that produce actual individuals in the world. While they are neither localizable in sensible intuition nor reducible to conceptual identity, Deleuzian ideas are not transcendent. Instead, they are genetic, differential, and immanent. In short, on Deleuze’s account, an idea is an immanent genetic condition for real (not merely possible) experience.

Chapter 4 of *Difference and Repetition* is where Deleuze most explicitly discusses his theory of ideas. The first example there is the atomic idea. As Deleuze construes it, the atomic idea articulates the problematic conditions (atoms and void) that are structured as a differential field (a collision of atoms) of singular points (the clinamen). The atomists, according to Deleuze, postulated the existence of atoms and void as their own formulation of an idea. “Ancient atomism,” Deleuze writes, “conceived of ideas as multiplicities of atoms, atoms being the objective elements of thought” (*DR*, 184).¹ As we will see, this is the formulation of the atomic problem: the production of the natural diversity of the world out of a non-totalizable infinite multiplicity of material particles that excludes mythological or transcendent forms and substances. The means for explaining this productive process is not to posit preexistent concepts that are supposed to explain natural things; for atomism does not take the natural states of things to be totalities or unities, as with a Whole or a One. Instead, atomism insists that the world is a multiplicity from top to bottom and from bottom to top. This is what Deleuze’s calls Lucretius’ *naturalism*. Naturalism speaks only of nature, rather than mythic gods or transcendent forms, and it does so by actively eliminating from philosophy any hint of transcendence, myth, or superstition that deprives nature of its positivity. Any philosophy that relies on Being, the One, or the Whole is not a naturalism, since it renders nature less real, secondary, or negative. In Deleuze’s naturalist reading of atomism, nature thus becomes an infinite sum that cannot be

---

¹ We will not follow Deleuze in his capitalization of the first letter of the word we translate into English as ‘Idea’ (*Idée*).
Naturalism, in short, takes nature alone as the object of speculative and practical philosophy, and it does so as a part of nature itself. The philosophical position of naturalism, then, is as also a natural product. Atomism is thus a naturalism because it affirms the full immanence and productive power of nature from within. We will also see how Deleuze himself also takes up this peculiar kind of naturalism.

Both Lucretius and Deleuze respond to previous thinkers through their naturalist philosophies. Deleuze frames the history of philosophy by dividing it into what he calls the major and minor traditions. On this account, the atomic and Deleuzian responses to the ‘major’ tradition are not simply instances of outright rejection but rather movements of inversion or reversion. For Deleuze, atomism is one of the earliest movements in the long history of what Nietzsche calls the “reversion or inversion of Platonism” (*LS*, 253). In this sense, the atomic project is a subversion or diversion of anti-naturalist or transcendent philosophies. It is a subversion in the sense that it is a turn (*vertere*) under (*sub*), that is, a turn to the dynamic movement of atoms ‘below’ the level of appearances. On the other hand, it is a diversion because it is a shift away from the mythic One or Whole and instead a turn to the diverse. As Deleuze puts it, atomism is a way of taking up of the task to “think the diverse as diverse… the production of diversity” (*LS*, 266). Similarly, Deleuzian thought is a reversion because it is a return to Kantian transcendental conditions yet it is a subversion because it transforms those conditions into genetic and differentially structured conditions.

It is clear that the philosophies of Lucretius and Deleuze share many characteristics: their insistence on multiplicity, their resistance to transcendent forms, their construal of nature as open-ended and nonlinear, their demonstrations of the being of becoming, their insistence on the importance of the concept of simulacra, etc. While these similarities are evident, this dissertation
will do more than merely gesture toward systematic analogies. Instead, the aim of this work is to explore the atomic idea as a provocative predecessor to Deleuze’s own theory of ideas. In short, atomism articulates the problem to which Deleuzianism is one response.

What we will see is that both atomism and Deleuze invert previous philosophers in that they refuse to simply think of ideas in terms of the empirically given or determinate identities. Instead, they take the generation of the world as a problem, that is, approach ideas as ways to think the production of the diversity of the given, including the production of thought itself. My claim is that atomism’s insistence on thinking of the diversity of nature as produced by the unending movement of multiplicities of atoms also produces Deleuze’s own thinking of the production of the world out of differentially structured fields. In short, they both think of ideas as problems. For Deleuze, this occurs by thinking of ideas in terms of difference and genesis; for atomism, this happens by thinking in terms of atoms and void.

Since this is primarily a story about Deleuze, we will focus on a critical examination of the ways in which his theory of immanent problems or ideas guides the functioning of these themes in Deleuze’s ontology as it is depicted mostly in Deleuze’s early solo texts, especially *Difference and Repetition* and *Logic of Sense*. We will then utilize atomism in order to flesh out this examination of Deleuze’s texts. As we will argue, they both share many of the same defining, concepts, arguments, and motivations. Consider the following parallel structure. For Lucretius, the immanent ontology offered in *De rerum natura* is a movement to the domain of atoms and void, a turn to the genetic conditions below the threshold of sensing and thinking; dispositional individuation is the emergence of individual bodies out of this atomic domain; the simulacrum is used to explain the production of thought out of the force of streams of effluences on sensory and cognitive organs; this all leads to an ethics of selecting those encounters that lead
to pleasure and the affirmation of nature. For Deleuze, the immanent ontology structured by ideas or problems is a movement to the virtual genetic conditions out of which the world is produced; the account of emergence and individuation is the process of actualization out of the virtual register; the simulacrum is a concept that sparks thought by a violent encounter with the being of the sensible; and joyful affirmation of the becoming of the world is what, following Hume, Spinoza, and Nietzsche, might be called an affirmative ethics. The point, though, is not merely to locate a general parallel in their respective accounts, but to show how atomism distributes a set of concepts that not only resonate with Deleuze’s texts but act as the genetic conditions for the emergence of Deleuzianism. Just as construing ideas as problems provokes thought in the Deleuzian theory of ideas, considering atoms, void, and the clinamen under the form of a problem is equally provocative of thought.

Motivating this claim, however, will not be easy. A quick glance throughout Deleuze’s texts – including his solo, historical, literary, artistic, and cinematic texts, as well as his collaborations with Guattari – does not reveal anywhere near as many references to Lucretius as it does, for example, to Spinoza, Kant, or Nietzsche. If Deleuze’s engagement with Lucretian atomism was so important, one might contend, then surely he would have written much more explicitly on the topic if not devoted a book-length study to Lucretius, as he was wont to do with philosophers he took as essential to his own work. Extended references to atomism and Lucretius are scant aside from the short article "Lucrèce et le naturalisme,” which first appeared in Études philosophiques in 1961 and was later reprinted in revised form as one of five appendices to Logic of Sense in 1969. In Logic of Sense, aside from this little essay there are a few references to atomism, and yet those that do occur are mainly comparisons with Stoicism. There are less than half a dozen references in Difference and Repetition. There are also a few mentions in A
Thousand Plateaus as well as Expressionism in Philosophy: Spinoza. Even fewer references are scattered through the rest of his oeuvre, and often merely take the form of the inclusion of the names of atomists in repeated lists: “Lucretius, Hume, Spinoza, and Nietzsche.” While Deleuze does not spend much time in direct engagement with ancient atomism, Deleuze does mention this ancient tradition either explicitly or implicitly in nearly all of his texts. Deleuze himself explicitly stated that he fantasized about writing something on ancient atomism. So, we contend that Deleuze’s encounter with this ancient tradition is extremely important to and defining of his own philosophy. It is thus the task of this dissertation to pull out the atomic influence from the margins and backgrounds of Deleuze’s work to the very front and center.

In the end, the telling the story of the Deleuze-atomism encounter leads to a fuller appreciation of all things Deleuzian. For ancient atomism is more than an influence or background condition for the possibility of Deleuzianism. It is, in short, a genetic condition for the production of Deleuzianism.

To begin this story, we should situate ancient atomism and Deleuze in terms of a particular philosophic lineage: the minor tradition.

The minor tradition

Whitehead once said that all of philosophy has been, generally, a series of footnotes to Plato and Aristotle. This position is perhaps most visually exemplified by Raphael’s famous painting The
School of Athens, in which the two undisputed main subjects – Plato and Aristotle – anchor the entire philosophical school captured in the scene. On the left, Plato is depicted as pointing up to the heavens, while on the right, Aristotle, his hand spread out and flattened, gestures downwards, toward the earth below. These two painterly gesticulations are supposed to orient the trajectory that defines the entirety of the landscape of philosophy.

Far off to the left of these two, a young Epicurus, one of the only figures in the picture actually smiling, turns the page of a book that rests atop a column. He is pictorially marginalized. He is a later figure in an alternative philosophical movement that runs contrary to or underneath these the Platonic and Aristotelian strands, and which has its primary seeds in two pre-Socratic Greeks: Leucippus and Democritus. These two early Greeks, left out of Raphael’s famous painting, formulated a set of concepts that eventually came to be characterized as ancient atomism. Unlike the upward and downward movements of Plato and Aristotle, Democritus is commonly depicted as gesticulating in another manner. One painting in particular, Diego Velázquez’s Democritus, shows the early Greek atomist not only laughing, like Epicurus, but also pointing at the globe.
Such a gesture signifies, perhaps, the affirmation of the atomic thesis that there is nothing more than “this world” – there is no form or telos before or beyond nature, but only atoms and void. Such a smile is the embodiment of a form of life filled with pleasure and humor, which Deleuze considers a “philosophical weapon against Socratic irony” (LS, 9). We thus see the painterly depiction of an affirmative and laughing philosopher embodying the results of atomism. For both atomism and Deleuze, such humor, such affirmation, and such pleasure are perhaps the defining ethical characteristics of this neglected tradition.

It is our contention that this atomic movement links up with and so is an extension of what Deleuze often calls “the minor tradition.” Deleuze deploys the concept of the “minor tradition” against a “major tradition” consisting of Plato, Aristotle, Aquinas, Descartes, Kant, Fichte, Hegel, Husserl, and Heidegger. The minor tradition, by contrast, follows a different lineage: Epicurus, the Stoics, Lucretius, Duns Scotus, Spinoza, Leibniz, Hume, Maimon,
Nietzsche, Bergson, and, presumably Deleuze himself. Deleuze’s move is to situate these proper names on a philosophical plane that transforms them into what Deleuze calls “conceptual personae.” The minor tradition is then a set of conceptual personae that all take up alternative or subverted stances toward some of the most important and contentious problems and questions in the history of philosophy. In this way, Deleuze takes up Democritus, Epicurus, Lucretius, etc. as some of his many “conceptual personae.”

The story this dissertation tells is essentially philosophical rather than historical. While we will clearly have to address the problems associated with making conceptual claims that connect one moment in historical time – classical Rome – to a very different one – mid- to late-twentieth century France – our emphasis will be on the philosophical significance of this trajectory. We will rely on one feature of Jay Lampert’s recent argument concerning Deleuze and Guattari’s philosophy of history: for Deleuze and Guattari, historical events are not sequential but co-existent. Rather than concerning ourselves with the chronological distance separating ancient atomism and Deleuze, we will focus on a coeval distribution of problems and arguments that have a purely conceptual relationship amongst them.

Deleuze insists on a distinction between doing the history of philosophy vs. becoming-philosophy. Deleuze openly admits that while the lives of the actual individuals Plato, Epicurus, Lucretius, etc. obviously follow the successive movement of historical time, when they are considered as conceptual personae operating in a flat philosophical space (what Deleuze would call a plane of immanence), they take on a different time or temporal order. In this way, philosophical time is a static time that does not follow simple successive orders of before and

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5 See Chapter 3 of *WP* for a complete account of conceptual personae.
7 Seeing history in this way is important because Deleuze himself admits that he was a part of a generation of French philosophers who were “bludgeoned to death with the history of philosophy” because it “play[ed] a patently repressive role in philosophy, it’s philosophy’s own version of the Oedipus complex.” Gilles Deleuze, *Negotiations*, trans. Martin Joughin (New York: Columbia University Press, 1990), 5.
after but “superimposes” before and after on coexistent planes that converge and diverge at different points (WP, 59). As Deleuze says, “Philosophy is becoming, not history; it is the coexistence of planes, not the succession of systems” (WP, 59). Seeing philosophical time as becoming, rather than historical, does not assume a final and completed picture of a thinker beforehand. By seeing Epicurus, Lucretius, and the other figures of the minor tradition as situated on the plane that is structured by the distribution of concepts, arguments, and positions from which his own thought emerges, Deleuze comes in contact with the plane on which ancient atomism is located. In short, since he is not doing the history of philosophy but becoming in philosophy, Deleuze engages in a becoming-atomic.

Situating concepts from chronologically diverse historical periods in such “an ideal space” allows various problems and questions to leap across formerly unbridgeable barriers so as to allow concepts to interact, spark each other to say something new, maybe mute and arrest a line of thought, often allowing various ideas to resonate and synthesize. The question of being a member of a minor tradition then has less to do with coming before or after in time and more to do with the various ways in which acknowledged and unacknowledged assumptions, stated and suppressed premises, obvious conclusions and unintended implications erupt when ancient atomism and Deleuzianism are brought together on a single plane. Doing philosophy in this way evades historical time and becomes “untimely” (DR, xxi).

But in what sense is the tradition to which Deleuze claims Lucretius and Epicurus belong “minor”? Is this language of minoritarianism merely another example of the use of unnecessary hyperbolic and metaphorical language? No. It is evident, for example, that many figures of the “major” tradition have deliberately tried to marginalize or even erase atomism from the

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8 Deleuze and Parnet, Dialogues, 16.
philosophical plane. Atomic texts have long been objects of great hatred. Take Diogenes Laertius’ possibly apocryphal story of Plato’s reaction to Democritus:

Aristoxenus, in his Historic Commentaries, says that Plato wished to burn all the writings of Democritus that he was able to collect; but that Amyclas and Cleinias, the Pythagoreans, prevented him, as it would do no good; for that copies of his books were already in many hands. And it is plain that that was the case; for Plato, who mentions nearly all the ancient philosophers, nowhere speaks of Democritus; not even in those passages where he has occasion to contradict his theories, evidently, because he said that if he did, he would be showing his disagreement with the best of all philosophers.

In the Roman republic, Lucretius’ contemporary Cicero wrote many highly critical assessments of Lucretius, Epicureanism, and atomism in general. The first book of De finibus, for example, depicts Cicero’s seemingly easy defeat of the central Epicurean arguments proposed by a rather hapless Roman atomist, Torquatus. At the end of the fourth century, St. Jerome famously circulated a biographical story about the madness and suicide of Lucretius. “Titus Lucretius,” he said, “was driven mad by a love potion, and when, during the intervals of his insanity, he had written a number of books, which were later emended by Cicero, he killed himself by his own hand in the forty-fourth year of his life. “ With the fall of the Roman Empire and the rise of the Christian church, almost all copies of De rerum natura disappeared. It remained lost for a very long time, not reappearing until its discovery in a German monastery by the great Italian book hunter Poggio Bracciolini in 1417. These are just of the few historical examples of how atomism, and especially Lucretius, has been forced into marginal or minor status. In this sense, the conceptual personae populating the minor tradition both “seemed to be part of the history of

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9 The irony, of course, is that much of what we know about Epicureanism comes from Cicero.
philosophy, but who escaped from it in one respect, or altogether.”\textsuperscript{12} So, while these minor figures were rejected by many major figures, they did contribute to the shaping of philosophy as a whole tradition, albeit in a minor or marginalized way.

Why is this minor tradition important to Deleuze studies? In short, if one wants to further develop or grasp some of the most significant features of Deleuze’s philosophy, then it is essential to turn back to these “minor” figures from the history of philosophy and examine the specific engagements Deleuze chose while developing a philosophy “under his own name.” In the past few years there have been wonderful accounts of many of these historical engagements, especially Deleuze’s engagement with modern and contemporary figures: Spinoza, Nietzsche, and Bergson are perhaps the most widely studied figures in this group. In order to more fully understand Deleuzian thought, it is thus necessary to move back further to the earliest members of this minor tradition, the atomists of Greece and Rome.

For some commentators, demonstrating similarities between two philosophers is sufficient for scholarship.\textsuperscript{13} For us, it is not enough to merely gesture toward similarities. The point, again, is to show how atomism produced, in a distinct sense, Deleuzianism. This is why it is no mere analogy. Instead, we will argue that the concepts and arguments that characterized, structured, and defined atomism, especially in its Lucretian form, have generated many of the main concepts and arguments operating in Deleuze’s writings.

This is a particularly Deleuzian point because, he says, “the genius of a philosophy must first be measured by the new distribution which it imposes on beings and concepts” (\textit{LS},

\textsuperscript{12} Deleuze and Parnet, \textit{Dialogues}, 15.

\textsuperscript{13} Joe Hughes’ explanation for writing texts about the Deleuze-Husserl relationship is almost contradictory and, given Deleuze’s disdain for analogies, strangely un-Deleuzian: “When Deleuze repeatedly describes his philosophy as a ’transcendental empiricism’ in \textit{Difference and Repetition}, he explicitly aligns himself with the general direction of Husserl’s late thought. He will in no way take up Husserl’s thought in any great detail – in part because it was not readily available – but we can outline some important similarities.” Joe Hughes, \textit{Difference and Repetition: A Reader’s Guide} (New York: Continuum International Publishing Company, 2009), 10.
6). For Deleuze, in order to appreciate the genius of atomic thought it is important to see how such a theory opens up a “new distribution” of potentialities for philosophical, political, and ethical thinking that eventually come to reverberate through, and actually structure, many of Deleuze’s texts. Evaluating atomism in terms of such a distribution helps clarify what we mean when we say that atomism produced important features of Deleuzianism. For now, we can say that the way in which atomism provided the genetic conditions for the emergence of elements of Deleuzian thought does not entail a single, direct line of descent. Instead, to say that atomism produced features of Deleuzianism means that atomism produced a number of concepts that Deleuze later took up and used in new and productive ways.

We can now clarify, maybe even sober up, one of Deleuze’s most well known yet overly sensationalized characterizations of doing the history of philosophy. He says, “I suppose the main way I coped with [doing the history of philosophy]… was to see the history of philosophy as a sort of buggery [enculage] or (it comes to the same thing) immaculate conception. I saw myself as taking an author from behind and giving him a child that would be his own offspring, yet monstrous.”14 While this imagery of “ass-fucking” seems shockingly melodramatic, it does have distinct textual basis. Rather than merely repeating some given identity without change in a dead repetition (what Deleuze’s calls a “bare” repetition), approaching the history of philosophy in the Deleuzian style means producing something new through a living repetition (Deleuze’s “clothed” repetition). This allows us to read the history of philosophy as an activity, practice, or operation that produces something new, extracts a difference through reading and rereading, and allows one to become an apprentice to philosophy. Or, as Deleuze

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14 Deleuze, Negotiations, 6.
says, the “history of philosophy, rather than repeating what a philosopher says, has to say what he must have taken for granted, what he didn’t say but is nonetheless present in what he did say.”

It is our goal to make sense of Deleuze’s ‘clothed repetition’ of ancient atomism.

The structure of the text

The chapter structure of this dissertation is a mix of both De rerum natura and Difference and Repetition. As De rerum natura begins with metaphysics, turns to physics and epistemology, and ends with a deployment of these findings in terms of the entire cosmos, this dissertation begins with Deleuze’s metaphysics of difference in terms of the theory of immanent ideas or problems, reads this theory into Lucretian metaphysics of atoms and void, turns to a physics of emergence and individuation before addressing questions of sensation and epistemology, and concludes with ethical questions about affirmation, joy, and pleasure. Its structure is thus a combination of both texts in that the actual chapter structure is similar to Difference and Repetition, and the content is closer to De rerum natura. In a sense, we will attempt to repeat De rerum natura from the perspective of Difference and Repetition. In the Deleuzian vocabulary, Chapter 1 will delve into the virtual register, or the plane of Deleuzian ideas; Chapter 2 will consider the virtuality of the atomic register; Chapter 3 will begin the process of actualization of the virtual register in terms of the processes of individuation in and of the world; Chapter 4 will continue this account of actualization but focus specifically on the emergence of sensation and thinking of an Epicurean subject; and Chapter 5 will take up this actualized subject and consider questions of ethics and practice. In different Deleuzian terms, the early chapters first articulate the definition of a problem, then locate the Lucretian-Deleuzian problematic, account for the

15 Ibid., 136.
emergence of solutions to this problem, and end with solutions that appear in the form of an
Epicurean subject acting and living in the Garden.

Chapter 1 offers an account of Deleuze’s theory of immanent problems or ideas. We
begin with Deleuze’s “Plato and the Simulacrum,” in which he claims that the motivation for the
development of the Platonic theory of ideas along with the essence/appearance distinction is
found in the development of a “method of division” that corresponds to transcendent ideas (LS,
253). Later, Kant developed his own theory of regulative ideas as a way of demonstrating the
illusory nature of the Platonist theory of transcendent ideas. Deleuze takes up the internal,
problematic, and objective unity that Kant gives to ideas, but rather than characterizing them as
unifying, totalizing, and conditioning, he sees them as multiple, differential, and genetic.
Following Maimon’s critique of Kant, Deleuze renders ideas ontological: ideas, Deleuze, writes,
“do not exist only in our heads but occur here and there in the constitution of an actual historical
world” (DR, 190). As multiplicities, ideas are the differentially structured distribution of genetic
relations and singularities that produce our world. Put differently, ideas are the problems of the
world, and the various actualized individuals we experience are the divergent solutions to these
problems. Put more technically, an idea is a structure that is neither opposed to difference (but
itself is differential) nor indifferent to genesis. Like Plato and Kant, three dimensions
characterize the Deleuzian idea. We call this the three-part problem-structure of ideas: the
elements are undetermined, but they are reciprocally determinable in terms of a differential
relation, and these reciprocal determinations include the determination of singularities. Unlike
the idea in Kant, an idea for Deleuze is not derived by tracing it from given experience, that is,
the idea is not what is empirically given or conceptually determined minus the modality of
reality. Instead, it is “virtual,” and we will explain what this modality means.
Chapter 2 turns to atomic metaphysics as it appears in De rerum natura, using Deleuze’s metaphysics as a way to construe atomism as a formulation of the atomic idea. The central focus of this chapter will be to show how the thinking of atoms and void influences Deleuze’s thinking of virtuality and genesis. We remain at the level of the virtual in this chapter, but this time look at the basic ontological principles of atomism and the immediate implications of such principles. Taking up the general theory of Deleuzian ideas articulated in Chapter 1, Chapter 2 applies it to the atomic idea. Rather than differential elements, differential relations, and singularities, the atomic idea is composed of atomic elements, atomic relations, and the clinamen. Chapter 2 is thus divided into three main sections, each one corresponding to a Lucretian articulation of a component of Deleuze’s theory of ideas. The atomists, we will argue, articulated the problematic conditions (atoms and void) that are structured as a differential field (collision of atoms) of singular points (clinamen). Considered as a response to problem of indivisibility, the atom is a problematic concept intimately linked to the concept of the infinitesimal. Turning to atomic relations, we will demonstrate how atomism responds to the problem of the one and the many with the atomic multiple. Next, we show how one of the conjunctive relations between atoms and void produces atomic motion. The final component of the atomic idea is the clinamen, which we will argue functions as an atomic singularity: the clinamen is that unassignable or non-localizable paradoxical element that determines the problematic distribution of atomic relations located on the plane of the atomic idea. With each component of the atomic idea in place, we will conclude by turning to the analogy between atoms and letters in order to develop an extended atomic grammar.

Chapter 3 will show how both these metaphysical accounts produce a physics of emergence and individuation. If Chapter 1 defined the Deleuzian idea as a problem that is
differentially structured and genetic, and if Chapter 2 continues this account through an analysis of basic atomic principles, then Chapter 3 argues that the processes of individuation that emerge from them are ways of solving of those problems. The idea is structured by means of singularities that distribute relations constituting the idea, and individuation is the actualization of those distributed relations in the form of extensities and qualities. For both Lucretius and Deleuze, the real individuals that populate the world of empirical experience are accounted for by means of the metaphysical picture of genetic conditions for real experience as it appears in Chapter 2. In Lucretian terms, this is the emergence of atomic assemblages out of the movement of atoms and void. What emerge are not simply more atoms but the unlimited variety of colors, sights, sounds, etc. that characterizes the qualitative world of actualized individuals. The differences between our phenomenal world of identities, resemblances, and extensities and the atomic world allow us to stress the non-resemblance between the conditions that produced our world and the conditioned world that we so easily recognize. We turn to Deleuze to see how the process of individuation produces extensities and qualities that cover up the differential structures that act as genetic conditions producing them. The key to this process, we argue, is that the problematic status of the atomic idea is simultaneously transcendent and immanent. The solution never completely resolves the problem, such that the problem is transcendent to the solution; and yet the very insolvability of the problem holds because the problem insists in the given solution.

Chapter 4 turns to the difficult questions of thought, consciousness and subjectivity. While both Lucretius and Deleuze certainly think that minds, consciousness, subjectivity, etc. are real, they argue that they are the products of dynamic processes actualizing virtual ideas. That is, rather than assuming that there is a pre-existent subject, they delve into the ways the subject
emerges out of the natural world. The task of this chapter is to how atomism and Deleuze account for the production of a thinking and conscious being (a subject). To show this, we will look at Lucretius’ account of the emergence of thought through the encounter with simulacra in perception, and then turn to Deleuze’s similar story of the violent, seemingly paradoxical, encounter with the being of the sensible and its relation to thought. We will then see how the idea does not lead thought into a process of imitation or aspiration for ideality or perfection, but engenders a process of learning. The central atomic feature of this process of learning is the role of the simulacrum in sensation. Out of this affective encounter with simulacra, thought erupts and learning occurs. The process of learning involves an encounter with problems that do not make us merely re-confirm what we already think, feel, believe, and opine, but disrupts our thoughts, feelings, beliefs, and opinions. We are forced to confront something nonsensical and to make sense of it. Deleuze calls this process of reaching the problematic conditions an “apprenticeship” (DR, 166). The production of thought and knowledge is then another instance of actualization, albeit this time the result is thinking.

Chapter 5 articulates an Epicurean-Deleuzian ethics as the affirmation of an immanent naturalism. This chapter is where we will link ancient atomism to Deleuze by means of what Deleuze calls a “great tradition” in ethics, which follows is “a secret link between Lucretius, Hume, Spinoza, and Nietzsche.”16 To demonstrate this, we will use Deleuze’s formulation of the Nietzschean method of symptomatology in order to conceptualize the Epicurean cure for the sickness he saw spreading through his own people. The Epicurean symptomatology has three parts that teach us how to eliminate empty desires, false beliefs, and painful forms of life in order to cultivate necessary and natural desires, true beliefs, and pleasure-filled forms of life. The findings of this atomic symptomatology lead to a concept of Epicurean health. Health, for

16 Ibid., 6.
Epicurus, is a life of true pleasure, and we will present an interpretation of Epicurus’ notoriously difficult concept of pleasure, claiming that from a Deleuzian standpoint, it lies beyond the standard pleasure-pain opposition. This will allow us to return to the concept of the atomic idea as it operates in nature. Atomism, for Deleuze, takes nature to be the object shared by both a speculative and a practical philosophy, and so is a fully affirmative naturalism. In this way, Epicureanism exchanged morality for symptomatology, love of truth for love of health, and religious myths for natural explanation. As a good symptomatology, then, Deleuze’s Epicureanism is utterly specific: it locates a specific disease in a particular circumstance according to an individual mode of existence. As we will show, for the Epicureans, a mode of existence or form of life is defined by means of its capacity for affecting and being affected, not in some possible world but in terms of natural occurrences at each moment. The point is not to determine universal norms or general foundations for such evaluations but to discover the conditions under which natural and necessary desires, true beliefs, and novel modes of existence are made possible. In order to grasp the force behind these modes of existence, it is necessary to turn to the atomic idea that genetically conditions them. Deleuzian-atomic ethics, we conclude, is an immanent theory that links up directly with the problems or ideas we saw in operation in metaphysics, physics, and epistemology or sensation. In this way, we argue that Deleuze’s atomism is a thoroughgoing and affirmative naturalism.
Chapter 1: Deleuze and the adventure of ideas

Introduction to problematics

To begin this story of the Deleuze-Lucretius encounter we turn to the main concept that guides the whole project: Deleuze’s theory of immanent ideas. For Deleuze, ideas are problems, and the task of this first chapter is to define what exactly Deleuze means by the *problem*. Since a philosophical theory, Deleuze argues, is basically a developed response to a selected problem, the first task of any philosophical theory is to select its constituting problem. Once we see the specific sense that Deleuze attaches to the problem, we can then develop the basic structure of Deleuzian ideas. This structure, which we call the problem-structure, has three parts. This chapter will articulate the three-part structure of the problem as it operates in the three most important theorists of ideas: Plato, Kant, and Deleuze.

Each section of what follows is dedicated to an analysis of the respective theories of the problem in Plato, Kant, and Deleuze. We begin with Plato. According to Deleuze, Plato developed the theory of ideas as a method for selecting from among people who all claim to be the true lover of wisdom, that is, the true philosopher. This very method of selection, however, ends up destabilizing and inverting itself. For, Deleuze argues, Plato is the first philosopher to invert Platonism. In the end, Deleuze extracts from Plato’s theory of transcendent ideas the basic distribution of a three-part problem-structure. The second section will do the same to Kant, whose theory of regulative ideas appropriates and transforms Plato’s account. Kant’s improvement on Plato, according to Deleuze, is to make explicit the problematic nature of ideas. Ideas, for Kant, are like horizons that guide the understanding in its ordering of nature. Kant’s critical move is to distinguish between the illegitimate or transcendent and legitimate or immanent uses of ideas in the ordering of nature. Kantian ideas are legitimately employed when
they have a merely regulative, rather than constitutive, role. In addition, Kant will determine the three-part structure of ideas even more distinctly than Plato. While Deleuze certainly appreciates Kant’s insistence on the immanent nature of ideas, he thinks that Kant does not pursue this insistence on immanence far enough. In pursuit of this immanent nature of ideas, the third and final part of the chapter will turn to Deleuze’s own theory of ideas, where we will articulate his own account of the three components of the problem-structure. These three components take their inspiration not only from Plato and Kant but also from modern and contemporary mathematics. We will close this account of Deleuzian ideas by showing how Deleuze appropriates and translates the concept of multiplicity from mathematics to ontology. At this point, we will have a fully developed account of Deleuze’s theory of immanent ideas, and chapter two will translate this three-part problem-structure of Deleuzian ideas into ancient atomism. So, while this first chapter tells the story of Deleuzian ideas, the next chapter will tell the story of the atomic idea.

The priority of the problem

Deleuze continually insists that a philosophy is constituted by the problems it selects and the question it develops in response to those problems. “A philosophical theory,” Deleuze says, “is a developed question, and nothing else. By itself, in itself, it consists not in resolving a problem, but in developing to its limit the necessary implications of a formulated question.”17 This means that a philosophical theory, in order to be what it is, is constituted by a problem. Everything about a theory is always in contact with the problem. When reading a philosophical text, then, if one loses sight of the problem constituting a theory, the theory is either misunderstood or erased.

For the order and nature of the elements of the theory is such due to the constitutive power of the problem. A theory is thus subordinated to a problem. Given this priority of the selected problem, the theory, as a set of responses, never fully resolves the problem. This renders the character and nature of that theory also problematic. For the insistence on the necessity of the problem means that the problem conditions everything that follows from it. This is perhaps the first strategy of a Deleuzian engagement with the theory of atomism: to locate the problem it selected and show how things would not be what they are if the question were not posed in that way. For Deleuze insists, “there is no critique of solutions, only a critique of problems.”

One of the major reasons for this prioritization is that problems themselves are not simply ready-made, but must be created. For the very task of selecting a problem is itself creative. One does not discover problems; one creates them. Problems do not just appear out of nowhere, as if created ex nihilo, but must be produced in some particular set of conditions. This does not mean that there is a set of pre-determined problems that, say, Plato or Lucretius simply choose. For selecting a problem determines the problem. This is why what Deleuze admires most about a Plato or Lucretius is the ability to recognize and exploit the “constitutive power” of those selected problems beyond merely offering true or false solutions. As Deleuze says, “while it is relatively easy to define the true and the false in relation to solutions whose problems are already stated, it is much more difficult to say what the true and false consist of when they are applied directly to problems themselves.” For Deleuze, Plato and Lucretius were great philosophers not just because of the philosophical theories they developed, but also, perhaps more importantly, because of the problems they selected. The reason why Deleuze favors Lucretius more than

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18 Ibid. 16-7. We will turn to the role of solutions or actualizations in later chapters.
19 Ibid. 16. What accounts for a philosopher, artist, or scientist’s, affinity with one problem or another, or the actual reasons why someone selects this problem rather than that one, remains, for Deleuze, one of the great mysteries of thought.
Plato is because, like him, Lucretius is “connected to problems that aim at seeking the means to do away with the system of judgment, and to replace it with something else.” That is, Lucretius does not only focus on judging what is true and what is false, but actually tries to account for the production of the true and the false. As we will see in a moment, Plato selects a problem that seeks to judge true from false claimants on truth and wisdom. By contrast, Lucretian atomism, I will soon argue, does not only seek to judge the truth from the false, but instead selects a problem that aims to develop an ontological structure that generates the world and all its individual inhabitants without recourse to judgment, whether or not they are true or false. We will call that ontological structure the atomic idea.

Since one of our central arguments involves showing how the Deleuzian prioritization of the problem also operates in Lucretius, we can now make at least one remark on that topic. The main reason for using this language of problems to characterize a story about the Deleuze-Lucretius encounter is the essentially genetic or productive nature of both philosophies. For problems, as we said, have a “constitutive power,” a power to produce the world. Problems do not stay the same, but evolve and change. Problems, in short, produce. To render the structure of the world problematic means to render it productive. This is something, I will argue, both Deleuze and Lucretius do. Lucretius, like Deleuze, does not try to assume some ready made structure of the world to which everything must conform; nor does he postulate a final form (or set of forms) existing or subsisting beyond the world toward which everything is tending or striving. Instead, he argues for a particular conception of the structure of matter and then tries to produce the world out of this basic structure. Everything he says, every argument he makes, every individual that he experiences must emerge from the atomic ontological structure. To

claim that everything is the world is produced is to claim that the world is essentially problematic. The world is an open-ended set of divergent solutions to the main problem of atomism. This is the problem selected by atomism: to produce the natural order of things by means of the nature of things. In Deleuzian language, the atomic problem is the immanent production of the great diversity of the natural world out of what I will call the “atomic idea.” The Lucretian atomic world is thus problematic in that it is completely genetic or productive. The world that we see and experience, about which we think, and over which we argue is a set of differing solutions generated by the atomistic problem.

My claim is that the natural world, for Lucretius and Deleuze, is structured as a distribution of problems. As Deleuze says, “The ‘problematic’ is a state of the world, a dimension of the system, and even its horizon or its home” (DR, 280). The nature of things, the natura rerum, is the atomic problem, and the order of natural things is equally problematic. This means that nature is not structured in terms of a solution; it is not to comprehend nature to a final completed state of the world; it is not to consider the world imperfect because it has not yet, or will never be able to have, reached perfection; it is not to feel remorse or longing for unattainable ideals or lost origins. In short, the point is not to first seek a solution and then evaluate the problems in terms of the resolvability of the solution. Instead, the point is to address the problem on its own terms; the point is to affirm the endless production, creation, or becoming of this world and its solutions in the very state of becoming. The state of the world remains problematic, and this should not make us worry, cower in fear, or feel guilty, but to affirm it, to feel pleasure in it, to live joyfully because of it.

To see how this plays out, we must first tell the story of Deleuze’s theory of immanent ideas. In order to tell this story, we must turn to Plato and Kant, who offer two of the most
prominent theories of ideas in the history of philosophy. We will not, however, offer full analyses of these accounts, for such projects would take us far off course. Instead, we will focus only on those features of these theories that are directly relevant to the theory of ideas that Deleuze develops (mostly) in Chapter 4 of *Difference and Repetition*. These features are tied together by the tripartite structure of the problem. The first one to articulate this problem structure is Plato. We turn there now.

**Plato’s theory of transcendent ideas**

*The method of division*

Deleuze’s account of Plato’s theory of transcendent ideas has three parts. We begin with Deleuze’s, perhaps questionable, characterization of how and why Plato developed his theory. In essence, the theory emerged as a method for selecting from among rival claimants to the truth. As a way of grounding this method of selection, Plato develops the theory of the transcendent idea. This theory has a threefold structure: the quality that a particular thing possesses, the perfect ideal of that quality, and the particular thing that possesses that quality at some degree of removal. At the lowest degree of removal is the simulacrum. As we will see, Deleuze’s theory is both a reception and an inversion of Plato’s theory in that Deleuze takes up the three-part structure of ideas but replaces the ideal model with simulacrum. We now tell this story of Deleuze’s reception and inversion of Plato’s theory of transcendent ideas.

To see why Plato developed a theory of ideas, Deleuze focuses on the socio-political context in which this theory was formulated. This reveals the very motivation for the development of Platonic ideas. For the issue, at least on Deleuze’s characterization, is not a concern solely for the answers that Plato offers but on the problems that he takes up as his own.

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23 Plato, of course, does not actually use the Latin term ‘simulacrum,’ but the Greek φάντασμα (phantasma).
According to Deleuze, “the motive of the theory of ideas must be sought in a will to select and to choose” (LS, 253). Tracking down this motivation or seeing what led Plato to take up this problem allows Deleuze to engage the Platonic theory at the level of the problematic.

Again, Deleuze contends that the motivation for Plato’s distinction between falsity and truth or appearance and essence is found in the “will to select and choose,” a “method of division” (LS, 253). The purpose of this method is “to select lineages: to distinguish pretenders; to distinguish the pure from the impure” (LS, 253). Such a selective process was addressed at the many rivalries then populating the Athenian agora. As Dan Smith says, this Greek polis was an immanent arena of a community of citizens “who entered into agonistic relations of rivalry with other free men, exercising power and exerting claims for each other in a kind of generalized athleticism.”24 Such a game of rival claimants,25 Deleuze contends, was opposed to the community of imperial states, which imposed order through transcendent myths from above and beyond the citizens.

Each type of social and political state had respectively different images of a thinker. While the imperial states had wise men or sages who possessed wisdom, Athens popularized the image of the philosopher, the friend or lover of wisdom. “If we really want to say that philosophy originates with the Greeks,” Deleuze and Guattari write, “it is because the city [Athens], unlike the empire or state, invents the agon as the rule of a society of ‘friends,’ of the community of free men as rivals” (WP, 9). In each case, there is a relation to an essence, idea, or object of truth, but the imperial wise man is different from the philosopher in that the sage

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25 As Dan Smith notes, “the word ‘claimant’ translates the French prétendant, which can also mean ‘pretender,’ ‘suitor,’ or even ‘candidate’.” Its translation as ‘claimant’ emphasizes the relation of the prétendant to its pretention (‘claim’), but loses the connotations associated with the words ‘pretender’ and ‘pretentious,’ which are also present in the French.” See Dan Smith, Gilles Deleuze and the Philosophy of Difference: Toward a Transcendental Empiricism (Dissertation. University of Chicago, 1997), 22n20.
incontestably possesses wisdom, while the philosopher, since he does not possess it, can only lay claim to wisdom. Through this competition to be the “true friend” of wisdom, rivalries proliferated, and many of Plato’s dialogues depict agonistic encounters among such claimants. Deleuze cites the example of the Statesmen, a text that tries to determine who is the “true statesmen” amongst the various claimants. As that dialogue progresses, “merchants, farmers, millers and bakers…and gymnastic trainers too, and doctors” all stand forth and claim, “I am the true shepherd of men.”

In the midst of this fervent community of competing rivals each professing to be the real friend of truth, Plato created the idea as a criterion for adjudicating and selecting true friends of wisdom from imposters. For, Deleuze says, “if each citizen lays claim to something, then we need to be able to judge the validity of claims” (WP, 9). This is motivated Plato to establish a new type of transcendence, one that differs from the type of transcendence imposed by imperial states. Now, the rivals are making claims to something beyond the particular community. This is, according to Deleuze, the power and curse of Platonism: “the poisoned gift of Platonism is to have introduced transcendence into philosophy, to have given transcendence a plausible philosophical meaning.” The true friend is not a friend of a fellow man but a lover of an entity beyond, an essence or idea. The real lover (Phaedrus) or the true shepherd of men (Statesman) is the lover of Wisdom, or Truth, of the idea and not this or that man or herd. Such a formulation grounds the method of selection: the idea allows “the false friend to be distinguished from the true friend,” philosophers from sophists, impure matter from the pure concept, almost like the process of sifting for gold (WP, 9).

**Foundational Myths**

This selective doctrine, Deleuze argues, for sifting amongst rivals and suitors, however, is grounded in something else: myth. “Myth,” Deleuze writes, “is indeed the story of a foundation” (*LS*, 255). Myth is essential to this process of dividing and sorting true from false claimants because it provides a means for measuring the degree of participation. The *Statesman*, for example, tells the story of an archaic god who ruled men and the world. Only such a pure figure deserves the name of the statesman, the true king-shepherd of men. Once this mythic figure is established as the ideal, it is easy to institute a hierarchical ranking according to the degree of participation or resemblance. At the highest ranking is the archaic divine shepherd, and then comes “the true statesmen or the well-founded aspirer, then relative auxiliaries, and slaves, down to simulacra and counterfeits” (*LS*, 255-6). Once the concept of the idea was invented and then surrounded by myth, it becomes easy to distribute truer and more false claimants according to the degree to which they contemplate or participate in the idea. For “to participate in” means to be in relation to the foundation. The foundation itself is what participates most fully: the idea of Justice, not any particular just act, is what is truly just; the idea of Beauty, not particular beautiful things, is what is truly beautiful. Everything else can merely participate in the pure idea to a greater to lesser degree depending on how near or how far away something is from the foundation. “In short, an elective participation is the response to the problem of the method of selection” (*LS*, 225).

According to Deleuze, the way to conceptualize the degree of participation in the idea is according to an order of resemblance. If the idea is the highest degree of sameness, the only thing that is truly self-same or self-identical, then the claimants have some lesser degree of resemblance to this ideal sameness. While, for example, the idea of beauty, beauty itself, is pure
in that it is nothing but beauty, a claimant to beauty is impure in that it is not only beautiful but is also a man, and a son, and a merchant, etc. Even more, this resemblance is not simply external, but spiritual or internal: “the copy is judged in terms of a derived internal resemblance” (DR, 127). While external resemblance is when one thing looks like another, internal resemblance is when the thought of one thing is dependent on some other thought. Such resemblance is spiritual in that it is conceptual: a beautiful thing spiritually resembles a model insofar as the condition for the status of the thing as beautiful occurs in thought alone. Thinking of the difference between the copy and the model is thus subordinate to the thought of identity or resemblance. The idea is the means to sort out degrees of resemblance to the foundation, founded or unfounded claims to truth. The idea is the condition for thinkability, for thinking beautiful things as beautiful.

On the face of it, Deleuze’s attempt to map the structure of Plato’s account of ideas might sound strange, if not simply historically inaccurate. Deleuze, however, is not trying to paint a perfect picture of the historical situation surrounding the rise of Platonism, but instead to reveal what he thinks is the encounter with a problem that gives rise to the fully elaborated metaphysics and epistemology that we know as the Platonic Theory of Ideas. The point Deleuze wants us to see is that Plato’s genius lies not so much in this ‘theory’ as in his development of the notion of the ‘idea’ as a putative solution to a deliberately chosen problem: How can we adjudicate the agonistic struggle among rival claimants in order to reveal the true lover (the true statesman, the true rhetorician, the truly beautiful, etc.)? The Platonic solution is the “transcendent idea.” More specifically, it is the method of hierarchical ranking by degrees of resemblance to a pure, perfect, and transcendent original. Thus, while there are likely flaws in Deleuze’s account of the socio-historical context in which Plato articulated this solution, the point of appealing to that context was simply to show the specific way that Platonic ideas function as solutions to problems. This
allows Deleuze to isolate the structure of Plato’s solution and to begin to develop his own solution to a different but related problem. This structure has three parts, and this ternary structure will be essential to Deleuze’s own theory of ideas. I will first articulate this structure and then explain it in more detail.

Deleuze sums the main structure of Platonic ideas in this way: “[1] the quality possessed or to be possessed; [2] the idea that possesses it first, as unparticipable; [3] that which lays claim to the quality and can only possess it [at] second, third, or fourth” remove or not at all” (WP, 30).

Let us run through each part of that structure again, but a little bit more slowly. The first part is the quality that a finite thing is supposed to be or possess, such as being beautiful. This particular body, such as the body of Alcibiades, is beautiful insofar as it possesses the quality of beauty. A body is beautiful not perfectly but because it has a quality that participates in that perfect beauty. Alcibiades’ body does not possess the quality of beauty perfectly because it also possesses other qualities, such as being a certain size or color. The second part is beauty as idea, the perfect object that is only beautiful. The idea of beauty, beauty itself, does not possess beauty as a quality but is beauty and only beauty. It does not participate in beauty, but is the unparticipable in which other things participate. That is, beautiful things derive their quality of beauty insofar as they participate in or resemble the idea of beauty. Finally, the third part is that which lays claim to that quality of being beautiful. This is the particular beautiful thing, such as Alcibiades’ body. A particular thing can possess the quality of being beautiful at some degree of removal from the idea. Alcibiades’ body might, say, possess the quality of beauty at one degree of removal, and a painting of Alcibiades’ body might be beautiful at a second degree of removal. This scale of degrees of removal continues to third, fourth, fifth, etc. degrees, eventually reaching a point at which any hint of resemblance disappears. When all resemblance vanishes, when we are left with
a something that does not seem to resemble any original, we have reached the simulacrum. We turn to the simulacrum now.

*The invention of simulacra*

While Deleuze takes up the ternary structural distribution of Platonic ideas to develop his own position, he alters the terms of each of the three parts so that what results seems much closer to the simulacrum than the Platonic idea. This is why the Deleuzian theory of ideas is both a reception and an inversion of the Platonic theory of ideas. Let us look at three distinct ways in which Deleuze receives and inverts each of the three parts of the Platonic idea.

First characteristic. While the Platonic idea understands that a particular is beautiful insofar as it bears a degree of resemblance to the perfect idea of beauty (beauty itself), the Deleuzian story does not construe the relation between quality and idea in terms of resemblance. While Deleuze does construe ideas as ontological structures that account for the existence of real things, he does away with the logic of resemblance and identity. This is why the Deleuzian idea is closer to “an image without resemblance” (*LS*, 257).

Second characteristic. While the Platonic theory characterizes the idea or model as that which is highest degree of sameness or identity, Deleuze turns to a model of difference. There is no longer an originary element repeated in various imperfect ways, but simply a virtual object defined as essentially dissimilar, continuously differing from itself, always displaced and disguised. Deleuze’s theory replaces an ideal foundation with an “unfounding” (*effondement*). Third characteristic. Finally, while the Platonic theory of ideas selects true from false claimants based on degree of resemblance, the Deleuzian theory erases the very distinction between model and copy. Since there is no longer a self-identical model at the top of the hierarchy from which degree of resemblance can be measured,
the great chain of participation shatters. This is the move from resemblance to dissemblance, from emulation to simulation, from sameness to difference. Stripped of its identity, the idea collapses into a simulacrum. For the very distinction between the model and the copy is erased.

This is where Deleuze makes his most shocking claim. Strangely, Deleuze argues that the erasure of the model/copy distinction is not something he is forcing out of Plato’ writings, but is actually located within the texts themselves. Consider how strange this claim really is. Deleuze is arguing that it is Plato, not any of his sympathetic or antithetic followers, who is the first to invert Platonism. For Deleuze, Plato inverts himself. However shocking this might be, we should consider the argument Deleuze offers in support of this radical claim.

According to Deleuze, with the invention of the Platonic idea and the order of resemblance, Plato also invents the lowest or minimal degree of resemblance, that which does not resemble at all: the simulacrum. Just as there is the highest degree of resemblance to the idea, which is embodied by the character of the philosopher, there are third, fourth, and n\textsuperscript{th} degrees of resemblance, eventually dissolving resemblance into dissemblance. In the overall drama of the Platonic narrative, the character of the sophist embodies the concept of the simulacrum. The sophist or simulacral figure is at the lowest degree of resemblance to the idea because he is at the highest degree of remove from it. While the Statesman and the Phaedrus attempt to isolate the figure at the highest degree of resemblance, the true claimant, the Sophist does the opposite. The Sophist attempts to isolate the figure of the sophist, the lowest degree of resemblance, or highest degree of dissimilarity. This is how, Deleuze argues, Platonism “confronts sophism as its enemy, but also as its limit and its double: because he lays claim to anything and everything, there is the great risk that the sophist will scramble the selection and perfect the judgment.”

Thus, while the Phaedrus and Statesmen move up the hierarchy of resemblance toward that which is

\[^{28}\text{Ibid.}, 136.\]
perfectly selfsame, the idea, the *Sophist* moves or falls downward to that which is most self-differing, that whose being is just difference. Deleuze characterizes the movement upward as the employment of irony, and the movement downward as the turn to humor.

Following this humor downward, to the bottom of the hierarchy, Deleuze argues that the method of selection, the process of selecting the true from the false claimant, eventually reaches a point at which it falters and fails. For the “true sophist,” if that phrase even makes sense, is defined as the most false claimant, the highest pretender. The humorous descent toward the simulacrum is not simply one of degree of difference or resemblance to the original idea. For there is no foundation, at the bottom, that can measure truer and more false claimants to difference. As Deleuze says, “By dint of inquiring in the direction of the simulacrum, Plato discovers, in the flash of an instant as he leans over its abyss, that the simulacrum is not simply a false copy, but that it calls into question the very notion of the copy…and of the model” (*LS*, 294). In an almost Hegelian type argument, Deleuze argues that with the very instantiation of the hierarchy of degrees of resemblance there is also the grounds for its collapse. This is why Deleuze makes his shocking claim: Plato is “the first to indicate the direction for the overthrow of Platonism” (*LS*, 295). Plato, for Deleuze, is the first in the long history of the attempts to invert Platonism. This is also why Deleuze both receives and inverts the Platonic theory of ideas: while Plato defines the simulacrum in negative terms – a copy of a copy of a copy, etc., an infinitely corrupted copy – Deleuze shows how it is possible, at the bottom of the Platonic hierarchy, to find an affirmative definition.

In the end, Deleuze appropriates Plato’s theory of transcendent ideas by collapsing the Platonic hierarchy of being and raising simulacra to the surface. If the task of the philosophy of the future, modern philosophy, is what Nietzsche called the inversion of Platonism, this is
because, Deleuze says,

Modern philosophy is born of the failure of representation, of the loss of identities, and of the
discovery of all the forces that act under the representation of the identical. The modern world is
one of simulacra…All identities are only simulated, produced as an optical ‘effect’ by the more
profound game of difference and repetition (*DR*, xi).

In this way, the Deleuzian theory of ideas both receives and inverts the Platonic theory. It
receives the ternary structure, but it inverts the hierarchy, thereby prioritizing the figure of
difference, the simulacrum, and subordinating representation and identity. This is perhaps the
clearest difference between the two theories of ideas: for Platonism, identity and resemblance is
prior; for Deleuze, the priority is with difference and dissimilarity. In a different language, all
identity, resemblance, and sameness are a result of divergent processes of production out of
structure and genesis.

We have now seen how Deleuze characterizes the original motivation for the development
of the Platonic theory of ideas. According to Deleuze, given the democratic social and political
character of Athens, the theory of ideas developed as a method for selecting true from false
claimants on truth. This method was grounded in the myth of an ideal foundation. This is where
Plato articulated the ternary structure of the theory of ideas: the quality possessed, the perfect
idea of that quality, and that which lays claim to the quality but can only possess it at some
degree of removal. At the highest degree of removal, or at the lowest degree of resemblance, is
the simulacrum. Deleuze’s shocking claim is that at the very moment in which Plato asserts a
theory of ideas that is structured in terms of a hierarchy of resemblance that has a transcendent
identity at its peak, he also collapses that very hierarchy. For if the transcendent model is at the
top, the simulacrum is at the bottom. This is the site of Deleuze’s intervention: Deleuze raises the
simulacrum to the surface, thereby prioritizing the figure of difference or dissimilarity. The
whole Platonic theory is thus problematized. With the Platonic theory of transcendent ideas collapsed into such a problematic state, we can turn to the next theory of ideas: Kant’s theory of regulative ideas.

**Kant’s theory of regulative ideas**

*The appropriation of Platonic ideas*

Kant’s theory of regulative ideas is an explicit appropriation and reformulation of Plato’s theory of transcendent ideas. As we will see now, Kant brings the problematic nature of ideas to the fore by demonstrating the organizing role ideas play in the logical use of reason and in the organization and unification of the different acts of the understanding. This allows us to locate what Deleuze will identify as the three-part problem-structure of Kantian ideas: undetermined, determinable, and bearing determination. First, the idea remains *undetermined*. This indetermination, we will see, is not an imperfection, but is an objective and positive structure that orients experience. Second, ideas are indirectly *determined* insofar as they act as regulative principles for producing objective knowledge. Finally, the object of the idea contains a complete infinite *determination* in that the concepts of the understanding address more and more differences based on the drive toward completing an incompletable series. These three aspects of Kantian ideas correspond to the three great horizons of dogmatic metaphysics: Self, World, and God. The most important element of the Deleuze-Kant relationship is their shared insistence on the immanent usage of these three ideas. Ideas are legitimately employed when the Self, World, and God are not taken as transcendent givens but as immanent problems. In the end, while Deleuze appreciates Kant’s insistence on the immanent and problematic rendering of ideas, he argues that Kant does not insist strongly enough. In the final section of the chapter, we will see
that Deleuze, like Kant, both appropriates and reformulates the Kantian ideas into Deleuzian ideas. For now, we turn to the Kantian theory of regulative ideas.

To begin, we should see what Kant takes himself to be doing in his relation to Plato. Kant is not shy in his explicit appropriation of Plato. In the opening to the “Transcendental Dialectic” in his *Critique of Pure Reason*, Kant explains that he takes up Plato’s concept of the idea rather than developing his own vocabulary because he engaging the same problem Plato did. Like Deleuze’s transformative reception of Plato’s theory of ideas, Kant’s appropriation is also not a bare reception. For one, Kant more explicitly characterizes his own theory of ideas as a theory of problems. In Kant’s words, “transcendental ideas…are not arbitrarily invented, but given as problems by the nature of reason itself” (*CPR*, A327/B384). For Kant, ideas are problematic. So, while he appropriates Plato’s language, Kant highlights that his theory of ideas sees them as problems. For Kant, this appropriation and reformulation of Platonism is, in fact, an important hermeneutic strategy. As he famously states, “it is not at all unusual to find that we understand [an author] better than he understood himself, since he may not have determined his concept sufficiently” (*CPR*, A314/B370). In this way, Kant is perhaps not really transforming the theory of ideas into a theory of problems but simply making the already problematic nature of Plato’s theory more explicit. As Kant reads it, Plato’s theory is already a theory of problems, even if he is not himself aware of it.

We can now say how Kant arrived at the thought of the idea. It is easy to assume that Kant’s theory of ideas is the primary component of his account of reason. According to Deleuze, however, Kant does not initially define reason in terms of special concepts called ideas (*LS*, 294). Instead, Kant initially calls attention to the logical use of reason, that is, reason’s role in syllogisms. This logical role is intended to orient the effective application of the understanding in
its ordering of the empirical world. The syllogism plays this role in that it seeks for the complete condition for an empirical concept.

In a syllogism, reason takes up an empirical concept, that is, some concept that can be derived from experience, and thereby seeks another concept beyond that empirically derived one. That first empirical concept then acts as the condition for the application of another concept. It is possible, for example, based only on experience of the world, to apply the concept ‘mortal’ to a particular man. This leads to the conclusion of the famous syllogism: Socrates a mortal. Reason, though, does not simply stop with that conclusion, but goes further. It seeks the full extension of the application of that concept beyond its particular application. That is, reason tries to extend that particular application to the entirety of the category “man.” In our example, reason tries to determine that “all men are mortal.” Reason has thus sought to complete its comprehension of the world by extending the particular application of an empirical concept to the entirety of a category. In short, reason seeks to find the unconditioned condition for the mind’s conceptual ordering of the empirical world. Kant says as much: “the proper principle of reason in general (in its logical use) is to find the unconditioned for conditioned cognitions of the understanding, with which its unity will be completed” (CPR, A307/B364). In itself, this logical usage of reason is not a problem. The problem arises when the understanding makes use of the non-empirical and a priori categories in a similar fashion. As in its logical usage, reason takes as its object a category and seeks a concept beyond the categories that acts as their condition. When this happens, Deleuze says, reason is “forced to invent supra-conditioning notions, which we will call ‘ideas’” (LS, 295). That is, reason seeks to find the unconditioned for the conditioned categories of pure thought. Since categories apply to all objects of possible experience, reason is forced to seek the unconditioned beyond all possible experience that conditions empirical experience. This is what
Kant means by the problematic use of reason.

This is the main reason why Kant characterizes ideas as problematic. Kant often thinks of an idea as an irresolvable problem, as a “problem without solution” (CPR, A328/B385). For him, the two terms are synonymous: ideas are problems and problems are ideas (CPR, A417/B445n). By that, he does not mean that ideas are necessarily false problems. On the contrary, Kant is saying that ideas are problematic insofar as they do not disappear in their solutions. As Deleuze puts it, ideas are the “indispensable condition without which no solution would ever exist” (DR, 162). If problems could be dissolved into their solutions, then they would simply be the inverted image of the solution. For Kant, however, problems are not simply the inverted side of solutions or negative statements, but objective structures or systems. True problems are never solved. They are unsolvable yet demand a solution in response (CPR, A482/B510). The problem or idea produces various and divergent solutions, none of which are final. This is why one of the main goals of the Critique of Pure Reason is to demonstrate how reason produces illusions by engaging in the pursuit of problems to which there is no complete answer (CPR, Axiiri). The problem is never closed, or at least we, as finite rational creatures, are not able to close the problem. For our very finitude means that we are only justified in making claims about things that fall within the bounds of possible experience. The point is that ideas have an objective organization of their own that is not reducible to a particular solution or response, that is not resolved into the various solutions that appear in our experience of the world. This very irresolvability is what allows the various solutions to be truly creative.

In addition to its logical use in syllogisms, reason has another, possibly more important, role in human experience. In short, the unity of the diverse forms of the employment of the understanding is a problem that reason takes up. In themselves, the different acts of the
understanding can only hold sway over unconnected operations. If the understanding were not oriented by these irresolvable problems, it would, Deleuze says, “obtain answers or results here and there, but these would never constitute a solution” (DR, 168). That is, these diverse acts would find local results, but these results would never be harmonized or centralized, but remain merely local and disconnected with each other. Without problems, these diverse and localized acts of understanding would lack a systematic unity that ties all acts of the understanding together. The most that the understanding can hope to achieve in its attempt to bring together its diverse acts is, Kant says, a “distributive unity” (CPR, A644/B672). In itself, it can never achieve a “collective unity” (CPR, A583/B611). This is the important point: Kant’s theory of ideas does not cut off problems from solutions, but allows solutions to be truly creative in that they are novel actualizations of the problematic field. If solutions resolved problems completely, then the solutions would not be creative at all, but mere repetitions of the same. The reason for this creative power is due to the lack of resemblance between problem and solution, between condition and conditioned. This is another difference between Plato and Kant’s respective theories of ideas. For Kant, problems or ideas do not subsist completely independently of actualized individuals, as is the case with the Platonic theory. Instead, the problems insist within their solutions. True problems are thus, in Kant, ideas that do not disintegrate into their solutions but remain problematic; they remain beyond experience so as to guide the concepts as a “focal point” or “superior horizon” that allows the concepts to reach maximal extension (CPR, A644/B672 and A658/B686). Ideas thus offer systematic unity to distinct acts of understanding.

*Three moments of Kantian ideas*

Now that we see how Kantian ideas function, we can look at the structure of ideas. According to
Kant, there are three aspects or “objective moment[s] of the idea”: undetermined, indirectly determinable, and bearing the ideal of infinite determination (CPR, A320/B377).

First, since the object of an idea is beyond experience, it cannot be known or given, but must remain in its problematic form. That is, the object of the idea remains undetermined, for it cannot be determined through empirical means. When the idea takes up or seeks the unconditioned that grounds the categories of relation – substance, causality, and community – it turns to undetermined objects – self, world, and god. These objects are the universal principles of the three types of syllogism: categorical, hypothetical and disjunctive. In each case, the object, such as the self, remains undetermined; it is thinkable but not knowable. To be thinkable but unknowable means that the faculty of reason, in itself, is not able to determine whether or not it is true or false. For the determination of something as true or false requires the application of categories to intuitions, but the objects of ideas are not amenable to such an operation. This indetermination, then, is not a fiction or imperfection, but is an objective and positive structure that limits (acts as a focus or horizon for) experience.29 The idea, as problem, is both objective in structure and yet undetermined in that we cannot produce an object adequate to the idea.

Second, “the object of the idea,” Deleuze says, “becomes indirectly determined” (DR, 169).30 Although the object of the idea is directly undetermined, thinkable but unknowable, it is indirectly determinable. To be indirectly determinable means to be determinable by analogy with objects of experience. In the way that ideas offer systematic unity to the determinate objects of empirical experience, those same determinate objects, Deleuze argues, “offer it a determination ‘analogous’ to the relations it entertains with them” (DR, 169). While Deleuze is a bit unclear on this point, it is safe to say that ideas are indirectly determinable insofar as they act as regulative

29 Kant also uses the images of “focal points” and “horizons” in the “Appendix to the Transcendental Dialectic” in CPR.
30 Emphasis added.
principles for producing objective knowledge. That is, insofar as such a regulative function guides the production of knowledge in empirical experience, the systematicity that such knowledge gains confers a degree of determination on the ideas themselves. So, the tentative, merely regulative, unity of empirical knowledge is similar to the structure of ideas. “This is why,” Deleuze says, “‘regulative’ means ‘problematic’” (DR, 168).

Third and finally, the object of the idea contains a complete infinite determination in that the concepts of the understanding can address more and more differences based on the drive toward completing a series that can never be completed in experience. Although the idea remains indeterminate, in that no empirical object can satisfy it, and although the idea is determinable in a way that is analogous to the determination of objects of real experience, the idea opens up an infinite terrain in which continuous determination of objects by means of the unified categories is possible. According to Deleuze, the categories can continue to specify, comprehend, and bring together into a unified whole “more and more differences on the basis of a properly infinite field of continuity” (DR, 169). While ideas give unity to experience, they are not themselves unified. Instead, ideas always remain open-ended and problematic. The idea thus acts as an ideal of the complete and infinite determination of a series or set of conditions.

Deleuze ties this all together. Kantian regulative ideas “present three moments: [1] indeterminate with regard to their object, [2] determinable with regard to objects of experience, and [3] bearing the ideal of an infinite determination with regard to concepts of the understanding” (DR, 169). These three objective moments of the Kantian idea correspond to the three characteristics of Platonic idea. In accord with the astounding systematic architectonics of the first Critique, Deleuze says, “Kant incarnated these moments in distinct ideas: the Self is above all undetermined, the World is determinable, and God is the ideal of determination” (DR,
These are the psychological, cosmological, and theological ideas, the three great foci or horizons that have hitherto inhibited metaphysical research in that no possible object of experience could ever correspond to such ideal objects. We thus have a succinct definition of a Kantian idea: any concept that takes as its object something that transcends possible experience.

Since one of the major projects of the first *Critique* is to identify the problems and illusions that arise when non-critical metaphysics claims to have knowledge of such transcendent objects, Kant stresses the importance of the distinction between the immanent and transcendent uses of ideas. While Deleuze does conceive of transcendence slightly differently than Kant, we can still see that this is a question of legitimacy or justifiability: the immanent use of ideas is legitimate, while the transcendent use is illegitimate. The immanent usage is when ideas are merely regulative guides, what we have called “focal points” or “horizons.” The transcendent usage is when ideas are constitutive or when they act as foundations for knowledge claims. By contrast, Kant stresses that the importance of the immanent usage in that knowledge of the totality of things is not assumed but must be produced. In short, our knowledge of the totality of things remains a problem. We can act as if there were a determinate self, world, or god, but we cannot say that there are such entities. What leads one down the illegitimate or legitimate path is the form of the question. This is perhaps the most important point of this Deleuzian reading of Kant’s theory of regulative ideas: *ideas are legitimately employed only when the self, world, and god are not taken as givens but as problems*. Ideas must be regulatively and immanently employed, never constitutively and transcendently employed.

For Deleuze, while Kant’s appropriation of the Platonic theory of ideas is an improvement on Plato’s, it does not go far enough. The issue is that two of the three objective moments of Kantian ideas remain extrinsic characteristics: “if ideas are in themselves undetermined, they are
determinable only in relation to objects of experience, and bear the ideal of determination only in relation to concepts of the understanding” (DR, 170).\(^{31}\) That is, the second moment of ideas holds that ideas are determinable only in relation to objects of experience. So, the determinability of ideas is not an internal characteristic but is such only by analogy with determinate external objects. Similarly, ideas bear an infinite determination only in relation to categories of the understanding. So, the infinite determination of ideas is dependent on the existence of pure concepts of the understanding that allow ideas to be infinitely determined.

In sum, what Kant said about Plato’s theory of ideas can also be said about Kant’s own account: while Deleuze certainly appreciates Kant’s insistence on the immanent nature of ideas, he notes that Kant does not follow this insistence on immanence far enough. This is why it is actually quite Kantian to say that Deleuze understands Kant (at least on this one point) better than he understood himself. Kant, according to Deleuze, did not determine his own concept sufficiently.\(^{32}\) Like Kant, Deleuze both appropriates and reformulates the Kantian theory by rendering the moments of ideas not in terms of an external object or conceptual identity but in terms of an internal and objective problematics. The way to do this is to turn the unity, totality, and conditioning character of Kantian ideas into multiplicitous, differential, and productive Deleuzian ideas.

**Deleuze’s theory of immanent ideas**

\(^{31}\) Deleuze also notes that these three moments repeat the three aspects of the Cogito: “the *I am* as an indeterminate existence, *time* as the form under which this existence is determinable, and the *I think* as a determination.” The difference between the Cartesian cogito and the Kantian cogito, for Deleuze, is that the Kantian I is a “fractured I, and I split from end to end by the form of time that runs through it” (DR, 169).

\(^{32}\) This is not to say that Kant would agree with the Deleuzian account. Nor is it to say that Kant and Deleuze are engaged in the exact same projects. Still, it is interesting to wonder what Kant would think about Deleuze’s project, especially after the writing of the third Critique. For if it is safe to say that much of Difference and Repetition is a direct engagement with, if not a re-writing of, the first Critique, then aligning these two projects is quite fruitful. Joe Hughes postulates an even more direct statement: “Difference and Repetition is modeled after the Critique of Pure Reason, but only from the point of view of the Critique of Judgment.” Joe Hughes, Deleuze’s Difference and Repetition, 3.
Deleuze and mathematics

Now that we have developed accounts of the two most prominent theories of ideas, we can begin to articulate Deleuze’s own theory. Perhaps the most obvious similarity among Plato, Kant and Deleuze’s respective theories of ideas is the three-part problem-structure. Each theory is characterized by three components: undetermined, determinable, and bearing determination. For Plato, the three components are the quality to be possessed (being beautiful), the idea that that quality (beauty in itself), and that which lays claim to the quality but can only possess it at some degree of removal (Alcibiades’ beautiful body). The quality shows the indeterminacy of the Platonic idea in that the possession of a quality by a particular thing is not specified by the idea but, instead, merely remains a quality “to be possessed.” The perfect idea of beauty, beauty itself, is determinable in that it accounts for the quality that a particular can or does possess. The Platonic idea has a bearing on infinite determination in that the idea is not exhausted by the instantiation of the quality in a particular body. For Kant, the idea remains undetermined in that the object of the idea exceeds the bounds of human experience and so cannot be determined through empirical means. Second, Kantian ideas are indirectly determined insofar as they act as regulative principles for orienting and producing objective knowledge. Finally, the object of the Kantian idea contains a complete infinite determination in that the concepts of the understanding address more and more differences based on the drive toward completing a series that can never be completed. Take the idea of the World. The World is undetermined because we cannot perceive the totality of the World in a single perception (CPR, A517/B545). It is, however, indirectly determined in that we acquire the idea of it by extending the category of causality through the use of hypothetical syllogism (if A, then B). By conceiving of the world in terms of causal chains, the “regress of all conditions for it is given to us as a problem” (CPR,
A498/B526). Finally, this determined idea allows for infinite determination in that we can continue extending this chain indefinitely, to the point at which we reach the concept of the totality of the World (CPR, 508/B536). This is how reason constructs a concept of the world to which no perception can ever correspond. Although the World, as a whole, is never an object of our experience, and so remains undetermined, it is still a determined idea that functions as a horizon for infinitely determining the totality of the World (CPR, A529/B566). We will soon see that while Deleuze’s own theory does follow this basic structure, Deleuzian ideas are different from Plato’s and Kant’s, especially in Deleuze’s use of the mathematical concept of the differential ($dx$) in construing ideas as intrinsically determined structures immanent to experience. This is the story we will now tell.

This story will have five parts. The first part will articulate the three components of Deleuzian ideas. These components correspond to the three aspects of Platonic and Kantian ideas we saw above. For Deleuze, the undetermined part is the set of differential elements, the determinable is the set of differential relations, and the determined is the set of singular points. We begin by articulating these three components. This structure is, however, only half of the entire theory. The second part of this chapter will further articulate this ternary structure by looking forward to the third chapter, which is where we will examine the second half of the theory. Since the three components of Deleuzian ideas take their inspiration mostly from modern and contemporary mathematics, the third part of this story will pause to offer a quick defense of Deleuze’s philosophical use of mathematics against actual and possible critics. The next part will then step back and situate Deleuze’s theory in direct communication with Plato and Kant’s respective theories. The fifth part will close this short account by casting everything in terms of Deleuze’s appropriation of the mathematical concept of multiplicities. To see how Deleuze
utilizes the concept of multiplicity, we will compare what Deleuze and Guattari call axiomatics or royal science and problematics or minor science. This will allow us to translate the concept of multiplicity from mathematics to ontology. At this point, we will have a fully developed account of Deleuze’s theory of immanent ideas. In the next chapter, we will use the three-part problem-structure of the Deleuzian idea to develop an account of the atomic idea.

The three components of Deleuzian ideas

According to Deleuze, an idea has three components: differential elements, differential relations, and singularities. These three components correspond to what we have seen in the Platonic and Kantian theories of ideas: undetermined, determinable, and determination. Deleuze casts each part in terms of the concept of the differential ($dx$): “a principle of determinability corresponds to the undetermined as such ($dx$, $dy$); a principle of reciprocal determination corresponds to the really determinable ($dx/dy$); a principle of complete determination corresponds to the effectively determined (values of $dy/dx$)” (DR, 171). The undetermined $dx$ and $dy$ are the differential elements, the principle of reciprocal determination is a differential relation, and the principle of complete determination is a singularity. Let us take each component in turn.

The first component is the differential element. What is a differential element? According to Deleuze,

The elements of the multiplicity [or idea] must have neither sensible form nor conceptual signification, nor, therefore, any assignable function. They are not even actually existent, but inseparable from a potential or virtuality. In this sense, they imply no prior identity, no positing of a something that can be called one or the same. On the contrary, their indetermination renders possible the manifestation of difference freed from all subordination (DR, 183).

For Deleuze, the differential elements have no determinate value in themselves. To think this
through, Deleuze turns to the idea of the continuity between two sensible or conceptualizable quantities. On a continuum, as Dan Smith puts it, the “difference between the two is a difference that tends to disappear…a disappearing or vanishing difference.”\textsuperscript{33} That is, the difference is an infinitely small difference, smaller than any given or givable difference or quantity, an “evanescent difference.”\textsuperscript{34} As vanishing, they have “neither sensible form nor conceptual signification, nor…assignable function” (\textit{DR}, 183). Such indetermination or evanescence means that the elements do not have determinate identities, and this means difference is prior, not subordinated, to identity. The point, however, is that even if the values or identities of the quantities are undetermined, the relation between these elements continues to exist. The differential, Deleuze claims, is “completely undetermined: $dx$ is strictly nothing in relation to $x$, as $dy$ is in relation to $y$” (\textit{DR}, 171). That is, in relation to $x$, $dx$ is (effectively) equal to zero, a quantity smaller than any determinable quantity, and the same goes for $dy$. It is just a difference, a differential quantity. We call the relation between these differential elements a differential relation. So, what is a differential relation?

In his early article “How do we Recognize Structuralism,” Deleuze distinguished three types of relations: real, imaginary, and differential. Let us take each type of relation in turn. In a real relation, elements “enjoy independence or autonomy: for example, $3 + 2$, or even $3/2$.”\textsuperscript{35} Since the elements are independent, difference is a relation dependent on these two pre-existing identities. There is a difference between $x$ and $y$ only when $x$ and $y$ have a determined value or identity by means of which the difference can be drawn. When these determinate identities


vanish, then, the difference is gone. In *imaginary relations*, by contrast, such as \( x^2 + y^2 - R^2 = 0 \), the terms do not have a specific value “but which in each case, however, must have a determined value.”\(^{36}\) The relations are imaginary in that the terms of the relation are not currently specified but must be determined in order for the relation to exist. The terms are non-specified but determined. They are imaginary. Standard formal logic is the study of such imaginary relations. *Differential relations*, however, are a third kind of relation, one that is neither real nor imaginary. In differential relations, things are quite different. Even when the values of the terms disappear, even when the terms have, Deleuze says, “neither existence, nor value, nor signification,” the relation continues.\(^{37}\) That is, although the terms seem, at least arithmetically, equal to zero, they are not yet exactly equal to zero; they are smaller than any quantifiable difference, but not yet zero. They are infinitely approaching zero without ever reaching zero. They are vanishing without having vanished, disappearing but not yet disappeared. Because of this, while \( dx \) and \( dy \) are completely undetermined in relation to \( x \) and \( y \), the elements of \( dy \) over \( dx \) do not cancel out one another. As Deleuze says, \( dx \) and \( dy \) are “*perfectly determinable in relation to one another*. For this reason, a principle of determinability corresponds to the undetermined as such” (*DR*, 172). So, the very indetermination of the differential is a real element that generates magnitude while not itself having any determinate magnitude. Simon Duffy puts it this way: “the differential is therefore expressed as a pure element of quantitability; insofar as it prepares for the determination of quantity.”\(^{38}\) As we will see in chapter three, these are the three components of Deleuze’s take on the principle of sufficient reason: the quantitability of the differential element points to the qualitatibility of the differential relation, which, in turn, points to the

\(^{36}\) Ibid.

\(^{37}\) Ibid.

potentiality of singularities.\textsuperscript{39}

This differential relation is the second component of Deleuzian ideas: the principle of reciprocal determinability. Although undetermined in themselves, $dx$ and $dy$ do determine each other through their reciprocal relation, that is, the differential relation. “What subsists,” Deleuze says, “when $dy$ and $dx$ cancel out under the form of vanishing quantities is the relation $dy/dx$ itself.”\textsuperscript{40} Since the value of both the difference in $y$ and the difference in $x$ are undetermined, the difference in one is related to the difference in the other by means of a difference. The differential relation is thus both external to its terms yet also constitutive of them; it is both transcendent and immanent. The notion of the externality of relations will be important for the discussion of atomic relations in the next chapter. This is perhaps the clearest case of the thought of pure difference, and this is one reason why, for Deleuze, difference is prior to and constitutive of determinative identity. A differential relation is a “non-localizable ideal connection,” a pure relation; it exists (or insists) even when the terms of the relations are vanishing ($DR$, 183). This is why the relation is determinable even when the terms of the relations remain undetermined. The relation is real even when not actualized. Deleuze calls this type of modal status “virtuality.” Since the concept of virtuality is quite complex and easily misunderstood, I will not rely too heavily on this term until the third chapter, where it can be situated in terms of the related concepts of the intensive and the actual.\textsuperscript{41}

The third component is the singular point. The complete Deleuzian idea requires another component in addition to the (undetermined) differential elements and (reciprocally determinable) differential relations. Along with the first two, the third component, a set of

\textsuperscript{39} “All three form the figure of sufficient reason in the threefold element of quantitability, qualitability, and potentiality” ($DR$, 176).


\textsuperscript{41} Peter Hallward’s Out of this World, while rewarding and challenging, is perhaps the text guiltiest of misunderstanding of Deleuze’s notion of the virtual. Peter Hallward, Out of this World (London: Verso, 2006).
singularities, complete the problematic distribution of ideas. For it is not enough to develop a structure if all we have are undetermined elements and determinable relations. While Deleuzian ideas do not have the sense of completed or static determinateness that we see in Platonic ideas, they still do have a certain structural distribution. In this sense, Deleuze wants to be able to think the idea in terms of its problematic status and not in terms of a given, possible or actual, solution or set of solutions. What is needed is a way to distribute these elements and relations in such a way so as to articulate a determinate structure that does not derive from any empirical intuition or conceptual identity. The advantage of the differential calculus, as Leibniz had already shown, was that it “expressed problems that could not hitherto be solved” (DR, 177). Singularities are those significant points that determine the structure of a problem as problematic. Deleuze sums this up nicely: “the complete determination of a problem is inseparable from the existence, the number, and the distribution of the determinate [singular] points which precisely provide its conditions” (DR, 177). So, an idea is an objective structure that is determined by a certain distribution of singular points.

Again, these singular points are what give the idea its determinate structural character. Put differently, a Deleuzian idea is organized by the differential field of singularities. The idea remains problematic in that this determination is not a resolution or representation. That is, the determination of the structure of an idea is not a matter of solving the problem. Instead, determining the structural distribution of singularities that characterize an idea is the determination of the idea in a problematic form. This is why, Deleuze claims, such a determination “testifies to the transcendence of the problem and is directive role in relation to the organization of the solutions themselves” (DR, 177). The distribution of singular points structuring the elements and relations of the idea are incarnated or actualized in divergent
solutions. Despite the various divergent solutions that are produced by the problem, the singularities are the stable and characteristic aspects of the idea. There are different types of stability of singularities possible for an idea, for example “bottlenecks, knots, foyers, and centers; points of fusion, condensation, and boiling; points of tears and joy, sickness and health, hope and anxiety, ‘sensitive’ points,” etc. (LS, 52). Depending on which type of singularity it obtains, the structure of the idea will vary.

This is why Manuel DeLanda, perhaps the contemporary Deleuzian most concerned with Deleuze’s relation to mathematics and science, often thinks of these singular points as attractors, that is, “recurrent topological features” that determine long-term tendencies of the behavior of systems.42 These attractors exert a certain degree and strength of influence on the field in which it operates, or what complexity theorists call “basins of attraction.” These attractors then influence the trajectories of curves that pass through these fields or basins. As DeLanda says, “the distribution of singularities gives us the information about the pattern of all the solutions.”43 DeLanda offers the example of two very different physical systems – a soap bubble and a salt crystal – that each seeks a shared singular point: a point of minimal free energy. There is “a soap bubble, which acquires its spherical form by minimizing surface tension, or a common salt crystal, which adopts the form of a cube by minimizing bonding energy.”44 Two very different types of things, a soap bubble or salt crystal, are structured by the same singularity.

DeLanda’s example of the soap bubble and the salt crystal allow us to make sense of the equating of the idea and the problem. Thinking of ideas as problems rather than as solutions allows us to think various divergent and dissimilar solutions in term of a single problem. This is because the idea retains a degree of independence from its solutions, while simultaneously

44 DeLanda, Intensive Science and Virtual Philosophy, 15.
remaining immanent to the solutions. Rather than simply addressing the actualized solutions or representations that seem to revolve around some given problem and tracing off given tendencies from that solution set, Deleuze attempts to think the structure of the idea as problematic. So, a single problem can generate quite divergent solutions – mathematical, biological, psychical, sociological, etc. In language that we will define in chapter three, ideas are thus systems of virtual differences that produce actual differences. In short, as a coexist structure consisting of elements, relations and singularities, an idea is never fully actualized. Instead, it problematically structures the fields and processes of actualization.

We cannot stress this enough: the concept of a singularity shows how single problem can generate quite divergent solutions. Consider another way in which Deleuze characterizes ideas. Unlike Platonic ideas, ideas are not of the order of degrees of resemblance or dissemblance, nor are they subject to the order of truth or falsity. Instead, the character of ideas is of the order the remarkable and the ordinary, the significant and the insignificant \((\text{DR}, 189)\). This allows us to define a singularity in yet another way. A singularity, Deleuze claims, “is the point of departure for a series that extends over all the ordinary points of the system, as far as the region of another singularity which itself gives rise to another series that may either converge with or diverge from the first” \((\text{DR}, 278)\). Singularities are the “turning points” of a system, the significant points that define the structure.

Geometry is perhaps one of the best examples for understanding singularities are “turning points.” A geometrical figure can be defined not by the determinate length or width of its sides but by the distribution of singularities that define a figure. A curve, for example, can be defined

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45 Deleuze says, “It was a great day for philosophy when…Leibniz proposed…that there is no reason for you simply to oppose the singular to the universal. It’s much more interesting if you listen to what mathematicians say, who for their own reasons think of ‘singular’ not in relation to ‘universal,’ but in relation to ‘ordinary’ or ‘regular’” \((\text{Deleuze, Cours Vincennes, transcripts, “Sur Leibniz,” 29/4/1980, http://www.webdeleuze.com/php/texte.php?cle=54&groupe=Leibniz&langue=1})\).
by a set of singular and ordinary points. When the gradient of a tangent is horizontal to the x-axis, the value of the differential relation is zero. Such points, where the tangent touches the curve, determine the peaks and dips of that curve. As Simon Duffy says, “determining therefore a maximum or minimum at that point. These distinctive points are known as…turning points.” By calling singular points ‘turning points’ we mean the points at which a curve changes dramatically, the points at which the curve turns up or down, the points of maximal height or minimal depth. The rest of the points on the curve are the ordinary ones leading to and from these singular points in what are called “neighborhoods.” The following graph demonstrates these maximum and minimum turning points.

To take the example of a different geometrical figure, a square has four singularities, and all the other points on the figure (the points making up the sides) are merely ordinary points. The singularities of a square, then, are the points at which a series of ordinary points converge and another series of ordinary points diverge. The size of the sides is unimportant. What is important are the remarkable points that extend out over, and so structure, the series of ordinary points. Once we have the distribution of singular points we have the means for generating any amount of actual individuals.

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Differentiation and differenciation

In order to understand the difference between the determinateness of actual solutions and that of virtual problems, Deleuze makes a grammatical distinction that is inspired by terminology coming from biology and embryology. To appreciate this difference, we must take a peak at what lies ahead to the next part of the theory. “The entire idea,” Deleuze says, “is caught up in the mathematic-biological system of differen/ciation” (DR, 220). While this distinction is important for Deleuze’s entire theory of ideas, we are introducing it now only in order to address one part of the entire theory. In this chapter we are focusing only on the first half of that theory, the problem-structure of ideas. We will not reach the second half, the actualization of these ideas in real solutions, until chapter three. So, we are now viewing this distinction from the perspective of the problems themselves, and will switch to the perspective of the second half later on. The distinction refers to two kinds of differential structuration: the first half of the story concerns differenriation, the second half concerns differenciation.

This is the grammatical distinction: ideas or problems are differenriated, and actualized solutions are differenciated. Differenriation\(^47\) refers to the distribution of the differential components we have mentioned – elements, relations, and singularities; differenciation refers to the distribution of solutions that are the actualizations of an idea. As Deleuze says, “Whereas differenriation determines the virtual content of the idea as problem, differenciation expresses the actualization of the virtual and the constitution of solutions” (DR, 209). Ideas, as problems, are determinate insofar as they are differenriated. In this way, an idea is both structured and

\(^{47}\) “[T]he word differentiation, itself, is nothing but the mathematical one, which used to refer to the pre-Cantorian mathematical framing, to the operation of writing the infinitesimal variation of some variable, expressed with respect to some others (let us say that if \(y=x^2+y^2\), we differentiate by writing \(dy=dx+3y^2dy\)” (Jean-Michel Salankis, “Mathematics, Metaphysics, and Philosophy,” in Virtual Mathematics, 52.).
differentiated; it is a differentially structured problem independent of any actual identity or solution. This is another reason why the problem is both independent of yet immanent to the engendered solutions.

We thus see three aspects of a Deleuzian idea: one, “its difference in kind from its solutions,” two “its transcendence in relation to the solutions that it engenders,” and three, “its immanence in the solutions which cover it up” (DR, 179). Let us say that again. First, since ideas are differentially structured and solutions are differentially structured, they are different in kind. Second, since the idea and its actualized solutions have such different structures, the idea remains beyond its solutions. No solution exhaustively actualizes the idea. Third, although the idea is transcendent in relation to its various solutions, it remains immanent to them. It is just that the differential structure of the actual solution covers up the differential structure of the problem within. This is why there are such different solutions to the same problem. The same problem or idea can engender both the soap bubble and the salt crystal because of the non-resemblance between solutions and problem. In short, the structure of the idea does not resemble its divergent solutions. Instead, ideas differ from their solutions.

Ideas in Plato, Kant, and Deleuze

Before discussing the last part of this story of the Deleuzian idea, we should step back for a moment and summarize our findings to see what we have done and where we are going. So far, I have argued that while Deleuze takes great inspiration from Plato’s and Kant’s respective theories of ideas, he also greatly diverges from those accounts. So, let us now bring them all together in order to state directly how Deleuze’s theory both receives and inverts Plato and Kant.

According to Deleuze’s theory, it is no longer possible to determine the structure of an idea
in terms of the standard Platonic question: “What is x?” That is, we cannot determine the character of the problem by tracing off the shared similarities of the various solutions and thereby locating a Platonic essence or highest degree of resemblance. Deleuzian ideas are not abstract universals or essences, such as the Platonic forms. For Deleuze, an “essence is nothing, an empty generality” that is unable to offer a satisfying explanation as to how this real particular was produced (DR, 182). Instead, the most that an essence can do is posit some “one” that is supposed to explain the degrees of resemblance shared among a “many.” The problem is that it does not explain what it is supposed to explain, the many, but must itself be explained. This is the old problem of participation. Rather than postulating a Platonic essence or highest degree of identity that is supposed to explain why some set of resemblances, the Deleuzian theory of ideas begins with “the evaluation of what is important and what is not,” that is, with locating the singular points (DR, 189). Deleuzian ideas do not locate a transcendent and universal truth that claims to explain why something stays the same, why an identity persists, but instead locates the decisive thresholds or critical points at which a structure changes. This is why problems, for Deleuze, are not of the order of essences but “are of the of the order of events” (DR, 188).

Deleuzian ideas are thus not Kantian ideas. While Kantian ideas constitute the space of possibilities for realization, Deleuzian ideas are real structures that produce actual divergent solutions. While mere possibilities are mirror images of actual images (minus reality), ideas are fully real. This is why the modality of Deleuzian ideas is not that of possibility but, as we will see in chapter three, virtuality. Further, a Deleuzian idea is also not an “abstract universal beyond the individual or beyond the particular and the general” (DR, 176). Instead, for Deleuze, “ideas are concrete universals” (DR, 176).48 The very determinate structure of Deleuzian ideas is

48 Emphasis added. The talk of “concrete universals” comes, interestingly, from Hegel. The concept is that universally thinkable concepts are not mere abstractions separated from concrete particulars but that concrete universals manifest themselves in the
real; it is just not real in the sense of an actual reality in some place and time, not in the sense of an empirical representation or abstract essence. As Proust might say, ideas (as virtual) are “[r]eal without being actual, ideal without being abstract” (DR, 208).

Second, Deleuzian ideas are also not a set of fixed concepts, such as Kant’s pure categories of the understanding. For the Kantian categories, since they seek to establish the necessary conditions for any possible object, are too broad to be able to account for the production of a real individual. For Deleuze, ideas are no broader than the solutions that emerge from them, but are, instead, ontological structures of multiplicities that explain the genesis of real individuals because of the interrelation between problems and solutions. We can thus summarize a sort of recipe that we can use to account for the existence of individuals or solutions: seek the genetic elements, the synthetic relations, and the distribution of singularities that explain the variations of individuals that are the actualization of an idea. In Deleuze’s words, “in the most diverse cases, we must ask whether we are indeed confronted by ideal elements…[that are] reciprocally determined within a network of differential relations…We must also ask what distribution of singularities, what repartitioning of singular and regular, distinctive and ordinary points, corresponds to the values of the given relations” (DR, 278). In short, we must determine the idea that engenders individual solutions. We will use this sort of recipe in the rest of this essay. First, in chapter two, we will see how atomism is structured by the atomic idea, and then, in chapter three, we will look at the exact process by means of which individual solutions are generated by both Deleuzian and atomic problems or ideas.

*A quick defense of Deleuze’s use of mathematics*

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particular. It is not that the particular participates in the universal, as in Plato, but that the universal is the universal in the particular. It is a sort of immanent genus or gathering of particulars such that this gathering expresses a universal.
Curiously (at least to some), Deleuze’s usage of the concept of the differential comes not from contemporary but from classical calculus, and Deleuze fully accepts the questionable nature of this. Alan Sokal and Jean Bricmont, for example, exploit this seeming naïveté by charging Deleuze with utilizing an “avalanche of ill-digested scientific and pseudo-scientific jargon” that evinces “a vast but very superficial erudition.”\(^{49}\) One of their comments is that many of the problems that plagued classical calculus “were solved by D’Alembert around 1760 and Cuchy around 1820.”\(^{50}\) However historically legitimate these claims might be, their polemical chapter on Deleuze in *Fashionable Nonsense: Postmodern Intellectuals’ Abuse of Science* does not constitute an actual critique. Besides doing their best to ensure philosophy’s irrelevance in the modern world, their position basically consists of a series of extended quotations to which they merely point and scoff. The only distinct claim they make is to demand respect for strict disciplinary boundaries, which means that philosophy should never pilfer from, say, math and science.\(^{51}\) For them, philosophy should stick to what it does best (which does not seem to be much for Sokal and Bricmont) and leave science and math to the professionals, so to speak.

Deleuze, however, takes a very different reading on the differences between disciplines. For it is a common Deleuzian strategy to extract the philosophical import of concepts that originate from some non-philosophical discipline, such as mathematics, science, film, literature, etc. So, although the mathematical problems of the classical calculus have been superseded, this does not mean that the older conception of the differential has no philosophical value.\(^{52}\) Instead,
Deleuze contends, the philosophical stakes of, say, the classical use of the concept of the differential are immense. While Deleuze himself acknowledges that “a great deal of truly philosophical naïveté is needed to take the symbol $dx$ seriously…there is a treasure buried in the old so-called barbaric or prescientific interpretations of the differential calculus, which must be separated from its infinitesimal matrix” (DR, 170).\textsuperscript{53} So, although there is certainly a danger of utilizing mathematical or scientific concepts in arbitrary, metaphorical, or misleading ways, Deleuze argues that “perhaps these dangers can be averted if we restrict ourselves to taking from scientific operators a particular conceptualizable character that itself refers to non-scientific areas, and converges with science without applying it or making it a metaphor.”\textsuperscript{54} Deleuze is convinced that it is possible to extract the concept of, say, the differential without submitting his argument to the developments in the history of mathematics. In short, Deleuze finds the philosophy import in math, science, cinema, etc.

So, while no one is claiming that Deleuze is a mathematician, there is a clear reason for making the concept of the differential so integral to his account of ideas.\textsuperscript{55} What Deleuze finds in the areas of mathematics that are particularly important to his account, especially differential calculus, is a particularly “developed conception of problems…a calculus of problems” (ATP, 570n61). The differential, for one, has an essentially problematic character in that it structures the internal character of the idea such that it disappears in the solution (or integration). That is, ontology, since it is basically equated with set theory, might suffer an equaling devastating diminution in argumentative force. Interestingly, at least for the question of the importance of Deleuzian philosophy and its relationship to mathematics, category theory is linked more closely to Riemann, topology, and related mathematics from which Deleuze finds inspiration for many of his concepts that to set theory.

\textsuperscript{53} As Deleuze says, “We cannot suppose that differential calculus is the only mathematical expression of problems as such…More recently, other procedures have fulfilled this role better” (DR, 179).

\textsuperscript{54} Deleuze, \textit{Cinema II: Time-Image}, trans. Hugh Tomlinson and Robert Galeta (Minneapolis: University of Minnesota Press, 2001), 129. The discussion as to whether Deleuze uses concepts form mathematics literally or metaphorically is a critique that seems unique to Badiou. For it is only Badiou who claims that ontology = mathematics (set theory). Deleuze would almost certainly readily admit that his use of mathematics is, to some extent, metaphorical. What is not metaphorical is the philosophical import he extracts from these concepts.

\textsuperscript{55} According to Simon Duffy, “nor is there a particularly Deleuzian mathematics.” Simon Duffy, “Deleuze and Mathematics,” 4. This text contains perhaps the best and most detailed work on Deleuze’s relationship to mathematics.
the differential, as we saw above, is the undetermined element of the idea, which becomes (reciprocally) determined through the various differential relations in which it is embedded. This means that it is possible to divorce the structure of the idea from empirical intuition or representational thinking. For the idea, Deleuze claims, is “no longer defined by characteristics borrowed from sensible or even geometrical intuition” (DR, 171). So, Deleuze turns to the differential calculus because it offers him a way of using a thorough conception of the constitution of problems as problems rather than in relation to solutions or to static individuals of empirical experience. So, Deleuze extracts the concept of the differential because it offers him a means for thinking difference as difference, freed from its subordination to identity. Acquiring the means to think difference in itself is what allows Deleuze to develop the three-part problem-structure we saw above.

Ideas as multiplicities

With the three-part structure of ideas in mind, as well as some of the ways in which Deleuzian ideas are both similar to and different from Platonic and Kantian ideas, we can now bring the three components together and thereby make sense of some of the various ways in which Deleuze defines and characterizes ideas. To see this, we will now run the problem-structure through a few different vocabularies. The difficulty is that Deleuze offers divergent, though not necessarily conflicting, definitions. Let us look at a few.

In one case, he calls an idea “an n-dimensional, continuous, defined multiplicity” (DR, 182). In another, he says that a “structure or idea is a ‘complex theme,’ an internal multiplicity – in other words, a system of multiple, non-localizable connections between differential elements that is incarnated in real relations and actual terms” (DR, 183). Or, “ideas are varieties that
include in themselves sub-varieties” (*DR*, 187). Or something closer to a characterization than a definition, “ideas are by no means essences. Insofar as they are objects of ideas, problems belong on the side of events, affections, or accidents rather than that of theorematic essences. Ideas are developed in the auxiliaries and the adjunct fields by which their synthetic power is measured. Consequently, the domain of ideas is that of the inessential” (*DR*, 187). In sum, we can see that ideas are not essences but belong to the inessential; they are not of the order of the one and the many but are multiplicities; they are not transcendent models but internally differentiated structures of continuous variation. These definitions and characterizations are not completely unfamiliar to us. For we have already talked about almost all of these terms. The only one that is a bit strange is the notion of multiplicity. So, let us take up this question: what is a multiplicity?

Although Badiou claims that Deleuze’s concept of multiplicity does not derive from a mathematical model but from a natural or vitalist model, Deleuze does refer explicitly to Riemann’s mathematical work when discussing his own usage of multiplicity.56 Since we are on the topic, a brief sketch of the differences between Badiou and Deleuze’s respective uses of mathematics is perhaps a helpful way to begin to talk about Deleuze’s use of the concept of multiplicity.

While Badiou turns to theorematic or axiomatic set theory to formulate his ontology, Deleuze refers to branches of mathematics that he calls “problematics” (*ATP*, 367). In the words of *A Thousand Plateaus*, axiomatics is a proponent of a “major” or “royal” science that attempts to reduce problems to essential formulae and invariant truths; problematics, however, is a kind of “minor” or “nomadic” science that insists on the irreducibility of problems (*ATP*, 367-74). While

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minor sciences initially stand opposed to major sciences, they can often be co-opted by the state apparatus and axiomatized. The differential calculus, for example, which eventually became the dominant mathematical language for many of the physical sciences during the scientific revolution, once only had “parascientific status and was labeled a ‘Gothic hypothesis’” (ATP, 636). One of the reasons for such status is because the calculus produced metaphysically problematic concepts, such as infinitesimals, limits, continua, fluxions and fluents, etc., and this might be one of the main reasons that Deleuze finds it so fascinating, that is, as problematic.  

Interestingly for our story, two of the prime examples that Deleuze and Guattari give of minor sciences include Democritus and Lucretius (ATP, 363 and 361).  

We can distinguish axiomatics and problematics by determining what each seeks to demonstrate. Axiomatics or theorematics seeks to demonstrate the essential properties of, say, a number or geometrical figure, by isolating what it takes to be the necessary features and idealizing or abstracting them from all accidents, variations, and dynamism. Problematics, by contrast, seeks to generate numbers or construct such figures by testing different rules of production and insisting on the processual element of the products. The constructivistism of problematics is also reminiscent of Hobbes or Kant’s definition of a circle. The Euclidean

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57 Bishop George Berkeley famously mocked the postulation of infinitesimals by asking, “And what are these fluxions? The velocities of evanescent increments? And what are these same evanescent increments? They are neither finite quantities, or quantities infinitely small, nor yet nothing. May we not call them the ghosts of departed quantities?” George Berkeley, The Analyst; Or, a Discourse Addressed to an Infidel Mathematician. Wherein It is examined whether the Object, Principles, and Inferences of the modern Analysis are more distinctly conceived, or more evidently deduced, than Religious Mysteries and Points of Faith, (London, 1754), 59.

58 We should always keep in mind that while Deleuze seems to champion minor sciences over major sciences, he emphatically insists on the necessity of both. They are two poles, both equally necessary, of a broad mathematical field. “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. (ATP, 554n21). See Georges Bouligand, Le déclin des absolus mathématico-logiques (Paris: Ed. d'Enseignement Supérieur, 1949).

59 Take, for example, what Deleuze says of intuitionism. Deleuze says, “When intuitionism opposed axiomatics, it was not only in the name of intuition, of construction and creation, but also in the name of a calculus of problems, a problematic conception of science that was not less abstract but implied an entirely different abstract machine, one working in the undecidable and the fugitive” (ATP, 461). Aden Evens echoes such comments. He says, while axiomatics and “traditional mathematics idealizes number ignoring its processual aspect, intuitionism formalizes the process as process, capturing this motion of number in vivo, formalizing not number but the genesis of number.” (Aden Evens, “The Surd,” in Virtual Mathematics, 224.) Intuitionism, then, utilizes the power of determination without killing it, so to speak.
axiomatic definition of a circle begins by determining the essential and fixed properties of an ideal circle. This is like answering the Platonic “What is a circle?” question. A particular geometric shape is then determined as a circle or not insofar as it does or does not resemble that fixed set of unchanging predicates of that first circle. A Hobbesian definition of a circle, by contrast, offers a problematic or genetic description of a circle that attempts to show how to construct a circle by determining the rules for the construction. That is, a constructivist approach to defining a circle is to determine the process for making a circle. Making a circle thus proceeds, for example, by taking a line segment, fixing one end at a stable point, and then moving the other end so that it rotates around the one fixed end. So, while axiomatics is perpetually reproducing ideal circles, a problematics produces genetic definitions, that is, it tells one how to make something round. A circle then is defined as a process of rounding, of making round, or becoming-round, just as a line is defined as aligning, of making linear, of becoming-line.

A constructivist or problematic procedure makes something round by, as in certain geometries, not only constructing a circle but also actually projecting it on different types of planes, such as different kinds of slopes or spheres. In this way, the original shape is affected by different geometrical circumstances. For Deleuze and Guattari, the “problem is not an obstacle; it is the surpassing of the obstacle, a pro-jection” (ATP, 362). In problematics, then, a geometrical figure is not defined by fixed essential properties, but by the ways in which it can change, its capacities to be affected, the points at which it undergoes radical shifts and changes. This is why we have already defined the concept of a singularity in terms of the attractors used in complexity theory and topological geometry. We thus see that problematics not only constructs circles but actually “does things” to them. That is, one of the key procedures of problematics is to make

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circles undergo a number of abstract transformations, such as stretching, folding, bending, twisting, cutting, projecting, distorting, shrinking, etc. Deleuze and Guattari thus notice a link between axiomatic and problematic geometrical definitions: a “theorematic figure is a fixed essence, but its transformations, distortions, ablations, and augmentations, all of its variations, form problematic figures that are vague yet rigorous, ‘lens-shaped,’ ‘umbelliform,’ or ‘indented’” (ATP, 367). The point of problematics is to identify the figure by its variations and affections, by its capacities for transformation, by its sites of transformation.

A variation on this sort of problematic mathematics is topology, which is focused on defining geometrical figures not in terms of how they stay the same but in terms of how they undergo transformations. Shapes that are distinct in a theorematic science such as classical Euclidean geometry are actually seen as the same shape in topology. In topological mathematics, if one figure can be transformed into another figure, within certain parameters, then those figures are not distinct but identical. Since figures such as a torus or donut shape and a coffee cup, to use a famous example, can be transformed into each other by submitting them to a number of ideal events and transformations, they are the same shape. That is, if you begin with a torus or donut shape, and stretch it a bit so that the hole is restricted to one side, tuck in parts so that the hole is more secluded, invaginate the remaining chunk so that there is a pocket, etc., then your donut has become a coffee cup. The same procedure can be done in the opposite direction, and many other directions. Such figures are called “homeomorphic” because they can be continuously transformed into each other, because they undergo the same changes, because they change in the same ways.

Seeing the differences between axiomatics or major science and problematics or minor science allows us to begin to see how Deleuze uses the concept of multiplicity. Related to
topology, there is another branch of mathematical problematics Deleuze uses to think of ideas: differential geometry, especially as it is theorized by the 19th-century German mathematicians Carl Friedrich Gauss and his student Bernhard Riemann. The differential geometry is called such because it employs the differential calculus to study curves and spaces in terms of the intrinsic and local variations. Unlike the Cartesian coordinate system used in analytic geometry, differential geometry does not need to fix, say, a curve in a global embedding space in order to assign a set of numbers of coordinates to the various points on the curve. If we want to map a two-dimensional curve, we no longer require an extra dimension (what we could call an N+1 space) that allows the imposition of external measurements, from a supplementary axis. Instead, we treat the curve itself as space. As Albert Lautman, one of the key influences on Deleuze’s thinking of mathematics, puts it, “differential geometry studies the intrinsic properties of a variety, independent of any space into which this variety would be plunged, [and thereby] eliminates any reference to a universal container or to a center of privileged coordinates.”

DeLanda says this was done by “coordinatizing surface” itself, by treating the surface as a space with its own intrinsic features. Put differently, while Cartesian analytic geometry aims to measure space, to impose an external measurement on a curve, differential geometry or topology aims to discover the structure of space as space. As Arkady Plotnitsky says, “it is not a matter of curves in a flat space but of the curvature of the space itself.” This is why, Aden Evans claims, differential geometry “allow[s] no overarching perspective and [so] must be navigated locally and singularly.” While Gauss developed this mathematical technology for 2-

62 Manuel DeLanda, Intensive Science and Virtual Philosophy, 12.
63 As Arkady Plotnitsky says, “Riemann uprooted the multiple (manifold) from its predicate state and made it into a noun, ‘manifold’ [multiplicite’]; “the multiplicity…is the true substantive, substance itself” (Arkady Plotnitsky, “Manifolds: On the Concept of Space in Riemann and Deleuze,” in Virtual Mathematics), 198.
64 Ibid., 199.
dimensional spaces, Riemann extended it to any dimension whatsoever, that is, to $n$-dimensions. Gauss and Riemann thus provided a mathematical means for thinking the notion of multiplicity (or *Mannigfaltigkeit*, in German).

We can now return to Deleuze’s definition of an idea: it is “an $n$-dimensional, continuous, defined multiplicity” (DR, 182). Let’s break this down, one by one, into its three parts. First, the dimensions are the variables or coordinates that constitute some phenomenon. Deleuze’s offers the example of the idea of color, which has three dimensions: hue, lightness, and saturation. These are the three singularities that structure the idea of color. In accord with the above definition of ideas, any colored individual that is actualized in the world does not resemble these three singularities, but incarnates them in divergent ways. A red object, for example, would have a distinct hue, lightness, and saturation. Since these are the three dimensions that structure the idea of color, they both require each other. Second, the continuousness of the idea or multiplicity refers to the “set of [differential] relations between changes in these variables” (DR, 182). In our color example, the continuity of the idea of color proceeds according to the variations that the dimensions can undergo, that is, how much a color can increase or diminish in hue before it changes into a different color. In terms of the red object, the continuity of the idea specifies the continuity of its variations, up to the critical points at which red becomes purple or orange. The point is that colors are not defined in terms of an extensive or discrete set of hierarchically arranged properties, but in terms of the continuities between the dimensions or variables. Third, the definition of a multiplicity refers to the previously undetermined “elements that are reciprocally determined by these relations” (DR, 182-3). According to Robin Durie, as indeterminate, “the elements of a multiplicity are not governed by any transcendent principle, in
the way that elements of a set are determined in advance by a defining property.” In terms of the three components given above, dimensions are determinate singularities, continuities are determinable differential relations, and definitions are the undetermined differential elements.

The point of defining an idea as such a multiplicity is to eliminate the need for recourse to an external model of measurement or supplementary transcendent essence and treat the idea in terms of its variations on a certain style, motif, or pattern. The consistency or coherence of the components of an idea is thus not imposed from above or outside but comes from the differential organization internal to the multiplicity itself. In Deleuze’s own words, “multiplicity must not designate 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” (DR, 182). Since there is no transcendent principle governing the being or nature of the components of a multiplicity, there is no need to explain the interaction between the One and the Many. This sense of multiplicity as beyond the difference between the One and the Many will be important in the next chapter, where we will show how atomism is a theory that tries to formulate a means to think the “organization belonging to the many as such,” that is, multiplicity.

Deleuze extends this mathematical conception of multiplicities to ontology. Just as the definition of a circle, to use the above example, is defined by problematics in terms of the morphogenetic processes that produce roundness, so species, bodies, and languages are defined in terms of their unique processes of production. There is no need to postulate external dimensions or transcendent factors to explain the existence of real individuals. Rather, we are

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67 Deleuze retains these three components of an idea throughout his career, merely using different terminologies to locate the operation of the idea in different registers. In A Thousand Plateaus, to cite an example from the musical and chemical register, the three components become: differential elements as intercalated elements, differential relations as unequal intervals, and singularities as articulations of superpositions” (ATP, 329).

68 Emphasis added. Robin Durie argues that Deleuze’s uses the Riemannian multiplicity (by way of Bergson’s modifications) to think Spinozist ontology that does not fall prey to the difficulties of thinking the relationship between the One and the Many. Durie, “Immanence and Difference,” 169-70.
able to tell the story of the production of such individuals in terms of the structure-generating potentialities immanent in the material world. The task of the next chapter is to extend these findings to the theory of atomism. For the atomists, there is no need to postulate Platonic essences or peripatetic teloi, for everything can be explained in terms of what we will call “the atomic idea.”

Conclusion

We have now developed an overall account of Deleuze’s theory of immanent ideas or problems. To do so, we first claimed that problems produce philosophical theories. For Deleuze, the problem is primary, and the theory is an extended question developed in response to that problem. With our eyes focused on the problem, we then turned to the two other great theories of problems or ideas in the history of philosophy: Plato and Kant. Deleuze takes up each of these previous theories and transforms them into his own theory of ideas, which is what we have meant by Deleuze’s appropriation and inversion of the older theories.

We first saw how Deleuze, in his nuanced reading of the Platonic theory of transcendent ideas, argued that the concept of the idea was the result of a socio-political context in which a method for selecting from among rival claimants to the truth was needed. The idea and the corresponding founding myth was the method for distinguishing true from false claimants. This very method, however, ended up subverting itself. For, Deleuze surprisingly claims, it is Plato himself who first inverts Platonism. In the end, Deleuze extracted a three-part problem-structure of Platonic transcendent ideas: the undetermined quality to be possessed (being beautiful), the determinable idea itself (beauty in itself), and that which lays claim to the quality and resembles the idea at some degree of removal (Alcibiades’ beautiful body).
We then saw how a similar three-part problem-structure operated in Kant’s theory of regulative ideas. For Kant, the logical use of the faculty of reason leads to the invention of supra-conditioning notions that act as the unconditioned for the conditioned categories of pure thought. As such, ideas lead beyond the bounds of human experience, and so can never be fulfilled. This is why Kant characterizes ideas as problematic. Problematic does not mean false or wrong, but rather unsolvable and provocative. The Kantian idea, we argued, has an objective organization that guides the human understanding of the world even though it exceeds human experience. The point of critique, for Kant, is to make a distinction between seeing ideas as either constituting knowledge or regulating knowledge, that is, as illegitimately/transcendently employed or legitimately/immanently employed. While Deleuze certainly appreciates Kant’s insistence on the immanent use of ideas, he notes that Kant does not insist strongly enough. What is important, for Deleuze, in Kant’s theory is the idea’s three-part problem-structure. Kantian regulative ideas present three moments: indetermination with regard to their object, determinable with regard to objects of experience, and bearing the ideal of an infinite determination with regard to concepts of the understanding.

We then turned to Deleuze’s theory of immanent ideas. While Deleuze appropriates the three-part problem-structure from Plato and Kant, he also transforms it by including the concept of the differential. This is the structure of Deleuzian ideas: the undetermined $dx$ and $dy$ are the differential elements, the principle of reciprocal determination is a differential relation, and the principle of complete determination is the set of singularities. We took this structure and ran it through a number of mathematical vocabularies. This lead to the final characterization of Deleuzian ideas: ideas as multiplicities. We then showed how Deleuze’s appropriation of the mathematical concept of multiplicity into ontology maps onto the earlier three-part problem-
The Deleuzian idea, in the end, can be described in a number of ways: a differential ontological structure, a productive problem, a continuous multiplicity, etc. With this understanding of the Deleuzian theory of ideas in mind, we now turn to an examination of atomism in terms of the Deleuzian theory. The next chapter will show how Deleuze conceives of the theory of atomism in terms of an idea. The story will follow this same three-part structure of the idea, and the chapter is divided into three main parts, each corresponding to the components of the idea. For Deleuze, these are the differentials elements, the differential relations, and the singularities. For atomism, these are the atomic elements, the atomic relations, and the clinamen. After demonstrating, in chapter two, how the atomic idea functions, we will then, in chapter three, bring Deleuze and Lucretius back together. The rest of the discussion will develop an account of how the Deleuzian and atomic ideas function as immanent and genetic conditions for the production of the real world and all the actual individuals populating it. To look ahead, chapter three will tell the general story of this process of production and individuation, chapter four will focus on the production and individuation of atomic subjects that sense and think the ideas, and chapter five will then articulate a Deleuzian-Epicurean ethical response to the atomic ideas and the atomic world it produces. In language that we have already begun to articulate, the first two chapters concern the virtual and transcendental conditions for the production of the world, the middle chapter concerns the genetic movement from the virtual conditions to the actual individuals in the real world, and the final two chapters concern the actual thinking and acting subjects in the real world. Although there is still a long way to go, all of this will be oriented by the theory of Deleuzian immanent ideas that we have articulated in this first chapter.
Chapter 2: The atomic idea

‘Saturate every atom,’ as Virginia Woolf said; or in the words of Henry James, it is necessary to ‘begin far away, as far away as possible,’ and to proceed by ‘blocks of wrought matter.’ – Deleuze and Guattari

Introduction

In the last chapter we developed an account of Deleuze’s theory of immanent ideas. We can describe a Deleuzian idea in a number of ways: a differential ontological structure, a productive problem, a continuous multiplicity, etc. Common to all of these descriptions is the three-part problem structure of Deleuzian ideas. The most explicit articulation of this theory appears in chapter four of *Difference and Repetition*. Directly after this formal account, Deleuze gives a very quick example of the idea: the atomic idea. This chapter will thus expand that first application of the basic problem-structure to atomism. By the end of this chapter, if all goes well, we will have a full articulation of the atomic idea.

To see how this happens, we should first recall the three-part problem structure of Deleuzian ideas. There are three parts of a Deleuzian idea – differential elements, differential relations, and singularities – and the atomic idea is composed of the same three components, with one difference. While the Deleuzian idea is structured in terms of the concept of the differential \((dx, dy)\), the atomic idea is structured by the concept of the atom. Rather than differential elements, differential relations, and singularities, the atomic idea is composed of atomic elements, atomic relations, and the clinamen. In order to make sure everyone is on the same page, the chapter begins with a review of the basic principles of ancient atomism. We will not support or analyze these basic principles in great detail but simply state them at the onset so that what we mean by ‘atomic’ is as clear as possible. After this quick snapshot of ancient
atomism, the rest of the chapter is divided into three main sections, each one corresponding to a Lucretian articulation of a component of Deleuze’s theory of ideas: the first section will cover the atomic elements, the second section will cover atomic relations, the final section will cover the concept of the clinamen.

In order to show how atomic elements function, we tell a short story about the emergence of the concept of the atom. As we will see, atomism responds to the problem of indivisibility through a philosophical employment of the mathematical method of exhaustion. Considered in these terms, the atom is a problematic concept intimately linked to the concept of the infinitesimal. We then turn to the second component, atomic relations, where we will see how atomism responds to the problem of the one and the many with the atomic multiple. Basically, the claim of this section is that the capacity of atomic relations for determining larger atomic compositions is necessary for atoms to function as undetermined elements in the atomic idea. After examining the exact nature of atomic relations, we will show how one of the first atomic relations, the conjunction of atoms and void, produces atomic motion. The question of atomic movement will naturally lead to the question of atomic speed. The final component of the atomic idea is the clinamen, which functions as a sort of singularity. To see how this happens, we take up some important questions of temporality. While the time of atomic motion is a sort of chronological time, the time of the clinamen is, in Lucretius’s language, *incertus*, and thus aligned with the mode of temporality Deleuze calls Aion. The clinamen, this chapter will argue, is that unassignable or non-localizable paradoxical element that determines the problematic distribution of the atomic idea. With each component of the atomic idea in place, we conclude by expanding the classic analogy with the alphabet into an atomic grammar. This grammar allows us to finally step back and survey the whole atomic idea.
An adequate outline of atomic physics

We are now transitioning from a discussion of the Deleuzian idea to a discussion of the atomic idea. Although we know what Deleuze means by the idea, we cannot just attach the term ‘atomic’ without first defining this term. While we can safely call Lucretius, Epicurus, et al. atomists, we should also say what it means to be an atomist. Historically, it means aligning oneself with a certain philosophical tradition, one that can be characterized by, if nothing else, a number of basic philosophical principles. To be an atomist means, at minimum, aligning oneself with or ascribing to a number of basic philosophical principles. What, then, are these basic atomic principles, the ones shared, admittedly to different degrees, by all of the ancient atomists?

Epicurus states the most basic atomic thesis at the beginning of his analysis of physics in his “Letter to Herodotus.” This is how he articulates the first thesis of atomic physics: “amongst bodies, some are composites (sunkriseis); others are those from which the composites are made. These later are indivisibles (atomos) and unalterable” (EH, 40). At its most fundamental, according to atomic physics, everything is either an invisible and unalterable particle of matter or composed of such particles. Lucretius uses many different terms and phrases to describe these indivisible and unalterable particles: smallest parts (minimae partes), beginnings of things (primordia rerum), seeds of things (semina rerum), first bodies (corpora prima), unseen bodies (corporis caecis), beginnings (primordia), etc. (DRN, 1:610, 1:268, 1:59, 1:61, 1:328). To be an atomist thus means, if nothing else, that this first and most basic atomic physical principle applies to everything in the natural world. The rest of atomic physics is a set of interrelated and interdependent principles that attempt to explain the order of nature.

In order to help his followers learn the interrelated principles of atomic physics, Epicurus offers what he calls an “adequate outline [τυπος]” of the basic theory of atomic physics (EH, 45).
Rather than going into great detail or even offering much argumentation in support of atomic physics, merely repeating and memorizing these basic principles is “useful to all those who are concerned with the study of nature” (EH, 37). Following Epicurus’ outline, we first state its six basic steps and then offer a short explication of each one of them:

1. “Nothing comes into being from what is not” nor disappears into nothing (EH, 38-9; cf. DRN, 1.159-73 and 1.225-37).

2. “The totality is made of bodies and void… Beyond these two things nothing can be conceived” (EH, 39-40; cf. DRN, 1.429-44).

3. “Among all bodies, some are compounds, and some are those things from which compounds have been made” (EH, 40; cf. DRN, 1.445-83).

4. “The totality is unlimited in respect of the number of bodies and the magnitude of the void” (EH, 41; cf. DRN, 1.958-97).

5. “And for each type of shape [of atom] there is, quite simply, an unlimited number of similar [atoms], but with respect to the differences they are…only ungraspable” (EH, 42; cf. DRN, 2.478-531).

6. “And the atoms move continuously for all time” (EH, 43; cf. DRN, 2.80-124).

This, in summary form, is the set of fundamental atomic principles that Epicurus offers in his main extant writings on atomic physics. This formulation is basically an appropriation of the positions of the earlier ancient atomists Leucippus and Democritus, and Lucretius’s De rerum natura is a later appropriation of that Epicurean formulation. While neither Epicurus nor Lucretius completely accept everything about their atomic predecessors, but actually alter and adapt things to their own liking, they remain, fundamentally, committed to most of the basics of atomic physics. While, for example, the pre-Socratic and post-Aristotelian atomists slightly disagree on the fifth principle, this disagreement does not change the fact that they remain atomists. Since the rest of the chapter will use these and related principles to develop an account of the atomic idea, we should offer a little more explanation about each one of these basic principles. Let us take them one by one.
First principle: “Nothing comes into being from what is not” (EH, 38-9). Nothing comes from nothing and nothing disappears into nothing. Inversely, something only comes from something. There is, on the face of it, a very simple reason for this principle: if something could come from nothing, if an existent could emerge out of the non-existent, then everything could come into being out of everything (DRN, 1.159-73 and 1.225-37). There would be no structure or order of generation, which is perhaps the most important feature of any physics. In a different language, this first principle prohibits generation ex nihilo. Moreover, not only is it impossible for something to come from nothing, something cannot become or “disappear into” nothing. As Epicurus says, “if that which disappears were destroyed into what is not, all things would have perished, for lack of that into which they dissolved” (EH, 38-9). Lucretius also takes up this thesis: “nature resolves everything again into its elements, and does not reduce things to nothing. For if anything were perishable in all its parts, each thing would then perish in a moment snatched away from our sight” (DRN, 1.215-8). The support for this claim is that true perishing, a going-into-nothing or reduction from something into nothing, would mean an utter negation of existence. If this were so, then all that there is would already have disappeared, thus leaving nothing; and once there is nothing, since something cannot come from nothing, the world would have disappeared. We call this the principle of conversation.

Second principle: “The totality is made of bodies and void… Beyond these two things nothing can be conceived” (EH, 39-40). There is nothing beyond atoms and void. There is no god or transcendent object beyond the world. This eliminates, besides atoms and void, other sources of change, causation, generation, etc. from atomic theory. Everything “that is” thus requires a natural, material, or physical cause to take place. Something cannot pop into or out of existence without a natural explanation. This is also the exclusion of divinity or transcendence. A
predominant feature of both Deleuze and Lucretius’ accounts of causation is to eliminate the
transcendent ground, to sever the root of prefigured essences and genera, and affirm merely the
immanent generative power of matter itself. In sum, everything that occurs and all that “there is”
is due to only two sources: atoms and void. There is no third option: “there is nothing which you
can call wholly distinct from body and separate from void, to be discovered as a kind of third
nature” (DRN, 1.420-32). We will call this the principle of atomic naturalism.

Third principle: “Among all bodies, some are compounds, and some are those things
from which compounds have been made” (EH, 40). While this is, perhaps, the most basic atomic
thesis, we are discussing it as yet another atomic principle in order to stress the interconnected
nature of atomic physics. Three related consequences follow from this (perhaps most basic)
principle. A) If there is nothing beyond atoms and void, that is, if there is no transcendent form
or telos organizing the world, then everything is either itself an indivisible and unalterable
particle of matter or composed of such particles. B) Besides the atoms themselves everything is
composed or composite. Nature is then a manyness, or what Deleuze will much later call a
multiplicity. C) In accord with the first and second principles, atomism denies the generative
power of negation. What appears to be destruction is not really reduction to nothing but simply
the disaggregation or disassembly of some atomic aggregate. One thing’s death is another thing’s
birth. Lucretius puts it succinctly when he writes, “to visible object utterly passes way, since
nature makes up again one thing from another, and does not permit anything to be born unless

69 Lucretius says elsewhere, “there is no place without into which any kind of matter could flee away from the all; and there is no
place whence a new power could arise to burst into the all, and to change the whole nature of things and turn their motions.”
DRN, 2.304-7.
70 It is interesting for the question of the Deleuze’s encounter with Hegel to note that Deleuze, in a discussion of Nietzsche’s
counter-dialecticism, implicitly admits that what he sees as the danger of Hegelian dialectics lies in negation and contradiction
becoming a “motor” or power of generation. Gilles Deleuze, Nietzsche and Philosophy (Hugh Tomlinson. New York: Columbia
aided by another’s death” (DRN, 1.262-4). Everything is composed of, generated by, and reduced
to atoms and void. We call this the principle of composition.

Fourth principle: “The totality is unlimited in respect of the number of bodies and the
magnitude of the void” (EH, 41). Both the number of atoms and the expanse of void must be
limitless. If the void were unlimited and the number of atoms limited, then bodies would never
come into contact with each other, but scatter about the unlimited void. Or, if the void were
limited and the atoms unlimited, then there would be no space to move, for the atoms would all
be packed together. Moreover, nature is also unlimited. If nature were limited, then there would
be something beyond it that limits it. For an extreme or limit is such only in contrast to
something else. Further, if there is a “something beyond,” then the totality is not the totality but
only a part of a larger totality. Lucretius suggests an entertaining thought experiment to support
the principle of the unbounded nature of nature. Imagine, he suggests, that nature is finite. Then
“suppose someone proceeded to the most extreme edge and cast a javelin” at that most extreme
limit (DRN, 1.968-70). What would happen? Clearly, he thinks, the lance would not bounce off
of anything, but would fly, unhindered, into space. This would happen every time you did this,
no matter how far out you travel. However simple this thought experiment might be, the point is
clear. For atomic physics, there is no limit to the number of atoms or extent of void. We call this
the principle of limitlessness.

Fifth principle: “for each type of shape [of atom] there is, quite simply, an unlimited
number of similar [atoms], but with respect to the differences they are…only ungraspable” (EH,
42). The fourth principle stated that there is an unlimited number of atoms and space. The fifth
principle further specifies the exact nature of the unlimited number of atoms. Atoms are not all
the same. That is, atoms come in different shapes. Some are spherical, some are pyramid-shaped,
some are rectilinear, some are hooked, etc. While the number of atoms is unlimited, and the
number of similarly shaped atoms is also unlimited, the number of kinds of atomic shapes is not
unlimited. That is, while there is an unlimited amount of any one shape of atom, such as
spherical atoms, this does not mean that the number of kinds of shapes is unlimited. Instead,
there is a limit to the shapes or kinds of atoms. The main reason for this is that if there were an
unlimited number of different atomic shapes, there would be an unlimited range of atomic sizes.
This is the principle of atomic limits.

We should note some disagreement over this principle. Leucippus and Democritus,
unlike Epicurus and Lucretius, allowed infinite shapes and sizes of atoms. This has the odd
consequence of allowing an atom to be big enough to see, if not even bigger. By contrast, for
Epicurus and the other post-Aristotelian atomists, there is a limit to the shapes and sizes of
atoms; it is just that this limit is ungraspable. This slight change in position was developed, most
likely, in response to some of the Aristotelian criticisms we will see. So, despite this
disagreement about a fundamental principle of atomism, both the pre- and post-Socratic atomists
deserve the name ‘atomist.’

Sixth principle: “the atoms move continuously for all time” (EH, 43). This is perhaps the
most interesting principle of atomic physics for this chapter. While the previous principles
restrict the atomic world to only atoms and void, as well as the composite macrobodies built out
of these basic microbodies, the sixth principle sets this world in motion. As we will see, it is not
enough to simply claim that everything is either atomic or composite; things are also always in
motion. There is no stasis in the atomic world that is not merely apparent. While there is, of
course, stasis at the macrolevel of composed bodies, when we shift our perspective to the atomic
level, this apparent stasis disappears. So, while a larger composite body can be at rest, the parts
composing that body must continuously move. This means that, on the atomic level, there is no fixed starting place or final resting place. Everything moves, without beginning and without end. Matter is always and necessarily in motion. Strangely, this feature of atomic physics is often overlooked, which is why part of the argument of this chapter is to highlight the importance of this principle to the atomic idea. This is the principle of continuous motion.

These are the basic principles of the theory of atomic physics. This is by no means the entirety of the theory of atomism, for there is much more to tell. In this and the next few chapters, we will spell out these other features of atomism, including more atomic metaphysics and physics, as well as an atomic epistemology and ethics. For now, this basic snapshot of the most elementary principles of atomic physics should suffice as an adequate outline for what follows. Now that we know what a Deleuzian idea is, and now that we know the minimal atomic principles, we can begin to articulate what we mean by the “atomic idea.”

**Atomic elements**

This is the most recognizable feature of ancient atomism: everything that is, was, or will be, is an atom, void, or a combination of atoms and void. So far, however, we have not offered any reasons for believing that there are such indivisible and unalterable miniscule material bodies bouncing around the void. To see why one should be an atomist, we will now offer a short explanation about the very process by means of which the concept of the atom emerges. Since, Deleuze claims, every concept is a response to a problem, we can witness the emergence of the concept of the atom by returning to the problems to which it is a response. One of the most important of these is the classic problem of divisibility and indivisibility. This section will show how atomism responds to this problem and to the challenges of some of Zeno’s paradoxes of
plurality by means of the mathematical concept of the method of exhaustion. Seen as a response to the problem of infinite divisibility and the associated paradoxes and concepts, the concept of the atom becomes intimately related to the concept of the infinitesimal. In short, this section will first move from the problem of infinite divisibility to atoms to the infinitesimal. What we find at the end of these movements is the first component of the atomic idea: atomic elements. Once we have established the atomic elements as the first component of the three-part problem structure of the atomic idea, the next two sections of the chapter will attempt to establish the second and third components: atomic relations and the clinamen.

*The problem of infinite divisibility*

One of the main principles of atomism is that there is a point at which reduction or division of bodies becomes impossible. We cannot endlessly cut or divide a body. Division bottoms out, so to speak. The place at which division becomes impossible is when you have reached the indivisible blocks of wrought matter, as Virginia Woolf would say. A more traditional way of saying this is that analysis, for atomism, is finite.

There is, however, something more primordial than the bare assertion of the indivisibility of atoms. Before one can make such a bold assertion or even have the concept of the indivisibility of matter, that concept must come from somewhere. As Deleuze says, concepts, like problems, are not ready-made, but must be produced. This applies as much to the atom as to any other concept. So, the concept of the atom must be engendered, and it is engendered when one attempts to address the problem of infinite divisibility. That is, the very concept of the atom emerged out of the problem of whether or not there was a point at which division of matter became impossible.
To see how the concept of the atom emerged in response to the problem of infinite divisibility, it is important to recall that atomism developed in response to many other philosophers, including Parmenides, Zeno, and other Eleatic figures.\footnote{This encounter between Parmenides and the other Eleatics and the Atomists is extremely important in the history of philosophy. John Burnet even called it “the most important point in the history of early Greek philosophy.” John Burnet, The Early Greek Philosophy, 4\textsuperscript{th} edition (London: A & C Black, 1930), 334.} This lineage is perhaps most clearly articulated in Aristotle’s \textit{Physics}.\footnote{Aristotle, \textit{Physics} in The Complete Works of Aristotle, ed. Jonathan Barnes (Princeton: Princeton University Press, 1995), VI.187a1-3.} Later on, we will examine some of the most prominent ways in which atomism responds to many of the Eleatics. For now, let us consider how atomism responds to some of Zeno’s paradoxes. One formulation of Zeno’s paradox of plurality, in essence, asks what would happen if one took a body or line that was everywhere divisible. This is how Aristotle formulates it:

Whenever a body is by nature divisible through and through, whether by bisection, or generally by any method whatever, nothing impossible will have resulted if it has actually been divided…

What then will remain? A magnitude? No: that is impossible, since then there will be something not divided, whereas \textit{ex hypothesi} the body was divisible \textit{through and through}. But if it be admitted that neither a body nor a magnitude will remain…the body will \textit{either} consist of points (and its constituents will be without magnitude) \textit{or} it will be absolutely nothing. If the latter, then it might both come-to-be out of nothing and exist as a composite of nothing; and thus presumably the whole body will be nothing but an appearance. But if it consists of points, it will not possess any magnitude.\footnote{Aristotle, \textit{On Generation and Corruption} in The Complete Works of Aristotle, 316a19.}

The question is: what would be left once every possible division is made? In one sense, these divisions would result in something with magnitude. This, however, does not make sense because then we would have something that is not yet divided, while we previously said that the figure or line was divisible everywhere. We would simply have to keep dividing. In another way,
if, upon dividing, no body is left over, then we will have a whole line or figure, with magnitude, that is composed of that which has no magnitude. That is, if what is left over after division is dimensionless or lacks magnitude, then how would we arrive at or construct a line or figure that has dimensions or magnitude out of such dimensionless elements. Even if it were possible to garner an infinite number of dimensionless points, we would never reach dimensionality. In short, we cannot get dimensions out of that which lacks dimensions, or we cannot get magnitude out of something that has no magnitude. We are left with a difficult alternative: either the division results in elements that have no magnitude or there is simply nothing left over after dividing. Either way, such elements, once combined, cannot result in a figure with magnitude.

We have turned to Zeno’s paradox of plurality because it addresses the problem at hand: the problem of infinite divisibility. In the provocative Eleatic style, Zeno does not resolve the paradox but leaves it in its paradoxical state. Put differently, Zeno does not determine the solution to the problem but leaves it in its problematic form. What Zeno’s paradox does, then, is open up a problematic space, a space that operates somewhere between that which has magnitude or dimension and that which does not. This is the problematic space between being and nothing. Atomism, in response to this paradox, is aimed at just this problematic space. In a moment, we will show how the very concept of the atom is the response to the problematic space separating something and nothing. That is, the concept of the atom is produced in response to the problem of divisibility. As David Furley says, “Epicurean theory attempts to slip through a gap,” and this gap is that problematic space between being and nothing.74

Let us think about this in terms of a related problem: the continuum. What is a continuum? David Sedley identifies two senses of the continuum operative in Ancient Greece

and Rome: a material continuum and a structural continuum. A material continuum is one that has no gaps, no interstitial void spaces, and a structural continuum is one that is infinitely divisible. Asserting the existence of a structural continuum is another way of saying that there is no end to the possibility of dividing a line or surface. Atomism denies both kinds of continua: it asserts material discontinuity in that there is void space between atoms, and it asserts structural discontinuity in that there is both a physical and conceptual point of indivisibility. We will first briefly discuss the material continuum, but will focus more on the atomic response to the structural continuum.

In Physics VI, Aristotle argues that the elements out of which a material continuum is composed must all touch, without leaving any gaps or space between them. If these elements are solid, then the continuum is essentially a single, static, and unmoving version of Parmenidean being. While Aristotle and the atomists disagree over their respective accounts of motion, they both agree that if a material continuum is so constituted, then motion, change, and becoming is impossible. It was not until the Cartesian and Newtonian physics of the seventeenth century that we see serious alternatives to this position that collapse the distinction between the material and structural continuum and redefine matter in terms of extension rather than solidity.

The question of the structural continuum is more relevant for our purposes. The argument is that while atomism arrives at the idea of indivisible parts of matter, atoms, it does so by addressing the problem of the infinite divisibility of a structural continuum. Interestingly, this is this same problem that produced the concept of the infinitesimal, and later we will argue that the concept of the atom led to the production of the concept of the infinitesimal. The process through

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76 While such a characterization of the two kinds of continua seems to imply that the material and structural continua are “inseparably united,” Sedley also points out that “it is important to appreciate that this was by no means assumed by the contemporaries and immediate forerunners of Epicurus and Zeno.” For a list of figures who separated these two kinds of continua, see Sedley, “Hellenistic physics and metaphysics,” 355-6.
which the problem of infinite divisibility of the structural continuum produces the concept of the
atom is our current focus. The question is, then, how did this concept emerge in response to this
problem? That is, what is the process by means of which the concept of the atom was produced?
To see this, let us try a thought experiment.

Imagine this: take a structural continuum and keep dividing. Every time you divide it,
you are able to divide again, and again, and again. If we take this possibility of infinite
divisibility seriously, then it seems that we will never be able to “make anything” or “build
anything” because we will never arrive at minimal parts that can act as building blocks for
construction of wholes. This is another implication of Zeno’s paradoxes. Zeno says, essentially,
if we simply keep dividing a line infinitely many times, then the line would be infinite in
magnitude because it would be composed of infinitely many parts, each of which would have its
own magnitude. The problem with this is that now every thing, large or small, would have the
same magnitude, namely, an infinite magnitude. Since all things would possess the same
magnitude, all would be the same size. Yet their size is not the same, since some are large and
others small. This is clearly a contradiction.

At this point, opponents of atomism will claim that this only follows if we unjustifiably
assume that everything reduced to uncuttable building blocks. Stoicism, for example, which fully
embraced the problems of the structural continuum, boldly asserts that just because a body is
infinitely divisible it does not follow that there is an actual infinity of constitutive parts. The
atomic response to such a position is found in the mathematical invention of a method for
addressing the problem infinite divisibility without falling into either horn of Zeno’s paradox: the

77 Ibid., 392.
method of exhaustion. Atomism needs a means for operating in the problematic space between magnitude and non-magnitude (being and nothing). This role is played by the method of exhaustion, which allows that problematic space to be addressed by separating and tying together Zeno’s two horns.

What is the method of exhaustion? It is a procedure for, among other things, measuring curves and curved figures by means of non-curved geometrical shapes. For example, we can determine the area within a circle by inscribing within the circumference of the circle a sequence of polygons with more and more sides; as the number of sides increase, the area of the shape begins to converge to the area of the containing shape. Eventually, the difference in area between the polygons and the area within the circle becomes arbitrarily small. As this difference between the areas of the respective shapes continues to decrease, the difference basically disappears. That is, the value for the area of the circle is methodically “exhausted” by the sum of the areas of the consecutively inserted polygons. The advantage of this method is that while it is difficult to find the area within a circle or under a curve, it is easy to sum the areas of a bunch of polygons. The following diagrams progressively show, moving from left to right, the exhaustion of the space within the circle. On the left is a triangle that, of course, only very crudely approximates the area of the circle. If we double the sides of the triangle to get a hexagon, as we do in the middle figure, the approximation gets closer. Doubling the sides yet again creates a dodecagon, as in the figure on the right, and the approximation gets even closer. We can continue this sequence of

78 While there is some discussion in Cicero and other critics of atomism about the unfriendly relationship between atomism and math, it is generally agreed that some kind of mathematics was a major influence on atomism. See Giuseppe Cambiano, “Philosophy, science, and medicine” in The Cambridge History of Hellenistic Philosophy, 587-90. The method of exhaustion was first developed by Antiphon in the late fifth century B.C. and then later exploited by Archimedes. Despite Aristotle’s refutation of the possibility of a body or plane being composed of parallel lines (Aristotle, De Caelo, in The Complete Works of Aristotle, 300a1), Archimedes successfully uses the method of exhaustion – which depends on just such an assumption – to successfully determine volume and area. According to both Michel Serres and Jürgen Mau, Archimedes the mathematician of the atomists, with Serres even claiming, “the atomist universe is Archimedean.” Michel Serres, Birth of Physics, trans. Jack Hawkes, ed. David Webb (Manchester: Clinamen Press, 2000), 13-25 (quotation on 15). Jürgen Mau, “Was There as Special Epicurean Mathematics?” in Exegesis and Argument: Studies in Greek Philosophy Presented to Gregory Vlastos, eds. E.N. Lee, A.P.D. Mourelatos and R.M. Rorty (Netherlands: Van Gorcum and Comp. B.V, Assen, 1973), 421-30.
approximations indefinitely and eventually exhaust the difference between the area of the circle and the area of the inscribed polygons.\textsuperscript{79}

\begin{figure}[h]
\centering
\includegraphics[width=0.6\textwidth]{circle_polygon}
\caption{Comparison of circle and inscribed polygons.}
\end{figure}

The atomists translate this mathematical method into their physics. To repeat, if, when trying to measure the area of a circle, we stop before we reach the infinite “terminus,” such as the circumference of the circle, and insert a limit, such as polygon, then we will be able to exhaust the continuous variability of the curve and treat sections of a continuously changing surface or curve through finite means. Now transform the curved surface into an infinitely divisible structural continuum and make the series of inserted rectangles a set of atomic objects. In both ways, we are able to make sense of an infinitely divisible surface in terms of finite objects. If we are able to harness the power of something infinitely divisible by finite means through the insertion of a limit, such as a polygon or atom, then we can respond to Zeno’s paradox and generate finite magnitudes in response to the problem of infinite divisibility without resulting in absurd paradoxes, such as small and large bodies being composed of the same infinite magnitudes. What we see, then, is a way to use finite objects to think infinite divisibility. We can now give a name to that finite means: the determination or finitude of the atom. Like a rectangle, the atom is what makes it possible to address the problem of infinite divisibility without falling into either horn of Zeno’s paradox. This is how atomism translates the method of exhaustion into physics, even if this translation is almost analogical. So, just as the method of exhaustion allows

us to grasp the area of a circle as composed of an infinite set of determinate and finite polygons, it also allows us to grasp an infinitely divisible structural continuum as composed of an infinite set of determinate and finite atoms. Both neutralize Zeno’s paradox of divisibility the same way.

We can sum up the whole argument this way: the very possibility of thinking adequately about some infinitely divisible thing is its conceptual division into a series of finite objects. Thinking infinity requires finite means, if we want to avoid Zeno’s paradox. That is, in order to approach infinity, we must stop just short of it. The difference between infinity and a set of finite objects that exhaustively approach it, however, effectively disappears. This is the method of exhaustion. That is, in order for us to determine the area of a circle, we need to insert a series of polygons that approximate the curve by a series of small parts whose areas themselves can be determined. By making these parts smaller and smaller, or by doubling the sides of the sequence of polygons, we can eventually make them fit the figure as much as we like. We are then able to deal with the possibility of dividing up the area of a circle into a bunch of polygons without actually dividing into infinity. This sequence of polygons then acts as indivisibles or atoms exhausting that area.

This method for exhausting the area of a circle also applies to the infinite divisibility of a structural continuum. In a way, atomism deals with the problem of the structural continuum by dividing it up into an infinity of indivisible elements. To make it really simple, take a structural continuum and cut it up again and again to infinity. The group of infinite cuts is the infinite set of all atoms. This is what atomism does: it cuts a structural continuum into an infinite amount of finite objects. The advantage is that once you have an infinite set of elementary parts, you have a way of exhausting the problem of infinite divisibility through finite means. It is much easier to think in terms of finite objects rather than worrying about continually dividing a structural
continuum. Now, the infinitely divisible structural continuum is no longer the “fathomless gulf, into which all things vanish” that so terrified Marcus Aurelius. Instead, we have a method for exhausting just such a continuum by means of finite and indivisible objects. We can continue to take smaller and smaller sets of atoms, but we must cut things up into such objects. This is why the method of exhaustion is almost identical to the method of indivisibles. As Eli Maor says comparing it to the method of indivisibles, “although the method of exhaustion has a sounder mathematical foundation, both methods were but a disguise for using the limiting process without explicitly admitting it.” The atomist insight is that it is not necessary to continue to divide infinitely. Instead, it developed a method for dealing with infinite divisibility by postulating a set of indivisible objects that methodically exhaust that infinitely divisible structural continuum. Atomism thus stops the infinite regress of divisibility short and attempts to produce the world with an infinite set of finite objects.

*Proto-infinitesimals*

We have now seen how atomists used a philosophical version of the mathematical method of exhaustion (initiated by Antiphon in the days of Leucippus and Democritus and extended by Archimedes in the wake of Epicureanism) to produce the concept of the atom and thus answer the problem of infinite divisibility. The important point for the larger story of the atomic idea is that ancient atomists are responding to a problem very similar to one faced by early modern philosopher-mathematicians. In response to this problem, the atomic solution via the method of exhaustion anticipates that of the differential calculus.

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81 Ibid., 12n2.
of which one arrives at the concept of the atom is addressed to the same problem later tackled by the differential calculus.\footnote{Deleuze pointed out this continuity in his lecture courses, explaining, “The Greeks already had to invent a special method called the method of exhaustion. It allowed them to determine curves and curvilinear surfaces insofar as it gave equations of variable degrees, to the infinite limit, an infinity of various degrees in the equation. These are the problems that are going to make it necessary and inspire the discovery of differential calculus and the way in which differential calculus takes up where the old method of exhaustion left off.” \textit{Deleuze, Cours Vincennes}, transcript, “Sur Leibniz,” 22/4/1980; emphasis added. Deleuze also comments on the Greeks use of the method of exhaustion in Gilles Deleuze, “Spinoza Lecture February 12, 1980,” from \textit{La Voix de Gilles Deleuze en ligne, http://www2.univ-paris8.fr/deleuze/article.php?id_article=91}.} Though this significant conceptual and historical relationship obtains between the atomic method of exhaustion and the differential calculus, we are not saying, nor is Deleuze saying, that atomism and its associated mathematics invented what we find in Leibniz and Newton.\footnote{For more discussion on the evidence for the prominence of mathematics in atomism, see Mau, “Epicurean Mathematics,” 421-30. Much of the evidence for the importance of atomic mathematics comes from papyrus 144 of Herculaneum.} As Maor claims, while the ancients basically used a limiting process when they exploited the method of exhaustion, they did not admit the \textit{concept} of a limit into their math and science, and so did not fully exploit the potential of such methods. Thus, while anticipating it in certain respects, the atom is not \textit{equivalent} to the infinitesimal. Instead, the atom and the infinitesimal are related yet different solutions to the same problem. The atom, Deleuze says, “still retains too much independence, a shape and an actuality” (\textit{DR}, 184). This independence or determination comes from the ancients’ characterization of the atom as composed of quantitative magnitudes – size, shape, weight, etc. Such independence and determination is another reason why the atom and the infinitesimal are not the same concept. An infinitesimal, as we said in the last chapter, is located below any determinate quantitative magnitudes. As explained in Chapter 1, it is that which is below any given magnitude or quantity but is not yet zero, but it is not a measurable something. An infinitely small quantifiable difference approaching without ever reaching nothingness, it is arithmetically equivalent to zero, but still not yet zero. As Archimedes might put it had he had access to the language of the infinitesimal, an infinitesimal number is one
that will never result in a finite number regardless of how many times it is added to itself. It is vanishing without having vanished, disappearing but not yet disappeared.

The point is that the problems to which atomism responded and the methods it employed to deal with those problems are the productive conditions for the ‘discovery’ of the concept of the atom. Since the concept of the infinitesimal also responds to similar conditions and used connected methods, the atom is located in the genealogy of the differential calculus. In this way, the atom is an ancient solution to a set of philosophical and mathematical problems intimately connected to those faced by Newton and Leibniz. We should also remember that Democritus, one of the first Ancient Greek atomists, is credited as being one of, if not the, earliest philosophers to discover the concept of the infinitesimal. It is no coincidence that one of the earliest formulators of the theory of atomism is also one of the earliest formulators of the concept of the infinitesimal. As Serres says, “Archimedes, like Leibniz after and Democritus before him, is a geometer of the infinitesimals. In the end he arrived at indivisibles…like Leibniz with the monad and Democritus with the atom.” This is why Deleuze confidently claims that “Leibniz tries to explain that, in a certain way, differential calculus already functioned before being discovered.” In the end, the concept of the atom and the concept of the infinitesimal are connected by a shared problem and method.

Now that we have demonstrated how the concept of the atom, by means of the method of exhaustion, emerges, we can begin to identify atoms as the first part of the atomic idea: the atomic elements. As we know, the concept of the atom, as the response to the problem of the infinite divisibility of a structural continuum, is intimately related to the concept of the

86 Bell, The Continuous and the Infinitesimal, 7.
87 Serres, Birth of Physics, 14.
infinitesimal. Insofar as the concept of the atom emerges in response to the same problem to which the infinitesimal is a response, both are responses to a similar problem and with a connected method. John Bell notes this close proximity of the indivisible and the infinitesimal: the “concept of that indivisible is closely allied to, but to be distinguished from, that of an infinitesimal…In each case the indivisible in question is infinitesimal in the sense of possessing one fewer dimensions than its generating figure.”89 Or as Marx notes, “according to Eusebius, Epicurus was the first to ascribe infinite smallness to the atoms.”90 So, both the atom and the infinitesimal address that problematic gap opened up by the problem of infinite divisibility and related paradoxes. In response to this problematic space, the concept of the infinitesimal is the assertion of an infinitely small magnitude right below the smallest finite magnitude and yet above zero, and the concept of the atom is the assertion of an infinite set of finitely small magnitudes that exhaust a structural continuum. Although the infinitesimal goes further, as in closer to infinity due to the explicit admittance of a limit, the atom is necessarily related to the concept of the infinitesimal.

While we have hopefully demonstrated the conceptual proximity of the atom to the infinitesimal, simply pointing to this proximity is not the real goal. The real goal of this first section of the chapter is to construe the atom as functioning in the atomic idea in the way that the concept of the differential functions in the Deleuzian idea. If we recall how Deleuze used the concept of the infinitesimal as a tool for thinking of differential elements as undetermined in themselves, we are now doing the same to atoms. As we saw, the infinitesimal allowed Deleuze to use the concepts of differential elements as the undetermined first component of the Deleuzian idea. Since the concept of the atom is so closely related to the infinitesimal, we can argue that the

89 Bell, The Continuous and the Infinitesimal, 6.
atomists use the atoms themselves as the undetermined first components of the atomic idea. While in the method of exhaustion atoms remain too determined to be identical to infinitesimals, nevertheless they possess a different form of indeterminacy. We will now show how atoms may be determinate and yet still function as the undetermined elements of the atomic idea.

Undetermined atomic elements and determining atomic relations

Focusing on atomic relations, as we will do shortly, allows us to see how the atomic elements function in the whole atomic idea. As Deleuze sees it, the first component of an idea is the undetermined part of the problem-structure, which in this case is fulfilled by atomic elements; the second part is the determining component, which is fulfilled by atomic relations. Since every component of the atomic idea must work together, the elements must be undetermined in order for atomic relations to fulfill the function of determining the atomic elements. If the elements are not relatively undetermined (and we will explain this relative indeterminacy in a moment), then the relations have no room to determine them. Seeing the function of atomic relations in this problem-structure means that atomic elements must be relatively undetermined. At the same time, an argument that stopped there would simply beg the question. Our task is to demonstrate that atoms really do function as the undetermined element when atomism is framed in terms of Deleuze’s problem-structure. So far we have only demonstrated that if they are undetermined (despite the determination that the method of exhaustion seems to demand), then they can indeed play this role. So, the question becomes, why should we consider atoms to be the undetermined element of the atomic problem?

First, as will be explored at greater length in Chapter 3, the only atoms in themselves have only quantitative determinations. Aetius list three sorts of quantitative determinations for
atoms: “Democritus specified: size and shape; and Epicurus added weight as a third.” Later, Lucretius follows Epicurus in his own specification of the three minimal quantitative determinations. For the classical atomists, atoms possess no qualitative determinations. Atoms are colorless, odorless, tasteless, and so forth. Along with arrangement and position, the minimal quantitative determinations of size, shape, and weight contribute only minimally to the emergent colors, sounds, tastes, etc. of the composite bodies we see, hear, and touch. Thus, while the atomists do take such minimal quantitative determinations to be factors contributing to the emergence of the qualitative determinations that characterize macro-object or composite individuals, they do not sufficiently determine those qualitative characteristics. For example, while it is true that the atomists attempt to explain the taste of something bitter or sharp by claiming that the bitter object is composed of sharp or barbed atoms, such arguments are certainly not central to atomic theory or necessary for its core principles. The mere presence of barbed atoms does not definitively entail bitter or sharp taste: one can eat an object that is composed of many sharp or barbed atoms without experiencing bitterness. Moreover, one of the main reasons for attributing to atoms quantitative determination alone is to ensure that the atomic microworld can provide the necessary and sufficient conditions for the great diversity of qualities and kinds of individuals populating the macroworld (DRN, 2.730-864). To ensure this, the atomists insist that the macroworld is not a mere reflection of the quantitative determination of the microworld. That is, the emergent individuals of the macroworld are not completely entailed by the quantitative determinations of the atoms, as if in a bare repetition. Instead, the organization and relations of atoms play a far greater determinative role for macroworld individuals than their shape, size, and weight. So, part of the argument for the importance of the

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91 Aetius, in The Epicurus Reader, 1.3.18.
92 DRN, 2.398-407. See also Theophrastus, Causes of Plants, 6.1.6.
atomic idea is that questions of organization and relation are much more important than the minimal quantitative determinations of atoms to Epicurus’ or Lucretius’ ability to account for the natural word and its individuals. Aristotle affirms the priority of organization and relation through a dramatic metaphor: “it appears completely different when one thing shifts position. For tragedy and comedy come to be out of the same letters.” This suggests that atomic elements, as the first component in the atomic idea, are relatively undetermined: even while quantitatively determined in terms of size, shape, and weight, they lack qualitative determination. This qualitative indeterminacy allows atomic elements to be determined by the atomic relations. It is that determination by relations that endows atoms with the power to generate the natural word and its individuals.

Another take on this problem would be to say that the minimal quantitative determinations of atoms are less determinations in themselves then ways of differentiating among atoms. Since the only quantitative measure possible for the size, shape, and weight of an atom would be some set of other atomic bodies, atomic size, shape, and weight actually designate a difference among atoms. For example, to attribute the shape of a sphere to one atom and the shape of a pyramid to another is really a means for describing the precise difference among atoms, i.e. for thinking different atoms as different. The same holds for size and weight. “Weight,” Marx observes, “exists for Epicurus only as different weight.” So, ultimately, atomic size, shape, and weight are determined only with respect to other atoms, that is, they are determined relationally. Thus, relatively undetermined atomic elements are determined by atomic relations.

94 The only atomic determination that might not match this reading is ‘hardness’ or ‘solidity.’ All of the atomists attribute hardness, even perfect hardness, to atoms (EH, 44). While this is a slight worry, I would argue that this determination is an unfortunate result of an attempt to insist on the materiality of atoms. Making atoms perfectly hard or solid is a way of preventing the evaporation of matter. The hardness of atoms has little to do with preventing atomic relations from determining the atoms.
95 Marx, First Writings, 124.
In sum, there are at least two reasons that the minimal atomic determination demanded by the method of exhaustion is no bar for claiming that atoms play the role of the (relatively) undetermined elements of the atomic idea. First, the quantitative determinations of atomic parts do not sufficiently define the composite individuals they constitute; second, the quantitative determinations of atoms (shape, size, and weight) are atomically relational. So while atoms do have minimal quantitative determinations, it makes sense to say that these determinations are not central to the productive power of the atomic idea. Instead, what matters is the qualitative relationality of atoms and their power to collectively constitute composite, macro-level bodies. Put differently, the merely quantitative determinations of atoms cannot account for the existence of the world. Such an account must focus on the ways atoms can enter into relations and the way that these relations engender the world.

*From atomic elements to atomic relations*

We began by articulating how the concept of the atom emerges in response to the problem of infinite divisibility, and we saw how one of Zeno’s paradoxes of plurality embodied this problem. The atomic response to this problem is to use, at least analogically, the mathematical method of exhaustion to discover a means for finitely addressing an infinitely divisible structural continuum. Seen as a response to the problem of infinite divisibility, the concept of the atom becomes the means for exhausting the surface of that continuum. When considered in terms of the problem to which atomism responds, atoms are intimately related to the concept of the infinitesimal. This allowed us to construe the atom as the first component of the atomic idea: atomic elements. If the concept of the atom is so closely related to the concept of the infinitesimal, that is, if the concepts are products of the application of the same method, then
atoms can function as the elements of the atomic idea. Deleuze himself develops his concept of the differential elements of the idea in terms of the concept of the infinitesimal in Leibniz et al. The next two sections will build on this discovery and turn to the second and third components of the atomic idea: atomic relations and the clinamen. After we see how these two components operate in the atomic idea, we will step back and draw together each of the three components of the problem-structure of the idea in terms of a famous atomic metaphor: the similitude of letters.

**Atomic relations**

Now that we have identified the atomic elements as the first component of the problem-structure of the atomic idea, we can turn to the second component: atomic relations. We begin by looking at another problem to which atomism responds: the classic problem of the one and the many. As we will see, the atomic response to the problem of the one and the many is what we can construe as ‘the atomic multiple’. Once we have established the presence of multiplicity in Epicurus and Lucretius, we will see that atoms are never alone but always in relation to other atoms. This is where we will really begin to dig into the concept of atomic relations.

The basic claim of this section is that the capacity of atomic relations for determining larger atomic compositions in the phenomenal register is what allows the atoms to produce a world that does not resemble the atomic register. There is no order of resemblance between micro and macro worlds. With this in mind, we will then examine the exact nature of atomic relations by situating atomism in a larger tradition that Deleuze calls philosophical pluralism. Philosophical pluralism is defined by, among other things, the principle that relations are external to their terms. We will then use one of the first atomic relations, the conjunction of atoms and void, to see how motion is essential to the complete account of the atomic idea. After
looking at sources of movement, we will discuss the speed at which atoms move. The speed of atoms, we will see, is an absolute speed, what Epicurus calls “the speed of thought.” With this account of atomic relations in hand, we will then turn to the final component of the atomic idea: the clinamen.

*The One and the Many*

The problem of the infinite divisibility of the structural continuum is closely related to the problem of the one and the many. These are two of the most significant problems in Ancient Greek and Roman philosophy, and ancient atomism addresses both of them. We have already discussed how atomism responds to infinite divisibility; we will now see how it responds to the one and the many.

For the Milesian monists, Heraclitus, and the Eleatics, the problem is to explain how one fundamental thing or process (Thales’ water, Parmenides’ Being, Heraclitean becoming, etc.) can account for the many things and qualities found in the world (trees, mountains, people, colors, sizes, etc.) Many pre-Socratics proposed that worldly diversity must emerge from a common source, some common property or feature. The difficulty, then, was to identify a single type of thing able to account for the variety of differences in a satisfying way. Rather than get caught up in a race to find the best kind of ‘one,’ the atomists responded to the problem of the one and the many differently. As we will demonstrate, it would be misleading to assume either that the atom plays the role of the Epicurean ‘one’ or that the atomists flip the order and prioritize the many over the one. Instead, the atomists formulated an entirely different concept in response to the problem. We will designate this response the concept of multiplicity or the atomic multiple.
There seem to be at least two ways to understand the atomic confrontation with the problem of the one and the many. First, to speak anachronistically, the atomists could be taken to follow a dialectical strategy in the Hegelian sense. On this account, the atomists take the Parmenidean one, “Being” as a highly magnified image of an atom. For Parmenides, besides being, there is nothing. Being and nothing are negatively determinative of each other: being is determined as not nothing and nothing is determined as not being. Yet since each is an affirmative determinate thought in itself – being is being and nothing is nothing – they relate to each other as independently determinate thoughts. So, being and nothing relate to each other not only as one thought and its negation, but also as positive thoughts in themselves. According to this dialectical logic, being is a self-enclosed one that relates to nothing as another self-enclosed one. As Hegel says, “as essentially self-relation, the other is not indeterminate negation as the void, but is likewise a one. The one is consequently a becoming of many ones.”

In this dialectical way, thinking the Parmenidean one leads directly to the domain of atomism. While such a Hegelian reading demonstrates a dialectical movement from the one to the many, it does not go far enough and so misses the atomic multiple.

This atomic multiple constitutes the second (and better) option for understanding the atomic confrontation with the one and the many. While we have yet to establish that atomism operates with a concept of the multiple, consider, for a moment, the atomic response to the Eleatic separation of being and nothing. For Parmenides, being simply is, nothing is not, and never the twain shall meet. This absolute separation depends on conceiving being and nothing as unities. Atomism, however, fragments being into many beings. This fragmentation recasts the separation between being and nothing: being is fragmented into many beings and nothingness.

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97 “Democritus fragmented the One-Being of Parmenides and multiplied it into atoms.” *DR*, 204.
becomes the void. Being and nothing are no longer self-enclosed entities but conjoined. What this means is that in response to the Eleatic arguments, atomism asserts a fundamental conjunctive relation: its fundamental principles conjoin being(s) and void and thereby introduce plurality into the one. Yet this is not yet enough to get us to the atomic multiple: many beings and a void is not enough. Instead, these many beings must relate to each other, that is, they must be organized. Above all else, atomism seeks to account for the production of worlds. Yet if atoms are not interrelated and organized in some way, there can be no macrobodies or worlds. As we saw in the Epicurean principle of composition, for the atomists there are only two options: things are either atoms or combinations of atoms (EH, 40). Since, the atomic line of reasoning goes, there was no time or state at which worlds and individuals did not exist, there is no time or state at which atoms were not organized and interrelated. Yet what is the origin of this organization? For atomism, it is not only the division or fragmentation of the one into many, for this may simply yield a homogenous and undifferentiated mass, in which case there would be neither worlds nor macrobodies. Instead, atomism responds to the problem of the one and the many by moving beyond the Eleatic options (one or many) and instead creating a concept of the ‘organized many’ or what we call the atomic multiple: the organization belonging the many.

Beyond the distinction between the one and the many, there is, in Deleuze’s words “an organization belonging to the many as such, which has no need whatsoever of unity in order to form a system” (DR, 182). Again, rather than trying to account for the many in terms of a prior organizing one, atomism discovers an organization belonging to the many itself. Unlike many other ancient accounts, the organization belonging to the many does not imply, for atomism, an organizer acting to achieve some end. Instead, the organization belonging to the many is situated on the plane of atoms themselves. This is an immanent, open-ended, undirected manner of
composition. There is no need for a unity to bring the atoms into relation with each other or to bring organization to the atomic world. Relations among atoms themselves are what organize and compose the worldly individuals. The result of the composition is non-homogenous in that its elements are all differentiated, and thus the atomic multiple is heterogeneous. Recalling Chapter 1, the organization belonging to the many is exactly what Deleuze means by multiplicity, a term which itself characterizes the ‘idea.’ If, then, atomism solves the problem of the one and the many by shifting its focus to the immanent organization of the many, we can claim that atomism, recast in Deleuzian language, focuses on the atomic multiple, which characterizes the atomic idea.

To claim that there is at least a basic outline of the concept of multiplicity in atomism implies something that may be shocking: *the defining feature of atomism is not the atom.* However counterintuitive this claim may appear, the reason for it is simple: an atom is never alone. If atoms were not always in relation, then worlds and individuals could not exist. Thus, thinking atomically about the basic material constituents of the world always yields plurality. In short, there is never just *an* atom; there are always atoms. Atomism is the philosophy of infinitely many organized atoms. Thinking atomically is thus a way of giving an account of the interrelated organization of the many at the heart of being. That is, atomism is the thought of multiplicity as being or being as multiplicity. To spell out this organization, we now need to account for the nature of atomic relations more precisely.

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98 This is why, perhaps paradoxically, what Deleuze says about Leibniz applies to atomism. It is not just a “question of infinitely small elements, but of infinitely small relations between two elements” (*Deleuze, Cours Vincennes*, transcript, “Sur Leibniz,” 22/4/1980).

99 When Marx notes “the atom…cannot actualize itself as the idealizing and pervading power of this manifold [Mannigfaltigkeit],” he is shifting the focus of atomism from the atom alone to the atomic idea or multiplicity. Marx, First Writings, 130.

100 Hegel and Marx also insist on this necessary relationality of atoms. They, however, construe it in terms of the shared repulsion of atoms from each other. Since this requires the whole Hegelian dialectical structure of negation and mediation Deleuze, does not follow this line or argumentation. Still, the point is that two different arguments reach the same conclusion.
Philosophical pluralism and external relations

While we tried to show how atomic relations determine the relatively undetermined atomic elements, we have yet to explain the nature of these relations. To grasp this, we must see how Deleuze situates atomism in terms of a long tradition in philosophy. Atomism is an early, if not the first, member of a philosophical tradition Deleuze calls “philosophical pluralism.” While philosophical pluralism extends through Hume’s empiricism to Russell’s modern logic to Deleuze himself, it is with Democritus, Epicurus and Lucretius that “the real noble acts of philosophical pluralism begin” (LS, 267). The defining characteristic of philosophical pluralism is the exteriority of relations. Since atomism and Humean empiricism are both equally members of this tradition, what Deleuze says of Hume in terms of the externality of relations also applies to atomism. For Hume, Deleuze claims, “relations are external and heterogeneous to their terms.” Such is the case for atomism, too. As Deleuze says, Humean empiricism creates “a world in which terms are veritable atoms and relations veritable external passages.”

What, then, is an external relation? To see this, we should start with internal relations. A relation is considered internal if it is seen as a property of a term. Leibniz is perhaps the one who does the most with internal relations under the rubric of in esse predication. For him, to say that Peter’s relation to Paul is an internal relation means that the concept of Peter contains the relation to Paul. Peter’s relation to Paul is closer to an attribute that Peter possesses. The term, Peter, contains the attribute “related to Paul.” Interestingly, Leibniz goes even further. He says that the concept of Peter contains not only the relation to Paul and Jesus, but to all other terms, including the relation to Cesar, Odysseus, Adam, etc. For Leibniz, all Peter’s relations are reduced to

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102 Ibid., 38; emphasis added.
properties of the concept of Peter. In such an ontology of purely ‘internal relations’ the term is the primary and determining factor.

For internal relations, we can account for the relations by examining nothing more than the terms themselves; for external relations, per contra, we cannot account for the relations by looking at the related terms alone. A theory of external relations switches the priority: relations are primary and determining while related terms are secondary and determined. Once relations are external to their terms, we cannot discover Peter’s relation to Paul in Peter no matter how far down we dig into his concept. In short, the difference between internal and external relations is a difference in priority in determination: the interiority of relations makes the terms determinative of the relations, while the exteriority of relations make the relations determinative of the terms. In terms of the atomic idea, atomic relations are external because they determine the relatively undetermined atomic elements. We cannot completely discover the relations that the atoms will assume by digging into the concept of the atom. In atomism, we do not simply find a world of atomic terms but a world of relations and organization. This use of external relations, which struck Deleuze like a “thunderclap in philosophy,” is the defining characteristic of all philosophical pluralists.

It is not surprising that Deleuze uses the same metaphor to speak of the kind of external relations found in Lucretian atomism and Humean empiricism: a Harlequin’s jacket (LS, 267).

Speaking of Lucretius, Deleuze says, “Nature is Harlequin’s cloak, made entirely of solid patches and empty spaces; she is made of plenitude and void, being and nonbeings” (LS, 267;
emphasis added). Speaking of Hume, he also says, in nature “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 bluntness, conjunctions and separations, alternations and interweavings.” Lucretius describes nature in terms of various kinds of external relations: nature is organized in terms of composition and decomposition, of conjunctions and disjunctions, “everything is formed out of connections, densities, shocks, encounters, concurrences, and motions” (DRN, 1.633-4). This is what allows Deleuze to claim that Hume’s empiricist atomism, like ancient atomism and Russell’s logical atomism, “breaks with the constraining form of predicative judgment and makes possible an autonomous logic of relations, discovering a conjunctive world of atoms and relations.”

Still, it may be unclear why atomism, or any of the philosophical pluralists, insists on external relations. The reason, in short, is the indivisibility of the terms or atomic elements. Atoms contain no interiority. Following Leucippus and Democritus, Simplicius writes, “suppose…the substance of the atoms to be compact and full.” For if they contained any interiority, then they would not be indivisibles but capable of further division. Thus, to say that there is no interiority in the atomic world is also to say that we cannot determine the relations that atoms will assume by digging into the concept of the atom. Atomic relations are not properties of atoms; atomic relations exist independently of the atomic terms. Since they are full, as in lacking interiority, atoms do not determine the relations into which they enter. All atomic relations are external

For Epicurus, Lucretius, Hume, or any of the philosophical pluralists, relations are

106 Deleuze and Parnet, Dialogues, 55; emphasis added.
107 Deleuze, Pure Immanence, 38.
external to their terms in that relations determine the terms rather than the terms determining relations. Later, we will use this principle of the exteriority of relations to develop an atomic grammar of conjunction, conjugation, and declension (logic of “and”) in order to displace the logic of predication, attribution, and existence (logic of “is”). For now, we will look at the results of what is perhaps the most important type of conjunctive relation: atoms and void. This basic relation will lead to an account of atomic motion.

Atomic movement

As we will soon see, not only does the postulation of an unlimited number of unchanging physical seeds necessitate exterior relations, but it also necessitates movement. This is another essential characteristic of atoms: just as an atom is never thought alone, but always in relation to other atoms, atoms are always moving. There is no thought of a fixed atom. The concept of atoms implies the concept of atomic movement. The means for seeing this is to follow one of the most important implications of the atomic explosion of Parmenidean being. For out of that explosion there is one particularly important relation: the relation between atoms and void. This conjunctive relation leads to the possibility of atomic motion. We will now see how we can follow the atomic idea from this atomic conjunction to atomic motion.

As stated in the sixth principle in our outline of atomic physics, the principle of continuous motion, matter is never fixed but always moving. Almost all of the atomists, as well as those who respond to atomism, explicitly state this principle. This is a list of all the references to the necessity of constant and endless atomic motion.

- Aristotle on Democritus and Leucippus: “For they say that there is always motion.”

\[\text{109 The necessity of the movement of atoms is one of the reasons why Michel Serres identifies atomism as an early instance of a sort of proto-hydrostatics.}\]
Simplicus: “Leucippus and Democritus said that their primary bodies, the atoms, are always moving in the unlimited void.”

Epicurus: “the atoms move continuously for all time” (EH, 43).

Lucretius: “If you think the first-beginnings of things [rerum primordia] can stand still, and by standing still beget new motions amongst things, you are astray and wander far from true reasoning” (DRN, 2.80-2).

Lucretius again: “beyond doubt no rest is granted to the first bodies…but [are] rather driven by incessant and varied motions [adsiduo varioque exercita motu]” (DRN, 2).

Lucretius again: “primary bodies are clearly never allowed to come to rest…At all times things are going on in constant motion everywhere, and underneath there is a supply of particles of matter which have been travelling from infinity” (DRN, 1.992-7).

Later, Sextus Empiricus: “the atom in itself is in everlasting motion.”

Deleuze: the “ancient atom is entirely misunderstood if it is overlooked that its essence is to course and flow” (ATP, 489).

It is clearly stated in almost every reference to motion in atomic physics that atoms are constantly and endlessly moving. While atomists quibble about less important differences among the different variations of atomic theory, every atomist insists on this principle. This leads us to believe that the movement of atoms is as important to the theory of atomism as are the atoms themselves. A static atom has no place in atomism.

There is a complicated reason for the endless and constant movement of atoms. In one sense, atoms are constantly moving because of the nature of void. The atomists define void in terms of “giving way” or relenting, of being unable to offer any kind of resistance, since it is completely lacking in density. It is, Epicurus says of atoms, “the nature of the void which separates each of them and is not able to provide resistance” (EH, 44). In short, void yields. Void is defined as relenting or yielding, but what does it yield to? It yields to atoms. This process of yielding to atoms is what we call movement. If there were no void, then the atoms would all be packed together, thereby making motion impossible. Since, however, there is void, atomic
motion is possible. As Lucretius says, “if there were no place and space \[ locus ac spatium \] which we call void \[ inane \], bodies could not…move anywhere at all in different directions” \( \text{DRN}, \ 1.426-9 \). This leads to another sense in which movement follows from atoms and void.

Given this definition of void, we reach one of the most important types of atomic relations. As we saw, relations are external to their terms, and one way to understand such external relations is in the form of conjunctions. Let us consider one of the most important conjunctive relations in atomism – atoms \textit{and} void – as part of the atomic response to Parmenides. Atomism explodes Parmenidean being into the infinite plurality of atoms. This is how we initiated a movement that proceeded first from the \textit{one} to the \textit{many} and then, with the introduction of the organization belonging to the many, from the \textit{many} to \textit{multiplicity}. There is, however, another implication of this explosion. This very movement from the Parmenidean one to the atomic multiple sets atomic elements in motion.\(^\text{110}\) One of the central Eleatic arguments is the impossibility of movement given that being simply \textit{is}. Parmenidean being is unchanging, unmoving, static, and fixed. Atomism, however, conjoins beings and void, and thereby introduces pluralism into being, which then allows being to move. In short, from the conjunction of atoms and void, atomic motion is made possible. One of the main reasons for seeing atoms as endlessly and constantly moving is the most insistent conjunction in atomism: atoms \textit{and} void.

Still, we should note that splitting the one into the many does not make movement necessary, but only possible. Atomism asserts, without much support, that atoms move continuously and necessarily. It is not much more than a basic principle. The only real argument for necessary atomic movement is based on experience. In order to account for the unending movement of the objects of the macroworld, atomism claims that the microworld must also move

\(^{110}\) Although this is not a story about Hegel and atomism, we see another way to get becoming out of the atoms and void of atomism operating at the very beginning of Hegel’s \textit{Logic}.\)
continuously. Movement cannot result from stasis; movement only comes from movement. This is why atomism conjoins the many with the void and so claims that movement is necessary. While this bare claim is perhaps suspect, Deleuze takes a different route. He argues that the externality of relations necessitates movement. For him, relations are not static but are closer to patterns for change or movement. Since external relations are not subordinate to or dependent on the terms, relations can change continuously. Making these constantly changing relations determinative of its terms implies that its terms are also continuously moving. Deleuze thus links the externality of relations to movement or becoming. Deleuze writes this about the link between relations and movement: “however strong the theorists of relations might have been, they have not seen this… a relation is not only external to its terms, but is essentially transitive, in the sense of transitory.”111 This is how Deleuze would make atomic motion not only possible but necessary.

In sum, atoms constantly move about for two main reasons. First, atoms continuously move because the atomists define the void as that through which atoms to move unimpeded, without any sort of drag, friction, or restraint. This makes movement possible. Second, atomic motion is continuous because beings and void are conjoined as an external relation. Once externally conjoined, atoms never stop, but are essentially in motion. This makes movement necessary. Marx also notes the primordiality of motion to the atoms: “since they are in constant motion… neither monads nor atoms exist, but rather disappear in the straight line; for the solidity of the atom does not even enter into the picture, insofar as it is only considered as something falling in a straight line.”112 According to Marx, continuous motion is so essential to atomism that atoms almost disappear into their movement. Or as Deleuze argues, making relations

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112 Marx, First Writings, 111.
external and determining of the terms sets everything in motion.

The speed of atoms

While it is clear that continuous movement is necessary to atoms, we have not yet said how fast the atoms move. This is the question of the speed of atoms.

Speed, in a contemporary sense, means something like a rate of change in distance over time or rate of change of position. This might be, for example, the change of the relation between the change in time and the change in place, or the rate at which a curve changes in some $n$-dimensional space. The speed of atoms, though, is not like the speed of larger atomic compounds. Instead, the speed of atoms is fundamentally different. According to Aristotle’s *Physics*, in order discover the speed of moving objects we take the ratio of the weight of the moving object in relation to the density of the medium through which the object is moving.\(^{113}\) In terms of atomism, the moving objects are atoms and the medium through which the atoms move is the void. The Aristotelian means for measuring speed implies that the medium has at least some density. The atomist void, however, has zero density; it simply yields. This means that the atoms move at a speed that has no ratio to any Aristotelian finite speed. The speed of atoms is beyond any finite speed. This leads to some interesting consequences.

As Epicurus points out, atoms move at the same speed, regardless of differences in weight or size (*EH*, 61). Given that the void simply yields, it cannot be assigned a definite rate at which it yields. Either the void yields at the same rate to all or there is no rate that can be assigned to pure yielding. So, all atoms move at the same speed. Lucretius describes this speed or rate of yielding as a “supreme swiftness [*praecellere mobilitate*]” (*DRN*, 2). Epicurus holds that the speed of atoms is the same as the speed of thought. How fast is this? Speaking of

traversing infinitely many things in a finite time, the author of the Pseudo-Aristotelian text *On Indivisible Lines* claims, “the motion of thought is most rapid.”

Deleuze characterizes the atomic speed of thought as absolute. In short, *atomic speed is absolute.*

Still, to claim that atomic speed is absolute does not exactly clarify things. One way to understand absolute speed is to consider it the same as infinite speed. While some find this attribution ridiculous, their reaction might be due to an implicit affirmation of several assumptions undergirding Zeno’s paradox of movement. This paradox says, for example, that an arrow will never reach its target because space is infinitely divisible. That is, at every instant the arrow must cover half of the remaining space left between its current location and the intended target. Since half the distance will always remain, from every position, the arrow will never reach the target. This is how Aristotle puts it: Zeno’s first paradox “asserts the non-existence of motion on the ground that that which is in locomotion must arrive at the half-way stage before it arrives at the goal.”

This paradox, however, confuses the movement of the arrow and the space covered by the arrow. While the space covered might be infinitely divisible, the movement is indivisible. Atomism, by contrast, makes movement external to the space traversed. While this sounds like a rather odd characterization, we are not simply offering an account of speed that does not refer to distance. Instead, we are witnessing an attempt to develop a concept of the indivisibility of movement. While movement must occur within space, it cannot be reduced to space. Through the concept of void, space and atomic movement have become disassociated in an interesting way. Since the medium or space traversed has zero density, the

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115 “The problem of an absolute speed of thought: there are some strange statements by Epicurus on this theme.” Deleuze, *Dialogues*, 31.


means for determining a ratio between movement and the space traversed has been separated. In a way, this separation reconstitutes another continuum: a continuum of movement or the flux and flow of the endless and constant movement of atoms. We can now bring atomism and Deleuze together to reach our conclusion. While Epicurus says, “atoms move *continuously* forever,” Deleuze says, “there is no movement that is not infinite” (*EH*, 43; *MP*, 281). Seeing the twisted bands and swirls of moving atoms as an infinite and multi-folded continuum is possible once movement is made external to space traversed.\(^\text{118}\)

This is one way to respond to Aristotle’s claim that partless or indivisible magnitudes of matter, like atoms, cannot move.\(^\text{119}\) To understand Aristotle’s critique, imagine that an atom is moving from one determined location, call it AB, to another determined location, call it BC. At any point in its movement, the atom must be in AB, BC, or both AB and BC.\(^\text{120}\) If it is localizable in either AB or BC, then it is not moving, but at rest. If it is in both AB and BC, that is, if it is partly in both locations, then it would not be partless, and so would not be an indivisible particle of matter. In this way, an atom cannot be said to be moving at any discrete period of time. That is, we cannot say that an atom is localizable in its movement across the face of a line or continuum. This does not mean, however, that atoms cannot move. Instead, we say that atoms are never at the beginning or end of their movements *in space*. This follows from the separation of atomic movement and void space. If void space or the medium traversed by moving atoms is smooth and continuous, while atomic motion is indivisible, then atoms are

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\(^{118}\) To risk drudging up a number of possibly distracting associations, such a conception of the indivisibility of movement is echoed by Bergson’s conception of *duration*.


\(^{120}\) Aristotle attributes a similar paradox to another one of Zeno’s paradoxes of motion. Aristotle says, “the flying arrow is at rest, which result follows from the assumption that time is composed of moments … [Zeno] says that if everything when it occupies an equal space is at rest, and if that which is in locomotion is always in a now, the flying arrow is therefore motionless.” Aristotle *Physics*, 239b.30.
always in a movement that is irreducible to the measurements of measurable space. Aristotle’s criticism arises when one overlooks this separation of atomic movement and void space.

The assertion that atomic motion is continuous, however, does not match what some of the atomists claim. For one of the possible responses to the Aristotelian criticism is to accept it and admit that while it is impossible to say that an atom “is moving” in this or that space, we can only ever say that an atom “has moved.” As Furley notes, this would imply that atomic movement is not continuous but staccato, that is, atomic motion is a series of discrete jerks.  

There are a few responses to this. First, there is no indication in the “Letter to Herodotus” that Epicurus accepted such a staccato interpretation of movement. Only the later Epicureans, Simplicus writes, explicitly accepted this. Second, atomic motion is only discrete or staccato in reference to space. Divorced from space, atomic motion becomes continuous and indivisible. Since atomism has separated space traversed and moving atoms by insisting that their relation is external, the reduction of atoms to space becomes impossible. Third, almost all of the atomists insist on the atomic principle of continuousness of atomic motion. Atoms are always moving. There is no such thing as an “atom at rest.” Since all atoms move at the same speed, it does not make sense to say that atoms are beginning and ending movement in a staccato fashion. So, atoms, at least on our account, cannot move in jerks but are incessantly and continuously moving.

Put differently, as Deleuze says of differential relations, atomic movements are non-localizable, neither here (at AB) nor there (at BC) nor in both (AB and BC) (DR, 183). This non-localizability is another way of talking about the continuity of atomic motion. Atomic movement does not go from one location to another; it is not reducible to any specific spatial location. For

121 Furley, Two Studies in the Greek Atomists, 113.
unlike the void space traversed, atomic movement is as uncuttable or irreducible as atoms. This is because we cannot calculate the ratio of the movement of atoms in terms of the space traversed. The most we can say is that they move at the speed of thought: an absolute and indivisible speed. Once we agree that atoms move at absolute speed, we make the divisibility of space traversed external to the endlessness and continuousness of atomic movement, and thus evade the Aristotelian criticism.

*From atomic relations and movement to the clinamen*

We have now looked at the second component of the three-part problem-structure of the atomic idea: atomic relations. We first saw that the atomic response to the problem of the one and the many is the atomic multiple. This led us to conclude that atoms are never alone but always in relation to other atoms. We then examined the exact nature of atomic relations by situating atomism in a larger tradition that Deleuze calls philosophical pluralism. Philosophical pluralism is defined by this principle: relations are external to their terms. This showed us how one of the first atomic relations, the conjunction of atoms and void, made atomic motion essential. After looking at two sources of movement, we then discussed the speed at which atoms move. The speed of atoms is absolute. With this account of atomic relations in hand, we can now turn to the final component of the atomic idea: the clinamen.

**Atomic singularities**

We complete this account of the three-part problem-structure of the atomic idea by adding the final component: the clinamen, which functions in the atomic idea as what Deleuze called a singularity. We will begin with a question about the priority of the clinamen or the atomic rain.
While this priority is logical, rather than temporal, the problem of temporality will help focus our account of Deleuze’s arguments about the clinamen. The time of the clinamen, we will demonstrate, is *incertus*, or what Deleuze calls Aion. The clinamen, we will show, is that unassignable or non-localizable and paradoxical element that determines the problematic distribution of the atomic idea. From this unassignable swerve, various and divergent series of atomic relations result: an ever-so-slight swerve in the midst of atomic motion provokes sets of atomic relations that in turn produce the various atomic solutions that cover up that problematic first difference. These solutions are the unlimited atomic worlds of words and things. With this final component of the three-part problem-structure of the atomic idea in place, we will conclude the chapter by elaborating an atomic grammar that completes the story of the atomic idea.

*Atomic rain*¹²³

So far, we have seen how atomic elements function in terms of atomic relations: atomic relations determine the relatively undetermined atomic elements. In order for these relations to determine the elements, the relations must be external to the elements. One of the most important relations in atomism, the conjunction of atoms and void, leads to an account of atomic motion. Different atomists accounted for atomic motion in different ways. This difference in the atomic accounts is perhaps due to Aristotle’s charge that Democritus and Leucippus “do not say why or what motion is, nor, if it is of one sort or another, do they state the cause.”¹²⁴ Possibly in response to this, Epicurus added another source of atomic motion, the infamous concept of the clinamen. In the three-part problem-structure of the atomic idea, the clinamen functions as the third

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component: singularity. To see this, we need to look at the initial conditions postulated at the beginning of all worlds – *in statu nascendi*.

The originary Epicurean picture of the world postulates a state in which all the atoms are falling through space, straight down, in parallel rectilinear motion. Given the equal speed and shared direction of motion of the falling atoms, there does not appear to be any reason for them to collide. If atoms continued to fall in these straight lines, atoms would never touch, and so they would never relate to each other. Without such atomic relations, the infinity of worlds would never have been produced. In the absence of worlds, a *universe* would truly exist. That is, the supposed initial conditions of the perfectly parallel rectilinear motion of falling atoms would be the true *universe*: * unus* (“one”) + *vertere* (“to turn or tilt”). This primordial atomic rain would consist of all the atoms turned towards one place, in one direction, down. As Epicurus says, “the atoms move at equal speed, because the atoms in aggregates are moving *towards one place*” (*EH*, 62), i.e., they are moving in the same direction. This would be a universal field of sameness. All atoms would be turned, as one, towards one place. Plurality would be reduced to oneness.

And yet, the diversity of divergent worlds of things exists. The two sources of motion already mentioned, weight and impact, are not able to sufficiently account or the production of the various atomic worlds. In order to account for the eventual collision of atoms, something else must happen. What happens is that there is an infinitesimal declination of at least one atom, that is, an atom swerves the tiniest of amounts away from their shared rectilinear direction. The diversity of divergent worlds is only created through the relations of atoms, and atoms only relate because of a slight shift away from that first rectilinear motion.

In one sense, it is true that the rectilinear rain of atoms is more basic to Epicurean
cosmogony that the clinamen. First, there is the universal fall of atoms. At some time after this, there is a swerve. Such priority, though, is not necessarily temporal. If it were temporal, then there would have been an atomic time prior to the existence of all worlds. This, however, is impossible. For atomism claims that atomic time has no independent existence. “Time,” Lucretius asserts, “exists not of itself [per se non est]” (DRN, 1.459). Instead, atomic time is dependent on motion. This strategy, Deleuze notes, that is common in ancient philosophy.¹²⁵ Aristotle, to cite a famous example, sees time as the measure or “number of movement with respect to ‘before’ and ‘after’.”¹²⁶ So, the priority of atomic rain is not a temporal priority.

Rist and a number of other commentators claim that this priority is not temporal but logical.¹²⁷ What is logical priority? As James Williams writes about Deleuze, logical priority does not mean “independence, separateness, abstraction, or ethical superiority,” but priority in thought.¹²⁸ Lucretius affirms the merely logical priority of atomic rain when he claims that the “war of first-beginning,” the generation and destruction of everything, from all but the smallest of things to the largest of worlds, has “occurred from infinity [ex infinito tempore]” (DRN, 2.574). For the atomists, time is infinite, and so has no ultimate beginning. Further, as we saw, atomic time is dependent on or subordinate to motion. Since the worlds built out of atomic assemblages must have always existed, there was no atemporal state prior to the existence of worlds. From an atomic perspective, it is impossible to think a total absence of worlds. There always was, there is now, and there always will be an unlimited number of worlds. This suggests that the priority of the atomic rain is not temporal but logical.

¹²⁶ Aristotle, Physics 4 219a30-219b1.
In fact, not only is the atomic rain not temporally prior to the swerve, the swerve itself is, in an odd sense, prior to the rain. Since the infinite variety of worlds is the result of the relations of atoms, and since atoms only relate due to the swerve, the swerve is ontologically primordial. This does not mean that the clinamen generates the atomic multiple but only that the clinamen provokes atomic relations. Amidst the fall of atoms, there is an *incertus* turning away from the one, away from the universe, and towards the multiple. The clinamen is the diversion in the middle of the universal. The turn away from the one and toward multiplicity, or the subversion of the one in the very middle of the one, is the provocation of atomic relations, which, in turn, produce the world. In this sense, the clinamen is prior. “Nature,” Serres writes, “has no beginning, it is always in the process of being born.” Nature is the order of births; it is productivity itself. It is the clinamen that sparks the birth of such natural diversity. First, there is the slightest of declination of movement of atoms, then atomic relations, and then there are atomic worlds.

*The time of the clinamen*

While the atomic rain is only logically, not temporally, prior to the clinamen, we have not yet explained the meaning of the concept of the clinamen. We now go into more detail about Deleuze’s understanding of the clinamen and how it functions as the third component in the problem-structure of the atomic idea. This raises the question of time. As we will see, the clinamen has quite a peculiar time of its own, one quite different from the atomic time we have already treated. Deleuze’s reading will help us understand why the time of the clinamen is so peculiar.

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129 Serres makes much of this diversion of the universal fall of atoms, although he sees it more as a transversal than a diversion or subversion. See Serres, *The Birth of Physics*, 144-7.

130 Ibid., 137.
Prior to Deleuze’s favorable reading, the history of the reception of the clinamen is sharply divided. Many considered the clinamen an embarrassing weakness, if not a downright absurdity. Cicero, for example, called it “a childish fiction,” an “arbitrary invention,” even “unscientific.” In the later Newtonian world where mechanical causation and physical determinism reigned supreme, the clinamen was considered simply an unfortunate misstep of early science. In contemporary times, however, especially considering the popularity of developments in fields such as quantum mechanics and hydrodynamics, the swerve has found a more receptive audience. Michel Serres, echoing Kuhn’s famous arguments, accounts for these divided responses to the concept of the clinamen in terms of divergent scientific paradigms. However history has treated the clinamen, Lucretius was nervous about putting forward such a controversial thesis. As he broaches the topic he says, “I am anxious that you should grasp a further point…the swerve” (DRN, 2.217-21). Yet to explain away it as a sloppy act of epistemological immaturity misses the power of the figure of the clinamen.

The first thing that Deleuze notices about the clinamen is its rather peculiar temporal and spatial status. As Lucretius puts it, the time and the place of the clinamen is *incertus*. ‘*Incertus*’ does not mean indeterminate. Instead, it means unassignable to this or that location in a chronological measurement of time or extensive spatial coordinates. Lucretius uses this sense of *incertus* in other places, too. For example, *incertus* is used to help explain the first principle of

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131 Given that Deleuze was most taken with those figures from the history of philosophy that offered a version of what we could call a differential principle, it is not surprising that he was so fascinated with the concept of the clinamen. It is possible to specify the exact location of contact in each of Deleuze’s encounters with other figures in the minor tradition simply by searching for just such a differential principle. In Spinoza, it is conatus; in Kant, it is the sublime; in Maimon, it is the differentials of reason; in Nietzsche, it is the eternal return; in Bergson, it is difference; in Lucretius, before all of them, it is the clinamen.


133 Serres, *The Birth of Physics*, 112. Serres takes up Lucretian physics/metaphysics as an important contribution to the science of hydrodynamics. For Serres, one of the problems with many interpretations of Lucretius stems from an improper choice of model. Typically, one thinks of atoms as completely independent and static entities that merely aggregate. While such an interpretation is not completely incorrect, it misses something important, the importance of conceiving of atoms as in motion. In order to remedy this misapprehension, Serres turns to the study of fluids and the behavior of fluids in order to grasp the atomic world as one of constant flux and motion. For Serres, then, atomic motion is more akin to hydrodynamic behavior than static atomism.
the outline of atomic physics, the principle of conservation. Lucretius states the principle of conversation this way: “no thing is ever by divine power produced from nothing” (DRN, 1.150). In this discussion, Lucretius mentions that if things could come out of nothing, then everything could be produced by anything. This would create an incertus state of production. There would be no certainty that a wild animal would be born in the wild, or that a farm animal on the farm. This sense of incertus does not mean indeterminate or undetermined, for there is no uncertainty that animals will be produced. The uncertainty of the incertus, instead, refers to ‘where’ or ‘when’; that is, it refers to the assignability or localizability of the birth of an animal in this or that time or place. “Incerto tempore,” Deleuze says, “does not mean undetermined but non-assignable or non-localisable” (DR, 184). This is why Lucretius describes the clinamen as occurring “at times quite uncertain and uncertain places [incerto tempore ferme incertisque locis spatio]” (DRN, 2.219). An uncertain time does not imply that there is actually a time at which something takes place, wherein it is just uncertain, from the perspective of an observer or measuring agent, as to which time in which it occurs. Instead, there is no such time as an uncertain time. All times are certain. Time is always a time of actualization. By contrast, in Deleuze’s words, uncertain time means it is “trans-historical, supra-historical…a congenial chaos, a creative disorder that is irreducible to any order whatsoever.” Taking place in such an uncertain time, “It is and must remain the perpetual object of a riddle, the perpetuum mobile.” Deleuze even compares the clinamen to the Hobbesian and Spinozist concept of conatus (DRN, 2.219). Like the clinamen, conatus is motion made in less space and time than can be assigned.

134 Deleuze, “Conclusions on the Will to Power and Eternal Return” in Desert Islands, 126.
135 Deleuze, “How does one recognize structuralism?”, 187.
136 Interestingly, at least for us, this connection between the Lucretius and Spinoza does not appear in the first version of the essay that became one of the appendices to Logic of Sense. This lends further proof that Deleuze’s encounter with Lucretius in 1961, prior to his detailed work on Spinoza, was quite formative. We are not claiming that Lucretius is more important to Deleuze than Spinoza, but simply that Deleuze’s encounter with Spinoza, especially in regards to the concept of conatus, was structured, to some extent, by the prior encounter with Lucretius, especially in regards to the concept of the clinamen.
It moves across the length of a point in an instant of time. The motion of the clinamen, similar to conatus in Hobbes and Spinoza, is an instantaneous, vanishing moment in time.

This *incertus* instant is not a distended present that absorbs the past and the future, but is the instantaneous frontier that is divided and subdivided, infinitely, in both directions at once. This is why, Deleuze says, it is “without thickness and without extension,” without density (*LS*, 164). Deleuze identifies such a time not with measureable atomic time, not with Chronos, but with Aion, the time of Venus, the eternal hour of the ideal Epicurean life. We can characterize these two kinds of time in the following way. Chronos is the time of the movement of bodies or atoms; Aion is the time of the clinamen, that is, the event of the swerve, the eventuation of worlds. Chronos is the time of conjunction and disjunction, shocks and connections; Aion is the time of the straight line that stretches out infinitely, and so curves into the past and future. Chronos is the time of the limited, of the past, present, and future; Aion is the time of the unbounded and unlimited, the pure and empty form of time. Chronos is the time of worldly effects; Aion is the time of the event. In short, *incertus temporis* is the time of Aion.

This is why, we will see below, the clinamen functions like the infinitive verb in an atomic grammar. The clinamen “neither begins nor ends but has gained or kept the infinite movement to which it gives consistency” (*LS*, 164).1 It is neither part of eternity nor part of time, but *entre-temps* (literally, ‘between times”). Since the clinamen is the “determination of the meaning of causal series, where the movement of an atom constitutes each causal series,” the clinamen is the determination that distributes the atomic relations so that they determine the undetermined atomic elements in the atomic idea (*LS*, 270). This is why the clinamen is not an action but an event. In particular, it is the event in the fall of the atomic rain that provokes atoms

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1 Although Deleuze and Guattari are talking about the event in this passage, it makes sense to say that the clinamen is one example of what they mean by an event.
into variable relations, that is, it is the determination corresponding to the distribution of atomic relations that determine the indeterminate atomic elements. In short, the clinamen functions as the third component in the problem-structure of the atomic idea: singularity.

**Clinamen as singularity**

The problem-structure of the atomic idea requires all three components. In the idea, what matters are not simply the atomic elements alone or the relations among the elements, but also those singular points at which those relations turn or shift, thereby giving rise to different distributions. To review the discussion from Chapter 1, a singularity is a virtual point in a structure that organizes the distribution of elements and corresponds to the distributed relations. Singularities are remarkable points or thresholds of divergence and bifurcation in ontological structures. The inclusion of singularities thus completes the atomic idea as a structure that “envelops a completely paradoxical object or element.”138 This paradoxical element does not appear in a series but is the point of convergence and divergence in the distribution of atomic relations. Deleuze calls it an aleatory point. Lucretius calls it the clinamen. Both consider it is an event.

To be more exact, the clinamen is even more than an event. It is closer to the “*Eventum tantum* for all events, the ultimate form for all the forms that remain disjointed in it, but that bring about the resonance and the ramification of their disjunction” (*LS*, 179). Infinitely different worlds or extremely divergent distributions of atomic relations stretch out infinitely into the future and the past from this unassignable swerve. As *incertus*, or even *atopon*, it has no place other than that from which it is missing; it has no time other than the Aionic moment that never appears as “now” in the atomic present of Chronos. This is because it is concealed under its own effects. As a singularity, the clinamen brings series of atomic relations into resonance. For the

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clinamen is that ever-so-slight movement along which atomic elements begin to relate, collide and, eventually, assemble into larger compounds. It pulls heterogeneous elements and series into communication. Jay Lampert’s description of a quasi-cause equally applies to the clinamen: it is “the force of variability behind all particular causal relations.”\textsuperscript{139} Rather than an intrusion from an external source, it is the point of divergence and convergence of atoms themselves.

We can now see how the organization of atomic relations is immanent, belonging to the many rather than being derived from the one. That is, the clinamen is the final component of the atomic multiple. While the clinamen is not simply the primary action that occurs at the beginning, it is, at least in one sense, “originary.” It is not an originary \textit{thing} in that it does not function like a Platonic form or first cause, which sets in motion a series of effects that resemble or point back to that originary movement. Those kinds of originary beings are transitive causes that stand apart, untouched, from what they set in motion. By contrast, the clinamen is not a first term or thing that can be separated from the series. It is not transcendent to the causal series to which it gives rise, but remains immanent to them. Although the atomic relations that emerge from it cover it up, the clinamen is not separable and distinct from them. Instead, that quite uncertain minimal movement, as a virtual event, is continuously displaced in relation to itself even though it resonates among its effects. As \textit{incertus}, it does not occur in this or that place, this or that time, but is simply a differentiating movement, a movement that makes a difference, pure differentiation. In short, it is the difference that makes a difference; it is displacement itself.

With the addition of this final component, we have now completed an account of the three-part problem-structure of the atomic idea. This final component is the clinamen, which functions in the atomic idea as a singularity. We first saw how the atomic rain is not temporally but logically prior. While the time of atomic motion is the time of Chronos, the time of the

\textsuperscript{139} Lampert, \textit{Deleuze and Guattari’s Philosophy of History}, 102.
clinamen is *incertus*, the time of Aion. This allowed us to finally construe the clinamen as the third component in the atomic idea. The clinamen is that *incertus* point that gives the idea its determinate problematic structure. As *incertus*, such determination is not reducible to a sensible place or time, or even a conceptual identity. It is that unassignable paradoxical element that determines the problematic distribution of the atomic idea. This ever-so-slight swerve in the midst of atomic rain gives rise to various solutions that then cover up that paradoxical difference. With this final component of the three-part problem-structure of the atomic idea in place, we can now conclude the chapter by elaborating an extended atomic grammar and thus complete this story of the atomic idea.

**The grammar of the atomic idea**

In order to tie together each component of the atomic idea, we conclude the chapter by turning to what the seventeenth-century Christian atomist Pierre Gassendi calls “the similitude of letters.”\(^{140}\) Lucretius was not the first atomist to use this analogy: Democritus deployed it, Plato considered it, Aristotle attacked it, and Epicurus rehabilitated it.\(^{141}\) In essence, this is an analogy for the way in which the atomic and the linguistic worlds are produced through combinatory processes: atoms are to composite individuals as letters are to words and sentences. The idea is that a finite set of kinds of basic parts can produce atomic and linguistic worlds through various combinations and changes. The composite bodies of the atomic world and meaningful words of the linguistic world are then the totality of the results of various combinations. To survey the atomic idea, we will extend this ancient atomic grammar by including Deleuze in this

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\(^{140}\) Gassendi’s adaptation of the similitude of the letters and its afterlife throughout the seventeenth century is treated at length in Daniel Selcer, *Philosophy and the Book: Early Modern Figures of Material Inscription* (London: Continuum, 2010).

\(^{141}\) *DRN*, 1.196-8, 823-9, 907-14; 2.688-99, 1013-22.
discussion. At the end, in Deleuzian fashion, we will remove the analogical nature of the grammar and reveal a problematic physics.

According to Aristotle’s formulation of Democritus’ analogy, the differences among atoms are like the differences in letters: “A differs from N in shape, AN from NA in arrangement, and Z from N in position.” Although the kinds of atoms or letters are finite (from alpha to omega or A to Z), the number of atoms or letters of a single kind (such as a spherical atom or the letter ‘A’) is unlimited, as are the possibilities for the dispositional configuration of atoms or letters. Echoing this analogical discussion of the physical world and language, Deleuze says, “our perception and our language distinguish bodies (nouns), qualities (adjectives) and actions (verbs).” While Deleuze is not explicitly alluding to the atomic similitude of letters in this quote, he is addressing the exact site of the atomic analogy. We can thus situate both the atomists and Deleuze on the same plane by extending the basic atomic grammar to include these new forms. Lucretius asserts this analogy: atoms are to letters as individuals are to words, phrases, sentences, books, etc. This extended atomic analogy now includes other types of grammatical objects: bodies are to nouns as qualities are to adjectives as actions are to verbs.

We can further elaborate this atomic grammar by bringing into the picture a competing Hellenistic philosophical school, Stoicism. Deleuze says:

The two great ancient systems, Epicureanism and Stoicism attempted to locate in things that which renders them possible. But they did so in very different ways. For in order to found… language and

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142 Throughout this discussion, we should keep in mind that while it might be true that language and ontology function in similar ways, this does not mean that something that applies to a linguistic grammar necessarily applies to an ontological grammar. Instead, we are merely using this analogy in order to make the atomic ontology more accessible.
145 There is, at this point, an opening to a different story different than the one we are pursuing in this dissertation. That other story is not about *worlds* of words and things but about *words and things* themselves, that is, it treats the (dynamic) genesis of language and bodies out of sense as it appears in *Logic of Sense*. Our current story is about the static genesis of worlds and the individuals populating those worlds.
its use, the Epicureans created a model based on the *declension* of the atom; the Stoics, on the contrary, created a model based on the *conjugation* of events. It is not surprising therefore that the Epicurean model privileges nouns and adjectives; nouns are like atoms or linguistic bodies which are coordinated through *se composent par* their declension, and adjectives like the qualities of these composites. But the Stoic model comprehends language on the basis of ‘prouder’ [*plus fiers*] terms: verbs and their conjugation, in relation to the links between incorporeal events (*LS*, 183).\(^{146}\)

On the face of it, Deleuze’s account of the differences between the kinds of words or grammatical elements that Epicureanism and Stoicism each take to be primary is quite traditional: a straightforward reading of atomism takes the postulation of atoms and void as its most important feature. I will argue that things are not so simple, beginning with a consideration of atomic being and becoming.

*The being of becoming*

The distinction between nouns and verbs in atomism is not as sharp as Deleuze presumes. To see this, we are must read Deleuze against his own interpretation of atomism in order to better articulate the Deleuze-atomism encounter. We will now focus on three of the most important components of this atomic grammar: ‘being,’ ‘conjunction,’ and ‘becoming.’ Placing these three grammatical components side by side will show that Deleuze’s understanding of the Epicurean theory of language is incorrect. While atomism does seem to privilege nouns, the distinction between nouns and verbs begins to break down very quickly. We will take three questions in turn: the question of *being*, the question of *conjunction*, and the question of *becoming*.

\(^{146}\) While we can make much of the differences and similarities among the Epicurean and Stoic grammars, we should at least acknowledge that while the system of ancient Stoic grammar is fully worked out and very textually grounded, we do not have a fully developed “Epicurean theory of language.” What we do have is incomplete and requires reconstruction from a few remarks and analogies dispersed through various fragments of texts and doxographical reports. Since we are not primarily focused on asserting an exact equivalence between the two systems, but more interested in extending an analogy that the atomists already use in order to make ontological claims more accessible, the difference in the theories of language does not detract from our argument.
1) Being. One of the central premises of atomism is that everything “that is” is either an atom or a combination of atoms and void. *Mutatis mutandis*, everything “that is not” is the void between “what is,” i.e. atoms. This means that, unlike the Eleatics, atomism attributes existence to “what is not,” i.e. the void. Aristotle puts it this way:

Leucippus and his associate Democritus declare the full and the empty to be the elements, calling the former ‘what is’ and the other ‘what is not.’ Of these the one, ‘what is,’ is full and solid, the other, ‘what is not,’ is empty and rare (This is why they say that which is is no more than what is not, because the void is no less than body is).

For the atomists, even non-being is affirmed: non-being or nothingness is void (*DRN*, 1.334-90, *EH*, 40). From the domains of ontology and physics to epistemology and ethics, both atomism and Deleuzianism are utterly affirmative. As we know from the basic outline, one of the first principles of atomism is the affirmation of being, including the being of non-being. In fact, the very act of affirmation is a metaphysical act: *the affirmation of being itself takes part in being*, for thought itself emerges out of a particular assemblage of atoms and void. That is, the concept of atoms is itself constituted by atoms organized in certain ways. Since affirmation is a mental act, atomic affirmation is the production of thought in being and being in thought (this production of thought will be the focus of Chapter 4). Thus, what Deleuze says of Nietzsche also applies to atomism: “affirmation itself is being.”

Marx, speaking of Epicurus, insists, “Just as his principle is the atom, so is the manner of his cognition itself atomistic.” The theory of atomism thus begins by affirming the metaphysical conditions for the production of itself. The first atomic thought is the affirmation of atomic being.

2) Conjunction. The affirmation of being as being-atomic or atomic-being is also the

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147 Aristotle, *Metaphysics*, 1.4 985b4-20; emphasis added.
149 Marx, *First Writings*, 124.
affirmation of atoms in relation. As we argued, atomic beings necessarily stand in atomic, and, as with the entire tradition of philosophical pluralism, atomic relations are external to their terms. Deleuze argues that the central instance of external relation is conjunction. Atomism, unlike many of the ancient schools, was not as encumbered by the verb “to be” or “being.” In its place, philosophical pluralists, like Hume and Lucretius, “substitute the AND for IS” (since the atomists and Hume both belong to the pluralist tradition Deleuze identifies, what he says here about external relations in Hume applies equally well to Lucretius). Both stress the primordiality of “A and B” before “A is B.” This emphasis on external relations derives from the insistence on thinking atoms as the organization belonging to the many, as multiplicity. Deleuze puts this several ways: the pluralist focus on conjunction “carries enough force to shake and uproot the verb ‘to be’” (ATP, 25); “the conjunction AND is neither a union, nor a juxtaposition, but the birth of a…broken line…a sort of active and creative line of flight AND…AND…AND…”; thinking pluralistically is “thinking with AND, instead of thinking IS”; etc. What follows is that the very thought of an atom always the thought of its conjunction with other atoms and so atoms can only be thought in terms of their relations. This is why the atomic idea concerns a multiplicity beyond the one or the many. As Deleuze puts it, for Hume, as well as for atomism and the other philosophical pluralists, a “multiplicity is only in the AND.” In this way, the question of being is conjoined with the question of conjunction. Beings (atoms) always occur in conjunction with other beings (atoms) amidst non-being (void). To borrow Zourabichvili’s play on the French homophony, $ET$ (‘AND’) + $EST$ (‘IS’) = $E(ST)T$. Atomic being does not simply be, it conjoins. Atomic thinking is never just in one term or another, or in

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150 Deleuze and Parnet, Dialogues, 57.
151 Ibid.
152 Ibid., 9-10; 57.
153 Ibid., 57.
154 Francois Zourabichvili Deleuze: A Philosophy of the Event and The Vocabulary of Deleuze. eds. Gregg Lambert and Daniel W. Smith, trans. Kieran Aarons (Edinburgh: Edinburgh University Press, 2012), 38; in French, these two words are homophonic.
the totality or complete set. Instead, atomism focuses on that problematic space “in between” atoms and void, on the conjunctive organization of the many, on the atomic multiple.

3) Becoming. A third part of the story of the atomic affirmation of being as conjunctive is connected to movement. On Deleuze’s reading of Nietzsche, affirmation is being “insofar as it is the object of another affirmation which raises becoming to being or which extracts the being of becoming.”\(^{155}\) The same could be said about atomism. As we already argued, atomism not only explodes Parmenidean being into the atomic multiple, but sets that multiple in motion.\(^{156}\) Atomic motion, we argued, is a consequence of that explosion. In response to the Eleatic argument that being simply is, atomism conjoins being(s) and void thereby introducing plurality into being and setting beings in motion. Given this movement and the atomic encounters that follow from it, being is constantly becoming. So from the conjunction of atoms and void, being and becoming are also conjoined. The affirmation of beings and void is thus also the affirmation of atomic motion. Since atomic motion is what produces the plurality of worlds of words and things, the thought of atoms in motion is the thought of the being of becoming. Thinking atomically means thinking of the becoming of the world in its atomic being and grasping being as the endless swarm of atomic becomings.

*The infinitive verb*

The atomist affirmation of being and becoming raises another question. While Deleuze suggested that atoms are like declined nouns, he was wrong to think this meant they were static. Declined nouns, like atoms, are necessarily relational and mobile. Just as it is not possible to conceive of atoms as static and immobile, in the atomic picture it is not possible to conceive of

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155 Deleuze, *Nietzsche*, 186.
156 Although this is not a story about Hegel and atomism, we see another way to get becoming out of the atoms and void of atomism operating at the very beginning of Hegel’s *Logic*.
nouns that way either. The declination of atoms is the result of the quasi-causal activity of the clinamen. The clinamen, that is, functions like an infinitive verb.

Consider the Latin words Lucretius uses to denote the swerve. The most common is the verb *declinare*, as in the declination of Latin nouns and adjectives. Locating the quasi-cause of atomic motion in this originary declination from the fall of atomic rain does seem to construe atoms as nouns. Still, there is more to this story. Many of the Latin words translated as ‘swerve’ from *De rerum natura* appear in the text as infinitives.\(^{157}\) In Book II, Lucretius uses the infinitives *depellere, declinare,* and *inclinare,* as well as *declinado,* and, of course, *clinamen.*\(^{158}\) When the swerve does not appear in the infinitive, its grammatical forms are similar ones with functions nearly identical to the infinitive. *Declinado,* for example, is a gerund, a non-finite verb operating somewhere between verbs and nouns while expressing characteristics of both.\(^{159}\)

*Clinamen,* by contrast, is that odd Latin noun Lucretius constructed out of *inclinare* and *declinare* in order to give substance to an important source of movement in atomic theory. Both of these terms point back to the Greek root κλίνω, meaning “to lean, to recline, to slope, to decline and to inflect.” Even the word *clinamen* is directly derived from several infinitive verbs.

The importance of the infinitive form to the concept of the swerve makes sense given that its movement is not specifiable to any localizable place or time. To recall, the time and place of the clinamen is *incertus,* that is, non-localizable or unassignable. Given this character, the

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\(^{157}\) To be more exact, this is the present active infinitive. Since it is the most basic kind of infinitive, we are only mentioning this form.

\(^{158}\) *Depellere:* *DRN,* 2.219; *depellere* is used in a different sense at 3.321, where Lucretius discusses the capacity of reason to overcome our faults: “illud in his rebus video firmare potesse, usque adeo naturam vestigial linquiparvola quae nequeat raio depellere nobis ut nil impedit dignam dis degree vitam.” (DRN, 3.319-322). *Declinare:* *DRN,* 2.221, 2.250. *Inclinare:* *DRN,* 2.243; at 6.563 and 6.573, Lucretius uses related terms (*inclinata* and *inclinatur*), but these terms refer to the lean of buildings and the tilt of the earth rather than the clinamen. *Declinado:* *DRN,* 2.250; *declinamus,* the first person plural present indicative active form of *declinare,* appears a few lines later at 2.259, but refers to the movement of human will as it swerves away from certain desires rather than the atomic swerve. *Clinamen:* *DRN,* 2.292.

\(^{159}\) The English word “gerund” comes from the Latin gerundium, which itself comes from the gerundive form gero, that is, *gerundus,* meaning “to be carried out.” A gerund is verbal in that it is based on a verb and so expresses actions or states of being, yet it functions as a noun. The gerund occurs when the noun becomes verbal. Grammatically, though, a gerund also functions as a noun in that it occupies a position in a sentence that a noun would normally occupy. A gerund could thus take the place of a subject, direct object, object of a preposition, etc.
clinamen is not an action that takes place in some place and at time, but an event that gives rise to movements over tensed times. In this way, it is an event that “does not tolerate the separation or the distinction between before and after, past and future” (LS, 179). As a pure event, the clinamen is obscured as soon as bodies assume a tense or person and so has a “positive, albeit problematic, being.”160 Although like an infinitive the time of the clinamen is not localizable or assignable to a certain determinate tense (the pluperfect, imperfect, present, etc.), this does not mean that the time or place of the clinamen is indeterminate. While Latin infinitives have tense and voice, they still retain the “to” structure (as in “to fall” or “to digress”), which is what gives them their status as infinitives (again, this is why we are focusing only on the present active form of the infinitive). Like the clinamen, Deleuze holds, “the verb in the infinitive is in no way indeterminate with respect to time; it expresses the floating, nonpulsed time…of the pure event” (ATP, 263). So, the time of the clinamen, like that of the infinitive verb, is the non-tensed, non-pulsed, non-modal form by means of which tense, pulse, and mode become determinate. It is the time of what Deleuze calls ‘Aion.’

Further, like the infinitive verb, the clinamen is not identifiable with any particular “person,” number, gender, or direction. The infinitive “to cut” is not reducible to “I cut,” “we cut,” “they cut,” etc. Infinitives have neither a beginning (arche) nor terminus (telos). They are fundamentally in between, entre-temps, like a singularity or swerve. As Deleuze puts it, “infinitive-becomings have no subject: they refer only to an ‘it’ of the event (it is raining) and are themselves attributed to…compounds or collectives, assemblages.”161 The infinitive is that which conditions and produces the tenses, persons, genders, or numbers but which is itself not tensed, personed, gendered, or numbered. Likewise, the clinamen is not reducible to a definite

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160 Deleuze, “How do we recognize structuralism?” 190.
161 Deleuze and Parnet, Dialogues, 64.
direction but is simply a deviation from any given definite or determinate direction: an oblique movement, an imperceptible bend, or unthinkable twist in atomic motion. It is not directed to this or that target, but is simply “to,” as the non-directional status of the infinitive is simply “to”: “to cut,” “to avert,” “to deviate,” “to deflect,” etc. the clinamen generates directed movements of convergence and divergence, but is not itself directed. From the pure movement of the clinamen, sweeps of atoms ripple through the void spreading in every direction ad infinitum, just as the declensions and conjugations spread out into the future and the past simultaneously. The clinamatic infinitive is the splitting, cleaving, or becoming in being that sends atomic shockwaves through the world that determine the individuations that take place within it. Thus, the clinamen and the infinitive verb are not indeterminate, but are rather expressions of maximal determination: the singularities from which the infinite variety of words and things emerge.

What about the infinitive form of ‘being’: ‘to be’? If the clinamen qua infinitive denotes the event of maximal determination that individuates atomic compounds and thus gives birth to worlds, and if this event is an event of becoming, then what account may we give of esse? Deleuze claims, “the verb ‘to be’ is precisely the only one that has no infinitive, or rather the infinitive of which is only an indeterminate, empty expression, taken abstractly to designate the sum total of definite modes and tenses” (ATP, 263). This is not a novel insight, as most philosophers know there is something peculiar about this verb in any language, be it οὐσία, esse, être, sein, ‘to be,’ etc. What both atomism and Deleuze do is replace the infinitive form of ‘to be’ with ‘to become.’ All becomings, Deleuze thinks, are already molecular, that is, atomic. Not only does atomism explode and then organize Parmendian being into infinite multiplicities of beings; it also sets that multiplicity in motion. As we saw, with atomism being and becoming coincide; being is extracted from becoming such that atomism is a theory of atomic becoming. It does not
simply posit a being that is said of all things, but a becoming that is said of all beings. This
being-as-becoming is said always in one voice, that is, univocally. Like the infinitive form of all
other verbs but ‘to be,’ it pertains to the “essence of becoming to move and to pull in both
directions [sens] at once” (LS, 1). In the basic atomic picture of the world, the clinamen, as the
third component of the atomic idea, is the infinite generative movement that pushes and pulls in
all directions across the void.

Is this enough to overturn Deleuze’s association of atomism with declination and nouns
rather than verbs and events? The clinamen is, after all, is still a declination, and in Latin only
nouns, pronouns, adjectives, and articles decline. Consider, however, the various meanings of the
word declinare, itself a verb in the infinitive form. Declinare can mean many things: to bend
from (the straight path); to turn aside or away; to deflect, parry, or avoid; to deviate, to digress. For Roman grammarians, declinare means any kind of inflection, including both declension and
conjugation. In addition, as we saw, sometimes Lucretius uses the word inclinare (also an
infinitive), which can mean “to inflect,” as in both declension and conjugation. The
declination of the clinamen, then, carries the force of both the conjugation of verbs and the
declosion of nouns. It is the source of both the relation among atoms and atomic motion. Put
another way, the clinamen is the inflection from which the series of atomic relations
are
distributed such that they are able to determine the undetermined atomic elements. As an
inflection, the clinamen is what happens to the falling atoms as they trace divergent lines across
the void. Thus, the declination of the clinamen is the quasi-causal infinitive that sparks

\begin{footnotesize}
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\item Lucretius uses some form of declinare four times in De rerum natura, twice as the present active infinitive declinare, once as gerundive declinato, and once as the conjugated verb declinamus. See note 90 above.
\item Lewis and Short, A Latin Dictionary (Oxford: Oxford University Press, 1879), “declinare.”
\item Ibid., “inclinare.”
\item Gilles Deleuze, The Fold: Leibniz and the Baroque, trans. Tom Conley (Minneapolis: University of Minnesota Press, 1993), 47.
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roots in the atomic and Archimedean method of exhaustion), an inflection functions as the turning point or singularity of a curve, the point at which the curvature of a line straightens out, so to speak, or the mark at which the tangent meets the curve. The inflection of the clinamen is that paradoxical singular point at which the straight line of the atom meets the slightest of curves.

Thus, rather than associating atomism with nouns and declensions as Deleuze does, we have argued that it must be understood through verbs and conjugation. Or better, we have argued that atomism conjoins being and becoming so closely in the concept of the clinamen that the domain of nouns and the domain of verbs bleed into each other. As the source of the movement and meaning of atoms, the clinamen is both declining and conjugating and so functions as a noun and verb simultaneously. When read through Deleuze’s three-part problem-structure of the atomic idea, atoms are no longer simply nouns, for movement is not merely an adjective or quality predicated of them. Instead, movement is the modality atoms assume through the clinamen and the conjunction of atoms and void. The infinitive swerve does not simply break the rectilinear fall of atoms and set them off on a new path, but provokes them to enter into relations with each other. The declination or the swerve is thus not complete but productive or emancipating. For what an atom means or how it behaves in one set of atomic relations is not what it means or how it behaves in another set of atomic relations. Similarly, what a noun means or how it functions in one sentence, paragraph, or dissertation is not necessarily what it means or how it functions in another sentence, paragraph, or dissertation.

Bringing everything together, the three components of an atomic idea – atomic elements, atomic relations, and the clinamen – compose the atomic idea, just as differential elements, differential relations, and singularities compose the Deleuzian idea. Seen in the light of this theory of ideas, atomism does not simply rely on a set of static nouns; instead, the atomic idea is
a multiplicity. The confusion as to whether or not atomism privileges nouns makes sense given that a multiplicity is, for Deleuze, a substantive. We can now see another dimension to Deleuze’s definition of a multiplicity. Deleuze says, “the upmost importance must be attached to the substantive form: multiplicity must not designate a combination of the many and the one, but rather an organization belonging to the many as such” (DR, 182). Deleuze recognizes the difficulty of conceiving of the multiple as a noun or substantive, yet thinking multiplicity as substantive is the very aim of Lucretian atomism. Once we highlight the importance of verbs in atomism, we are able to see that Deleuze’s grammatical claim (the “Epicurean model privileges nouns”) fails to capture the whole story (LS, 183). “Although Epicurus seems to have accepted the commonplace division of words into nouns and verbs,” Elizabeth Asmis notes, “he made no use of these distinctions to frame a theory…”166 While Asmis takes this lack of distinction to mean that the difference between nouns and verbs plays no role in atomic metaphysics or theory of language, I have argued that it indicates something fundamental: atomic ‘entities’ are not nouns that are simply given in themselves, but the relatively undetermined elements in an ontological and verbal grammar of becoming that accounts for the production of natural diversity. The structure of this grammar, I have argued, is the atomic idea.

More than a metaphor

While the similitude of letters may at first seem to be a mere metaphor that helps us understand essential features of atomism, it is much more than that. Yes, it does begin as an analogy in which atoms are said to behave like letters of an alphabet. Yet as we extend the metaphor, it generates real articulations of each component of the atomic idea. Let us now see how this occurs.

166 Elizabeth Asmis, Epicurus’ Scientific Method (Ithaca: Cornell University, 1984), 25.
First, take the atomic elements. Atoms are not simply similar to letters, for all actual written and spoken letters are themselves composed of atoms. Thus, letters are not only analogous to atoms but are also atomic composites. The letter printed on this page or flashing up on this screen, “A,” is a composition of atoms and void, as is every letter on every page of every copy of *De rerum natura*, of this dissertation, and of everything else. As Serres says, “language is first of all in bodies.” It is no coincidence that the word Lucretius uses when talking about such elements, *elementa*, not only designates ‘atoms’ for Lucretius but also ‘letters of the alphabet.’ In sum, the elements of language are not simply analogous to the elements of the atomic world; rather, language itself is an infinitely unfolding composition of atomic elements.

Second, take the atomic relations. Relations among atoms are not simply metaphorical but real, and necessarily so. If there are no extrinsic atomic relations or organization then there are no atomic worlds. This means that the infinite atomic worlds of words and things, including the various forms of language that appear in these worlds and amidst these things, are the result of atoms standing in various relations with each other. So the sensible letters we read and write as well as the sounds we speak and hear are combinations and conjunctions of atomic series streaming about at absolute speed. The various relations among letters, words, sentences, books, etc. emerge out of the various atomic relations that hold shape, according to the determination of the clinamen, for some period of time or another. The relations holding among the elements of language are therefore products of atomic relations, just as any articulation of the linguistic elements themselves is composed of a set of atomic elements. Thus, we are not arguing that the world is structured like a language or even that language is structured like the world. Instead,

168 For more on this, see Joseph Ferrell, “The Architecture of the *De rerum natura*” in *The Cambridge Companion to Lucretius*, eds. Stuart Gillespie and Philip Hardie (Cambridge: Cambridge University Press, 2007), 90. Prior to Lucretius, though, Plato already used this double meaning when he discusses *stoichēa*, which are both elements and letters.
language is structured as the world is structured, that is, language is a structure in and of the atomic world.

Third, take the clinamen *qua* singularity. Both clinamen and verbal infinitive mark the points of convergence and divergence among various atomic relations and other linguistic forms. Both act as the points of around which inflected and declined bodies and words turn. Just as the clinamen is the quasi-cause or event that brings atoms into relations and yet is obscured as atomic bodies assemble and interact, the infinitive is the determined movement in no determinate direction (movement to ... = x) that inclines verbs and declines nouns as language is actualized and individuated. Both the clinamen and the infinitive thus mark the thresholds at which change occurs in words and things. In all, the atoms and letters, relations and languages, singularities and infinitives, are as much atomic structures as everything else in the infinite worlds of words and things. The similitude of letters is thus more than a metaphor because even metaphors are atomic assemblages structured by elements, relations, and singularities.

We have now developed an extended atomic grammar we can use to step back and examine some of the findings of our analysis of the three components of the atomic idea. We first addressed three of the most important parts of this grammar of the atomic idea. These three components take the form of three interrelated questions: the question of *being*, the question of *conjunction*, and the question of *becoming*. Being and becoming are conjoined such the difference between the two is erased in a single affirmation. This affirmation of being and becoming then led to the next part of the atomic grammar: the infinitive verb. Contrary to Deleuze’s association of atomism with nouns and declensions rather than verbs and conjugations, we saw that the clinamen, as the singularity in the atomic idea, functions both as the source of the declension of nouns and adjectives and the conjugation of verbs. To function in
this way, it takes the form of an infinitive verb. Both the clinamen and the infinitive verb operate in that *incerto tempore ferme incertisque locis* that is the apersonal and non-tensed time of Aion.

**Conclusion**

After an initial outline of the six basic principles of atomic physics, this chapter showed how the concept of the atom emerged in response to the problem of infinite divisibility by translating the mathematical method of exhaustion into a philosophical register. This allowed us to see how the concept of the atom is intimately related to the concept of the infinitesimal, which in turn allowed us to demonstrate that atoms function as the elements of the atomic idea. We then turned to the second component, atomic relations, which we read as a response to the classic problem of the one and the many. Atomism responded to that problem with the atomic multiple, which yields the principle that atoms are always in relation. Here, we demonstrated that atomic relations are far more significant than the quantitative determinateness of atoms themselves for determining larger composite entities and thus for the atomic account of generation. After situating atomism in the tradition of philosophical pluralism, we examined the nature of these relations, arguing that atomic relations are external to their terms. An examination of one of the first of these external relations – the conjunction of atoms and void – demonstrated that motion and the problem of atomic speed is essential to the complete account of the atomic idea. We then argued that the third and final component of the atomic idea is the clinamen, which functions as a singularity. We showed that while the time of constituted atomic motion is the time of Chronos, the time of the clinamen is *incertus*, or the time of Aion. The clinamen is that *incertus* point that gives the atomic idea its determinate problematic structure. We concluded by turning to the
extended grammar of the atomic idea, treating being, conjunction, becoming, and the infinitive verb.

So far, this dissertation has examined two major issues: the Deleuzian virtual idea and the Lucretian atomic idea. Deleuze identifies the ideational realm with the virtual, and the coming chapters will shift their attention to what emerges from this virtual register. Thus, the remainder of the dissertation will focus on three different kinds of genesis. The Chapter 3 (built around an interpretation of Chapters 4 and 5 of *Difference and Repetition*) will explain the generation of actual individuals in the world. It will begin by introducing Deleuze’s distinction between the virtual and what emerges from it by explaining what Deleuze means by “the virtual” and “the actual” and giving an account of how he coordinates them. Virtuality and actuality, we will show, function as the two poles of the process of the generation of the world. This is where we will see that an idea or problem is not only an ontological structure, but also a structure of progressive determination of the components of the ideas – elements, relations, and singularities/clinamen. These ideal structures then act as patterns for processes of individuation of the actual world. Chapter 4 will focus on one particular line of individuation emerging from the idea: the thinking and sensing human subject. As we will see, both Lucretian atomism and Deleuzian ontology argue that subjectivity and its related characteristics are the outcome of natural processes and lines of individuations emerging from the immanent and genetic ideas. Chapter 5 examines a different dimension of the production of subjectivity: the practical or ethical dimension. For atomic and Deleuzian subjects do not only sense, think, or believe; they also act.
Chapter 3: Differentiation, individuation, dramatization, and actualization

Nothing is harder to define than the individual. - Deleuze

Introduction

Now that we have developed a short account of Deleuze’s theory of immanent ideas, we can elaborate the rest of the problem. So far, we have only looked at the structural or ideal character of atomic and Deleuzian ideas. This part of the theory is only conceptually relevant, however, if ideas give rise to actual individuals. This chapter will articulate the ways in which ideas are actualized, that is, the ways in which the atomic and differential elements, relations, and singularities that compose ideas generate the determine qualities and forms of individual things. We will now see how this theory accounts for the genesis of the actual world and its individual inhabitants in both Deleuzian and Lucretian terms.

The next part of the theory will thus detail the distinct processes through which concretely existing individuals emerge as actualizations of atomic or differential ideas. This is different from other accounts of the generation of the world in that, for Lucretius and Deleuze, the forms or functions that actual individuals assume are not presupposed or preconstituted. Instead, forms or functions are products of, not conditions for, various genetic processes of individuation. Individuation, according to Deleuze, is truly genetic in that the form, function, goal, etc. of the individual is not set beforehand. We cannot say what shape something will take before it is produced. Instead, we can only describe the ways in which something can vary as genetic material develops. For what something is, or the classification under which something falls, is the result of the genetic processes that emerge from the idea.
To understand what this all means, let us turn to Deleuze’s second example of an idea from Chapter 4 of *Difference and Repetition*. In that chapter, right after the mention of the atomic idea, Deleuze gives the example of the “organism as biological idea” (*DR*, 184-5). This is one of many times in which Deleuze turns to a classic debate between the eighteenth-century French naturalists, George Cuvier and Étienne Geoffroy Saint-Hilaire. According to Cuvier and other comparative anatomists, organisms are teleologically defined according to their empirical form and function. The parts of an animal, he argues, should be classified insofar as they resemble parts of other animals, with ‘man’ being the standard model. We can classify a body-part of an animal as an ‘arm’ insofar as it is similar to the form and function of a human arm. If, however, the form or function of a part of a body does not share certain characteristics with the corresponding human part, then the same determination cannot be applied. So, although a bird’s wing and a man’s arm might appear similar on a superficial level, teleologically speaking they fulfill different functions and assume different forms. On this account, a wing and an arm are considered two different kinds of things, belonging to two separate anatomical classes. Geoffroy, by contrast, argues that organisms should be classified not in terms of the actualized form or function of their parts, but instead in terms of the ideal relations that generate the actualities. He contended that whether its function be flying or grasping, the teleological purpose of a limb does not determine a body-part as belonging to a definitive class. For Geoffroy, a body-part may perform very different functions and assume dissimilar forms and yet

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169 Part of my discussion of Deleuze’s use of Geoffroy is based on Henry Somers-Hall’s, *Deleuze, Hegel, and the Critique of Representation* (New York: State University of New York Press, 2009), 224-33.


be classified as the same kind of thing. As Deleuze puts it, Geoffroy tried to classify organisms “independently of their forms and their functions…beyond an empirical distribution of differences and resemblances” (DR, 184).

In order to classify, say, an arm and a wing as belonging to the same class despite functional and formal differences, Geoffroy developed an almost topological manner of classification that involved an abstract structure or body-plan. “Cuvier reflects a Euclidean space,” Deleuze and Guattari write, “and Geoffroy thinks topologically” (ATP, 47). To use our example from Chapter 1, just as coffee cup and donut (torus) shapes are identical in topological terms despite empirical differences, so a wing and a hand are considered the same ‘shape’ despite empirical differences. The organism, for Geoffroy, is like an abstract topological structure. This abstract structure (the ‘biological idea’) sets the conditions for the form and function of a part of an organic body to emerge at the end of a developmental series or morphogenetic process. Incarnating the sets of relations among the ideal parts composing the idea in conjunction with the character of an environment produces a certain empirical form (here, a hand; there, a wing). Consider, for example, the skeletal structure of a bird. On Cuvier’s teleological account, the structure of the bones is subordinated to the form and function of the bird. The end or purpose of the bird (flying) is what determines the skeletal relations. The structural relations among the bones do not matter as much as the final purpose of the mature organism. Geoffroy, however, focuses instead on the relations among the ideal elements composing the biological idea. For Geoffroy, we could say, ideal skeletal relations are genetically prior to the actualized bones. The same abstract structure is actualized in different animals (as a wing in a bird and as a hand in a human being), insofar as avian or human
organisms share the same set of structural relations. For Geoffroy, relations, rather than form or telos, determine proper biological classification.

Consider the embryo, which allows us to shift our focus away from the fully developed adult organism toward a much earlier stage of its development. Although birds and humans are very dissimilar animals with very different skeletal structures, and so have different numbers of bones, looking back to their embryonic stages (prior to the actualization of their specific forms and functions) reveals abstract structural similarities. In this way, the biological idea is like an Abstract Animal that is structurally determined independently of and prior to teleological, formal, or functional differences. The same Abstract Animal can thus be actualized as a series of dissimilar animals (DR, 185). The biological idea is an abstract body-plan that offers ‘genetic’ (i.e., generative) material for the composition of a form or the production of a function. It offers an ideal surface that supplies the means for the ‘morphogenesis’ of diverse species of animals. We discover the biological idea through an almost transcendental investigation into embryogenesis. This is why Geoffroy’s definition of an organism came to be known as a “transcendental anatomy” or “plane of composition.”¹⁷⁴ The embryo is particularly useful on this account because it is so supple and malleable. That is, the embryo can undergo sets of transformations that the mature organism could not survive. The form or function that an animal actually assumes is the result of the way in which the sets of transcendental relations composing the idea of the Abstract Animal are developed depending on environmental influences. More concretely, the final form an animal assumes is the result of the way in which the genetic material of an embryo is affected by the environment in which it develops.¹⁷⁵

¹⁷⁴ Ibid., Geoffroy coins the term ‘plane of composition’ (plan de composition). Geoffrey, Principes, 33.
¹⁷⁵ It is no coincidence that these ideas sound similar to Darwin’s. While Geoffroy’s own remarks on evolution were incorrect, Darwin claimed that Geoffroy’s idea of an abstract body-plan shared by dissimilar animals contributed to his own formulation of the theory of evolution. Darwin, The Origin of Species, (London: Wordsworth Editions, 1998), 414.
According to Deleuze, Geoffroy’s concept of an Abstract Animal is an example of a biological idea developed in order to explain and classify organisms beyond their empirical resemblances and differences in form and function. Geoffroy constructs an abstract map of “differential relations between pure anatomical elements which are incarnated in diverse animal configurations, with their diverse organs and functions” (DR, 185). Geoffroy’s Abstract Animal is an idea in the Deleuzian sense because it shares the three-part problem structure: the unformed and ideal objects that will become, say, bones are the differential elements; the determining connections among these unformed elements are the differential relations; and the determinate points by means of which these connections are distributed are singularities. This should help us understand the next part of Deleuze’s position, since although Deleuze turns to mathematics to articulate his theory of the differential idea, he turns to biology and embryogensis to explain how the idea is actualized in real individuals. This process of actualization or generation of actual individuals in Deleuze and Lucretius is the focus of this chapter.

**The order of reasons**

The process of the generation of the world and the individuals that populate it proceeds by means of the progressive unfolding of ideas. This progressive unfolding, Deleuze says, follows an “order of reasons”: differentiation, individuation, dramatisation, and differenciation (DR, 251). In a slightly different vocabulary, what Deleuze means by these four stages are idea, field of individuation, processes of individuation, and actualization. Let us examine each of these terms.

The first term is idea or differenziatation, and refers to the ways in which the atomic and Deleuzian ideas are structured (we have already looked at this in earlier chapters). What is important here is that Deleuzian ideas are not only ideal structures but also real genetic
conditions. In this sense, ideas bring together the commonly-dissociated categories of structure and genesis. The first part of this chapter will detail how the ideas function as genetic conditions or transcendental fields for both the atomists and Deleuze. To accomplish this, we will first distinguish Deleuze’s account of genetic conditions from Kant’s theory of transcendental conditions. We will then bring this together with the arguments of Chapter 1 and Chapter 2 by turning to a concept that links Lucretius and Deleuze: the principle of sufficient reason.

The second term is individuation, here referring to the impersonal field in which, Deleuze argues, it occurs. While Deleuze and Lucretius both aim to develop fully immanent and genetic ontologies that truly explain the production of the world rather than merely repeat a more perfect world or assume that the organization of the world is predetermined, Lucretian atomism lacks a detailed story of individuation. Although Georges Simondon, perhaps the most important influence on Deleuze’s account of individuation, does correctly point out this hole in Lucretius, I contend that it may have more to do with the long and precarious history of the material in which the text of De rerum natura re-appeared. As we will demonstrate, precisely where Lucretius’ argument demands an account of individuation, we find only a textual lacuna. The Lucretian atomic world thus opens up at precisely the conceptual locus where Deleuze’s account of individuation intervenes. In order to tell the whole story of the atomic idea, then, I suggest that we need to turn to Deleuze.

The third term is a process of individuation Deleuze calls “dramatization.” If individuation refers to the field of intensities, then dramatization is the process of individuation by means of which intensities produce actualities. Dramatization raises the question of how certain intensive or dynamic processes actualize ideas. This is where I will explain the role of intensities (as opposed to extensities) in Deleuze’s account of individuation. The distributions of
intensities are progressively determined according to what Deleuze calls “spatio-temporal dynamisms,” a term intended to replace Kant’s “schema” (DR, 214). In short, dramatization is the process through which incarnation or actualization of ideas happens, and spatio-temporal dynamisms are the embryonic or larval potentialities that actualize the ideal structures.

The fourth and term is differenciация or the emergence of actualized individuals. As we will see, the Lucretian and Deleuzian accounts of actualization insist on a strict order of non-resemblance between the conditions and the conditioned. This is one of the primary meanings of the atomic principle of conservation: unlike Platonic essences, Aristotelian forms, Kantian conditions, or anything other than the real and intensive individuations that produce real and actual individuals, all macrolevel causation is real and immanent. That is, the causes of larger compound bodies are immanent to them insofar as the composites emerge out of the configuration of the atomic parts composing them. Deleuzo-Lucretian differenciación claims that ideal relations give rise to actual various species or qualities and that the singularities corresponding to those relations give rise to the actual organization of the parts. In this way, the actual qualities and kinds that we experience are the results of, not the reasons for, intensive fields and processes of individuation. As we will see below, this is not simply another instance of the standard primary and secondary quality distinction because both the kinds and qualities are produced. Despite some clear differences, then, the goal of the Lucretian and Deleuzian accounts is very similar: while Lucretius tried to reveal the atomic bodies and relations constituting the composite bodies and objects in terms of the atomic idea, Deleuze tried to explicate the intensities and differences enveloped by actualized individuals in terms of his theory of immanent ideas.
Ideas and differentiation

Atomic principles

The atomic explanation for the production of the world is based on two basic principles: atoms and void.\textsuperscript{176} The relation between these two basic principles generates further principles, such as a denial of the creative power of nothingness inspired by a Parmenidean logic. As Epicurus puts it, “Nothing comes into being out of what is not” (\textit{EH}, 38-9), or as Lucretius says, “no thing is ever by divine power produced from nothing [\textit{nullam rem e nilo gigni divinitus umquam}] (\textit{DRN}, 1.149-50), and “nothing can be created from nothing [\textit{nil posse creari de nilo}]” (\textit{DRN}, 1.156-7).

There is, on the face of it, a very simple reason for this principle: if the existent could emerge from the non-existent, then everything could (or maybe would) come into being out of everything. We first saw this in the short sketch of the six basic atomic principles we gave at the beginning of last chapter, where we called this idea the principle of conservation. Let us now expand our discussion of it.

At its most basic, the principle of conservation is meant to limit atomic generation to the dynamic processes of the natural world: generation must arise out of the atomic idea, that is, out of distributions of atomic relations, elements, and singularities. Generation does not just happen without reason, and things are not just produced out of nothing. There are instead certain conditions that produce composite bodies. The structure of these generative conditions is the three-part problem or the atomic idea. From these genetic conditions, various and divergent lines of genesis emerge. Trees, mountains, people, language, etc. all emerged from these basic problematic conditions. Generation must come from real material conditions, that is, from the atomic idea. As Lucretius says, “if things came out of nothing [\textit{de nilo}], all kinds of things could

\textsuperscript{176} We must be careful not to collapse these two related but distinct principles into one. In the atomic world, what is is constituted by A) atoms, the uncuttable and unchanging particles of matter, and B) void, the space in which these material particles swim about; or A) beings and B) nonbeing; or A) material things and B) non-material emptiness.
be produced out of all things…men could arise from the sea, from the earth scaly tribes, and birds could hatch from the sky” (DRN, 1.159-163). In sum, atomic generation emerges from the atomic idea.

If we invert the principle of conservation, the same logic holds: not only is it impossible for something to come from nothing, but something cannot become nothing. As Epicurus says, “if that which disappears were destroyed into what is not, all things would have perished, for lack of that into which they dissolved” (EH, 38-9). Lucretius also takes up this thesis: “nature resolves everything again into its elements, and does not reduce things to nothing. For if anything were perishable in all its parts, each thing would then perish in a moment snatched away from our sight” (DRN, 1.215-218). The support for this claim is that true perishing, a going-into-nothing or reduction from something into nothing, would lead to an utter negation of existence, a loss of something whereby nothing is gained. If this were so, then all that there is would have already disappeared, thus leaving nothing. And once there is nothing, since something cannot come from nothing, the world would have long since been annihilated. Let us step back for a moment and assess what this principle, and its inversion, means in the greater picture.

First, the atomic principle of conservation buttresses our Chapter 2 argument for reading atomism through the Deleuzian ‘idea structure.’ There, we demonstrated that atomism responds to the same problem that produces the concept of the infinitesimal. Since the thought of atomic elements emerges in response to the problem of infinite divisibility, atoms are the means of preventing thought from “bottoming out,” so to speak, at nothing. Atoms are not the macro-bodies of everyday experience, but that plane of minimal materiality that is as close as possible to nothingness without collapsing into nothing. In setting the atoms adrift on the surface of void,
atomism conjoins material particles and void space without collapsing them into each other. This most basic conjunction simultaneously sets the process of generation in motion without collapsing nature into nothingness. The principle that something cannot become nothing is thus another argument in favor of seeing atoms as the relatively undetermined atomic elements in the atomic idea and atomic relations as the rules for the generation of an atomic world.

Second, this principle of conversation and its inversion strips negation of the power of generation. What appears to be the productive force of negation is really an illusion that results from the confusion of atoms or pure differences with actualities. Ontologically speaking, negation occurs only at the already-constituted level of actualized macrobodies; productivity, however, belongs to the atomic idea and its actualizing processes of generation. Earlier we discussed Lucretius’ claim, “[N]ature resolves everything again into its elements, and does not reduce things to nothing. For if anything were perishable in all its parts, each thing would then perish in a moment snatched away from our sight.” He adds to this, “for there would be no need of any force (vis) to cause disruption of its parts and dissolve their connexions” (DRN, 1.215-220). That is, even macrolevel destruction is not a reduction to nothing, but rather the dissolution of an atomic aggregate. Generation and destruction are then matters of composition and decomposition. While a brother really does die in battle and the shattered urn is really destroyed, the matter of which they were composed is never destroyed. What is necessary for the real death of a composite body is a blow or force that disrupts the coherence of the atomic assemblage. The point is that destruction or perishing in the macro register is an effect of dispositional transformation in the atomic register. Lucretius sums it up nicely, writing, “no visible object utterly passes way, since nature makes up again one thing from another, and does not permit

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177 Deleuze, in a discussion of Nietzsche’s counter-dialecticism, implicitly admits that the danger of Hegelian dialectics emerges when negation and contradiction become a “motor” or power of generation. Deleuze, *Nietzsche*, 191.
anything to be born unless aided by another’s death” (*DRN*, 1.262-264). With this, we see another reason why atomic relations are essential to the theory of atomism. Creation or formation of a brother’s body or a clay urn is due to the atomic relations being actualized in specific times and places. These relations exist (or insist, as Deleuze would say) act as rules for the generation of these assemblages. So, once atomism has placed an unbridgeable limit separating being and nothing and set things in motion on the empty surface of the void by exploding being into infinite multiplicities of atoms, atomic relations become the rules for the generation of individual bodies and things.

Third, and most importantly, the conservation principle and its inversion demand the exclusion of divinity or transcendence and the affirmation of naturalism and immanence. This is part of a movement that Deleuze calls the “universal ungrounding [effondement],” something he thinks occurs throughout the minor tradition in which he places Lucretius (*DR*, 202). The ground, in this ungrounding, is any hint of transcendence. A predominant feature of both Deleuze and Lucretius’ accounts of causation is a drive to eliminate the transcendent ground, to sever the root of prefigured essences and genera, and to affirm the immanent organization of matter itself. Lucretius unabashedly emphasizes this universal ungrounding: “no thing is ever by divine power produced from nothing” (*DRN*, 1.150). This means that there is no action at a distance, so to speak, or no imposition of essential forms or preexistent identities. In order for change to occur and in order for something to “cause” another, there must be real material change. This also applies to the existence of individuals. Everything that occurs and all that “there is” emerges from the conjunction of two distinct principles: atoms and void. There is no third option: “there is nothing which you can call wholly distinct from body and separate from
void, to be discovered as a kind of third nature” (*DRN*, 1.420-432). This is atomic naturalism. “Nature,” Lucretius emphasizes, “is her own mistress and is exempt from the oppression of arrogant despots, accomplishing everything by herself spontaneously and independently and free from the jurisdiction of the gods” (*DRN*, 2.1090-2).

The atomic principle of sufficient reason

This first generated principle and its inversion – “nothing comes from nothing” and “something only comes out of something” – together function as an early prototype of what Leibniz later formulates as the principle of sufficient reason.

The formulation of this proto-principle is meant to construe the conditions for the actualized and individualized world around us as organized, genetic, and immanent. The atomic ideas are not a set of transcendent models, a series of teloi, or a list of genera or categories. Instead, they are atomically organized, genetic, and immanent conditions for actual individuals. As such, we are forced to think of the production of actual individuals as solutions to problems rather than as derivative copies of ideal models. Rather than asking, “What is x?” we ask, “What are the genetic atomic elements, sets of atomic relations, and distribution of singularities or clinamen implied by some individual?” That is, we are forced to ask about the distinct ways in which the actualization of this idea or the processes of individuation emerge from the structure of the idea. We are forced to take the production of the actual individuals that populate our world as a natural problem. This is why we are using Deleuze’s theory of immanent ideas.

The imperative to explain individuation in the atomic and Deleuzian way is very different from a model of individuation based on the relations among universals and particulars or genera.

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178 Lucretius says elsewhere, “there is no place without into which any kind of matter could flee away from the all; and there is no place whence a new power could arise to burst into the all, and to change the whole nature of things and turn their motions.” *DRN*, 2.304-7.
and species. On those models, the individual is considered a particular instance of a general kind, which means that the differences that make some individual that individual are treated as secondary or accidental to an originary essence. For Deleuze and Lucretius, by contrast, the goal is not to discover the reason for being (ratio essendi) but the reason for existing (ratio existendi). This is why the atomic question is less the Heideggerian one – “Why is there something rather than nothing?” – and the more Leibnizian one – “Why this rather than that?”\(^{179}\) The atomic answer to this question requires accounting for the individuating differences of a body.

At its most basic, the Lucretian version (of what Leibniz later famously formulates as) the principle of sufficient reason insists on the immanent production of the world out of atomic ideas. It is a variant on the principle of sufficient reason because it does not say that the movement of actualization causes something to be, and it is not committed to (and, in fact, explicitly rejects) the Leibnizian insistence that the sufficient reason for the existence of a series of things necessarily lies outside of that series (God as the extramundane sufficient reason for the existence of the world). That is, while it is safe to say that Leibniz and Lucretius both develop a principle of sufficient reason in order to address the genesis of individuals, the results of their respective versions are fundamentally opposed. For Leibniz, the sufficient reason of something is outside, and so not immanent to, the world as an aggregate or sum: God. For Lucretius, however, the sufficient reason of the world and its individuals are the distributions of atomic elements, relations, and singularities. According to atomism, the sufficient reason of a thing accounts for the singular differences composing that composite individual. To do this, Lucretius’ principle is not meant to simply explain how a single cause is linked to an effect or a series of effects.

Instead, it is meant to account for the genetic conditions through which processes of individuation emerge.

This is not a rejection of causality, for the principle of causality and the principle of sufficient reason are intertwined. Instead, the difference between the two principles is a difference between kinds of problems. For atomism, the principle of causality does not explain the generation of the being of a singular individual because it attempts to explain the individual by means of something beyond the individual. That is, causality does not refer to the specific process of individuation that led to the emergence of a real individual. The principle of causality thus takes up a different problem. The problem addressed by that principle only offers the necessary conditions for something, and so does not explain the real genesis of a thing but instead requires explanation of itself. Put differently, given that causality tries to “explain” the existence of an individual by pointing to another individual, it merely defers the question and so skips over the question of generation. This is why the principle of causality is unable to determine the being of an individual when the problem at hand is not how actualized individuals interact with other actualized individuals but when the production of those very actualized individuals is the problem. Since the principle of sufficient reason is supposed to offer the necessary and the sufficient reason of individuation, it should account for the genesis of actual individuals. Deleuze states this position in his article on Hume that first appeared in François Chatelet’s *Histoire de la philosophie*. “The problem,” he writes, “is not that of causes, but the functioning of relations as the effects of these causes, and the practical conditions of this functioning.”

Lucretius and Deleuze both aim to explain the genesis of individuation and so recognize the difference embodied by these two principles. Since the clinamen, relations, and elements are necessary and sufficient to account for the genesis of a real world, the atomic idea

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180 Deleuze, “Hume” in *Desert Islands*, 164.
functions as the principle of sufficient reason.

To be fair, we should admit Pierre Bayle’s late seventeenth-century critique of Lucretian atomism. Bayle’s critique, in essence, says that the clinamen and the atomic relations corresponding to it are only sufficient to produce a world, but not necessarily this world. In our language, the atomic idea accounts for the generation of the actual individuals in some world, but not necessarily the individuals in this world. There are two responses to this interesting critique. First, while it is more appealing to be able to account for the generation of this individual and world rather than just any individual and world, it is still an achievement to be able to account for the genesis of a real world, whether it is this world or just a world. As we will see in a moment, there is a difference between determining necessary principles for a possible world and determining necessary and sufficient principles for a real world. We address this distinction in the next section. Second, I suggest that this drawback has something to do with the lack of a detailed account of individuation in De rerum natura. The absence of such an account is, we claim below, a result of the complicated history of the actual pages that brought Lucretius’ text to the world.

For now, we should just note the three aspects of the atomic version of the principle of sufficient reason. We saw the first and second in our analysis of the atomic idea. The group of atomic or differential relations capable of determining the undetermined or ideal elements function as the “first aspect of sufficient reason” in that they operate as the means for determination of the undetermined elements. The “second aspect of sufficient reason” is the distribution of singularities that corresponds to the atomic or differential relations. They fulfill this second aspect in that they provide the complete determination of the idea as a genetic

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181 For an account of Bayle on atomism, see Selcer, Philosophy and the Book, 103-121.
Ibid., 99.
ontological structure. The third aspect of sufficient reason is another dimension of individuation, which Deleuze calls dramatization.

“There is only one kind of production, the production of the real.” (AO, 32)

The attempt to account for the emergence of actual individuals by means of the theory of ideas leads to a different issue: conditioning. For atomism and Deleuze, ideas are the conditions and the world we experience is the conditioned. The goal now is to explain how Deleuze’s use of conditions can help us understand something important about atomism. To see this, we should first see how Deleuze’s use of the language of conditioning directly engages Kant. To understand what Deleuze means by ‘conditions,’ it is thus important to see how Kant uses the concept. This will allow us to determine how Deleuze both agrees and disagrees with Kant.

The question of conditioning is one of the most important, and so most complicated, features of Kantian philosophy. If it is accurate to characterize Kant’s entire critical project as transcendental, then the goal of Kantianism is to determine the conditions for three basic facts of nature: knowledge, morality, and aesthetics (CPR, A11/B25). In each of the three critical texts, Kant takes the quid facti question as given, that is, he assumes that there is in fact truth, goodness, and beauty. The goal then is to try to determine what is necessary to make these facts possible and so justify claims made about these facts. Put differently, Kant seeks to answer the quid juris question undergirding the quid facti question. Kant’s answer is given in terms of the language of conditions and the conditioned. The conditioned are, say, the facts of knowledge, morality, and aesthetics, and the conditions are the ideal and formal structures shared by all rational beings that undergird the facts. Kant calls these structures ‘conditions’ because they are necessary to establish the very possibility of the conditioned. In order for the conditioned to be
possible, certain conditions are necessary. Without the conditions, the conditioned is impossible. According to the famous formulation, the conditions are necessary for the very possibility of the experience of the objects and facts of experience (CPR, A96). These conditions are structured in terms of the *a priori* concepts or “categories.” With the discovery of these categories, Kant believes he has a convincing answer to this question: “The question now is whether *a priori* concepts do not also precede, as conditions under which alone something can be, if not intuited, nevertheless thought as object in general, for then all empirical cognition of objects is necessarily in accord with such concepts, since without their presupposition nothing is possible as object of experience” (CPR, A93/B126). The very term ‘transcendental’ that characterizes the entire Kantian critical project means that Kant does not deal simply with the facts or objects of empirical experience, but with the indispensible conditions that make it possible for us to have the experience of empirical objects. Since the conditions are necessary for human experience in the sense that they apply to all human experience, they are the objective means for justifying claims about the facts of nature. At the root of the conditions is a sort of transcendental unity of the subject, or what Kant famously calls the transcendental unity of apperception. The transcendental unity of apperception is a sort of *a priori* structure of subjectivity that unifies or unites the various experiences of the world. It is an ideal form of self-consciousness that makes all my experiences *my* experiences. The transcendental unity of apperception, taken together with the categories and the *a priori* forms of sensibility, constitute the necessary conditions for the possibility of our experience of the empirical world.

While Deleuze’s language of conditioning undeniably engages the Kantian project, Deleuze also greatly diverges from the Kantian path. For Deleuze, to note one difference, conditions are not rooted in the sort of necessary subjectivity or ideal self-consciousness found in
Kant’s use of the transcendental unity of apperception. As we will see in the next chapter, the Deleuzian subject is not presupposed as an organizing force of the conditions. Instead, Deleuze holds that the subject is the result or product of the process of actualization. While we will have to wait until Chapter 4 to elaborate this position, for now we can claim that for Deleuze, the subject is a result and so is not presupposed. What Deleuze says is thus appropriate to atomism as well: “Far from being individual or personal, singularities preside over the genesis of individuals and persons; they are distributed in a ‘potential’ that admits neither Self nor I, but that produces them by actualizing or realizing itself, although the figures of this actualization do not at all resemble the realized potential” (LS, 102-3). Removed from any sort of foundational Kantian personhood or self-consciousness, Deleuze argues that the conditions he develops are populated by impersonal elements or pre-subjective assemblages that precede subjects and last beyond subjects. In a similar vein of thought, Lucretius argues that the collections of atoms are both prior to the formation of persons or subjects and will outlast every person or subject. This is why one of the lasting lessons of atomism for Deleuze is the famous dictum “death is nothing to us.” In Deleuze’s words, as subjects we are “optical ‘effects’ of the more profound game of difference and repetition” or the divergent and convergent movements of atoms (DR, xvii). This is one of the most important features shared by both Lucretian atomism and Deleuze: every composite body is produced and thus entails a genetic history from which it emerged. Lucretius and Deleuze insist that individuals must be produced out of a set of immanent and productive conditions: ideas. Conditions, then, are neither subjects nor objects, but the transcendental field structured by the three-part problem or idea.

One of Deleuze’s most direct engagements with Kantian-style transcendental philosophy concerns the difference between what is often called Kant’s transcendental idealism and
Deleuze’s transcendental empiricism. The main difference between these two transcendental accounts is modal. Kantian critical philosophy is, in a sense, a modal critique of the size or extent of the domain of possibility. There is, for Kant, a difference between metaphysical and logical possibility, on the one hand, and transcendental or epistemological possibility, on the other (*CPR A50-64/B74-88*). Mere logical possibility defines the domain of all things that are thinkable without contradiction. The problem is that such a domain of possibility extends beyond that of justifiable human knowledge. This is one of the central characteristics of critical philosophy: a drive to delegitimize knowledge claims that lie beyond the constraints of possible human experience. To ignore these bounds is to risk falling into the illusion that humans can justifiably speak or make legitimate claims about things to which humans cannot have determinative access. The way to undertake this restricting move is to search for the necessary conditions for all possible experience for human beings. Once such conditions are discovered and justified, real experience (the conditioned) will gain a means for justification that will allow humans to legitimately make claims about the facts of human experience.

By contrast, Deleuzian-style transcendental empiricism further restricts by simultaneously empowering the modal domain. For Deleuze, merely determining the conditions for all possible experience is not sufficient for generating actual experience, since Kantian conditions remain external to conditioned, actual experience. Making the conditions external to the conditioned construes the process of realization of some possibility as a “brute eruption, a pure act or leap that always occurs behind our backs” (*DR*, 211). What is lacking is an account of the genetic process that explains why some possibility is realized rather than others. This is not to completely erase Kant’s achievements, for finding such Kantian conditions does provide a means to justify knowledge claims. The problem is that due to the external relationship between
the conditions and the conditioned, these claims are not able to reach real experience. By contrast, Deleuze’s transcendental empiricism, following Solomon Maimon’s critique of Kantian transcendental idealism, attempts to relate the conditions to the conditioned by rendering the conditions genetic, thereby eliminating the externality of the conditions to the conditioned. This involves restricting the conditions not to any and all possible experience but only to those conditions that contain or are themselves generative of real individuals. In short, transcendental conditions do not provide the sufficient reason for real experience in the diverse forms in which it appears because the conditions remain external to the conditioned.¹⁸⁴

Why does Deleuze think that Kantian conditions are external to that which they condition? Kantian transcendental conditions, he argues, are simply “traced” from the conditioned. He claims, “Kant traces the so-called transcendental structures from the empirical acts of a psychological consciousness: the transcendental synthesis of apprehension is directly induced from an empirical apprehension and so on. In order to hide this all too obvious procedure, Kant suppressed this text in the second edition. Although it is better hidden, the tracing method, with all its ‘psychologism,’ nevertheless subsists” (DR, 135). For Kant, the conditions merely double the conditioned. The transcendental merely repeats (in the sense of bare repetition), with only the slightest of changes (‘add the predicate possible’), that which is given in experience. The only difference between the real and the possible is that the former has the reality that the latter lacks. This is why transcendental conditions cannot explain the actualization of particular individuals. As Marx says, given that “the opposite of what is possible is also possible,” the possible is not even opposed to the real.¹⁸⁵ The possible is closed in on itself, never able to touch reality. A possible world never becomes real, but remains eternally

¹⁸⁴ This claim about Kant is a version of the same critique that Deleuze, in Chapter 1 of Difference and Repetition, aims at Plato and Aristotle.
¹⁸⁵ Karl Marx, First Writings, 144.
possible. So, the issue with such tracing is that it gets caught in a dangerous circularity. The conditions traced from the conditioned are supposed to explain the conditions when, in fact, they end up offering an explanation that simply doubles what is supposed to be explained. While these explanations are more or less satisfying, they fail to give genetic accounts because the differences subtending and thus producing the given are covered up by the given.  

Deleuze strongly emphasizes that this distinction between merely transcendental conditions and genetic conditions is not just a verbal squabble but is, instead, “a question of existence itself” (DR, 211). Unlike Kantian conditions, Deleuzian conditions, or what we can call ‘virtuality,’ is not opposed to the real. Instead, a Deleuzian conditions is “fully real insofar as it is virtual” (DR, 208). The virtual is a fully real defining feature of any actual object. Its very reality as a transcendental structure is composed by differential elements, relations, and singularities. As we know, these are the three components of the problem or idea. This is why the virtual “is the characteristic state of ideas” (DR, 211).

Virtuality is another way of describing the status of genetic conditions. Unlike merely transcendental conditions, virtual ideas do not assume given empirical facts or actual identities. Instead, the actualization of the virtual idea occurs by means of a differentiating or diverging movement. Put differently, if Kantian transcendental conditions are a mirror image of reality, the Deleuzian virtual and the actual break with this order of resemblance. Actualized individuals never resemble the virtual elements, relations, or singularities that account for their generation.

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186 In his doctoral dissertation, Marx’s division into the two kinds of possibility operating in Democritus marks a similar distinction to the two kinds of conditions we are now addressing. Marx locates a difference between what he calls “abstract possibility,” what we are calling Kantian conditions, and “real possibility,” which we are identifying as Deleuzian and atomic conditions. “Abstract possibility,” Marx writes, “is the direct antipode of real possibility… Real possibility seeks to explain the necessity and reality of its object; abstract possibility is not interested in the object which is explained, but in the subject which does the explaining. The object need only be possible, conceivable. That which is abstractly possible, which can be conceived, constitutes no obstacle to the thinking subject, no limit, no stumbling-block. Whether this possibility is also real is irrelevant, since here the interest does not extend to the object as object” (Ibid., 105). This distinction is similar to Deleuze’s own re-conceptualization of the modal categories of possibility and reality with virtuality (or what Marx calls “real possibility”) and actuality. Strangely, Marx only sees the Democritean version as deploying “real possibility,” while the Epicurean version, for him, turns to “abstract possibility.”
For the type of determination characterizing the components of the structure of the idea is not the type of determination of actual objects. In this sense, actualization is not a mere tracing or bare repetition but is “always a genuine creation” (DR, 212). Actualization (or what Deleuze calls ‘differenciation’) always follows divergent lines of genesis. Another way to describe the modality of the virtual is as the problematic: the virtual is a problem and the actual is a solution.

Still, while both Deleuze’s transcendental empiricism and Lucretius’ genetic atomism do attempt to account for the existence of real individuals, this does not mean that they successfully account for the existence of each individual entity. Deleuze insists that we cannot simply restrict ourselves to the various actualized individuals in empirical experience. Instead, both he and Lucretius seek to develop vocabularies to speak about a set of genetic conditions that define rules for the production of actual individuals (in Lucretius, these are the principles governing the way that atoms, their relations, and their clinametic swerves generate macrolevel, individuated bodies). This is important because the focus is not on thinking the status of a being in terms of its developed state or full actualization, but on thinking the production of individuals themselves, or what Deleuze calls the dramatizing process of individuation.

One way to do this would be to turn to something like an essence, and Deleuze, perhaps surprisingly, does so. Lucretius, on the other hand, is very careful never to use the term essentia in De rerum natura. One reason for this may be that Cicero, one of the major critics of Epicureanism, had recently popularized that term as a sort of barbaric Latinization of the Greek ousia. Fortunately, Deleuze clarifies what he means by ‘essence’ so as to distinguish it from the Platonic variety: “it is more a combinatory formula [combinatoire] supporting formal elements which by themselves have neither form, nor signification, nor representation, nor content, nor given empirical reality, nor hypothetical functional model, nor intelligibility behind

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appearances.” Unlike Platonic essences, Deleuzian essences are not generalities that materially instantiate copies whose perfection is measured by their degree of resemblance to their origin. Instead, these Deleuzian “essences” are like atomic or differential structures that distribute a range of possible variations. Discussing essences in Plato and Deleuze, Levi Bryant makes the distinction well:

The aim here is not to discover the invariant essence without which the being could not be what it is, but rather to see what sorts of variations a set of singularities is able to undergo while maintaining a structural identity. Both points of view are in a sense ‘structural’; however, the former seeks to determine what it can understand of a triangle under its fixed form, while the latter seeks to determine what it can understand of the structure by setting it in variation…what is of concern is the relational or structural identity of relations among singularities characterizing the triangle as it undergoes variation. Deleuze’s essences are, in short, “problematic essences.” In fact, rather than using the term ‘essence,’ it is better to call them ‘problems.’ Although he does not use this term, Lucretius might prefer problema to essentia.

With this distinction in mind, we can understand how the ideas function as conditions or transcendental fields for the generation of actual existent individuals. As characterized above, this conditioning is closer to the principle of sufficient reason than the principle of causality. This is the first stage in the process of actualization, and there are three others. It is now time to take a closer look at these fields and processes of individuation that emerge from the genetic ideas or transcendental conditions.

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188 Deleuze, “How do we recognize structuralism?” in *Desert Islands*, 173.
Individuation

The production of individuals out of atoms or pure difference is perhaps the most important feature of the atomic and Deleuzian accounts. After Lucretius explains the metaphysical picture of atoms and void in the first book, he spends the rest of *De rerum natura* talking about the creation and destruction of every kind of individual, e.g., people, minds, trees, mountains, worlds, etc. Deleuze, too, discusses the problem of individuation in almost all of his texts. To list just a few prominent examples, *Bergsonism* devotes an entire chapter to it when discussing the *élan vital*; *Difference and Repetition* ends with two chapters on individuation; *Logic of Sense* allocates four entire series to it (two series for static genesis, and two for dynamic genesis); and *The Fold* assigns a significant chapter to individuation.

Since it is so important for both Lucretius and Deleuze, we should ask: How does individuation come about? Gilbert Simondon, one of the most important influences on Deleuze on this matter, sets the tone.

The process of individuation must be considered primordial, for it is this process that at once brings the individual into being and determines all the distinguishing characteristics of its development, organization, and modalities. Thus, the individual is to be understood as having a relative reality, occupying only a certain phase of the whole being in question – a phase that therefore carries the implication of a preceding preindividual state, and that, even after individuation, does not exist in isolation, since individuation does not exhaust in the single act of its appearance all the potentials embedded in the preindividual state.\(^{191}\)

The first thing is to see that the individual is relative to the other stages in the process of individuation. It is relative in the sense that it is only a moment or phase within, and not the predetermined culmination of, the entire process of the production of the individual. This means

that an actualized state is not the final achievement of a directed process that was aiming at the individual from the beginning but a stage relative to divergent processes. Even the emergence of a seemingly developed individual leaves things open-ended, metastable, open to the possibility for other individuations to emerge out of this same process. In this way, individuation is a process of progressive determination or continuous unfolding and actualization.

However important the genetic relation between atomic ideas and fully developed individuals, Simondon contends that the details of the actual process of individuation and actualization remain obscure in Lucretian atomism. For Simondon, atomism correctly locates a “region of uncertainty” between the atoms moving about the void and the actuality of complex individuals, a region that he claims is the domain of individuation. The problem, Simondon thinks, is that atomism then overlooks the details of what goes on in this uncertain region. On his reading, atomism does attempt to link the actualized individual to the atoms, especially by rendering the whole region “of one kind,” that is, rendering it all atomic material. But, Simondon claims, in its eagerness “to reach the individual that is the result of this process” atomism does not sufficiently address this uncertain region in its explanation of individuation, thereby bypassing the stage where individuation takes place. In short, he argues that atomism seems to focus too much on the product and so misses the importance of the process of production.

Simondon’s observation is correct. This seeming oversight in an ancient materialism might, however, be a matter of matter itself. That is, it may have something to do with the tortuous history of the actual text of De rerum natura. As is clear from Stephen Greenblatt’s engaging story about the history of the text, the precariousness of the path by which De rerum

192 Ibid., 298.
193 Ibid., 299.
194 Ibid., 299.
195 Ibid., 298.
natura was “lost” and then “rediscovered” implies that the text itself went through many versions, reproductions, losses, alterations, etc., evidenced by a number of lacunae in the text often occurring in the midst of philosophically important discussions (alternatively, of course, Lucretius may never have quite finished it). One particular lacuna bears directly on the issue of the missing atomist account of individuation.

The lacuna in question occurs in the second book between lines 164 and 165. Here is the context:

But the first-beginnings \([\textit{primordia}]\), which are of solid singleness, when they pass through the empty void, are not delayed by anything from without, and being themselves units composed of their own parts, when they are carried each to that one point to which their first efforts tend, most certainly they must be of exceeding swiftness and must be carried far more quickly than the light of the sun, and traverse a space many times as wide in the same time than the sun’s lightnings traversing the heavens…[lacuna]…nor to follow up the first-beginnings separately one by one, that they may see in what way everything is done. But some in opposition to this, knowing nothing of matter, believe that without the gods’ power nature cannot with so exact conformity to the plans of mankind change the seasons of the year, and produce crops, and in a word all else which divine pleasure, the guide of life, persuades men to approach, herself leading them and coaxing them, through the ways of Venus, to beget their generations (\textit{DRN}, 2.157-74).

Prior to line 164, where the lacuna is situated, Lucretius is discussing the nature of the motion and the speed of atoms. As we discussed in Chapter 2, the motion and speed of atoms is important for the way Lucretius renders the atomic idea genetic. Setting the atoms in motion, in conjunction with the effect of the clinamen, allows the atoms to relate, combine, and eventually begin to compose larger atomic composites. Prior to the lacuna, Lucretius is discussing the atomic conditions out of which individuals emerge. In Deleuze’s language, he is discussing
differentiation, or the problematic structure of the atomic idea, the first in the order of reasons. At this point the lacuna is found. While it is impossible to determine exactly how much text is missing in this lacuna, Lucretius’ modern editors all note that according to the fifteenth-century Italian humanist Pontanus, a whole leaf of the manuscript (about fifty-two lines) is missing at this point (DRN, 2.164nb). In fact, this had already been suggested soon after the re-appearance of the text when a near contemporary with Poggio Bracciolini (who re-discovered De rerum natura) suggested that a significant amount of text was missing here. Nearly every modern editor of De rerum natura has suggested that these missing lines described the processes by which macrolevel bodies are produced from their constituent atomic parts. Moving beyond this, our suggestion is that this standard reading of the likely content missing at the lacuna bolsters our strategy for reading Lucretius through a Deleuzian lens. That is, the standard reading supports our thesis about reading De rerum natura in terms of the three-part problem structure of the atomic idea. In terms of such a Deleuzian structure, the lacuna becomes the place in which Lucretius articulates the individuation process of the actualization of the atomic idea.

Immediately following the lacuna, in lines 165-6, Lucretius says, “…nor [ nec] to follow up the first-beginnings separately one by one, that they may see in what way everything is done” (DRN, 2.165-6). The use of nec indicates the continuation of a thought missing from the extant text. This likely means that the missing text connects the topic of discussion prior to the lacuna (the conditions under which the motion of atoms produces compound bodies) with the topic of discussion that follows it. So, what do we find following the lacuna? After line 166, there is an anti-theological and anti-transcendent discussion that argues against the providential, divine, and teleological ordering of the world. Lucretius, I claim, explicitly addresses this issue because he realizes that people do not understand the way in which the atoms produce the world, and so
insert a divine plan in order to account for such processes. They are the ones, not the atomists, who skip over what Simondon called “this uncertain region” where the process of individuation takes place. Lucretius, by contrast, seeks to explain the process of the generation of compound, macrolevel bodies without reference to the gods. This suggests that what is missing in the lacuna is an argument about the process of the formation of the world out of the atomic idea.

Thus, given that the discussion prior to the lacuna focused on what we have been calling the atomic idea or the genetic conditions for the emergence of real individuals, and given that what appears after the lacuna seems to qualify a distinct claim about the genesis of real individuals, it seems that what is missing concerns the exact nature of that process of the production of individuals out of the atomic idea. This is how the progression of the argument goes: comment about the atomic idea \(\rightarrow\) lacuna \(\rightarrow\) comment about the individuals produced out of the atomic idea. Don Fowler puts it this way in his account of an argument about motion:

“This \textit{since} many atoms fly continually through the void in many ways with inconceivable speed, the variae res of our world are produced and dissolve, change takes place in the world, and the generations of men come and go, \textit{but} men cannot perceive the causes of these phenomena.”

This progression suggests that what is missing is an account about the processes that produce composite bodies. That is, it seems that what is missing is a discussion detailing the process of the formation of the world and the macrobodies that populate it from the “first-beginnings” to the “way everything is done.” In short, the nature of the discussion before line 164 and after line 165 suggests that this gap is exactly that point at which Lucretius would have focused on the processes of individuation and world production.

As mentioned, several important translators and commentators on Lucretius and atomism

support the reading of the lacuna suggested here. W.H.D. Rouse, the first translator of the Loeb edition of *De rerum natura*, and Martin Ferguson Smith, the reviser of the Loeb translation, both agree with this reading of the lacuna. For example, Smith writes, “the opening of the next paragraph, (167 ff.) suggests that Lucretius may have gone on to explain how the atoms, by their movements, formed and form the world and everything in it” (*DRN*, 2.165n). Don Fowler, perhaps the commentator who has done the closest and most detailed reading of this part of the text, fully supports this position, arguing that the “missing lines probably dealt, therefore, with the creative (170 *creare* etc.) activity of the atoms, the forming of compounds, and the changes visible in the world (170 *mutare*).”\(^{197}\) Finally, Cyril Bailey, the Dean of textual scholarship on the atomist tradition, addresses the lacuna in question as follows: “A considerable number of lines seems to be lost here, in which Lucretius probably first gave other reasons for the atoms’ velocity, and then fulfilled the promise of line 62 to explain how the atoms by their motion created and dissolved things: the next two lines read like a conclusion of such a section.”\(^{198}\) Thus, Bailey too posits that the lacuna between lines 164 and 165 of Book 2 contained a discussion of the coming to be and dissolution of individual, macrolevel entities.

In sum, it is likely that the lacuna is exactly the spot in which a discussion about what takes place in the genetic movement from atoms and void to atomic compounds and the world, or what Deleuze would call the movement from the virtual to the actual. This part of the story is where Lucretius might have detailed the exact mechanisms or dynamisms through which people, animals, mountains, worlds, etc. are individuated or actualized. If we agree that Lucretius and Deleuze offer immanent and genetic ontologies, then they both must be able to account for the whole movement from atoms populating the void or virtual relations and singularities.

\(^{197}\) Ibid., 230. A few pages later Fowler writes, “Lucretius in the lacuna has given an account of atomic motions in creating the world” (235).

characterizing ideas all the way up to the individual. Unfortunately, the place in which Lucretius might have explained how atoms, through their movements, formed and form the world and the composite bodies populating it, is missing. Still, the progression of thought in the discussion surrounding the lacuna suggests that what is missing contained a discussion of exactly this “uncertain region.” So, while Simondon correctly notes the absence of an atomic discussion of the process of the formation of composite bodies, or what we are calling individuation, this very absence is a matter of matter. It is absent, I suggest, not because Lucretius overlooked it, but because the material text was corrupted.

Just to be clear, my claim is not that Lucretian atomism contains, explicitly, all the problematic features that sparked Deleuzianism, nor do I claim that this is a magical discovery that finally reveals the truth of what has been missing for hundreds of years. Instead, I simply claim that, in addition to the explicit features of an immanent and genetic materialist philosophy, the very lacuna in *De rerum natura* also functions as part of the problematic plane of immanence from which Deleuzian philosophy emerges. In this way, Deleuze fills in the lacuna in Lucretian atomism by offering an ontological and physical story that not only produces the individual, but shows how the process of individuation produces those very same fully-formed bodies and qualities that cover up the genetic atomic structures. This is one of the main advantages of reading Deleuzianism as a response to the problematics that Lucretian atomism addresses: they do not simply assume as a given fact or take as ready-made the ideas, perceptions, and features of the world we experience and about which we think and speak, but try to generate it from first beginnings. In order to fill in this lacuna in *De rerum natura*, we will now turn to Deleuze’s story of individuation. This story will, as Simondon puts it, “try to grasp the entire unfolding of ontogenesis in all its variety, and to understand the individual from the perspective of the process
of individuation rather than the process of individuation by means of the individual.”

This change in focus renders actualization divergent and unforeseeable rather than convergent and imitative. The first lesson is that individuation does not result in just one individual but in the production of many things, one of which is the individual; this is another sense in which the individual ‘relative.’ After seeing this, upon reaching the stage of actualized individuals, we will return to Lucretius. In a way, we are now following Deleuze into that dark region of the text. We are entering the lacuna.

Field of individuation

According to Deleuze, individuation is the second step in the order of reasons leading from the idea to its actualization: from the idea to individuation to dramatization to actualization. So, while the whole movement does eventually result in some actual individual characterized by a determinate extensity and quality, individuation is not yet actualization. We will get to dramatization in the next section. For now, we will highlight the difference between ideas and individuation.

While ideas are defined by their ideal or virtual relations, individuation is defined by intensive relations. The process of individuation is how ‘intensities’ select ideas and begin to determine those ideal relations and singularities. These intensities, which I will address fully in a moment, are the defining characteristics of individuation, and carry the potential determinability of ontological structures out of their ideal or virtual insistence into actual existence. In a way, ideas are the rules of production or DNA that will structure and organize the actualization of an individual in an intensive environment. This is not to say that ideas completely determine what an individual is to be. Instead, ideas only determine the variations in terms of which an

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individuation can develop or the ways in which some individual can change in its process of individuation or growth. The claim is that intensities are what determine the relations and singularities composing the idea so that they are, eventually, actualized in real qualities and extensities. To see how this is done, we must be clear about what Deleuze means by “intensities.”

We start with one of Deleuze’s own characterizations of ‘intensities.’ An intensive quantity is that which “includes the unequal in itself” (DR, 232). What Deleuze has in mind here is the notion that an intensive quantity contains something unequal or irreducible to a purely quantitative number or metric amount. Since the quantitative measurement involved in the intensive quantity is not equal to the intensity it measures, the number of that quantitative measurement fails to grasp something about the intensity. This is why the intensity is “that which is unequalisable in quantity itself” (DR, 232). An intensity is not equivalent to a measurement just as a quality, such as the hue of a shade of blue or the heat of a summer’s day, is not equivalent to a quantity. While an intensity is a “quality that belongs to the quantity,” it is not equal to a quantity (DR, 232). It is like the heat that belongs to the reading on a thermometer or the pressure that belongs to the barometer. In sum, intensive quantities are qualitative differences, that is, measurements of differences in degree. By contrast, extensive quantities, as we will soon see, are expressions equal to the quantitative differences they measure. There is no quality concealed by the extensive measurement. With this distinction in mind, we can compare intensities and extensities.

Consider the difference between an extensive measurement and an intensive measurement. An extensive measurement is something like length or volume, such as one gallon of water. If we divide the original volume in half, we get two half gallons of water. The
difference is a metric difference, which means that there is no real change in kind between one-gallon, a half-gallon, a quarter gallon, an eight of a gallon, etc. The difference between such extensive measurements is equal. “Division can therefore take place and be continued without any change in the nature of what is being divided” (DR, 237). An intensive measurement, by contrast, is more like pressure or temperature. Such intensities cannot be divided as extensities are divided. If we divide in half a gallon of water at one hundred degrees Fahrenheit, we do not then get two half gallons at fifty degrees of temperature. Instead, we have two half gallons of water at the original one hundred degrees Fahrenheit.

This indivisibility of intensities means that the differences between intensities are not equal but unequal. As you change extensive measurements, there is a “repetition of the same unity” (DR, 232). As you change intensive measurements, though, the units are not equal to each other. Put differently, the ‘distance’ between extensive measurements is the same, but the differences between intensive measurements is asymmetrical. Or, the units of extensive measurement are all equal and similar, but the units of intensive measurements are unequal and dissimilar. To give one final example, the difference in the distance between extensities is the same: thirty-one feet is as far from thirty-two feet as thirty-three feet is from thirty-four feet. The distance between intensities, however, is not the same: the distance between thirty-one degrees Fahrenheit is as not far from thirty-two degrees Fahrenheit as thirty-three degrees Fahrenheit is from thirty-four degrees Fahrenheit. When one crosses the thirty-two degree threshold, there is a change in kind – either a becoming-frozen or a becoming-liquid. There is a non-metric or qualitative difference that results in a change in kind or nature: an “intensive quantity may be divided, but not without changing its nature” (DR, 237). As we will see later, extensities are produced out of the play of intensities. This is why underneath extensities, “at the deepest layer
of the divisible, the unequal still rumbles in intensity” (DR, 233).

Perhaps it is better to think of it this way. An intensive measurement is an intensive array or scale of degrees, such as the ticks on a thermometer. If there is a significant change in intensity such that the change overwhelms the variable series of degrees along which a given intensive quantity is arrayed, then there is a corresponding change in extensity as well, which then produces a difference in kind. In this sense, we should think beyond heating a gallon of water from fifty to one hundred degrees Fahrenheit. It is better to think about using an average thermometer, the store-bought kind often used measure a common summer’s day, to measure the temperature of the water used in a nuclear reactor. The heat generated by the nuclear reaction would so far exceed the highest scale of the store-bought thermometer that what is measured is no longer even a liquid measureable in gallons, but is instead converted into a totally different kind of thing: nuclear power. Clearly, there is a change in kind.

Another characteristic of intensities follows from the first: intensity is the affirmation of difference. The priority of inequalities and intensities is part of the argument for the priority of pure differences. That is, extensities are all equal because they are differences that are dependent on pre-established identities, while intensities are unequal because they are prior to the establishment of extensive identities. They, instead, produce extensities. This means “intensities affirm difference” (DR, 234). Difference, for Deleuze, is always affirmative, just as atoms are always positive. Negation, opposition, identity, etc. are produced by a more fundamental difference. Differential and atomistic relations are not negative or oppositional relations, but the positive potentialities for the production of individuals. “Every phenomenon refers to an inequality by which it is conditioned, diversity and every change refers to a difference which is its sufficient reason. Everything which happens and everything which appears is correlated with
orders of differences: differences of level, temperature, pressure, tension, potential, differences of intensity” (DR, 222). The generative nature of intensities points not to an originary lack or negation but to a set of positive and productive conditions.

The third and most important characteristic of intensity is that “intensity is an implicated, enveloped, or ‘embryonised’ quantity” (DR, 237). What does it mean to say that intensity is implicated or enveloped? In essence, it says that intensity is concealed by a quantity or extensity. To be ‘implicated in’ means to be “folded into” or “concealed within.” There are two ways in which intensities are concealed.200 One refers to the way in which the intensities populating a field of individuation are concealed by the actual extensities and identities that characterize actualized individuals (DR, 240). Basically, the claim is that the intensive processes by means of which something is produced are covered up by the relatively stable product that results. As an example, think back to the biological idea. Cuvier focused on the final form of a bird and thereby concluded that the function or goal of a wing guides the developmental process. Geoffroy, by contrast, argued that Cuvier ignored the morphogenetic processes that produced that final form. Cuvier’s conclusion is understandable because not only does the final product conceal those morphogenetic or intensive processes that produce the form and function of the mature organism, but the final product also does not resemble the pure intensities of individuation. It thus requires something like a theory of ideas, such as Geoffroy’s biological idea, to reveal those concealed intensive processes. Intensities are implicated in or concealed by extensities insofar as they produce but do not resemble extensities. In sum, extensities explicate the intensities that are implicated within: the movement of actualization thus proceeds from implication to explication or from the intensive to the extensive.

The other order of implication or form of concealment means that intensity is implicated

200 What I am calling the “two ways of concealment” Deleuze calls “two orders of implication” (DR, 240).
or concealed within itself (*DR*, 240). Think of the way in which each time the temperature increases, the colder temperatures do not completely disappear but are instead folded into the higher temperature. In a way, intensity is implicated within itself just as intensities build on or drive forward each other as intensity increases. The higher temperatures then conceal the lower temperatures. This form of concealment shows that intensity is not completely exhausted by the extensities that result from them. Instead, intensities continue to envelop pure differences such that the actualized individuals, extensities, and identities are only relatively actualized, and so are always subject to changes and transformations. The seemingly final form of the mature organism, for example, is not final but merely a temporary stage in the process of individuation. “Individuation,” Simondon says, “is a relative phenomenon, like an alteration in the structure of a physical system.”  

Individuals are relative phenomena in that the process of individuation does not exhaust all the potentials embedded in the preindividual state in the appearance of a single individual. The form of a given individual is, instead, merely a temporary stage relative to long and divergent processes of individuation. So, an individual is relative in that further individuations remain possible; it is one form among many forms that individuation assumes.

This is where Deleuze begins to borrow terminology from developmental biology, such as embryos or larvae, to capture the individuality of individuation. The “embryo,” Deleuze writes, “is the individual as such directly caught up in the field of its individuation” (*DR*, 250). He picks these terms in particular because developmental biology focuses on a domain that is populated by elements that are not yet fully formed individuals but still individuated to some extent. In this way, Deleuze is clearly inspired by Geoffroy’s use of the organism as biological idea. An embryo, for example, is not yet an adult organism but contains distinct genetic material that will guide the formation of the organism. Even better, the embryo is not a homogenous mass

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but contains differenciated parts; it is just not as differenciated as the fully formed organism. As an embryo, the individual is closer to an abstract body plan or plane of composition that does not determine the final form or function of mature organism but orients the ways in which the embryo can change as it is specified and organized through processes of individuation.

These intensities thus compose an intensive field or milieu of individuation that pre-exists the extensities, identities, forms, functions, etc. of actual experience. This field is the result of the selection of those relations and singularities composing the virtual idea or problem. The formerly undetermined elements start to become determined according to the relations that guide their determination, and the singularities are intensified as thresholds that mark the points at which rapid changes occur in the development of the embryo. As Deleuze puts it, the “intensive field of individuation determines the relations that it expresses to be incarnated in spatio-temporal dynamisms (dramatization)” (DR, 251). If the virtual or atomic idea is the pure problem, the field of individuation is the first set of movements, emerging from the structure of the problem, that lead, eventually, to the actual solution. This is why the field of “individuation emerges like the act of solving a problem, or – what amounts to the same thing – like the actualization of a potential and the establishing of communication between disparates” (DR, 246). The field of individuation is the solution in its embryonic form; it is the first distribution of lines of resolution. It is not yet clear what extensive form the solution will assume, but the distribution of intensities that will come to define the parts and organization of the solution are here in nascent form. This is one reason why Deleuze claims that individuation is “by nature clear and confused” (DR, 253).

To recall the mathematical influence on Deleuze, if the virtual or atomic idea is the moment of differentiation, individuation is the integration of the disparate or unequal elements
according to the differential relations such that they begin to resonate (DR, 246). This is not to say that the individualized solution will resemble this intensive field of individuation. For the actualized individual is not extensively determined by the idea, the field of individuation, or (as we will see next) the processes of individuation or dramatization. That is, at no point in the process of actualization is there an order of resemblance between one register and the next. The composition of the field of individuation does not resemble the organization of the actual. In sum, this stage in the order or reasons designates the distribution of intensities that together compose the field of individuation that corresponds to the relations and singularities of the idea.

Now that we understand what Deleuze means by the intensively composed field of individuation, we can press on to the next moment: dramatization, which is characterized as the processes of individuation emerging from the intensive field. We will now see why the field of individuation is different from the process of individuation, and we will see the role dramatization plays in the overall process of the actualization of the virtual idea.

**Dramatization**

Dramatization is third in the fourfold order of reasons through which an idea is actualized. As we have seen, the ideas, as atomic or differential structures, do not simply identify unchanging essences or immaterial forms, but distribute genetic relations, elements, and singularities that act as preindividual grounds of individuation. From these preindividual grounds an impersonal field of individuation is established or distributed. At the level of ideas, there are only anonymous, preindividual differences, for Deleuze, or atoms, for Lucretius. In their ideal status, differences or atoms are either completely or relatively undetermined. When they enter into intensive relations in a field of individuation, they begin a process of determination as parts or regions of
embryonic individuals. This does not mean that there are now fully formed individuals, but simply that the genetic conditions begin to condense the sets of relations from which individuals emerge. In dramatization, the processes of individuation are gaining more and more determination.

The next question concerns how these dynamic processes actualize ideas. Here, the reason for Deleuze’s “dramatization” language becomes clear. What role do the processes play in the progressive unfolding of ideal ontological structures? To be precise, they create or distribute spaces in or through which “roles” can be played out by various actors. Even better, the roles so come to determine the actors that the actors, who were undetermined prior to their playing of the role, first find themselves because of these roles (DR, 216). It is through these roles that actors come to attain a degree of determination. The actors become the roles because they are relatively undetermined prior to their actualization of the roles. Before the acting out of the role, the actor is “larval” or “embryonic,” by which Deleuze means relatively undetermined and so open to the various possible determinations that characterize the role. While they are “yet to be fulfilled” when the drama is in its merely structural or ideal form, the roles themselves function as rules for determination. The roles are determined by their very capacity for determining that which comes to fulfill them. This is not to say that the role pre-determines what the actor is to be, but instead endows the actor with certain traits and themes that establish degrees of variation that can be actualized or acted out in various and divergent paths. Moreover, the roles are able to operate in their determining capacities insofar as they are distributed in certain ways that correspond to significant moments or dramatic thresholds in the act of playing out the drama. The roles are able to determine the actors in various ways because of the distribution of these roles throughout the duration of the play. Each role is not a role unto itself, but always in relation to other roles, as
each actor is undetermined in itself but comes to be determined or defined by means of the ways in which the role is acted out. The roles are acted out in the spaces distributed by the field of individuation. Deleuze says as much: “the roles dominate the actors, the spaces dominate the roles, and the ideas dominate the spaces” (DR, 216). We can translate this back into the language of ideas: the actors are the formerly undetermined elements, the roles are the determining relations, and the spaces or the stage is the structural distribution of the elements and relations or the idea. This is the process of the dramatization of the idea.

What is it that dramatizes the idea? Intensities. Individuation is the field of intensities and dramatization is the process of individuation by means of which intensities produce actualities. As Deleuze says, the process of “individuation is the act by which intensity determines differential relations to become actualized, along the lines of differenciation and within the qualities and extensities it creates” (DR, 246). In ideas, all relations and singularities coexist. Individuation then selects from among the relations and singularities coexisting in the idea and begins to separate them out, and dramatization is the process by means of which the intensities act out the intensive field. Deleuze says of intensities that in the drama, “instead of coexisting, they enter states of simultaneity and succession” (DR, 252). This is why the virtual idea is both preindividual and static. It is only with the selection of intensities that individuals begin the process of actualization and temporal determinacy appears. Once certain relations are selected, separation into divergent processes of individuation occurs. This, in turn, gives more determinacy to the distribution of inequalities or differences. That is why each intensity expresses only certain relations or degrees of variation and processes of individuation do not develop in every possible way. What distinguishes one process of individuation from another is the selective restriction of its potentialities for change and development. It is restricted or
determined by the differential relations that it selects. In a sense, an individuation is individuated by the degrees of variation or development that it expresses. An individuation is not this or that identifiable individual, but the distribution of variations or “directions of development.” Deleuze calls these directions of development “spatio-temporal dynamisms” (DR, 214).

The spatio-temporal dynamism is used to replace Kant’s use of the schema (CPR, A137-147/B176-187). According to Deleuze, Kant “invented” the schemata to allow concepts to determine spatio-temporal relations that are supposed to correspond to the concept. This is an issue for Kant because of the strict difference between the pure representations that belong to the domain of the faculty of understanding and the empirical representations that belong to the domain of the faculty of sensibility. In order for these two strictly distinct domains to touch, so to speak, “there must be a third thing, which must stand in homogeneity with the category on the one hand and the appearance on the other, and makes possible the application of the former to the latter” (CPR, A138/B177). Such a mediating representation must be both pure or non-empirical and yet also sensible or empirical. The schema is thus an operation through which “an application of the category to appearances becomes possible” (CPR, A139/B178). Kant calls this application of the category to appearances “subsumption,” and the schema is what makes this operation or procedural rule of subsumption possible (CPR, A137/B176). As an operation, the schema is a rule of production, the production of an object or intuition that conforms to a concept. In a way, a schema is a rule of “time-determination,” that is, a procedure for relating the atemporal concepts to empirical intuitions, which are themselves always “in time” or temporalized (CPR, A138/B177). This is why schemata give rise to temporalized conceptualizations.

To illustrate what he means, Kant mentions the concept of the shortest path from one point to another. The shortest path, which turns out to be a straight line, is not simply a predicate of an already existing thing. Instead, according to Kant, the shortest path is the rule for producing a line that is straight. To get a straight line, use the rule for taking the shortest path. The shortest path is thus a rule for the production of a straight line in time and space. That is, you get the straight line by actually drawing the shortest (temporal determination) path from one point to another point (spatial determination). The definition of a straight line as a rule of production does not follow Euclidean geometry but Archimedean geometry, the geometer of atomism. As Deleuze puts it in a lecture on Kant, the “shortest path is a notion that is inseparable from the calculus that in antiquity was called the calculus of exhaustion in which the straight line and the curve are treated in a synthetic confrontation…a rule of production.”

Kantian schemata are thus rules for bringing two heterogeneous series – concepts and sensations – into a “homogenous” or harmonious productive operation. While it is clear how this third thing, the schema, is supposed to function in Kant’s architectonics, it is not clear how the schema has the power to relate the concept to the sensation. Kant himself recognizes this obscurity in that he calls it “a hidden art in the depths of the human soul” (CPR, A141/B180).

For the schema, as paradoxically both pure and empirical, must be both external to the concept, given the purity of the concept, and partly conceptual. This is why, Deleuze says, “the schema does not account for the power with which it acts” (DR, 218). It is clear how it is supposed to act or what role the schema is supposed to play, but the power or capacity for fulfilling that role, for actually producing the spatio-temporal determinations or individuals, is almost miraculous. It is thus a mystery as to how the rules of production gain the power of production.

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http://www.webdeleuze.com/php/texte.php?cle=57&groupe=Kant&langue=1
Everything changes, according to Deleuze, once the production of individuals is not tied to schemata of concepts but to dynamisms or dramas of ideas. Spatio-temporal dynamisms are “group[s] of abstract lines coming from the unextended and formless depth” of ideas. By replacing Kantian schemata with spatio-temporal dynamisms, Deleuze has endowed the dynamisms with the productive power that the schemata lacked. This power is derived from the idea, which is itself composed of pure differences. The drawback with concepts is that they are established identities, and so do not contain the generative power for spatio-temporal determination. This is why concepts require something external to them, that is, schemata for their realization in space and time. Ideas, by contrast, are defined as virtual distributions of genetic elements, differential relations, and distinctive points or thresholds. Ideas do not require schemata because they are themselves productive ontological structures. Since spatio-temporal dynamisms are not external to ideas but are instead expressions of ideas, they are already endowed with productive power. In this way, concepts are not presupposed as necessary conditions for the possibility of spatio-temporal determinations, but actually result from processes of production and spatio-temporal dynamisms. Concepts are products of problems. Thus, a spatio-temporal dynamism “acts below the sphere of concepts” (DR, 218). This is another way in which Deleuze inverts Kantianism and inserts powers for divergent production rather than simple repetition or mimetic determination. While the Kantian order of reasons goes from possible concept to real sensation by means of the schema, the Deleuzian order of reasons goes from virtual idea to actual concept by means of spatio-temporal dynamisms (emerging from intensive fields of individuation). What does Deleuze call the operation of spatio-temporal dynamisms? He calls it dramatization of the idea.

So, dramatization is the process through which such spatial-temporal incarnation unfolds,

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and spatio-temporal dynamisms are the embryonic or larval potentialities that guide the ideas to actuality. Spatio-temporal dynamisms guide the ideas so that its relations and singularities provide the degrees of variation that individuations can assume in various distributions of space and time.

**Actualization**

Perhaps the best way to see the movement of actualization or differenciation in Lucretius is to look back at the beginning of *De rerum natura*, where Lucretius first lays out the principle of conservation. This is where we find one of the most important arguments of the text: the exclusion of any principle of creation *ex nihilo* and the insistence on some variation of what we can anachronistically called an atomic principle of sufficient reason. Keeping in mind what we said about this principle above, we can now see another way in which it functions in atomism. Lucretius asks,

> In a situation where each thing did not have its own procreative bodies [*genitalia corpora*], how could there be a fixed mother [*mater certa*] for things? But since in fact individual things are created from seeds, each is born and emerges into the realm of daylight from a place containing its own matter and primary bodies; and the reason why everything cannot come into being out of everything is that particular things contain their own separate powers (*DRN*, 1.167-73).

The question Lucretius raises concerning the “fixed mother of things” refers to the power of a natural production, a consistent generative source of matter, the *certa mater* of matter. The fixed mother of things is the emblem for the principle of sufficient reason in that it accounts for the existence of what atomists call composite bodies or what Deleuze calls individuals, and this means looking into the distinctive processes of generation and individuation for these composites or individuals. Since the task of the immanent ontologies that Lucretius and Deleuze espouse is
to offer the necessary *and* sufficient reason of individuation, they aim to account for the genesis of composed individuals, and so are able to determine the actual being of a composed individual or assemblage. These ontologies aim to describe the *ratio existendi* of real composite individuals. To claim that there must be a fixed mother of individual things, that is, a set of conditions for real composed individuals is another way of claiming that generation must emerge from the atomic idea. A good example of this is the biological idea. The biological idea showed us how a determinate abstract body plan can function as the determinate yet virtual conditions from which various dissimilar yet ordered species emerge according to certain morphogenetic orders.

Moreover, this means that creation cannot just happen like a burst out of nowhere, as is the case with explanation by means of models and copies (Platonism), genera and species (Aristotelianism), or necessary conditions for possible reality (Kantianism). The problem Deleuze sees with the general Platonic accounts is that in them, the individual is merely a particular instance of the general kind, which means that the differences that make an individual *this* individual are treated as secondary or accidental to an originary essence. Deleuze sees a similar problem with the Aristotelian account, in which the form or “kind of thing” some individual is supposed to be is not generated but assumed beforehand, and so merely “applied” to unformed matter. Finally, the problem Deleuze sees with Kantianism is that, as Deleuze puts it, the status of the external relation between the conditions and the conditioned construes the process of realization of some possibility as a “brute eruption, a pure act or leap that always occurs behind our backs” (*DR*, 211). Such an act of realization of the possible is almost magical. What is lacking is any account of a genetic process that explains why some individual is realized, that is, an account of a process of individuation. It is precisely such an account that might have

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206 Marx notes that for atomism, contrary to the Aristotelian account, “the contradiction between existence and essence, [and] between matter and form, is inherent in the concept of the atom.”
been found in the problematic opening (the lacuna) in Lucretius and that is found in Deleuze. In this way, Deleuze and Lucretius escape the problems Deleuze associated with the Platonic, Aristotelian, and Kantian accounts by rendering the conditions for individuation determinate, immanent, and genetic, thereby eliminating the necessity for external forms or essences as well as the externality of the conditions to the conditioned. The “first beginnings of things,” Lucretius says, “exist by nature and are not made by hand after the fixed model [certam formam]” (DRN, 2.377-9). In short, transcendent forms and transcendental conditions do not provide the sufficient reason for real experience in the diverse forms in which it appears. Rather than explaining why some individual exists, such accounts end up offering an explanation that simply doubles what is supposed to be explained. So, while the Platonic, Aristotelian, and Kantian accounts offer determinate conditions as a set of fixed forms or transcendental conditions (certam formam), Lucretius and Deleuze offer determinate conditions as a set of immanent, genetic, and material conditions (mater certa). Another name for these determinate, immanent, and genetic conditions is ‘ideas,’ in their atomic, Deleuzian, or biological forms.

Thus, becoming-atomist or becoming-Deleuzian does not involve seeking out transcendent, static, and self-identical essences that are said to explain actual individuals simply because of some degree of resemblance. Such a turn to the transcendent does not take up the problem of the existence of the real world but actually avoids it by looking around for things that look like this or that. The problem with explanation by perfect models is that they are not able to account for the genesis of the world; they merely double the world and, in so doing, render the world imperfect or degraded. In contrast, both Lucretius and Deleuze posit that rather than depending on resemblance or striving for the highest degree of similarity, actualization involves a movement of differenciation, that is, a process that requires an ideal register (as in the atomic
idea) that does not simply repeat our world. This means that the actual qualities and identities
that characterize our world do not resemble the genetic conditions that produced them. The
sights, sounds, smells, etc. that color our world do not resemble the atoms or differences that
produce them. As Lucretius puts it, “the atoms do not emerge into the light” of appearance
(DRN, 2.796). Or as Deleuze might say, the actualities do not resemble the ideas they incarnate.
In short, there is a strict order of non-resemblance between the conditions and the conditioned,
between the atomic world and our world, between the virtual register and the actual register. This
is not a mere repetition of the standard distinction between primary and secondary qualities
because the primary properties that a composite body has (shape, size, form, etc.) do not
resemble the conditions that generated them anymore than the secondary qualities of some
composite body. Since they are both generated, neither primary nor secondary qualities (neither
forms nor qualities) resemble their genetic conditions.

Reading the atomic insistence on explaining the generation of individual things in
conjunction with the Deleuze-Lucretius encounter allows us to articulate a very distinct order of
generation from atoms and void to individual things. This, I have argued, is what Deleuze calls
the order of reasons: ideas, individuation, dramatization, and finally, actualization. In sum,
actualizations are “distinguished first by the order of ideas they incarnate or actualize:
differentials of this or that order. Secondly, they are distinguished by the process of
individualization that determines that actualization...Finally, they are distinguished by the
figures of differenciation that represent actualization itself” (DR, 255). Another way to think
about this order of reasons is to think of actualization as the “act of solving a problem” (DR,
246). The movement from the problem to the solution or from the idea to its actualization does
not occur in the idea alone but progressively unfolds, according to the order of generation, from
the idea through individuation and dramatization to actual individuals.

This is another meaning of the atomic principles of conservation: the actualized individual envelops or contains within its own means of production, its own “distinct power [secreta facultas]” (DRN, 1.173). The problem with De rerum natura is that it seems to skip over the details linking these generative seeds and distinct powers to the actual individual. However, this is due, I claim, to the lacuna in the text, and this is another reason why it is useful to situate Lucretius in the Deleuze-Lucretius encounter. In terms of this encounter, Deleuze responds to the lacuna by developing an account of the generative fields and processes that govern the emergence of this or that individual thing.

We can now say what exactly happens when actualization occurs and how it relates to the components of ideas. “Differentiation itself already has two aspects of its own, corresponding to the varieties of relations and the singular points dependent upon the values of each variety…differentiation in turn has two aspects, one concerning the qualities or diverse species that actualize varieties, the other concerning number or the distinct parts actualizing the singular points” (DR, 210). Differentiation or actualization thus describes how the relevant differential or atomic relations and the corresponding singularities are determined as, respectively, various species or qualities and the organization of the parts.

While it might be slightly confusing to draw divergent lines of individuation from virtual or atomic relations and singularities to actual species and parts, the import of the claim is clear. To be exact, the species, kinds, or forms of things that can be defined according to extensive categories or measurements are the result of, not the reason for, the existence of various kinds of individuals. That is, the various kinds of plants and animals, from the smallest to the largest, are not copies that seek to mimic some original or fulfill some teleological function, but the products
of processes of generation that are governed by the differential relations structuring the idea. The qualities of some natural kind, such as, to use Lucretian imagery, the changing colors of the “dove’s plumage” or the “peacock’s tail,” do not preexist the actual individual. This is, for Lucretius, one of the arguments for why atoms do not have color or quality. In themselves, atoms are quality-less, not determined by any color, smell, taste, etc. Species and types are not transcendent essences, forms, or functions of which actual individuals are particular instances, but the result of truly genetic and individuating processes. The color of the peacock’s tail and the species peacock itself are produced out of atomic ideas that are themselves indeterminate in terms of colors and species. As we remember, one of the fundamental features of this kind of individuation is that the conditions are not merely traced from the conditioned, that is, the conditions need not resemble the conditioned.

In terms of atomism, the conditions (the movement and activity of the atoms) do not resemble the phenomenal world of our everyday experience. The colors, sounds, tastes, etc. that characterize our sensory world do not apply to atoms. For atoms are devoid of such a qualitative nature. This is another reason why composite bodies or individuals are only relatively stable; they are still temporary sites of the very process through which they evolved; as such, they are subject to further evolution. In sum, the movement and combinations of atoms produce actual species and qualities. The nature of species and kinds lies not in their resemblance to an original species or kind, but in their abilities to evolve and differenciate. Species are defined not insofar as they share a defining set of qualities or characteristics, but insofar as they change and vary. Species are not substances but events. That is, the spatio-temporal dynamisms populating the intensive fields and processes spark different kinds of animals and plants, as well as the colors and qualities they display.
To attribute natural kinds or species and qualities to something that preexists the individuals is an illusion that results from a certain feature of the nature of generation. As we saw in the discussion of the biological idea, this is part of Geoffroy’s critique of Cuvier. That is, the differences, intensities, or atoms that, through differenciation or actualization, produce the individual doves and peacocks we see and experience are covered up. As Deleuze puts it, “difference necessarily tends to be cancelled in the quality that covers it, while at the same time inequality tends to be equalized within the extension in which it is distributed” (DR, 266). In this way, atoms are covered up by the emergent properties of atomic assemblages. The actual individuals and their actual functions are commonly viewed in terms of their unchanging qualities or the fixed composition of their bodies. This fixity, however, is the result of a (relatively) completed process of individuation. The illusion of fixity arises because the dynamisms and intensities that defined the process disappear beneath the extensive and qualitative characteristics of the individual produced. In short, the actual product obscures, by enveloping, the atomic or intensive process that produced it.

Put differently, the solution tends to erase the problem, and the illusion of fixity arises when we fail to notice the problem contained beneath the individual solutions. This is not to say that the problem is simply transcendent to the solution, as is the case with transitive causes. Instead, to say that the problem insists or persists in its solutions yet is also covered up by them is to say that the “problem is at once both transcendent and immanent in relation to solutions. It is transcendent because it consists in a system of ideal liaisons of differential relations between genetic elements. It is immanent because these liaisons or relations are incarnated in the actual relations that do not resemble them and are defined by the field of solutions” (DR, 163).

One of the reasons this dissertation investigates the Deleuze-Lucretius encounter is their
shared insistence on the details of the process beneath the product and the problem beneath the solution. Both insist that the problem “still objectively persists in the solutions to which it gives rise and from which it differs” (DR, 280). Chapters 1 and 2 detailed the structure of this concealed problem. Chapter 3 has articulated the general processes by means of which the solution emerges from the problem. Chapter 4 will use this process to follow one particular line of individuation, namely, the genesis of the sensing and thinking Epicurean subject. Chapter 5 will extend that account by following the Epicurean subject into the practical and ethical domain.
Chapter 4: The encounter in sense and thought

When any naturalist philosophy of the sort we find in Lucretius and Deleuze tries to account for thought, consciousness, and subjectivity, problems begin to arise. While idealist thinkers begin by taking categories like these to be given and then step back to analyze their functioning through one analytical technique or another, naturalist thinkers can start to sound quite out of their depth when they address questions related to consciousness or thinking. While Deleuze certainly holds that thought, minds, consciousness, subjectivity, etc. are real, he also argues that they are the outcomes of genetic processes actualizing virtual ideas. That is, they are not causes, but effects whose reality and emergence must be explained. The essential question of such naturalisms is not “How is experience given to a subject?” but rather, “How does the subject emerge amidst the given?” The task of this chapter is to explain how Deleuze’s account of the production of a thinking and conscious being (a subject) is a result of a framework he inherits, at least in part, from the response to this problem offered in atomic naturalism. This chapter will begin at that far end of this tradition with the Lucretian and Epicurean account of the constitution of the sensing and thinking agent within the atomic world. The second half of the chapter will turn to Deleuze, where we will account for the emergence of thinking and sensing beings out of the problematic plane of the idea. This plane, we will argue, is found in both Lucretius and Deleuze.

As we saw in the last chapter, divergent processes of individuation emerge from ideas or problems taken as immanent and genetic ontological structures. For Lucretius, this is due to the continuous movement of atoms swirling about the void. Eventually, sets of atoms bombard the affective surface that is the human body (Deleuze also talks about this in terms of the excitations of the body in response to various atomic sparks). Through this process, the body is compelled to
react in various ways: it perceives, it remembers, it thinks, etc. While both Lucretius and Deleuze use different terms to describe these moments of the body’s encounter with this endless material bombardment, we will focus on Lucretius’ theory of simulacra and Deleuze’s talk of what he calls the sentiendum and cogitandum. To bring these different vocabularies together, we will keep to the language of problems. The world poses problems to the faculty of sensibility, which then carries this problematic force through various other faculties, that is, imagination, memory, etc. It is then the defining character of the power of thinking to determine the problem as that which produced thinking. As Joe Hughes puts it, “If sensibility is the faculty of apprehending problems, thought is the faculty of determining problems.” The goal of this chapter is to detail this process of the constitution or production of thought out of the sensible. To get there, we begin with Lucretius’ affective theory of perception and the role simulacra play therein. We will then situate this theory in the larger Deleuzian story of the discord of the faculties, beginning with the initial spark of sensation that flickers along the arcing line of the faculties and, eventually, sets thought alight. On Deleuze’s account, the point is neither to arrive at a final, definitive answer nor to sort true from false solutions, but rather to confront the problematic field of ideas that define the shape of thought. Thinking, then, begins with a violent shock to thought. Deleuze calls this process the apprenticeship to the idea: learning for, with, and by means of the problem.

**Simulacra and the production of thought**

We start things off with the atomic definition of soul, as well as the complicated relationship between spirit, mind, and body. We then turn to the atomic account of sensation and perception. For atomism, all perception is true and real. This account of sensation is where we will develop

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207 Joe Hughes, *Deleuze’s Difference and Repetition*, 114.
the difficult concept of the simulacrum, one of the few topics in ancient atomism Deleuze addresses directly. Simulacra, as we will see, embody a challenging account of perception marked by real material encounters. We perceive due to the impact of simulacra on the sensible surface of our bodies. Given the great speed and fineness of the simulacra, though, we do not perceive simulacra in themselves. It is through the forceful impact of imperceptible simulacra on our sensory organs that thinking emerges. Just as simulacra spark sensation, the force of this encounter also stirs thought. Once we reach the level of thought, we will then discuss the atomic conceptions of truth and falsity. While atomism claims that all perceptions are true, it is still is careful to diagnose dangerous illusions. Finally, we will see how atomism relocates questions of truth and falsity to the level of the atomic idea. It is through the emergence of the sensing and thinking atomic subject that the atomic idea is finally articulated. In the end, the atomic idea is that which emerges at the end of a genetic line leading from the atomic idea to the thought of the atomic idea.

Animus et anima

Having explained the nature of the beginnings of things in Books I and II of *De rerum natura*, Lucretius turns to an account of the soul in Book III. According to the atomists, there are two parts of the soul: mind (*animus*) and spirit (*anima*). The first thing to note is that mind and spirit are not different in kind from the body (*corpus*). Instead, like our hands and feet, both are constituted by a particular combination of atoms. Lucretius says, “the mind [*animum*], which we often call the intelligence, in which is situated the understanding and the government of life, is a part of man, no less than hands and feet and eyes are parts of the whole living being” (*DRN*,
3.94-7).\textsuperscript{208} As the eye is a coherent formation of atoms locked into a certain pattern of behavior, so mind and spirit are atomic products of atomic motion and arrangement. According to Serres, since “the soul is a material body, the body is a thing, [and] the subject is just an object, physiology or psychology is just physics.”\textsuperscript{209} Since everything is atomic, the science of ψυχή, is equally a science of φύσις. Atomism is almost an ancient psychophysics.

While it is hard to say where the sensible ends and the reasonable begins, given that they are made from the same cloth, this does not mean that body and soul are the same. After making the claim about the material nature of mind and soul, Lucretius begins an extended critical discussion of the ancient harmonia theory of mind, which differentiates animus and anima from body. “Some Greeks,” he says, “thought that the feeling of the mind [animum] is not situated in any fixed part, but is a sort of vital condition of the body, called harmony [harmoniam]” (DRN, 3. 98-9). While Lucretius offers some rather unconvincing arguments against the harmony theory, the point is clear: while the body and soul are both real and material compounds, there is still a difference between them.\textsuperscript{210} The reason for this claim is that soul is able to experience joy or agony while the body is not, and the body is able experience pleasure or pain while the mind is not. This is important because there must be some sort of interaction between the body and soul. Rendering animus and anima material saves this interaction. In short, while the body and soul are different, they are not different in nature. “The nature of mind [animi] and spirit [animai] is body,” Lucretius argues, “for it is seen to drive forward the limbs, to arouse the body from sleep, to change the countenance, to guide and pilot the whole man” (DRN, 3. 161-5). As atomic, the body acts on the soul and the soul acts on the body. “Therefore,” Lucretius

\textsuperscript{208} A lacuna follows this, in which at least one line is missing.
\textsuperscript{209} Serres, The Birth of Physics, 49.
\textsuperscript{210} The main arguments are: 1) the soul is not an harmony of body parts because it is possible for the body to be healthy while the soul is not and vice versa, 2) the soul can be active when the body is still, as in dreams, and 3), the soul can function even when one loses a limb or one’s body is severely damaged.
concludes, “the nature of the mind [animi] must be bodily, since it is affected by bodily weapons and blows” (DRN, 3.175-6). Lucretius has both differentiated animating and corporeal capacities of the atomic subject and yet established a real form of interaction among them. This interaction begins when a blow to the body “sets in motion” a lively signal that sparks the body, spirit, and mind into action (DRN, 3.247).

While the soul is distinct from the body, there is a further distinction within the soul. As we said, anima and animus are both material variations on the atomic “soul.” So, what is the difference between spirit (anima) and mind (animus)? Long and Sedley, referring to later physiological language, see anima as the nervous system and animus as the brain. Rist sees the difference in terms of rationality: animus is rational and anima is irrational. We, however, will take a different route and take this difference as a difference in affection: the difference between anima and animus is a difference in the capacity to change and be changed, the power to affect and be affected. Let us think about why such an affective account of perception is most convincing.

According to Epicurus, the “soul [ψυχή] is most responsible for sense-perception” (EH, 63). More specifically, anima is the power for sensing and perceiving, which includes both receiving what strikes the body in order to transmit it to animus and for communicating from animus to the body. Since the whole body can sense (for Lucretius, the body is a sort of animated sensory surface), anima must be dispersed through and infused with the whole body. Indeed, anima does not even stop at the limits of the body. Instead, “particles of spirit [animai] flee abroad through all the pores of the body” (DRN, 3.254-5). Animus, by contrast, is located in the center of the chest (an obvious physiological mistake made by most ancient philosophers).

211 Long and Sedley, Hellenistic Philosophers, 71.
212 Rist, Epicurus, 79.
Located in this generally centralized place, *animus* is the “head [*caput*], so to speak, and lord [*dominari*] over the whole body… the understanding which we call mind and intelligence [*animum mentemque*]” (*DRN*, 3.143-4). In sum, while *anima* is defined as the power of sensation, while *animus* is the power of emotion and thought.

Perhaps strangely, the atomists also claim that soul atoms are a bit different than other types of atoms. The atoms that compose the *anima* and *animus* are of a particular kind: they are “exceedingly rounded and exceedingly minute particles” (*DRN*, 3.181-5). Since these kinds of atoms are so small, delicate, and round, they move at the fastest possible speed: the absolute speed of atoms. Aetius and Lucretius even further specify *animus* and *anima* atoms into heat (*vapor, calor*), air (*aer*), breath or wind (*ventus, aura*), and one unnamed type Lucretius mysteriously calls the “soul of the soul [*anima animae*].”

On our reading, there are two main reasons for including these finer distinctions of types of soul atoms. The first reason is the result of the popular responses to these questions in other schools of thought in Greece and Rome. Other philosophers spoke of the soul or mind as consisting of similar kinds of things. The Stoics, for example, thought that the soul was a sort of breath (*pnuema*). Seen this way, the distinction is not philosophically important. The second reason is that fire, wind, and air are associated with certain emotional states: identifying some

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214 Epicurus’ “Letter to Herodotus” actually has a threefold distinction of soul atoms, but this difference is merely superficial and may be the result of the personal nature of the letter. For more on this see Rist, *Epicurus*, 76.
215 Aristotle claims that in identifying soul with fire atoms, Democritus is the first philosophy to develop a concept of life. For Democritus, these fire atoms are restrained and restored through respiration: things live insofar as they respire. *Aristotle, De Anima*, 403b29-404a16, in *The Complete Works of Aristotle*. 

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soul atoms as fire indicates an agitation of atoms and thus wrath, wind atoms are associated with rapid slowing of atoms and thus fear, and air atoms are associated with quietude and thus calm and tranquility. So, identifying soul atoms as fire, wind, or air is a way of defining them in terms of what they can do, such as capacity for sensations (anima) and the associated emotions and thoughts (animus). This is why defining the differences between soul atoms in terms of capacity to change and be changed still holds. Given that all atoms are the same, there is no real fire atom or wind atom. Atoms give rise to fire and wind but are not themselves fire or wind. Instead, as we know, they are indivisible particles of matter. The difference between one mental state and another, then, is not a difference in number or kind of soul atoms but a difference in varying dispositional arrangement of atoms that, in turn, determine the capacity to change and be changed.

Distinguishing between body, anima, and animus atoms in terms of capacities and powers does, however, raise an objection. Since both body and soul are atomic, it is difficult to determine which atoms are soul atoms and which ones are body atoms. If one were able to open up, say, a leg and try to distinguish which atoms were corporeal and which were soul, it would be nearly impossible. This does not seem like much of a worry, though, given that the difference between body and soul atoms has less to do with fire and wind atoms and more to do with their capacities to change and be changed, which is itself a result of pattern and arrangement. Human parts are distinguished in terms of the individuating capacities of arrangements of atoms to be affected corporeally, cognitively, etc. This even applies to organs themselves. Just as that which acquires the capacity to receive light becomes the eye, that which requires the capacity to sense becomes anima, and that which becomes the capacity to think and reason becomes animus. Thus,
what Lucretius says about sense organs applies to all of the faculties of the human, “Each has its own separate capacity [potestas] and its own power [vis]” (DRN, 4.489-90).

This allows atomism to respond to the objection that it is impossible to pinpoint the location of soul atoms and body atoms. The difference between body and soul is not a difference in kind but a difference in capacity or power. Since everything is atomic, anything can become the eye if it is involved in the right processes of generation. Animus atoms, for example, need not remain simply mental, but can become part of the capacity to see. Animus atoms are not restricted to animus and ‘eye atoms’ are not restricted to the eye. What the eye is, then, is a capacity to receive light. In a thinly veiled attack on a general Platonic theory of perception, Lucretius says, “to say that the eyes can discern nothing, but that the mind [animum] looks out through them as open portals [foribus recluses], is difficult,” even contrary to experience (DRN, 4.359-61). In fact, no part of the body is a powerless organ that is completely subservient to the animus. Instead, the eye is the power to receive light just as the ear is the power to receive sounds. While it is, of course, true that such operations, such as seeing, always occur in conjunction of the body and soul, this is further testament to the importance of conjunction in atomism. The eye can receive light only when part of the larger sensing-thinking assemblage. There is no eye alone, just as there is no animus alone. As Lucretius says, “the mind [mentem] is begotten along with [gigni pariter] the body, and grows up with it” (DRN, 3.445-6). In sum, the mind and body are ways of thinking and sensing. As Lucretius says in a beautiful passage aimed at the teleological proclivities of the Stoics and Peripatetics,

Do not suppose that the clear light of the eyes was made in order that we might be able to see before us… Such explanations… put effect for cause and are based on perverted reasoning; since nothing is born in us simply in order that we may use it, but that which is born creates its use. There was no sight before the eyes with their light were born, no speaking of words before the
tongue was made… in a word, all the organs [membra], existed before their use; they could not have existed before their use; they could not have grown up for the sake of use [causa] (DRN, 4.825-42).

The Theory of the Simulacrum

Now that we have a general understanding of the atomic account of corpus, anima, and animus, we can turn to the atomic account of sensation and perception. Similar to the clinamen, Lucretius’ account of the simulacrum and its role in a theory of perception is much maligned. In some respects such an account seems quite prescient, but in others, it is simply wrong, given what know about the contemporary science of perception. The obvious falsity of the position, however, does not detract from its philosophical importance. Deleuze, while conceding the flaws of the account, argues that the simulacrum actually embodies the “invention of a brilliant, though difficult, Epicurean theory” (LS, 273). We find this concept mostly in Book IV of De rerum natura.

The atomic account of sense-perception is fully haptic. Epicurus explicitly asserts that all sensation is reducible to touch. What is touch? It is, Lucretius writes, the “sense of the body [sensus corporis]” (DRN, 2.434). Touch is material impact. Sensation, then, is contact or impact of the world on our bodies. Serres too stresses the importance of touch in atomism, “Like all philosophers passionately concerned with objective reality, Lucretius was a genius of touch and not vision… Knowledge is not seeing, it is entering into contact, directly, with things.”

Interpreting sensation a kind of touch offers a key to understanding Epicurus’ somewhat puzzling claim: “All perceptions are true.” The Greek term that Epicurus uses, which is

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216 While Elizabeth Asmis insists on a terminological distinction between the sensation of touch and the causal process of contact, I think the ambiguity of the term evinces the fully haptic nature of the atomic theory of perception. See Asmis, Epicurus’ Scientific Method, 130.
commonly translated as ‘true,’ is \( \text{αληθής} \), which can also mean ‘real’ or ‘actual.’ While the surrounding context of the appearance of this word in the text does not definitively justify translating it as ‘true’ or ‘real,’ Rist’s claim is most appealing: “What Epicurus means when he says that all sensations are true is that a real event takes place in the act of seeing.” Further, \( \text{αληθής} \), for Epicurus, applies not just to words or propositions but also to things and events. Truth and falsity thus mean something closer to existence or non-existence, to affection or absence of affection, or to whether or not there is an affective encounter or change. Seen this way, all sense-perception is true insofar as it involves a real event or a real change in atomic disposition. Another name for this real change is affect. In short, to sense is to be affected. This applies to thinking as well. According to Rist, sensations are true insofar as “they have the power to move us.” This movement begins in the exterior world, presses through our sense organs, and moves into the mind. So, all thought begins with real contact with an exterior world, with the outside world affecting our bodies and minds. As Lucretius says, “reasoning is in its entirety the product of the senses [\textit{ratio... tota ab sensibus orta est}]” (DRN, 3.483-4). Or as Rist puts it, “General concepts then are the direct derivatives of sensation... the general concept itself depends entirely on the records of sensation in the mind.” From sense to thought, all begins with the touch.

Simply equating sensation with touch becomes more difficult when we consider the various types of sense. In the case of taste or the tactility of the flesh, touch sufficiently accounts for sensation. Smelling, hearing, and especially sight, however, are more difficult to explain. This is why atomism turns to the theory of the simulacrum.

218 Rist, \textit{Epicurus}, 19-20; emphasis added.
Every object, and so everything that is perceivable by human organs, is a collection of moving atoms temporarily locked in some moving pattern or formation. What is lasting about such objects is not the exact set of atoms composing the object but the pattern or arrangement of atoms. This means that atoms continuously escape the pattern. While atoms are constantly being sloughed off, others arrive to take their place. The environment in which a body is situated continually replenishes it as atoms slip away. Due to this constant swapping and movement of the atoms, thin atomic films or ‘outlines’ are shed from these objects. Epicurus compares this process to the way in which fire casts off heat and snakes shed old skin (EH, 46). Different atomists use different words for such effluences: Epicurus calls them είδωλα; Lucretius mostly uses simulacrum, although he also uses imago, effigies, and figura. Lucretius sums up this process: “There exist what we call images [simulacra] of things, which, like films [membranae] drawn from the outermost surface of things, flit about hither and thither through the air” (DRN, 4.30-2). As they are cast off and drift about the world, these films hold the formation or arrangement of the body from which the come.

Like atomic motion, this process of shedding simulacra never stops, but is “continually flowing, discharging, and scattering” (DRN, 3.217-8). Sometimes, the simulacra meet surfaces, such as glass, that allow for easy passage; sometimes, the image is broken by a more obstinate surface, such as rough stone or solid wood; sometimes, the images meet a reflective surface, such as a mirror, and bounce off unbroken. Other times, the simulacra strike the human body. When this occurs, simulacra enter the sensory organ and pass through it, sending a shaped shock through the organ, first into anima, and then into animus. The form of the simulacra in-forms the eye and then the soul.
This does not mean, however, that a single simulacrum constitutes sensation. Instead, like the atoms themselves, simulacra are never alone, but collective, swirling swaths of sensation. As Deleuze says, a perceived “image bears witness to the succession and summation of simulacra” (LS, 277). In this way, extended streams of simulacra account for the continuous perception of, say, a tree or tower. Given that we are constantly seeing the objects of our experience, these streams of simulacra constantly bombard the eye and body. In a Deleuzian vocabulary, this succession of images is a movement-image. While each single simulacrum is a fixed image, the quick succession of images, each slightly different than the one before and the one after, causes the perception of movement. “When the first image perishes and a second is then produced in another position, the former seems to have altered” (DRN, 4.771-2). It is thus no coincidence that many commentators speak of atomic perception as almost cinematographic.\footnote{This is not simply a gratuitous and anachronistic attempt to link atomic perception with Deleuze’s cinema books, for many of the more traditional commentators on atomism invokes this very word. See Bailey, 410 and 415, or Long and Sedley, 77.}

Since the eye is constantly adapting to this constant simulacral bombardment, the sense organ is less of a stable entity and more a constantly shifting surface, endlessly stretching, changing, forming, and reforming. The eye is might be more accurately defined as a power or capacity and less as a static organ or entity. This is clearly a very haptic account of perception: simulacra literally enter the pupil and alter it as it passes through. Perception is not simply passive reception, but physical distortion; it is a real material encounter.

**The size, speed, and time of simulacra**

While perception occurs by means of simulacral shocks and blows, simulacra are themselves extremely thin (*tenuis*) and fast (*celeritas*). Although simulacra retain the distinct shape and color of the object from which they emerged, they are much, much thinner. In fact, they are
characterized by an “unsurpassed fineness” and are thus too fine to be perceivable in themselves \((EH, 47)\). In addition, simulacra are exceedingly fast, moving at an “unsurpassed speed” \((EH, 47)\). Like any other atom, since the simulacrum moves “through the void with no conflict… it can cover any comprehensively graspable distance in an inconceivably [short] time” \((EH, 46)\). How fast is this? It is almost (but not quite) as fast as the speed of atoms and the speed of thought. Simulacra cross great distances, “from the borders of heaven to the borders of earth,” in an “instant \([puncto tempore]\)” \((DRN, 3.215, 3.214)\).\(^{222}\) “Images \([simulacra]\),” Lucretius says, “must be able to run through space inexpressible by words in a moment of time” \((DRN, 4.191-3)\). Any speed less than this speed applies only to larger objects, ones that are subject to resistance.

This is why, Deleuze claims, the theory of simulacra “is inseparable from the theory of time” \((LS, 274)\). Epicurus claims that simulacral movement occurs in a temporality below the time of sensation \((LH, 48)\). According to Deleuze, “The emission of simulacra occurs in a time smaller than the minimum sensible time” \((LS, 274)\). Elizabeth Asmis also notes this specialized theory of time. “Epicurus,” she says, “makes a distinction between perceptible time and time that is too small to be perceived.”\(^{223}\) Although simulacra traverse a perceived distance in an instant, this does not mean that they are in different places at once. Simulacra travel at the extreme of perceptible speed. While our sense organs simply cannot pick up on such a speed, we can think of it. This difference will show us that although we cannot sense such a time, thought emerges out of the sustained effects of the impact of simulacra.

The most important, albeit possibly confusing, implication of characterizing simulacra with such great speed and fineness is that they cannot be, in themselves, perceived. Since they

\(^{222}\) The lacuna after 216 might have contained more argument in support of the speed of simulacra.

are so fast and so thin, we cannot sense them. In short, *simulacra are imperceptible*. A simulacrum is not an empirical sensation because it is independent of a sensing body that experiences it. It is not a determinate feeling or affection, but the material being that exists in itself, even in the absence of a sensing subject. A simulacrum has an independent and autonomous existence. While we do not sense this or that simulacra, we experience sensation through the streams of simulacra. So, a simulacrum is not reducible to this or that sensed being, but is the being of sensation itself. While they are imperceptible, they produce perception. Although we cannot see or sense simulacra, we see and sense because of simulacra. As Lucretius says, “the sensible is born from the insensible [*ex insensilibus... sensile gigni*]” (*DRN*, 2.890). Deleuze also notices that while “the simulacrum is… imperceptible,” it produces sensible images (*LS*, 274). This follows from the size, speed, and time of simulacra: “They have,” Lucretius writes, “a texture so fine that they cannot be seen individually”; “the images [*simulacra*] move at an extraordinary speed” (*DRN*, 4.89, 214). In short, simulacra are the imperceptible spark of sensation.

*The atomic mind and the concept of truth*

Lucretius says, “insofar as what we see with the mind [*mente*] is similar to what we see with the eyes, it must come about in a similar way” (*DRN*, 4.749-51). This “similar way” is the impact of series of sheets of ordered particles, simulacra, which are transferred from the sense organ to *animus* or *mens*, thereby sparking thought. One does not choose to come into contact with the simulacra, but is instead forced into thinking by means of the impact of the movement of atoms arising from sensation. Thought emerges involuntarily. “Since I,” Lucretius, “have proved that it

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224 As Deleuze and Guattari might say, a stream of simulacra is like a “bloc of sensation… a compound of percepts and affects.” *WP*, 164.
is by means of whatever images stimulate my eyes that I see, say, a lion, you can now tell that the mind [*mentem*] is moved in a similar way” (*DRN*, 4.752-5). The mind is quite literally stirred into thought.

All that is involved in thinking – reasoning, calculating, deciding, wishing, etc. – emerges out the impact of the world on our bodies. We learn about the world, reflect on and think of it, because we are in real physical contact with it. Knowing is not a matter of standing witness to a higher truth but of the touch of matter. This material encounter with an external world is an absolutely exterior relation, a constant theme in those parts of atomism and empiricism that Deleuze so admires. In fact, thinking is itself an affective encounter. Just as one perceives through encounters with streams of physical images and by means of the effect these encounters have on the mind, so one thinks because of the soul’s encounter within the body itself. Thinking is the encounter of the mind or *animus* with spirit or *anima*, just as sensing is the encounter of spirit with body or *corpus*. There are external relations all the way up and down. Thinking and reasoning are results of an affective learning process of adapting to the force of these encounters and learning how to organize them. Thinking is a formative process in which forms of engaging the world, through sensation, shape the mind. Simulacra are the forms that inform the sensible body and become the information drifting through the mind. The mind is not a preexisting substance but a product formed by certain ways of living and acting. The question of atomic thinking is a matter of the atomic encounter.

This does not mean, however, that one should or can just think anything at all. Atomism, like any philosophy, is an argument in favor a certain image of the world and so contends that it is the best way of being in and thinking of the world. For atomism, the question is: How can atomism be the better theory when thought itself is a result of the world? In short, what makes
atomism better or more convincing than, say, Stoicism? This is an important question because of the possibly confusing Epicurean statement we saw above: “All sensations are true (αληθής).” If all sensations are true, and the movements of the simulacra that contour sensation are the very same movements that shape the mind, then it seems that any thought is true. This is obviously implausible, and no atomist would claim that all thought is true, especially given the importance of the role of experience in atomism. What is needed is a sort of criterion that can distinguish truth from falsity.

Prior to stating this criterion, however, Lucretius makes a very interesting claim that follows from his ever-present atomic naturalism. Before someone can determine the true from the false, he must first determine “what gave [crearit] him the concept [notitiam] of true and false” (DRN, 4.475-6). Before we can know what the criterion of truth is, and thus be able to distinguish true from false concepts, atomism demands that we first give an account of the creation of the concept of truth. Since everything in the mind came from the very material encounter with the world, “it is from the senses in the first instance that the concept (notia) of truth has come” (DRN, 4.478-9). As we know, one of the first principles of atomic physics is that nothing comes from nothing. Everything must be produced, and this includes bodies, minds, and concepts.

The prioritization of this question means that atomic thinking does not presuppose a natural inclination for truth. Instead, there is a much more important question that atomism seeks to answer: What makes it possible to think true or false concepts? What produces the concept of truth at all? Or better, what accounts for the production of the very thought of truth or of falsity? As Deleuze says of Nietzsche, “a new image of thought,” perhaps of the kind we see operating in atomism, “means first of all that truth is not the element of thought” but instead a result of a
productive process.\textsuperscript{225} For atomism, the element of thought is the atomic idea. This is not to say that atomism ignores the true-false relation. Instead, it alters the sense and power of that relation, reinterpreting it as a real product of nature. Since everything emerges out of the atomic idea, asking how the concept of truth was created is a way of returning to the atomic idea. In other words, it is a way of linking the true-false relation to the problem of the production of the actual world out of the atomic idea.

The question as to where the concept of truth comes from relates to Epicurus’ infamous dictum. In Lucretius phrasing, “The senses cannot be refuted” (\emph{DRN}, 4.481). Here Lucretius is not simply rendering sensation the sole criterion of truth. Instead, he is closely aligning truth with reality. As Sextus Empiricus notes, Epicurus did not make a distinction between seeing something as true and seeing it as real or existing.\textsuperscript{226} This alignment of truth and reality is also expressed in the Latin term Lucretius uses. Similar to Epicurus’ Greek term, the Latin word Lucretius uses that we translate as ‘true’ is \textit{verus}, which not only means ‘true’ but also ‘real, actual, or genuine.’ Truth comes from the senses not just because they are true, but also because they are real.

Prior to true or false concepts, there is a real sensible encounter. This is one reason why the use of the term ‘simulacra’ is not arbitrary. In contrast to an account based on resemblance between model and copy, as we see operating in Platonism, the focus of the simulacral theory is based less on ideal resemblance and more on real impact and movement. “Epicurus,” Elizabeth Asmis writes, “uses the distinction between resemblances and originals precisely to deny that there are ontological gradations.”\textsuperscript{227} Atomism inverts the traditional order of things: the

\textsuperscript{225} Deleuze, \textit{Nietzsche}, 104.
\textsuperscript{227} Asmis, \textit{Epicurus’ Scientific Method}, 147.
transcendent (Platonic essences) has become the imaginary and the appearances (simulacra) have become real. This means that the concept of truth, just like any other concept, was produced out of the natural world. Asking this question (What gave us the concept of truth in the first place?) strips the concept of truth of its givenness. Since the concept of the true now has a distinct life span, truth is divorced from eternal essences qua the transcendent sites of truths. Appearances, in turn, are no longer the source of falsity and illusion. Atomism subverts the essence-appearance relation as much as the true-false relation. While simulacra are false for essences, essences are false for simulacra. In atomism, we move from ideals to idols, from ειδος to ειδωλον, from essence to appearance. The theory of the atomic idea is severed from the root of ideal essences and set adrift in the play of idols.

As important as the concept of truth is, atomism would fail as a philosophical naturalism if it were only able to account for the production of truth. It must also account for the production of falsity. If the production of the concept of the true is the first half of the atomic theory of simulacra, then the story of the production of the concept of falsity, error, and illusion is the second.

*The production of the false*

Simulacra are everywhere, within and without us. While an atomic subject is immersed in a world populated by swirling blocks of sensation, these simulacral blocks are autonomous. Sensation is produced by simulacra, but simulacra are neither reducible to nor intended for this or that sensation. The independence of the simulacra along with their great speed and thinness means that they can easily change as they collide with each other. As these independent blocks of sensation swim about at extreme speeds, they sometimes crisscross and get caught up in each
other. As they do so, they disturb and distort each other. According to Lucretius, this explains the appearance of three of the most pernicious types of illusion: theological or mythic creatures, fantastical dreams, and erotic fantasies, or what Deleuze names the “theological, oneiric, and erotic” (LS, 275). Atomism reveals the illusory nature of these perceptions by reducing them to natural explanations. Let us look at each kind of illusion in turn.

1) The disturbing illusions of religion. Theological illusions appear when simulacra meet and intersect each other very high up “in this part of the sky called the air” (DRN, 4.132). The aer is the atmospheric region where clouds freely drift along the sky’s edge. As the clouds bump into each other, they assume various shapes and forms, some of which seem to resemble the creatures and places we know from their famous myths. Sometimes, Lucretius explains, “giants’ countenances appear to fly over and to draw their shadow from afar, sometimes great mountains and rocks torn from the mountains go before and pass by the sun, after them some monster pulling and dragging other clouds” (DRN, 4.136-40). Just as quickly as the clouds seemed to form the figures of giant creatures and mythic landscapes, these same figures pass away. Religion and superstition, noticing these accidental occurrences, then turn these accidents into essences, thereby asserting the actual existence of mythic figures. This leads to the development of fear and dread of towering gods who can exact pain and punishment on us lowly humans if we do not fear, obey, and respect these powerful gods. One of the main goals of atomism is to explain away the types of fantastical deities and mythical creatures filling religious discourses that were popular in Ancient Greece and Hellenic Rome. Epicureans thought that these stories were some of the main causes of pain and perturbation, and so tried to combat these abuses of nature by explaining mythical conclusions in terms of natural occurrences. In other words, the theory of simulacra allows Lucretius to claim that all theology reduces to nature.
2) Oneiric or dream illusions. In dreams, the simulacra received during the daytime continue to swim about the mind, often crisscrossing and intertwining with each other. Closed off in the mind, new images are formed during dream life. Since these newly formed images do not commerce with the external world, they tend toward the fantastical. Upon waking, these fantastical images slip into waking life thereby orienting diurnal perception. The problem is that while dreaming, the mind is cut off from the world and so unable to compare these simulacral formations to properly sensory ones. “The mind,” Deleuze says, “isolated from the external world and collected or repressed when the body lies dormant, is open to these phantasms” (LS, 276). With eyes closed, one sees a centaur, but since one cannot compare this image to the sensory world, one attributes existence to one’s own fantastical oneiric creations. This is why we forget that the appearance of a fantastical centaur is really just the combination of simulacra from real men and real horses that occurs in the isolated dreaming animus. The seeming perception of a centaur is taken as evidence of a real centaur when in fact it only corresponds to dream images. That is, these phantasms become illusory when one forgets that there are natural explanations for them. The theory of simulacra allows Lucretius to claim that oneiric illusions also reduce to nature.

3) The erotic image. While the image of the erotic object is still, in some sense, connected to the object of love and desire (a woman or boy’s body) the erotic simulacrum is the condensation of many different objects of desire. In an almost psychoanalytic fashion, what appears to be a distinct object of desire is really the site of a whole set of desires, many of which have nothing to do with that seemingly distinct desired object. What is illusory about the object of erotic desire and what differentiates it from other kinds of desired objects is that it seems to promise what it cannot give. This is where illusions begin. Other desires, such as hunger and
thirst, can be fulfilled by the consumption of the object, for the wine or bread sending out their respective simulacra can satiate those desires. Food and drink simulacra thus promise fulfillment and lead to satiating consumption, at least temporarily. The erotic simulacra, however, promise satiation but never lead to fulfillment. Lucretius explains it nicely when he says, “As when in dreams a thirsty man seeks to drink, and no water is forthcoming to quench the burning in his frame, but he seeks the image of water, striving in vain… nor can bodies even in real presence satisfy lovers with looking” (DRN, 4.1097-102). Even when bodies do engage in sexual activities, the other body or bodies cannot be absorbed or possessed and so complete satisfaction remains eternally elusive. This insatiability of erotic desires inflates the erotic image to a great extent, thereby becoming cut off from the world. This is how erotic desires lead to erotic illusions. Yet again, we see how the theory of simulacra allows Lucretius to claim that simulacral illusions reduce to natural explanations. In sum, just as atomism attempts to explain the production of the true, it also explains the production of the false: through the concept of simulacra.

From the atomic idea to the idea of atomism

So far, we’ve seen Lucretius argue that sense-perception is produced through the encounter with that which cannot be sensed in itself, namely, streams of simulacra. Yet there is also the question of another set of insensible objects: atoms themselves. Just as the spirit (anima) is forced to sense, so the mind (animus) is forced to think. Thought is not a choice or the result of a natural affinity for the truth. Instead, thought, truth, and falsity are produced out of the affective
encounter with streams of atomic formations. This means that the very thought of thought (the atomic image of thought) is produced by the same processes that produce the rest of nature.228

The first movements that lead to the emergence of thought occur through the encounter with simulacra. The ground of thought is the impact of external forces on the body. Thought emerges out of the unforeseeable or the unexpected, that is, out of a material ground that thought does not control. Next, certain reverberations emerging from this encounter, which we can call imaginings or opinions, echo through the mind. These are the affects resulting from simulacra and so can be either true or false. The ultimate question as to the veracity of these opinions is always tied back to those involuntary affective encounters, that is, to natural explanations. Finally, these opinions, insofar as they refer to the affective encounter, become conceptual or at least cognitive. Even the most conceptual movements of the mind remain tied to the affective encounter. This leads to an interesting claim: that which produces and shapes thought also escapes thought. Thought emerges out of the simulacral encounter, which itself is beyond thought. Concepts are thus verified not by turning inward and away from the world but by opening outward towards nature. This is another sense of the atomic insistence on the truth or reality of sensation. Just as sensation emerges out of a dynamic relationship with what is not yet sensing, thought operates by means of a productive relationship with what is not yet thinking.

Seen this way, it is not a fully individuated mind that thinks, but the thoughts produced out of the affective encounter that individuates the mind. Thinking is not the resolution of a puzzle, but is the site of the unexpected individuation of thought and thinker. It is not an “I” that thinks, but thought that individuates the “I.” At the source of thought is not an adequation or correspondence, but a spark of something wholly exterior to thought. This is why the atomic

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228 This is why Elizabeth Asmis spends so much time in her wonderful *Epicurus' Scientific Method* explaining how atomism, unlike Platonism (especially in the *Phaedrus*), does not presume a ready-made concept at the beginning of a thought and inquiry.
world, Deleuze says, “is a world of exteriority, a world in which thought itself exists in a fundamental relationship with the Outside.”\(^{229}\) The thinking subject is produced, not presupposed.

This leads to an important question: is the atomic idea true or false? As we recall, sensation, according to atomism, is always true or real. The evaluation of the truth of any thought must relate back to a real, affective encounter, and this includes the thought of the atomic idea. Still, relating thought back to the affective encounter does not simply mean comparing a copy with the original. For atomism, truth is not a question of adequation. Instead, truth and falsity apply to problems or ideas themselves.

What, then, does it mean for a problem to be true? For Deleuze, a true problem is one that demands a response, that is, that accounts for the concepts that respond to it. A true problem necessitates a pure relation to the outside, to the productive conditions from which thinking emerges. A problem is true when thought is compelled to think, when thought is sparked by an affective encounter. Our claim is that Deleuze’s theory of problems is, in part, derived from the strategies of ancient atomism. Both atomism and Deleuzianism are essentially ‘problematic’ in this sense. The problem that ancient atomism selects is that of the immanent production of the natural diversity of the world from an infinite multiplicity of material particles. To do this, atomism approaches nature under a problematic form, that is, taking the thought of nature itself to be a product of the natural world. To see thought as a product of nature means to be unable to enclose the world in a natural totality, which means that thought can only assume a relation to something outside itself… something that compels a cognitive response. So, the atomic idea is a true problem insofar as it forces thought to think atomically.

\(^{229}\) Deleuze, *Pure Immanence*, 38.
In the previous chapters, we have seen how atomic ideas function as the ontological structures out of which the unlimited number of worlds emerges. This includes everything from trees and mountains to thinking and sensing subjects to true and false concepts. In Chapter 3, we accounted for the individuation of any actual thing, and this chapter has, so far, focused on the line of individuation leading up to sensing and thinking atomic subjects. Thinking atomically is a process of learning by means of the sensible encounter with the simulacra. The theory of atomism is that which emerges at the end of a genetic line leading from the atomic idea in its operation as a virtual ontological structure, along diverging lines of individuation, eventually reaching the thought of the atomic idea. That is, atomic theory is able to account for its own production, not as a predetermined end, but as one among many results of divergent lines of production. While this may sound circular, we must always remember the atomic idea is a problem. It is not a fixed essence, but a set of dynamic and genetic processes of nature. The atomic idea then does not close the circle, either at the top (the thought of the atomic idea) or at the bottom (the atomic idea itself). Instead, nature, the genetic plane of the atomic idea, remains essentially open-ended. The atomic world is not a “whole” or “One,” or “totality,” but a heterogeneous and infinite sum, a multiplicity in Deleuze’s sense. Nature remains a problem, and as such, atomism does not close lines of production that lead to other philosophical positions, but instead demonstrates the inability of competing physics and metaphysics to account for the production of the world without recourse to mythic, theological, and transcendent explanations. In contrast to systems of thought that rely on these superstitions, Lucretius relies on nothing but nature itself to account for the genesis of the very ‘thought’ about which he writes. He maps, for example, the genetic line from the swerve of the atom to the thought of the swerve of the atom (and more generally, from the atomic idea to the thought of the atomic idea). We will next show
that in the same way, Deleuze maps the genetic line from pure difference to the thought of pure difference (and the differential idea to the thought of the differential idea).

To review, we began with a definition of the atomic soul. The atomic soul is expressed in two ways: as spirit (*anima*) and as mind (*animus*). We then turned to the atomic account of sensation and perception, which focused on the difficult concept of the simulacrum. According to atomism, we perceive due to the impact of simulacra on the sensible surface of our bodies. Given the great speed and fineness of the simulacra, we do not perceive simulacra in themselves. Thus, although simulacra are imperceptible, they produce perception. We then moved from sensing to thinking. Atomic thinking is engendered by means of the communication of the forceful impact of imperceptible simulacra on our sensory organs to thought. Just as simulacra spark sensation, the force of this encounter also stirs thought. The question is not how to explain what is given to thought but to explain how thought emerges out of a given encounter. We then discussed the atomic conceptions of truth and falsity. While atomism does claim that all perceptions are true, it also diagnoses dangerous illusions. We saw how atomism reduced three of these illusions to natural occurrences. Finally, we saw how atomism relocates questions of truth and falsity to the level of the atomic idea, which is how the theory of atomism is finally articulated.

**Deleuze and the production of thought**

The first part of this chapter followed the genetic line leading from the atomic idea to a sensing and thinking atomic subject. This second part follows the genetic line going from the differential idea to a sensing and thinking differential subject. We will first see how sensation is awakened by an encounter with something unrecognizable and paradoxical wherein the normal, empirical
exercise of the faculty of sensibility is incapacitated and thus forced into what Deleuze calls “a superior exercise.” It is through this superior exercise that sensibility encounters not this or that sensation, but the being of sensation. Like the simulacrum in atomism, the being of sensation is both imperceptible and yet productive of sensation. This use of sensibility is how Deleuze initiates a new doctrine of the faculties, one that inverts many features of the Kantian version. At this point, we will see how all the faculties are awakened through a violence that forces each faculty into its superior or transcendental exercise. The violence that the faculty of sensibility suffers is then transmitted to the faculty of thought. Through this violence, all of the faculties are left incapacitated and disconnected. This leads to the first four postulates of what Deleuze calls the dogmatic image of thought. This section of the chapter concludes by turning to the eighth postulate, the postulate of learning. It is through learning, or what we can call a fundamental apprenticeship, that the theory of ideas returns. Learning involves a sort of fundamental apprenticeship in which one encounters the problematic field of ideas. In this way, there is a genetic line leading from the differential idea to the thought of the differential idea in the sensing and thinking differential subject.

*The sentiendum in Platonism*

As is the case for atomism, thinking, for Deleuze, is not the willful exercise of a pre-established faculty of recognition or intellection. Thinking is neither innate nor the result of a ready-made cognitive disposition. Instead, like all else in the world (except for atoms and void), thinking must be generated, and Deleuze has a particularly forceful account of the generation of thought. Deleuze’s claim is that thought is produced out of an unforeseen and wholly contingent encounter in sensation or what Deleuze enigmatically calls the “being of the sensible.” To see
how Deleuze thinks the violent encounter with the being of the sensible gives rise to thought, we first return to his account of Platonism.

As we saw in Chapter 1, Deleuze argues that the implementation of Platonic transcendent ideas establishes a hierarchy of resemblance. This hierarchy divides the world into two domains: models and copies. The model is the transcendent foundation, such as the idea of beauty itself, and the copies are the various beautiful things that stand in some degree of resemblance to their ideal foundation. Objects in the world are thus identified as this or that type of thing, according to the hierarchy. Most of the time, identification is easy. Identifying this object as a table or that one as a finger rarely leads to more questions or problems. As Plato says, “some sense perceptions don’t summon the understanding to look into them, because the judgment of sense perception is adequate.”

In such cases, the mind successfully identifies this object as a general kind of thing. This finger is just a finger. There is no problem to be solved. In such a successful act of identification, all the subjective powers are attuned to the same object. It is the same finger that one sees, imagines, remembers, conceives, etc. Thinking about such easily recognizable things leaves the mind undisturbed, if not idle.

While such cognitive activities are very often successful, there always remain a number of problematic perceptions that simply do not fit the available categories and concepts. In a Platonic frame, certain perceptions, which we can call simulacra, do not seem to be copies of anything. Lacking any reference to an original, they seem untamable and indefinable. As Deleuze says, “the simulacrum implies huge dimensions, depths, and distances that the observer cannot master, an art of encounter that is outside knowledge and opinion… a becoming-mad, or

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232 This is one reason Deleuze claims such activities “have nothing to do with thinking.” *DR*, 138.
a becoming-unlimited” (LS, 258). The point of stressing this untamable and indefinable character is not just to affirm madness and chaos, but to show that even within the Platonic hierarchy of being there is something that evades limitation, identification, and definition. Simulacra reveal the possibility of a sensory encounter with that which cannot fall within the set of concepts and categories available when the law of resemblance is the order of the day. In a way, simulacra are the symptoms of a problem that the Platonic characterization of thought can neither avoid nor solve.

While Plato tries to explain away this simulacral excess as an unfortunate perceptual or cognitive error, Deleuze instead makes it a defining feature of thought. Rather than an exception, such a disruption of thought determines thought. Thinking does not begin, he argues, when we successfully recognize something we already think. Instead, thought begins when we encounter something that exceeds the boundaries of thought. Thought begins when words do not fit and categories do not apply. In this sense, there is less of a focus on the violence that thought enacts on things in the world and more of a focus on the violence that the world exacts on thought.233 This is why the violent encounter is imperceptible (insensible). It is sensation without a distinct object of sensation.

In what sense, though, is this still sensation? How can the encounter involve both that which is insensible and that which can only be sensed? Isn’t this a blatant contradiction? No. As we will soon see, the encounter is imperceptible only from the point of view of recognition. Recognition is unable to bring the various faculties into focus on a selfsame object that is recognized as this or that type of thing. Instead, what is encountered is not another instance of a general type but an event that is characterized by an unrecognizable difference. Deleuze uses the

Latin *sentiendum* to designate that which is imperceptible but can only be sensed in this encounter. Since it is unrecognizable and unable to be categorized by cognition, the *sentiendum* only involves the power or faculty of sensibility.

An inverted doctrine of the faculties

Still, one may ask, does this faculty psychology imply the acceptance of some Kantian principles that do not fit well with Deleuze’s greater project? A strict Kantian faculty psychology, for example, entails the primacy of an autonomous form of subjectivity or transcendental ego. In this account, faculties belong to an active and self-subsistent subject, which means that the subject is primary and the faculties are dependent on the subject. Deleuze, however, thinks that it is possible to develop a doctrine of the faculties that does not imply these more Kantian positions. He says, “Despite the fact that it has become discredited today, the doctrine of the faculties is an entirely necessary component of the system of philosophy” (*DR*, 143). In order to realize this promise we must see how Deleuze turns the Kantian account on its head, so to speak, and so develops an inverted doctrine of the faculties.

One of the major ways that Deleuze develops this inverted doctrine is to invert the order of priority or dependency. The problem with the Kantian doctrine, Deleuze argues, is that the process out of which subjectivity is generated presupposes the form of the subject. That is, the process that accounts for Kantian subjectivity is already subjective. This is an issue because it traps the subject in a vicious circle in which the process accounts for subjectivity by means of subjectivity. Deleuze, by contrast, contends that the process by means of which the subject is produced must be non-subjective. For him, faculties do not belong to a preexisting subject. Instead, faculties are tendencies or patterns characterizing ways of encountering the world.
Rather than derived characteristics of a subject who subsequently exercises them, for Deleuze the subject emerges out of the exercise of the faculties. The faculties or tendencies account for the emergence of the subject rather than the other way around, and so act as conditions for the emergence of a sensing, remembering, and thinking subject. In sum, faculties are patterns of being in the world, and it is amidst these worldly patterns that the subject comes into being.

*Some questions about this new doctrine*

Even if we accept this inverted priority of the doctrine of the faculties (whereby the exercise of the faculties accounts for the existence of subjectivity rather than the exercise of subjectivity accounting for the existence of the faculties), many questions remain. For instance, what makes one power or faculty different from another? The differences among the abilities to sense, to remember, to imagine, to understand, etc. are not metaphysically different kinds, but only different kinds of patterns or tendencies arrayed across the same continuum of action and affection. What is the difference between sensibility and intelligibility if there is such a continuum of the faculties?

We should first note that that the concept of a continuum does not necessarily imply smooth transitions between different sections. Instead, there can be sharp turns on a continuum at those points where a singular point brings about a major difference. An obvious example of this is when the temperature of water passes across certain thresholds. At these threshold points, the movement from one degree to another brings about a significant change (turning into solid, liquid, or gas) while still remaining a continuum. In this way, the continuum need not be linear. This same nonlinearity of a continuum applies to the faculty continuum as well. A faculty, as a set of patterns or structured tendencies, is defined insofar as those patterns and tendencies
drastically change at certain threshold points.

The next question is how to determine the location of the threshold points separating subjective powers or faculties along the continuum. Take the power of sensibility. According to Deleuze, the limits of the power of sensibility emerge when it encounters paradoxical perceptions. It is with these paradoxical perceptions that the capacity for sensation reaches its limit or threshold point. The limit of sensation is the place at which perceptual recognition of a sensed object or other results in a contradiction. It is when one is not sure what one is sensing, or when something seems to be in two contradictory states at once. Deleuze cites the example from the *Republic* in which Socrates talks about experiences in which “sense perception does not declare one thing any more than its opposite.”\(^{234}\) In such experiences, one perceives two contradictory things or states at the same time. This happens, to use Plato’s example, when we look at the last three fingers on a human hand. The perception of the ring finger is paradoxical because the ring finger is both large and small: it is large relative to the little finger and small relative to the middle finger. Since the power of perception is unable to determine by itself whether the ring finger is either small or large, we have located the limit or threshold of the power of sensation. This is an example of a paradoxical perception that acts as a limit that properly defines the domain of the faculty.\(^{235}\)

While such paradoxical perceptions do mark the limit point of the faculty of sensibility, Deleuze has something more forceful in mind. For him, a faculty, at its limit, “falls prey to triple violence: the violence of that which forces it to be exercised, of that which it is forced to grasp and which it alone is able to grasp, yet also that of the ungraspable (from the point of view of its


\(^{235}\) Deleuze claims that such paradoxical perceptions lead to the concept of simulacra in Plato. As Ronald Bogue says, the “experiences that provoke thought are those of contradictory perceptions. Such contradictions lead thought to essences, says Socrates, but according to Deleuze they are evidence of the existence of simulacra, which impinge on thought and force it into its proper activity.” Ronald Bogue, *Deleuze and Guattari* (New York: Routledge, 1989), 57.
This is the threefold limit of the final power” (DR, 143). Locating this triple violence gives us a sort of experimental method for discovering the proper domain of a faculty. It allows us to ask, “What forces sensibility to sense? What is it that can only be sensed, yet is imperceptible at the same time?” (DR, 143). In terms of sensibility, the triple violence that it undergoes is expressed by the *sentiendum*. The *sentiendum* is the sign of that violent material encounter that sends a shock that arrests the power of empirical sensation. Think, for example, of hearing a sudden, explosive, and overwhelming blast of sound. When we experience such a violent sound, our ears go deaf or ring uncontrollably. Paradoxically, it is at the point when the power of hearing is incapacitated that the sensory power is most compelled to hear. The drive to hear is never stronger than when the power of hearing is shut down. The sudden blast thus enacts a triple violence: it forces the exercise of hearing; in this exercise, hearing is forced to grasp what it just experienced; and yet hearing is thrown beyond its mere empirical exercise because it cannot grasp what was just experienced.

This same experimental procedure applies to other faculties. To find the limit of a faculty (or the location at which a faculty is engendered), we look for this triple violence. For example, the limit of the power of memory might be a trauma (*memorandum*), the limit of the power of language might be silence or an uncontrollable stutter (*loquendum*), the limit of the imagination might be the sublime (*imaginarium*), etc. Trauma, silence, and the sublime act as the respective limit points at which it is impossible to remember, speak, imagine, etc. This even applies to faculties not yet discovered, since, Deleuze insists, we cannot determine in advance what a faculty is nor where its limit is located. The triple violence that incapacitates the power of hearing forces this power to operate in new ways, beyond the normal modes of hearing and

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236 Deleuze compares the encounter with “pharmacodynamic experiences” or drug experiences, as well as sensations of vertigo. *DR*, 237.
sensing, in what Deleuze calls the transcendental or superior exercise of the faculty.

As should be clear, Deleuze’s use of the concept of the transcendental is not completely Kantian. Recall the Deleuzian critique of Kant sketched in Chapter 3. According to Deleuze, rather than accounting for the generation of a faculty, Kant traces the transcendental exercise of the faculty from its empirical exercise. Deleuze sees this tracing strategy at work in the A-deduction in the first Critique (CPR, A98-110). Let us look at one example of this tracing of the transcendental: the faculty of sensibility. In the deduction of the faculty of sensibility, Kant starts with its empirical employment, wherein he notices the unity of a diverse manifold in a single empirical perception. “Every intuition,” Kant writes, “contains a manifold in itself” (CPR, A99). Kant then asks what must be the case in order for the unification of this chaotic manifold to happen. What makes possible this unity of diverse elements in an empirical representation is what Kant calls the “pure synthesis of apprehension” (CPR, A98). The synthesis of apprehension is the act of unifying a chaotic manifold offered to us in perception such that individual representations are perceived as both distinct wholes in themselves and yet also following each other in a smooth temporal succession. This synthesis, however, is pure, and so only applies to a priori, not empirical, representations (CPR, A99). As a priori, the synthesis of apprehension acts as the transcendental condition for the empirical employment of the faculty of sensibility. It is a transcendental condition insofar as it does not involve this or that object of sensation but sensibility as such. The transcendental exercise is what allows for the empirical apprehension of unified yet differentiated manifolds. Kant then runs through the other faculties using the same tracing method. He starts with the empirical employment of the faculty, and then deduces what must be the case in order for the empirical employment to be possible (CPR, A100-110). Eventually, Kant reaches the a priori categories of experience, as well as the transcendental unity
of apperception.

This strategy is supposed to account for or justify (de jure) the empirical employment of a given faculty. Yet according to Deleuze, Kant does not account for the generation of an actual faculty (de facto). Instead, he assumes the empirical exercise and traces the transcendental there from. That is, Kant begins with what is given in the empirical employment of sensibility and then looks for what must be the case for it to be possible. The transcendental employment of sensibility is then essentially the same thing as its empirical employment, minus empirical reality. This is why, Deleuze claims, Kant simply traces the transcendental from the empirical. Put differently, Kant projects the empirical into the transcendental without accounting for the generation of either.

In order to understand what something is, Deleuze argues, it is more telling to seek out the limits of that thing, those points at which it stutters and breaks down, rather than its proudest moments. We learn more about the nature of a faculty through its breakdowns and disturbances than through its successes and achievements. In a different register but in a similar sentiment, Lucretius notices that “it is more useful to scrutinize a man in danger or peril, and to discern in adversity what manner of man he is: for only then are the words of truth drawn up from the very heart, the mask is torn off [eripitur persona], the reality remains” (DRN, 3.55-8). Similarly, Deleuze shuts down the empirical exercise of sensibility and then looks to see how it functions.

Rather than beginning where the empirical exercise of the power of hearing works perfectly, Deleuze begins where hearing is stunned into submission.237 Deleuze begins where it is no longer possible to specify hearing this or that particular sound. Paradoxically, hearing

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237 While this talk of the violence and shock of the material encounter seems melodramatic, the point is to find a means for erasing the object from the faculty of sensibility in order to force it to turn away from the empirical and toward the transcendental. The easiest way to do this is through an incapacitating and overwhelming violence. A different, less violent way to do this is through Kant’s use of reflective judgment of beauty in the Critique of Judgment. Deleuze, however, passes over this option and focuses more on Kant’s use of the sublime.
begins when one goes deaf to the empirical. A sudden explosive sound prevents the power of hearing from operating in its normal, empirical mode, wherein it is able to specify a particular empirical sound. In this new exercise of the faculty, one does not hear anything in particular. One simply hears, albeit in a non-empirical manner, in the transcendental or superior exercise of the faculty. It is transcendental because what is involved is not this or that object of sensation but the faculty of sensibility as such. As transcendental, this superior exercise distributes the genetic conditions that account for the existence of particular sensations. “Sensibility,” Deleuze says, “in the presence of that which can only be sensed (and is at the same time imperceptible), finds itself before its own limit, the sign, and raises itself to the level of a transcendental exercise: to the ‘n\textsuperscript{th}’ power” (DR, 140). The transcendental exercise of hearing does not represent a determinate and identified empirical sound, but rather accounts for the generation of a particular sensation in the first place.

Since the empirical exercise of the faculty of sensibility is paralyzed and so unable to recognize any particular sensible thing, it can only encounter the being of the sensible. Its normal modes of sensing are interrupted, which then raise the faculty to a new mode of sensation. The transcendental exercise of sensibility is the site of the fundamental encounter with the being of the sensible. This encounter with the being of the sensible is irreducible to any particular sensation or sensed object yet is not exterior to or beyond particular sensations. Instead, the being of the sensible is what allows particular sensations to emerge, that is, what gives being to this or that actual sensation. Deleuze thus gives us an account of sensibility as such, the being of the sensible, and a formulation of the transcendent exercise of the faculty of sensibility that is the genetic condition for individual sensations themselves.
From the sentiendum to thought

We have now seen at least a general sketch of Deleuze’s doctrine of the faculties. This new doctrine utilizes the concept of the *sentiendum* in order to signify the violent encounter that incapacitates the empirical exercise of the faculty of sensibility. Out of the violent encounter with the being of the sensible, thought emerges. As is the case with atomism, Deleuze privileges sensibility as the origin of thought: “On the path that leads to that which is to be thought,” Deleuze explicitly claims, “all begins with sensibility” (*DR*, 75). This is because the encounter with the *sentiendum* sets in motion a “volcanic line” that spreads throughout each of the faculties, from sensation to imagination to memory to cognition and possibly into faculties yet to be formed.\(^{238}\) Given the violent and forceful character of sensation we saw above, there is a distinct reason why Deleuze calls this movement through the faculties a “volcanic line.” As we will see, Deleuze contends that thinking does not occur through the harmonious exercise of all the faculties, but instead, emerges out of a discord. To see how this is accomplished, we will now follow that volcanic line from sensation to cognition. This line is revealed through what we can call an apprenticeship to the idea. Such an apprenticeship is a distinct process whereby we are forced to confront problem-ideas and learn to create concepts in response.

The first four postulates

In Chapter 3 of *Difference and Repetition*, Deleuze articulates eight postulates that capture what he takes as the main characteristics of the dogmatic image of thought: 1) the postulate of *cogito natura universalis*, 2) the postulate of common sense, 3) the postulate of the model of recognition, and 4) the postulate of representation. Deleuze then develops what he calls the

\(^{238}\) This follows the movement from sensation to image to memory to conceptual representation in experience that Aristotle outlines in the conclusion to *Posteriror Analytics* II, 19.100a.
“disjunctive theory of the faculties.” We will first examine these four postulates and then turn to the disjunctive theory of the faculties in order to understand Deleuze’s response to the dogmatic image of thought and its corresponding theory of the harmony of the faculties. Once we see this, we will return to the question of the Deleuzian idea by means of the eighth and final postulate, the postulate of learning.

The first postulate of the dogmatic image of thought claims that we are naturally endowed with the capacity for thinking. Basically, the idea of this dogmatic image is that we, as natural born thinkers, already possess a good will (bonne volonté). We presuppose that the mind has an innate desire to find the truth at whatever cost. The mind cannot help but seek to avoid error and reveal the truth in all its splendor. Since everyone has the capacity for thought, everyone naturally seeks the truth. This is why Deleuze calls this postulate the cogitatio natura universalis.

The key feature of the cogitatio natura universalis is a natural sense of orientation or direction. This is why Deleuze uses the phrase bon sens or “good sense,” a reference to the famous first line of Descartes’ Discourse on the Method.239 In French, the term sens is polysemic: it can mean a sense of taste, an instinctive capacity to “get it,” the meaning or significance of a word, or even just direction or orientation. While Deleuze includes all these other meanings of the word, in these first few postulates he is primarily concerned with the sens of direction and orientation. There are a number of common French phrases that convey this meaning: sens interdit means “no entry,” sens unique means “a one-way street,” aller dans le bon sens means “to go in the right direction.” So, natural good sense means that, by birth, everyone is oriented or directed toward the truth. It is as if we have a congenital cognitive

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239 “Good sense is of all things in the world the most equally distributed.” Descartes is not the only philosopher to open a major text with the explicit presupposition of bon sens. Aristotle, for example, begins the Metaphysics by claiming that “All men by nature desire to know.”
compass that takes truth as its ultimate direction. Combining the bonne of bonne volonté (good will) and the sens of bon sens moralizes this innate desire for the truth, thereby making it a moral duty, by nature, to seek the truth. Orienting oneself in any other direction is immoral. As Zourabichvili says, “That the will is good means that to will is to will the truth.”240 A good will is an orientation toward the good and the truth.

The focus on the sens of the bon sens directly relates to the main focus of the second postulate: le sens commun or common sense. Deleuze says, “good sense and common sense complete each other in the image of thought” (DR, 134). Again playing with the meaning of sens as a sense of orientation or direction, ‘common sense’ means, at least since Aristotle, a shared orientation or convergence of all the faculties on a single object. This is necessary for the recognition of an object. An object is recognized only when all of the faculties relate to the same object and agree that it is the same one that is shared by the faculties. This happens, for example, when the book that I sense with my eyes and hands is the same as the book that I remember from a few years ago, which is the same book about which I am currently reading, etc. When this occurs, all the faculties converge on the same object. Sensation, memory, cognition, etc. are then harmonized insofar as they all point in the same direction, at the same object. Another name for the common sense is a subjective concordia facultatum, a concord or harmony of the faculties. The postulate of the common sense or faculty harmony is directly related to the earlier postulate: the bon sens is what distributes the object among the faculties, and the sens commun is what contributes the form of the same object that is shared among the faculties. As Deleuze puts it, “Good sense determines the contribution of the faculties in each case, while common sense contributes the form of the Same” (DR, 134) In sum, the faculties harmoniously recognize the same object when they all (commun) are oriented (sens) toward the same end (bon).

240 Zourabichvili, Deleuze, 46.
The third postulate is the model of recognition. Once we assume that all of the faculties are harmoniously oriented and distributed by good and common sens, the object on which they are oriented must be fixed. Not only must sensibility, memory, and cognition be oriented in the same direction, but the object at which the faculties are directed must be the same one that is sensed, remembered, and recognized. The shared object is then not a result of discovering something new and perhaps unrecognizable, but is instead a satisfying moment of recognition. Yet it is only possible to recognize something if that object conforms to a recognizable form. In this way, the form of the object of the encounter is presupposed before the encounter. The form of recognition is imposed on the object. “The form of recognition,” Deleuze says, “has never sanctioned anything but the recognizable and the recognized; form will never inspire anything but conformities” (DR, 134). Every encountered object must submit to the form of a recognizable identity. The identity of the object is prejudged. Since the “how” something is thought submits to the form of identity and recognition, “what” is thought is also known in advance. Thought is never disturbed by what it finds, but is instead satisfied by finding something already familiar. Cognition becomes re-cognition. Once submitted to this identifiable and recognizable form, the faculties can easily work in a quiet and agreeable concord. Such a form of thinking, Deleuze says, “bears witness to a disturbing complacency” (DR, 135). In short, the form of the orientation of good and common sense is the model of recognition.

The postulate of recognition is the first step towards the fourth postulate: the postulate of representation. Representation is characterized by four elements: 1) identity, 2) opposition, 3) analogy, and 4) resemblance. As Deleuze dramatically puts it, these are the four branches on which “difference is crucified” (DR, 138). Each of these elements respectively corresponds to a faculty: 1) cognition, 2) judgment, 3) imagination, and 4) perception. Let us take these one-by-
First, in the encounter with an object, the form imposed by a general concept is that of identity. The imposition of an identity allows thought to recognize an object as a particularization of a yet-to-be-determined concept. Second, the determination of an object as a particular instance of a general concept occurs through the judgment that certain predicates apply to that object at the expense of others. The distribution of these predicates is one of opposition. Third, the object is judged in reference to the highest or most general concept (*summum genus*). This is a reference to the analogy of being in Aquinas. The being or substance of an object is similar to the most general conception of being. General being is distributed among particular beings analogically. The being of the object is not the same as, but is still similar to, being in general. Thought then judges that the object falls within such an analogical distribution. Fourth, the object is perceived in terms of how much it resembles other objects. The encountered object falls within a group of other objects that it resembles in some general way. In relation to other objects, it is not a truly singular or unique object, but instead must fall into a complete and continuous distribution of ordered objects of nature. Thought is thus able to represent the world according to a smooth and continuous order of things. Everything that could be encountered will fall within this order of nature. There is no room for anything else, that is, there are no leaps in the natural order of things. In sum, these are the four wooden bars of the postulate of representation: conceptual identity, imagined opposition, judged analogy, and perceived resemblance. The object is identified as having the form of an unspecified concept, opposed to a set of determinations within that concept, analogically related to the most general concepts, and said to resemble other objects that are determined by the concept under which they fall.

The vocabulary of bars of a wooden cross on which difference is crucified is not
arbitrary, for this ligneous imagery informs what Deleuze and Guattari later call the arborescent schema in *A Thousand Plateaus*. While the arborescent schema is a commonly misunderstood concept, it has a distinct historical target: Porphyry’s famous diagram of the Aristotelian taxonomic table of natural beings.²⁴¹

Any object that we can encounter should be localizable in this arborescent-table according to the four elements of representation. Take, for example, the category “human.” A human being is identified as falling under a more general concept by applying one of the oppositional predicates rational and non-rational: a human is rational, as opposed to non-rational. The concept “human” is then specified as falling within the general concept “animal.” If we follow even more general concepts up the taxonomic tree to the very top, the highest general concepts are related to being or substance analogically. This substantiality is analogically distributed all the way down the trunk of the table. Just below the very bottom of the trunk, the individual and merely contingent

differences belonging to, say, Socrates or Aristotle are ignored in favor of perceived
resemblances among these individual human beings. In this way, the four elements of
representation allow us to recognize, identify, and represent each new object in every encounter.
Any difference from this model is crucified. 242

The discord of the faculties
Deleuze responds to each of the four postulates with his theory of the discord of the faculties. In
response to the first postulate of cogito natural universalis, Deleuze insists on first accounting
for its generation rather than assuming it as a gift from the gods. For him, “thinking is not innate,
but must be engendered in thought” (DR, 147). The capacity for thinking is not an equally
distributed ability that we, as humans, naturally possess. We are not born with a natural affinity
for truth. Thought, rather, is born of chance. 243 Thought is born when something accidentally
stuns us into silence, leaving us paralyzed and incapacitated. This means that thought does not
will itself into thinking. The movement that eventually leads to the emergence of a thinking
being occurs not at the moment that thought recognizes itself, but at the moment that it forgets its
own name, at the moment it loses its way in the world. In response to this shock, thinking begins.
Instead of a cogito natural universalis, there is more of an incognito innaturale singularitatem.
That is, there is an unknown and unrecognizable singularity that does not nicely fit into the
smooth contour of the natural world but instead seems unnatural, even monstrous. One is not
born a thinking thing; one is shocked into thinking.

242 I readily admit that I have overlooked a number of important differences in Deleuze’s reading of Platonic dichotomous
definition, the Aristotelian species and genus definition, Aquinas’s analogical ontology, and the arboreal schema from A
Thousand Plateaus, and Deleuze himself addresses each of these very carefully and separately. While my treatment does not
address the differences between them, I do not overlook them now simply in order to access the overall shared sense of
hierarchical organization operative in the dogmatic image of thought.

243 This conception of thought arising out of chance or fortuitous encounters is inspired by Spinoza’s account of the three kinds of
knowledge in his Ethics, P40-44.
Contrary to the second postulate, thought, for Deleuze, is not characterized by the harmonious convergence of the faculties on some given and identifiable object. Thought does not begin once all the faculties are mutually oriented on an identifiable object. The fundamental encounter that sparks thought does not give a ready-made object to sensibility as if it were a sort of gift intended for clear identification and classification. Instead of a loving gift, thinking begins with “thefts or trespasses”; instead of a clear and distinct object, Deleuze locates an unfriendly “dark precursor” (DR, 147, 145). As we said, such a violent encounter does not ensure recognition, but, due to its unsettling force, actually forestalls recognition. Deleuze talked about this violent encounter in terms of intensities or the sentiendum. The sentiendum is a sign of the disorientation of good sense, which shatters the accord of the faculties. In this way, Deleuze does not completely eliminate the postulates of the dogmatic image of thought, but instead eliminates their status as presuppositions. That is, Deleuze tries to account for the generation of good sense, common sense, the capacity for recognition, and the four bars of representation. As Deleuze says, “Delirium lies at the base of good sense” (DR, 227). This delirious fundamental encounter engenders a “discord of the faculties, a chain of force and fuse along which each [faculty] confronts its limits” (DR, 141). The harmonious accord of the faculties is broken apart, left disoriented and in disarray, thereby forcing all the faculties to meet their respective limits.

The fundamental encounter in sensibility thus sets in motion a volcanic line that sends shockwaves through each of the faculties, scattering them in all directions. This violence forces memory to confront its own limits, and so rise above its normal empirical activity, beyond all particular memories, to its superior or transcendental exercise. Having stunned and rendered memory unable to remember, the force of this shockwave eventually reaches thought. That fundamental violence that first constrained sensibility, then memory, also forces thought to
confront and cross its own empirical limit. At the edge of this empirical limit, Deleuze says, “the faculties enter into a transcendent exercise, in which each confronts and joins its own limit: the sensibility that apprehends the sign; the soul, the memory, that interprets it; the mind that is forced to conceive essence.”\textsuperscript{244} At this limit, recognition finds no traction. This is how Deleuze responds to the postulate of the model of recognition.

The notion of a faculty forced to confront its empirical limit and so beginning its superior exercise is not new. We have already seen how the faculty of sensibility confronted its own limit. We have not, however, seen how the other faculties confront their respective limits. Due to the main theme of our overall story of the Deleuze-Lucretius encounter, we will sacrifice full treatments of the other faculties in order to focus mostly on the faculty of thought. Forced to confront its limit, “thought is also forced to think its central collapse, its fracture, its own natural ‘powerless’ which is indistinguishable from the greatest power” (\textit{DR}, 147). Similar to the paradoxical status of the \textit{sentiendum}, the \textit{cogitandum} signifies the limit of thought (\textit{DR}, 147).

The \textit{cogitandum} is both unthinkable and that which can only be thought. Given that recognition depends on the harmonious convergence of the faculties, the \textit{cogitandum} is unthinkable from the perspective of the smooth empirical exercise of the faculty. The \textit{cogitandum} is the disruption of that faculty harmony. Thinking, for Deleuze, still involves a relation among the faculties; it is just that this relation is not one of convergence and harmony. Instead, it is disordered and divergent. This relation takes the “form of a discordant harmony, since each [faculty] communicates to the other only the violence that confronts it with its own difference and its divergence from the others” (\textit{DR}, 146).\textsuperscript{245} Put differently, the faculties form a “broken chain or

\textsuperscript{244} Deleuze, \textit{Proust}, 101. We will explain Deleuze’s mention of essence in the next section.

\textsuperscript{245} While Deleuze explicitly mentions Kant’s concept of the sublime in the third \textit{Critique} as an important inspiration for this notion of discordant harmony, just before that mention he includes a footnote that specifically points to a text by a lesser-known Greek-French philosopher and near contemporary, Kostas Axleos. According to Deleuze, Axleos applies the notion of a discordant harmony “to the world and employs a particular sign (‘and/or’) to designate ontological difference in this sense.” For
tortuous ring” through which “we are violently led from the limit of sense to the limit of thought, from what can only be sensed to what can only be thought” (DR, 243). Each faculty reaches its own limit: sensibility seizes the imperceptible, memory meets the immemorial, cognition confronts the unthinkable, etc. The relations among the faculties are not smooth translations, but incommunicable stutters, for that which belongs to each faculty unto itself cannot be communicated to the other faculties. The limit of sensibility belongs to sensibility alone; the limit of memory belongs only to memory; the limit of thought belongs only to thought; etc.

The question now is how to determine what belongs to each respective faculty alone? One of the problems with the dogmatic image of thinking as characterized by the eight postulates is that it becomes difficult, if not impossible, to determine what belongs specifically to thought. What is missed is a characterization of what thought is essentially. In the dogmatic image, thought is defined not by what it is, essentially, but by one of its modes. For example, thought is often characterized by the act of sensing, imagining, or remembering. This is problematic because thought should not be defined simply by one of its various modes but by an essential movement that allows the different modes of thinking to be considered as thinking. That is, thought is not reducible to its various modes (sensing, imagining, remembering, etc.), but is instead what allows all its modes to be modes of thought. It is almost contradictory to define thought as both one of its modes and as that which makes them modes of thought. So while the sentiendum, for example, is that occasion on which an imperceptible violence is sent reverberating among the faculties, thereby transmitting a shockwave that stirs thought into action, it is not the defining feature of thought. To put it in more Kantian language, the

sentiendum is a necessary condition insofar as it forces thought to respond, but it does not define thought essentially.

The problematization of essences

What, then, is the defining feature of thought? What is it that belongs to thought alone? Deleuze claims the noeteon or essence is that which belongs only to thought (DR, 141). It is important not to misinterpret what Deleuze means by ‘essence’ or ‘noeteon,’ for the language of essences is often associated with characteristics out of place in the Deleuzian account (ideal models, hierarchies of resemblance, and other characteristics of what he calls ‘Platonism’). As we said in Chapter 3, the name for Deleuzian immanent essences is ‘idea’ or ‘problem’. In a way, the Deleuzian theory of ideas is a strategy for redefining an essence as a problem rather than a form. The dominant feature of thought is the immanent essence, problem, or ideas, three terms that are basically synonymous. In short, thought thinks problems. Deleuze says this explicitly, the “problem of thought is tied not to essence but to the evaluation of… a multiplicity, in relation to the ideal events that constitute the conditions of a ‘problem’ (DR, 189).

With this in mind, we should consider the idea or problem in relation to Deleuze’s transcendental empiricism. As we know, problems are never manifested in the array of solutions created in response to the problems. Deleuze very clearly defines problems as both ‘above’ and yet ‘within’ solutions: “The problem is both transcendent and immanent in relation to solutions” (DR, 163). On the one hand, problems are transcendent to its solutions because they consist in a structure of ideal connections, that is, the differential relations determining differential elements. On the other hand, problems are immanent to their solutions insofar these connections or relations are incarnated in the actual relations. As Deleuze says, while an idea or “problem does
not exist apart from its solutions... it insists and persists in these solutions” (DR, 163). It is not that the ideas resemble the engendered solutions, but that the ideas act as dynamic structures or patterns of genesis that are actualized in divergent and dissimilar ways. So unlike purely transcendental essences, the actual relations structuring the field of solutions do not resemble the problem-structure of the ideas. Since they have this (quasi)transcendent yet immanent status, they belong only to thought. Ideas, as immanent essences, do not belong to actualized solutions, but rather to the structures genetically conditioning these solutions. In sum, problems or ideas are genetic conditions at which thought is directed. Deleuze’s calls the study of these (quasi)transcendent yet immanent planes a “transcendental empiricism.” It is through this transcendental empiricism that Deleuze avoids tracing essences from the actualized individuals and yet still establishes a relation that accounts for the genesis of the actual solutions. In sum, essences cannot be traced from the empirical or actual if they are also supposed to generate the empirical.

This (quasi)transcendent yet immanent status of ideas is also why they are both unthinkable yet can only be thought. One of the supposed advantages of transcendental essences is that they are said to eliminate all empirical contingencies and so render the object purely cognitive, i.e., only thinkable. The transcendental essence is the empirical object minus actual reality, and we have already seen the problem with tracing essences from the empirical. By contrast, since Deleuzian immanent essences or ideas are not simply traced from the empirical, they are not empirically thinkable. As with the sentiendum, ideas or essences are unthinkable from the perspective of empirical cognition, and so are, instead, only accessible to thought from a transcendental perspective. So, essences or ideas are both unthinkable and “that which can only be thought” (DR, 141).
While Deleuze characterizes ideas and *cogitanda* as both unthinkable and that which can only be thought, this does not mean that they are identical. Instead, Deleuze makes a fine distinction between them. He says that we must “reserve the name of ideas not for pure *cogitanda* but rather for those instances which go from sensibility to thought and from thought to sensibility, capable of engendering in each case, according to their own order, the limit… object of each faculty. Ideas are problems, but problems only furnish the conditions under which the faculties attain their superior exercise” (*DR*, 146). This is the difference between ideas or problems and *cogitanda*: ideas are not solely the object of thought. Instead, Deleuze says, “ideas correspond… to each of the faculties and are not the exclusive object of any one in particular, not even thought” (*DR*, 193). Ideas are closer to the signs that compel each faculty to confront its respective limit and thereby initiate a superior exercise. The difference is in the way each faculty confronts the transcendent object specific to it at its respective limit. The faculty of sensibility senses the problem or idea that can only be sensed; the faculty of memory recollects the problem as that which can only be remembered; the faculty of thought thinks the problem as that which can only be thought; etc. For sensibility, the idea takes the problematic form of the *sentiendum*; for memory, the idea takes the problematic form of the *memorandum*; for cognition, the idea takes the problematic form of the *cogitandum*. This is how the discord of the faculties allows each faculty to confront its respective object, something that would not happen were they are in harmony. In the presence of that which is its own, a faculty begins its transcendental exercise, and every transcendental exercise is problematic. This is why, Deleuze says, ideas “traverse all the faculties, but are the object of none in particular” (*DR*, 146). What happens is that ideas, as problems, force each faculty to its respective limit, thereby forcing each to encounter what properly belongs to it: its own problematic object (*DR*, 193).
Apprenticeship of problems

We are now connecting the story of the fundamental encounter with the theory of ideas. The transcendental or superior exercise of a faculty is the sign of the encounter with ideas. Ideas are what engender each faculty to encounter its own limit, what establishes the thresholds separating the faculties, and what gives each faculty its respective problematic object. Ideas thus distribute the problematic field that moves from sensibility to thought and back again. Along this movement, each faculty is carried to its limit and, in so doing, forces the other faculties also to transmit violent reverberations through this field. As Deleuze says, ideas “run throughout the faculties and awaken them in turn” (DR, 164). Once the faculties are awakened, they begin to explore this problematic field of ideas. These two things – the investigation of ideas and the awakening of each faculty to its transcendental exercise – are two sides of the same process. Following Lucretius, Deleuze calls such a process an “essential apprenticeship or process of learning” (DR, 164).

This learning is what Deleuze means by the superior or transcendental exercise of the faculties.

Deleuze distinguishes two aspects of this apprenticeship. First, an apprentice is one who constitutes and occupies this problematic field. An apprentice confronts the problematic structure of the idea, that is, engages the differential relations and elements corresponding to the distribution of singularities of the idea. Faced with this problem-structure, the apprentice embodies a process of learning rather than knowing. Deleuze says, “The idea is not the element of knowledge but that of an infinite learning, which is of a different nature to knowledge. For learning evolves entirely in the comprehension of problems” (DR, 192). Knowledge of an object, Deleuze claims, assumes a clear separation between the object of knowledge and the knowing subject. In such a strict subject-object divide, the subject represents the object such that neither

246 Lucretius talks about an “apprenticeship to philosophy” at DRN, 1.81.
the object known nor the knowing subject is fundamentally affected. In a different language, knowledge assumes a form of recognition whereby the focus is on the determination of clear and distinct solutions. By focusing almost exclusively on solutions, knowledge overlooks the obscure genetic processes that give rise to these clear and distinct solutions.

Learning, contrary to knowing, involves a fundamental transformation of the self and its relationship with the world; it involves a loosening of the empirical structures of solutions and an opening on to the violence that transforms the self and the body, which means that it “affects the entire individual” (DR, 165). While we can describe what we should know in order to be considered a knowledgeable person, we cannot know how we learn before actually engaging in or mixing with the transformative process of learning. “We never know in advance,” Deleuze says, “how someone will learn: by means of what loves someone becomes good at Latin, what encounters make them a philosopher, or in what dictionaries they learn to think” (DR, 165). Like the movement that sparks thinking, learning is an “involuntary adventure” (DR, 165). We can choose to begin a time of apprenticeship, we can express a desire to become a philosopher or learn Latin, but the actual process of learning remains unconscious. Contrary to Descartes’ Regulae, Deleuze claims, there is no method for learning. Learning is beyond recognition, representation, and consciousness. Instead, it “always takes place in and through the unconscious” (DR, 165).

The second aspect of the fundamental apprenticeship is the awakening of each faculty to the level of its transcendent exercise, and Deleuze uses some concrete examples of to illustrate

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247 Although a full treatment of this ‘fundamental education’ is beyond the scope of this dissertation, note that one of the main inspirations for such an apprenticeship is Kant’s notion of the sublime in the third Critique. In that account, due to the force of an overwhelming or even crushing encounter the faculties of the imagination and understanding fail and stutter. Due to this failure, this overwhelming force is communicated to the power of reason, the domain of transcendent ideas. The other faculties then enter into a discordant harmony with reason. “At the very moment the Imagination believes it has lost its freedom,” Deleuze writes of Kant, “through the violence of Reason, it is freed from the constraints of the Understanding, it enters into accord with Reason.” In this way, the apprenticeship to ideas is also a sort of aesthetic education. Deleuze, “The Idea of Genesis in Kant’s Aesthetics,” 63.
what he means by such apprenticeships: learning to swim and learning a foreign language.

Learning to swim does not mean merely picturing the activity of swimming in the head or moving our arms through the air as if we were in water; it does not mean representing it to ourselves as an object to be known. It means, instead, combining the distinctive points of the body with the distinctive points of the sea such that we are able to operate in a new medium.

Deleuze also mentions learning a foreign language. “Learning to swim or learning a foreign language,” Deleuze writes, “means composing the singular points of one’s own body with those of another shape or element, which tears us apart but also propels us into hitherto unknown and unheard-of world of problems” (DR, 192). Composing oneself in conjunction with the sea or a foreign language means allowing ourselves to be taken up by the contour of a foreign medium; it means following such a sea change to the limit. At this limit, ordinary common sense is incapacitated and the faculties are disoriented. Our old ways of knowing prevent us from composing ourselves in conjunction with the sea or language by imposing a predetermined set of methods or answers. When these old ways and means fail, we are forced to recompose ourselves and begin anew. This is a sort of crossing of a threshold, almost an explosive movement from one domain to another, and the contour of this movement is the process of learning. Again, this is the second aspect of the fundamental apprenticeship: the awakening of each faculty to the level of its transcendent exercise. The faculties are awakened when they are compelled to confront their own limits. To learn, Deleuze says in the famous TV interview with Claire Parnet, “One has to be on this limit, this is what I think. Even when one does philosophy… one is on the limit that separates thought from non-thought.”

This limit opens onto the problematic field of ideas; it is the unknown plane of the sea or the strange surface of a foreign tongue.

In one sense, then, learning is an intermediary stage between two domains, such as the

248 Deleuze and Parnet, L’abécédaire, “A pour Animal.”
domains of thought and non-thought or knowledge and non-knowledge. Considering learning in this sense is the essence of the eighth postulate of the dogmatic image of thought. In this postulate, Deleuze identifies the kind of absolute apprenticeship we see in Hegel’s *Phenomenology*: the subordination of learning to the end result, absolute knowledge. For Deleuze, however, knowledge is not the goal of learning. Learning is not the means for a higher knowledge. Deleuze does not deny that learning often results in knowledge. Still, what one really learns from some lesson or even where one will ever learn anything at all is always a matter of chance. As we saw in Chapter 3, just like the individual at the end of a process of individuation, knowledge is one among several different actualities that may emerge at the end of a process of learning. Just like an individual, a state of knowing is relative: it is another moment within the complex and dynamic process of an infinite learning. This means that actual knowledge is not the final achievement of a directed process that was, from the very beginning, aiming at a final or absolute knowing. Even the emergence of some kind of knowledge leaves things open-ended, metastable, open to the possibility for the emergence of other kinds of thinking, doing, learning, knowing, etc. This is why one cannot even say when a time of learning is done. As we are well aware, exams and standardized testing are not adequate means for determining whether or not someone has learned. In a sense, then, Deleuze flips the priority in education: learning is not merely an intermediary process between non-knowledge and knowledge, but is instead, a “living passage,” “an infinite task” (*DR*, 166). We have seen this inversion before: the problem is revealed beneath the solution; the process is prior to the project; and the simulacrum is raised to surface.

Still, if knowledge is not the intended goal, what is the result of this transformative apprenticeship? In short, what does the apprentice learn? While we have already said that one
cannot determine in advance what learning produces, becoming an apprentice to problems means, if nothing else, relocating or at least extending traditional philosophical valuations from solutions to problems. Take, for example, the concept of truth. According to the dogmatic image, categories of the true and the false are applied to solutions. Problems are neither true nor false, but are simply disruptions or disturbances in the smooth functioning of knowing and solving. Problems are evaluated only “in terms of the possibility of their finding a solution” (DR, 162). Thinking only begins, on this image, when one starts looking for solutions. This heavy focus on solutions blinds one to the field of problems. What happens is that one eventually leaves the field of problems altogether, an act that has the unfortunate affect of artificially fixing problems according to their empirical form or function. Deleuze attributes this “infantile prejudice” for solutions rather than problems to a pedagogical model in which a “master sets a problem” for a pupil who, in turn, takes the problem “as is” and searches for the predetermined answer (DR, 158). In this way, problems are put out of touch, similar to transcendent ideas. Problems are then rigid, seemingly ready-made (tout fait), and so almost completely disappear beneath their solutions.

What is forgotten is that problems are not pre-made, but are fabricated and selected. In this sort of problematic education, Deleuze points to a different sort of pedagogical model, an alternative to the master-pupil model mentioned. This model involves pedagogic experiments in which “pupils, even very young pupils, participate in the fabrication of problems, in their constitution and their being posed as problems” (DR, 159). The art of the selection of problems, which involves the process of conjoining oneself with a problematic field, is the lesson of the apprentice of such pedagogic experiments. The apprentice is one who merges his body with the problem, who withstands the temptation to solve the problem before it is sufficiently determined.
To do this, we must shift traditional pedagogical and philosophical categories from the focus on solutions to a focus on problems. Consider, again, the notion of truth. The apprentice shifts questions of truth and falsity away from actualized responses to the problematic ideas. “Far from being concerned with solutions,” Deleuze argues, “truth and falsehood primarily affect problems” (DR, 159). Solutions are still true or false, yet the truth or falsity a solution has is derived from the solution to which it is a response. Or as Deleuze puts it, the “problem always has the solution it deserves in proportion to its own truth or falsity” (DR, 159). The problematic field of the idea is the source of truth and falsity, the genesis for derived truths. This close relationship between problems and solutions means that the status of solutions is not indifferent to the state of the problem. This is another dimension of Deleuze’s transcendental empiricism: he has substituted an “effective genesis” in place of a transcendental conditioning (DR, 162). Put differently, the truth or falsity of the generated solutions is not detached from the process through which they were generated. What does it mean to make this shift, to talk about the truth or falsity of problems rather than just true or false solutions? It means taking seriously the ways in which problems produce truth and falsity. As Deleuze says, “truth is a matter of production, not of adequation” (DR, 154).

Conclusion

We have now added another step in the movement from virtual ideas to actual individuals. As we saw in the first two chapters, ideas function as immanent ontological structures that are “expressed in individuating factors” (DR, 259). These individuating factors are the fields and processes of intensities that incarnate the relations and singularities composing the ideas. The fields and processes of individuations emerging from the field of virtual ideas were the focus of
Chapter 3. That is, the intensive fields act as genetic conditions for divergent lines of individuation that eventually result in various actualized individuals, including trees, tables, books, cities, mountains, and most importantly for Chapter 4, human subjects. The human subject is one among many productions of these processes of individuation. The thinking, conscious subject is then not a primary term but is merely one site at which ideas are expressed. Ideas, as Deleuze puts it, “swarm” about the subject (*DR*, 259). The “implicated world of intensive quantities” that emerges from the ideas constitutes the “universal concrete individuality of the thinker” (*DR*, 259). In the first half of this chapter we looked at the way in which atomism accounts for the production of thinking and sensing subjects, and the second half looked this process in Deleuze. As it reads right now, these two accounts seem a bit disconnected. We conclude this chapter and prepare for the next one by bringing them back together.

The account of the violent encounter that is so important to the Deleuzian theory of the discord of the faculties resonates with the Lucretian account of the simulacrum and its role in sensation and cognition. To see this, recall what we said about the status of atomic simulacra. Lucretius writes, “the images [*simulacra*] move at an extraordinary speed” and “have a texture so fine that they cannot be seen individually” (*DRN*, 4.89, 214). Since simulacra possess this unsurpassed fineness and move at an unsurpassed speed, they cannot be, in themselves, perceived. For Deleuze this means that the simulacrum is “imperceptible” (*LS*, 274). Yet while simulacra are imperceptible in themselves, they give rise to perceptions. A simulacrum is not a particular sensation, feeling, or affection, but the material force that engenders particular sensations, feelings, or affections. Put differently, simulacra have an independent and autonomous existence beyond any particular sensation, and so exist even in the absence of a sensing subject. So, while we do not sense this or that simulacra, we experience sensation
through the real impact of streams of simulacra.

Deleuze’s doctrine of the faculties functions similarly. For Lucretius and Deleuze, the subject is not a preexisting entity in itself but the emergent result of the bombardment of simulacra or sentienda on the sensible surface of the body. The subject, then, finds its own constitution in the ways in which sensation erupts on this surface. The sensing of these surface excitations then compel a response that initiates processes out of which the subject emerges. While there is no preexistent subject that senses (as in recognizes) this or that simulacrum, the might of mere matter compels a response. For atomism, these are the streams of simulacra; for Deleuze, this is the sentiendum. For both, it is a real, material encounter with that which simultaneously cannot be sensed but also produces a response out of which a sensing subject emerges. This is, in essence, Deleuze’s definition of the being of the sensible (DR, 236).

Although the emergent subject cannot see or (empirically) sense simulacra and sentienda, it sees and senses because of simulacra and sentienda. Both act as the paradoxical “it” (id) or “something” (quelque chose) that engenders sensation. Lucretius asks, “What is it [id] that strikes your very mind, which moves it and compels it to express diverse feelings” (DRN, 2.896-900)? Deleuze says, “the being of the sensible… must designate the paradoxical existence of a ‘something’ [quelque chose] that simultaneously cannot be sensed (from the point of view of the empirical exercise) and can only be sensed (from the point of view of the transcendent exercise)” (DR, 236). In short, simulacra embody the imperceptible spark of sensation, just as the sentiendum is the imperceptible violence that compels the faculty of sensibility to respond. In the end, Lucretius and Deleuze develop overlapping aesthetics that are freed from an aesthetics based on a model of recognition, identity, or resemblance. Freed from such a model, both accounts posit a realm of movement and difference as the material ground of sensation and
cognition. The simulacrum and the sentiendum are the real differences by means of which recognizable identities and resemblances are produced and then, subsequently, perceived. They both act as material signs that force the power of sensation to respond.

While the two accounts are similar, there are always differences. One difference is that while atomism contends that the simulacrum is a sort of formed image of the body from which it was cast off, Deleuze construes the sentiendum as a plane of “free or untamed difference in itself” (DR, 144). That is, the simulacrum is a formed image, while the sentiendum is not so much a formed image as it is the smooth surface on which pure differences swim freely about. In Chapter 3, we called such pure differences “intensities.” Consider how intensities relate to questions of sensation. The very idea of intensity concerns an increase or decrease in, say, sensation, such as the intensity of temperature. We often say that when the temperature increases, it becomes more intense, and when it decreases, it becomes less intense. We can also imagine the increase to infinity or the decrease of that sensation along an asymptote that approaches but never reaches zero. For any given temperature, it is always possible to imagine a smaller or greater intensity of that sensation. Still, intensities are not equivalent to this or that actualized sensory quality, but instead engender the actualized qualities and extensities of sensation. “Intensity,” Deleuze claims, “is the sufficient reason (ground) of all phenomena, the condition of that which appears” (DR, 222). As such, intensities are pure differences, and it is the sensible encounter with these material differences that “creates at once both the quality in the sensible and the transcendent exercise within sensibility” (DR, 144). The empirical exercise of

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249 Deleuze’s target here is Kant’s discussion of intensity in the “Anticipations of Perception” in the First Critique. There Kant says, “every sensation, thus also every reality in appearance, however small it may be, has a degree, i.e., an intensive magnitude, which can always be diminished, and between reality and negation there is a continuous nexus of possible realities, and of possible smaller perceptions. Every color, e.g., red, has a degree, which, however small it may be, is never the smallest, and is the same with warmth, with the moment of gravity, etc.” CPR, A169/B211. Deleuze’s use of the concept of intensity functions as “not the anticipation of perception, but the proper limit of sensibility from the point of view of its transcendental exercise.” DR, 237.
sensibility is only able to grasp empirical sensory qualities and extensities, not intensities. While intensities produce the actualized qualities that the empirical exercise of sensibility grasps, they lack any recognizable sensible identity. From the empirical point of view, intensities are imperceptible. This is why Deleuze focuses on the paralyzing or distorting of the empirical exercise of sensibility. “The point of sensory distortion,” Deleuze writes, “is often to grasp intensity independently of extensity prior to the qualities in which it is developed” (DR, 237).

At this point, despite an initial difference, the Deleuzian and Lucretian accounts come together. Deleuze’s description of intensities that produce sensation shares the framework of Lucretius’ description of simulacra. Since they are imperceptible in themselves, atomism focuses less on the perception of a fully formed image than on the power of the simulacrum to produce distinct perceptions. Simulacra are, Lucretius insists, imperceptible. They are the imperceptible forces that produce sense-perception. A conscious perception emerges out of streams of unconscious perceptions. In short, perception rises out of imperceptions. This is perhaps one reason why the atomic account is not overly focused on the status of simulacra as fully formed images: the exact form of simulacral imperceptions are not completely determinative of recognized sense-perceptions. It is not that the streams of simulacra function as parts that, taken together, construct a whole or sum; this is not a mereological account of perception. Instead, these simulacral encounters relate to actual perceptions in terms of a material force. A conscious perception occurs when streams of simulacra build on and envelop each other. The simulacra are then like the background noise of the sensible world. They are not parts of a fully formed sensed whole, but the forceful elements that produce actual perceptions. Out of the obscurity and distorted haze of the encounter with imperceptibles, perception emerges into clarity. While it is true that Lucretian simulacra are more formed or organized than Deleuzian pure differences or
intensities, the capacity of streams of simulacra and intensities to produce sensation is common to both systems. Even though qua theory of perception the atomist position is ultimately false, it is still philosophically powerful as an account of the material production of thought and sensation insofar as it attunes us to the material force of the real encounter with streams of differences rather than fully formed images.\textsuperscript{250} While the details of the atomic account are wrong, the naturalist framework that derives from the ontology in which they are embedded is right. As Deleuze is fully aware, the theory of simulacrum shows us that identity and resemblance are the effects of an underlying plane of difference rather than the ground of perception.

Hence the Lucretian and Deleuzian accounts of sensation share a general naturalist framework. For Lucretius, sensation and cognition “must come about in a similar way,” that is, through the transference of the impact of simulacra from the sense organ to \textit{animus or mens}, which thereby sparks thought (\textit{DRN}, 4.751). This means that our various modes of thinking emerge out the impact of the world on our bodies. Streams of simulacra move through, say, the eye, then shape the spirit or the atomic power of sensation, and continue on to materially transform the material constitution of the mind. Thinking is thus the emergent effect of the transformation of the body that results from the force of the real material contact with the external world. The force of the encounter spreads from eye to spirit to mind, from body to sensation to thinking. The activities of the mind are then the products of a long chain of force that ultimately find their source in sensation. In this sense, despite some divergences, the Lucretian and Deleuzian accounts still resonate. “On the path that leads to that which is to be thought,” Deleuze writes, “all begins with sensibility” (\textit{DR}, 75). Even the most conceptual movements of the mind are emergent effects of that which is beyond thought. Just as perception

\textsuperscript{250} As we now know, the material forces of sensation are electro-magnetic waves or photons of light rather than simulacra.
emerges out of a forceful relationship with imperceptions, thought is produced out of a productive relationship with what is not yet thinking.

For Deleuze, thought emerges out of the violent encounter with the being of the sensible. Like Lucretius, Deleuze takes the encounter in sensibility as the origin of thought. For the encounter with the *sentiendum* sparks a material force that spreads throughout each of the faculties, from sensation to cognition. This is where Deleuze starts to characterize the emergence of thought slightly differently than Lucretius. Deleuze characterizes this real material force as violent and disruptive. Thought does originate out of the sensory encounter, but that sensory encounter is aggressive and overwhelming. On Deleuze’s account, what is transferred from sensation to thought is thus a violent shock that pushes each faculty to its respective empirical limit. Upon reaching this limit, the faculties are raised to a superior exercise. Thus, while the Lucretian and Deleuzian accounts both structure the emergence of sensation and cognition in terms of a real material encounter with that which is insensible and unthinkable, they characterize the encounter a bit differently. Deleuze considers this process violent and incapacitating, while Lucretius does not insist on its aggression.

This difference derives from their different goals. The ultimate goal of the atomic theory of the emergence of the mind is to dispel false beliefs and empty desires by means of a naturalistic account of their production. While we briefly considered these issues in the first part of this chapter, Chapter 5 will take them on in much more detail. For now, we simply note that Lucretius’ attempt to explain away false beliefs and illusions by an explanation of their production means that he focuses on the production of particular genres of thoughts, beliefs, and opinions. Deleuze has a different focus. He certainly appreciates the Lucretian ethical critique of
myth, religion, and superstition, and the next chapter will explain what exactly Deleuze so admires in Epicurean ethics.

Despite these minor differences, both Lucretius and Deleuze offer naturalist philosophies that attempt to account for thought, consciousness, and subjectivity, or at least agency. Rather than presupposing a spiritual substance or transcendent consciousness, they both claim that subjectivity and its related characteristics are the outcome of natural genetic processes and lines of individuations emerging from immanent and genetic ideas. The essential question of such Lucretian or Deleuzian style naturalisms is thus not, “How do we explain the ways in which the subject experiences the given,” but rather, “What are the processes out of which the subject is given?” So, this chapter explained how atomism and Deleuze account for the constitution or production of the subject within the atomic and differential worlds we developed in the previous chapters. In sum, this chapter accounts for the emergence of thinking and sensing beings out of the problematic space of the idea found in both Lucretius and Deleuze, and Chapter 5 will continue this story of the production of subjectivity by looking at the ethical dimension of the subject.
Chapter 5: Ethics in the Garden of Epicurus

From thought to ethics

The characterization of thought developed in the last chapter leads us directly to Epicurean and Deleuzian ethics, just as Lucretius himself quickly transitions from discussions of theoretical to practical philosophy in many places in *De rerum natura*. As a self-proclaimed Epicurean, ethics plays an important role in Lucretian atomism. The meaning of these ethical claims, though, is not as clear as we might expect. While we will not refute most of the standard interpretations of atomic ethics, we will argue for a more nuanced interpretation of Epicureanism, one that stresses health and affirmation as much as tranquility and undisturbedness. This will allow us to connect Epicureanism to Deleuzian ethics. We will link Ancient Greece to Contemporary France by means of what Deleuze calls a “great tradition” that follows “a secret link between Lucretius, Hume, Spinoza, and Nietzsche.”

While Deleuze situates himself at the end of this ethical tradition, the role ethics plays in Deleuze’s texts remains an open and difficult question. Still, there are ethical moments in Deleuze. Michel Foucault, for example, unequivocally identifies one of Deleuze’s main texts as “a book of ethics, the first book of ethics to be written in France in quite a long time.” Following Foucault’s lead, I contend that there is at least a minimal ethics in Deleuze, one that follows from his commitments to immanence and affirmation. To get a glimpse of this immanent theory of ethics, we can look to some ethical themes in Epicurus and Lucretius. While these concepts will not exhaustively articulate the nature of a Deleuzian ethics, they will help illuminate some of the ethical characteristics that Deleuze most admires about this great

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251 Deleuze, *Negotiations*, 6. In another place Deleuze writes, “Not since Lucretius has the critical enterprise which characterizes philosophy been taken so far (with the exception of Spinoza). Lucretius exposes the trouble of the soul and those who need it to establish their power – Spinoza exposes sorrow, all the causes of sorrow and all those who found their power at the heart of this sorrow.” Deleuze, *Nietzsche*, 190.

To begin this journey, let us imagine that we are in the Ancient world, some time around the third century B.C.E. Imagine we are taking a short walk through Ancient Athens, heading north out of the Agora, past the Diplyon Gate, on the way to Plato’s Academy. After passing the Stoa, yet before reaching the Academy, we come across a small plot of lush land. This is Epicurus’ Garden. We enter the Garden and sit down, rather than walk about like the Peripatetics, in order to discuss atomic philosophy. Since almost no archaeological evidence of the Garden remains, it is almost pure speculation to describe such an environment. Still, in order to make things as vivid as possible, we can safely imagine a small plot of land, with an open area for walking and sitting, perhaps populated by some plane and olive trees. There might be a number of potted plants, perhaps even a few varieties of Mediterranean herbs. Given the rather disciplined nature of Epicureanism, though, it is unlikely that the Garden is too opulent. The most we can presume is that it is a comfortable, open, and accepting environment. It is on this small plot of land that we begin our account.

We first turn to Deleuze’s appropriation of a Nietzschean method in order to analyze atomic ethics. The method has three parts: a symptomatology, an etiology, and a therapy. In the Epicurean version, these three parts become: a typology of desires, an etiology, and an analysis of forms of life. The findings of this atomic version of this method allow us to develop an Epicurean concept of health. Health, for Epicurus, is a life of true pleasure, and we will how Epicurus tries to develop a difficult concept of pure, affirmative pleasure. After this, we will

253 This description is based on Long and Sedley’s account on their *The Hellenistic Philosophers*. These geographical claims, however, are not settled. R.E. Wycherley, for example, contends that the Garden was in the city, and M.L. Clarke argues that it was, as is commonly supposed, outside the city. Strangely, both writers refer to Cicero’s *De Finibus* 5.3 in which Cicero, while describing a walk he took with some friends outside of the city, refers to “‘Epicurus’ Garden, which we passed just now’” (*in Epicuri hortis quos modo praeteribamus*). For our purposes, though, this debate is irrelevant. See Long and Sedley, *The Hellenistic Philosophers*, Vol. 1, 1-6; Wycherley, R.E., ‘The Garden of Epicurus,’ *Phoenix*, Vol. 13, No. 2 (Summer, 1959), 73-7; and Clarke, M. L., ‘The Garden of Epicurus,’ *Phoenix*, Vol. 27, No. 4 (Winter, 1973), 386-87.
return to the concept of the atomic idea. Since atomism, Deleuze claims, takes nature as the object shared by both a speculative and a practical philosophy, it is a fully affirmative naturalism. We will conclude the chapter by fleshing out the five basic characteristics that Deleuze attributes to Ancient Atomism. To get there, we begin in the Agora, the starting place of our walk to the Garden of Epicurus.

The Garden

To see why Epicureanism so greatly differs from the other Hellenistic schools – the Academics, the Stoics, the Peripatetics, the Skeptics, etc. – we extend Deleuze’s rather unusual characterization of the state of philosophy in Ancient Greece so that it reaches forward in time to Hellenistic Greece and Rome. A was the case in Chapter 1, we make use of Deleuze’s account here not because it grasps some hidden truth about the Greek world that has escaped classicists but because it offers a vivid characterization of a social, political, and intellectual milieu. This characterization allows us to draw powerful and interesting philosophical conclusions despite the possibly questionable nature of its historical exactitude. Above all, we should remember that, despite the value of historical accuracy, this is a story about the Deleuze-atomism encounter, and so the primary objective is an exploration of Deleuze’s engagement with ancient philosophy.

As we know, Deleuze accounted for the emergence of Platonism and its theory of transcendent ideas in terms of the prevailing political and social conditions in that part of the Ancient world. Deleuze claims that there were two major political formations: the imperial and the democratic states. Each type of socio-political formation set different conditions in which philosophy could emerge. This is evinced by the respective roles the thinker plays in each type of state. While the imperial states had wise men or sages who possessed wisdom, Athens
popularized the image of competing democratic philosophical rivals, each claiming to be the true friend or lover of wisdom. “If we really want to say that philosophy originates with the Greeks,” Deleuze and Guattari write, “it is because the city [Athens], unlike the empire or state, invents the *agon* as the rule of a society of ‘friends,’ of the community of free men as rivals” (*WP*, 9). In both the Empire and the Athenian democracy, there is a relation to an essence, idea, or object of truth. Yet the imperial wise man is different from the philosopher in that the sage incontestably possesses a unique relation to objects of wisdom, while the philosopher, since he does not possess it, only claims to be a friend of wisdom. Through this democratic competition to be the “true friend” of wisdom, rivalries proliferated, and many of Plato’s dialogues depict agonistic encounters among such claimants. The main distinction in these two political and social formations is that while the imperial states functioned in terms of a sort of vertical or top-down organization in which the sage at the top had special access to the truth, the Athenian state was horizontally structured. In this horizontal structure, no one had special access to the truth, which meant that everyone could lay claim to wisdom. This had the effect of creating a fervent agonistic community. Since each claimant had an equal right to profess to be the real friend of truth, there was a need for a criterion for adjudicating and selecting true friends of wisdom from imposters. Deleuze says, “if each citizen lays claim to something, then we need to be able to judge the validity of claims” (*WP*, 9). It was in this socio-political milieu that Plato developed his novel theory of ideas and established a new type of transcendence. The true friend, for Platonism, is not a friend of a fellow person but a lover of an entity beyond, a transcendent essence or idea. So, while Athens functioned as a horizontally and immanently structured political and social state, Platonism brought transcendence to the people. “[T]he poisoned gift of
Platonism,” Deleuze writes, “is to have introduced transcendence into philosophy, to have given transcendence a plausible philosophical meaning.”

In a sense, political and socio-economic movements in Hellenistic Greece and Rome were not so different from what we see in the democratic and agonistic community of the Athenian city-state. While the old Athenian community flourished for a short period of time, it eventually disintegrated. With the downfall of such democratic states, a new set of imperial powers entered, eventually becoming almost completely dominant. This process from Athens to Empire, a movement from competing collections of smaller city-states to expansive conglomerate powers, occurred amidst the rise of Alexander and the continuation of his achievements through his successors and challengers, and Athens was one of those smaller city-states conquered by such empires. Once Athens was turned into merely one dependent part of a larger empire, the role of the individual citizen changed. The main transformation occurred in the possible forms of life available to the political subject: the individual went from being a creative and competing rival to more of a passive and weakened participant. In a way, the citizen went from active agent to reactive subject. The concern of the political arena was no longer how to select from among rival claimants (perhaps the epitome of active agency), but how to care for the self, as Foucault famously put it. In order to attend to this pacification of citizens, the Hellenistic thinkers tried to develop various philosophies that addressed this loss of political voice, power, and agency.

The Stoic and Epicurean forms of address are quite different. The Stoic form denies the importance of external objects and the immediate political order in favor of a universal

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254 Deleuze, “Plato, The Greeks,” 137
community of rational citizens, a sort of early cosmopolitanism.\textsuperscript{255} Stoicism, then, advocates reflection and contemplation as a respite to life under Imperialistic powers. As Deleuze says, “in barren times philosophy retreats ‘on’ things. If it is not itself creating anything, what can it do but reflect on something? So it reflects on eternal or historical things, but can itself no longer make any move.”\textsuperscript{256} While this diagnosis of Hellenistic philosophy does capture something about the Stoic response, it distorts the Epicurean one. Unlike the Stoics, atomism does not aim to simply reflect on the self in order to determine truth or goodness. Instead, it tries to evaluate forms of life in terms of what they can do, how they can act, how they can grow and change. Rather than asking the Stoic questions – What is truly mine and what is not? What completely submits to my will and what does not? – Epicureanism asks: Does this form of life lead to pleasure or pain? Do these beliefs lead to insatiable desires or moments of affirmation? Does one affirm and celebrate life or deny and negate it? Such questions resonate with Nietzsche’s famous response to the Eternal Return: Do you, Nietzsche asks, “throw yourself down and gnash your teeth and curse… Or have you once experienced a tremendous moment when you would have answered him: ‘You are a god, and never have I heard anything more divine.’”\textsuperscript{257} While Epicureanism is not as passionate and ecstatic as Nietzsche might prefer, it is still a fully affirmative and facilitative philosophy.

This is why, we will argue, the withdrawal into the Garden is not an utter negation of the world, but a way of creating the social and political conditions that allow entrance into certain relations and encounters that nurture certain ways of composing one’s body, desires, beliefs, affects, etc. This withdrawal into the Garden is a way of carving out a little plot of immanence,

\textsuperscript{255} In Logic of Sense, Deleuze offers a very interesting account of the Stoics’ transformation of a new image of the philosopher, one that sharply contrasted with the pre-Socratics, Socratic philosophy, and Platonism. See the first few series of Logic of Sense for more on that.
\textsuperscript{256} Deleuze, Negotiations, 122.
\textsuperscript{257} Friedrich Nietzsche, Gay Science, ed. Bernard Williams, trans. Josefine Nauckhoff (Cambridge: Cambridge University Press, 2001), 341. While the Eternal Return is really a Stoic concept, the same questions apply when evaluating forms of life.
beyond the imperial powers, in which to cultivate healthy forms of life. As the old Athenian
Agora was an immanent domain politically and socially structured much differently than the
imperial states, the Epicurean Garden is an small plot of earth in which everyone could equally
nurture his or her own pleasure (hedone), in conjunction with the community, and beyond the
touch of the Empire.

While the general political and social conditions for the emergence of Platonism and
Epicureanism were somewhat similar, the paths these two respective philosophies eventually
assumed are quite different. Unlike the Agora, the goal of the Garden is not truth and goodness
but pleasure and health. In the Garden, there is no agonistic culture in which various rivals
claimed to be the true lover of wisdom, but an immanent community of natural beings that select
those relations that lead to health and pleasure. Deleuze says something interesting in his
assessment of other members of the great ethical tradition: the “question is knowing whether
such a reaction abandons the project of a selection among rivals or, on the contrary, if it draws up,
as Spinoza and Nietzsche believed, completely different methods of selection, which are no longer
directed toward claims as acts of transcendence, but toward the manner in which the
existing being is filled with immanence.”258 We can find this kind of method of selection in
Epicurus and Lucretius. For them, the method of selection is less a way of judging true from
false claimants in term of a transcendent object, and more of an evaluation of the health of
various forms of life. The method of selection shifts from judgments of truth and goodness to
evaluations of health and sickness.

In place of the agonistic community and its Platonic reaction, the Garden is a place where
health is evaluated in terms of the degree of pleasure or pain expressed in individual forms of
life. Evaluating health does not involve comparison to a definitive and abstract model that acts as

258 Deleuze, “Plato, the Greeks,”, 171; emphasis in the original.
a transcendent criterion for judgment, which means it does not matter whether one is a true or false claimant of truth. Epicureanism initiates a new method for evaluating life forms in terms of what is expressed in a life. Symptoms are what is expressed, and the Epicurean evaluates these symptoms. This focus on symptoms expressed in forms of life abandons transcendent models and methods of judgment and concentrates instead on immanent means for evaluating the ways in which we live. So, rather than a culture of rivalry over transcendent objects, the Garden is the site of a new kind of culture: horticulture. The Garden is a place where cultivation, growth, and convalescence happened; it is where subjects are nourished and returned to health. To do this, the different members of the Garden do not compete as rival claimants on an unattainable object. Instead, they enter into mutually nourishing relations that aim to augment each other’s capacities for living lives of pleasure and joy. The Garden is a place where sickness withers and health blossoms. As we will see at the end of the chapter, while the actual Garden of Epicurus is now gone, the Epicurean form of life remains.

Symptomatology

Nietzschean symptomatology

It is in the nourishing and healing environment of the Epicurean Garden that the symptoms of soul-ills are diagnosed and remedies are offered. To see this, we can use an interesting concept from the Deleuzian oeuvre: the method of symptomatology, which Deleuze discovered during his extended study of Nietzsche. While Deleuze found that this method is developed mostly in Nietzsche’s essay “The Philosopher as Cultural Physician” and the Genealogy of Morals, the

components of the full symptomatological method operates throughout his texts. According to Deleuze, Nietzsche explicitly utilizes this method in order to diagnose the most pernicious illnesses affecting modern European Man. By means of this symptomatology, Nietzsche conceives of the common goals, wills, and motives of many Europeans as expressions or signs of something else. Eventually, these signs were grouped together to form syndromes, such as, the ascetic ideal, ressentiment, bad conscience, etc. Nietzsche reads and deciphers these signs, and signs of signs, almost like an ethical semiotician.

While the symptomatological method necessitates beginning with an interpretation of these expressed signs, it is more than a mere semiotics. In fact, Nietzsche criticizes those who never get beyond a semiological analysis. For him, these are not just signs, but symptoms. The meaning of a symptom, for Nietzsche, is located in its vital force. A symptomatology then sees symptoms as expressions of the forces that produce them and the practices in which they are expressed. Nietzsche then groups these symptoms together, eventually developing a whole typology of symptoms. This typology is the result of the convergence or condensation of these symptoms on the site of a particular set of forces expressed in certain forms of life. According to Nietzsche, the most pernicious of these are the reactive and nihilistic forces of nineteenth century Europe. These reactive forces are the sources and the meanings of the symptoms in that they control bodies by orienting the practices and forms of life of these bodies, thereby leading to forms of life plagued with guilt, fear, and shame.

From Nietzsche’s implementation of this method we can extract a more general symptomatological method. There are three main parts. First, take the symptomatology. Like a semiotician, or even an artist, a symptomatologist sees certain expressions or signs as symptoms

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of an underlying sickness or force. Eventually, the symptoms gain a sort of consistency and repeatability, thereby condensing into a syndrome. This leads to the second part of the method: the etiology. The etiology locates the source and the meaning of the symptoms or syndrome. It is the disease itself, the controlling force or forces that produce the symptoms. The third and final part of the method is the therapy, which focuses on the form of life or mode of existence characterizing a practice. The symptoms and the disease are not abstracted from life, but instead possess certain forms of life. People with Parkinson’s disease, for example, are possessed by their sickness. The therapy is not aimed just at the symptoms, then, or even at the disease, but especially at the form of life of one fraught with the syndrome. The focus is not only the possession of the disease, but the form of life a disease possesses. The therapy offered then aims to address the disease and its symptoms so as to lead the sick forms of life to convalescence. A symptomalological therapy aims to discover new ways of living and new forms of practice beyond those offered by the current political, ethical, aesthetic, etc. domains.

Symptomatology, etiology, and therapy – these are the three parts of the Deleuzo-Nietzschean symptomatological method. While such a method is clearly inspired by medicine, it is not completely medical. Instead, the method of symptomatology is located at the meeting place of philosophy, art, medicine, and ethics. “Symptomatology,” Deleuze writes, “is situated almost outside of medicine, a neutral point, a zero point, where artists and philosophers and doctors and patients can encounter each other.” The Garden is just such a neutral point. Our task now is to see how Epicurus functions as an early proponent in a long line of symptomatologists. Beginning with the symptomatology, the next three parts of this chapter are

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261 The term ‘syndrome’ comes from the Greek word συνδρομή, meaning the “concurrency or convergence of symptoms.” For an elaboration of this movement from symptom to syndrome, see Dan Smith, “Analytics: On the Becoming of Concepts,” 126.

262 Deleuze, “Bergson’s Conception of Difference,” 34.
structured in terms of the three parts of this symptomological method.  

Symptomatology: the typology of desires

The first part, the organization of symptoms into a typology of symptoms, is perhaps the distinguishing aesthetic feature of any good symptomatologist. “There is always a great deal of art involved in the grouping of symptoms” (LS, 237). The grouping of some symptoms, rather than others, or the association of certain symptoms and the disassociation from others, is almost like creating a work of art. In a sense, the symptomatologist is an artist and the artist is a symptomatologist. Both, Deleuze claims, are “clinicians of culture” (LS, 237). Just as an artist’s name is associated with a particular style of making art (Warhol’s soup cans or Newman’s zips), or just as the name of the doctor who groups specific symptoms and isolates the underlying cause takes on a life of its own (Tourette’s syndrome or Asperger disorder), so Epicurus’ name bears the signature of his particular conceptual creation. What we now call ‘Epicurean’ thus has less to do with the man himself and more to do with the success of his symptomatological method. As Dan Smith says, “the proper name is here used to indicate a non-personal mode of individuation,” and the name ‘Epicurus’ indicates a certain way in which one becomes Epicurean.  

Epicureanism creates concepts and mobilizes practices that produce Epicurean modes of existence, and Epicurus had to first formulate the mode of Epicurean individuation in order to make them possible. To do so, he had to develop a symptomatology, establish an etiology, and offer a form of therapy.

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263 Martha Nussbaum also details a three part Epicurean method, although she characterizes Epicureanism more as a form of therapy than a symptomatology. The main difference between these two is that therapy is modeled on a doctor of medicine, while symptomatology is modeled on the doctor of aesthetics, a sort of doctor artist. Put differently, while therapy relies on the art of medicine, symptomatology rests on the art of medicine. Moreover, this split between medicine and aesthetics means that while therapy takes some idea of “healthy” for granted (presumably based on the normal), symptomatology is also interested in new ways of life and is unconcerned with any sort of normalizing. Basically, Nussbaum-therapy stops before the investigation into forms of life. See Nussbaum, *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton: Princeton University Press, 1994), 105.

We can use the method of symptomatology to understand how he interpreted and grouped certain symptoms. The symptoms on which he focused specifically were expressions of desire. In order to understand these expressed desires as symptoms, Epicurus developed a very explicit typology of kinds of desire: “Some desires are natural [phusikai] and others empty [kenai epithumiai], and of the natural some are necessary, others natural only; but of the necessary some are necessary for happiness, others for the body’s freedom from disturbance, and others for life itself” (EM, 127). On the face of it, such a division into kinds of desires was common in Ancient Greece. In the Republic, for example, Plato distinguishes necessary and non-necessary desires, and Aristotle also marks the difference between natural and non-natural desires.  

For them, the two distinctions resulted in the same distribution: natural and necessary desires are coextensive, and non-natural and non-necessary desires are also coextensive. Plato and Aristotle thought that natural or necessary desires were distinctly bodily, and so, when fulfilled, led to lower or baser kinds of pleasure.

Epicurus, however, makes slightly different distinctions. For him, necessary desires include both bodily appetites and spiritual or mental pleasures. Just as the desires for food and shelter are necessary and natural for the body, so are the desires for happiness, freedom from fear, and lack of disturbance for the soul. So, while other Greeks considered the desire for happiness to be higher or better than natural or bodily appetites, Epicurus saw them as equally natural and necessary. The very terms Epicurus uses to make the distinction between natural (phusis) and empty (kenai) desires are themselves material or corporeal terms. Through his own organization of the types of desire, Epicureanism flattens out the traditional hierarchy. Rather than considering the body and its desires as chains that draw us away from true freedom, pleasure, and happiness, Epicureanism calls attention to the body as another product, just like the

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265 Plato, Republic, 558d-559c, and Aristotle, Nicomachean Ethics, 1118b8-27.
mind and consciousness, of the natural world. Since the body is produced by nature, nature provides what is necessary for its continuance. This leads, for Epicureanism, to a joyful affirmation of nature. “Thanks be to blessed Nature,” Epicurus affirms, “because she has made what is necessary easy to procure, but what is hard to procure not necessary.”

In this way, the body, more than the mind or consciousness, is the model for Epicureanism. Epicurus is as fascinated by what a body can do as are Spinoza and Deleuze. In sum, this is the basic typology of desires: natural and necessary, natural but unnecessary, and empty. Let us take them one by one.

First, there are natural and necessary desires. These are the desires for such things as food, shelter, and tranquility. If such desires are not satisfied, for example if we do not drink at least some potable liquid and eat some nutritious food, we will be in great pain and, sooner or later, we will die of thirst or hunger. These are the types of things that the Garden provided. As Seneca puts it, Epicurus’ “garden does not whet your appetite; but quenches it. Nor does it make you more thirsty with every drink; it slakes the thirst with a natural cure – a cure that requires no fee.” As we will see, these desires arise from true beliefs and result in forms of life of pure, affirmative pleasure.

Second, natural and unnecessary desires are more specific kinds of desires. They are often seen as natural desires for more luxurious items. The desires for specific kinds of drink or food, such as nice wines or “expensive foods” are standard examples. Certain kinds of sexual desires are also included in this second category. These natural but unnecessary desires are not,

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266 Stobaeus, Anthology 3.17.23, in The Epicurus Reader, 102.
267 Spinoza writes, “They do not know what a body can do, or what can be deduced from the consideration of its nature alone” (Spinoza, Ethics, in Spinoza: Complete Works, trans. Samuel Shirley, ed. Michael L. Morgan. Indianapolis: Hackett Publishing Company, 2002), II.33), and Deleuze quotes and paraphrases Spinoza throughout his work, including his EP, 217-34, NP 39, etc.
268 See EM, 127; Principle Doctrines, 26; Vatican Sayings, 21, 23, 35, 59.
269 Seneca, Ad Lucilium, 21.10.
270 Scholion on Epicurus, Key Doctrines, 29.
in themselves, detrimental, and only become such if they lead to unhealthy forms of life. An unhealthy form of life leads to the pursuit of luxury without any restraint or heed to natural limits. When such desires are immoderately pursued, we feel like we cannot live without, say, a fine wine or sexual fulfillment. Such desires should thus be avoided when they lead to more pain than pleasure. As we will see later on, any desire that leads to an impure pleasure, a pleasure mixed with pain, should be cautiously evaluated, if not rejected. In the next section we will learn that these desires arise from a mixture of true and false beliefs, and they lead to forms of life mixed with positive and negative pleasure and pain.

Third, there are unnatural and unnecessary desires, which we can also call empty desires. Epicurus gives the examples of the empty desires for “crowns and erection of statues,” or even immortality. We can add to this list: the desires to mock or hate, to seek vengeance or redemption for ills suffered, to shame or commit cruelty on others or even oneself, etc. Such desires are dangerous in that they can never be completely satisfied, but are instead forever thwarted. One is never satisfied with any amount of fancy clothes or statues, just as the spiteful desires to shame or mock are never finished once they are set in motion. These are empty because getting caught in such endless loops of unfulfillable desires leaves one in a state of continuous pain, anxiety, and disappointment. As we will see, such desires arise out of false beliefs and result in painful and fearful lives.

In sum, the first part of the Epicurean version of the symptomatological method is to interpret expressions of these desires as symptoms of the state of the soul of some form of life and then organize these symptoms on a typological table. This typology of the different kinds of desires is result of the Epicurean symptomatology.

Before we move on to the second part of this Epicurean method, however, we must

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271 Ibid..
address one more question. What, exactly, is a desire for Epicurus? While a complete account of Epicurean desire is a complicated story, especially if we consider it in comparison to the other models of desire in the Ancient world, it is enough for now to understand only the basic structure of desire in Epicureanism. To see this, we contrast Epicurean desire and Platonic desire. To lay the cards out on the table, this is the basic difference between these two models of desire: while the Platonic conception of desire is based on a model of lack of a transcendent object, the Epicurean model is an affirmation of an immanent mode of life. We first consider the concept of desire as it appears in Platonism.

A comprehensive treatment of the role of desire in the Platonic dialogues would also be quite complex, and far beyond the constraints of our discussion. For our purposes, all that we want to draw from that account is a basic structure. The first thing to note is that this structure is intentional. As is clear from the Gorgias, Meno, Republic, etc., “everyone desires for good things.” We should focus on the ‘for’ in this formulation. In Plato’s dialogues, since desire is always desire for something, there is an emphasis on that at which desire aims. While the object of desire may slightly change, the model of desire as aimed at an object beyond the desiring being persists. For example, in the Symposium, Socrates details the erotic ascent to the form of beauty in itself as a movement of desire; in the Republic, there is a similar type of ascent, albeit this time in terms of virtue rather than beauty, in which desire aims at the form of the good. In each dialogue, the focus is on a distinct object that rests beyond or outside of the desire and the desiring being. Whether it is beauty or goodness in themselves, Platonic desire aims beyond all

272 For a more focused treatment of this topic, see Charles H. Kahn, “Plato’s Theory of Desire,” The Review of Metaphysics 41, no. 1, (September 1987), 77-103.
273 Emphasis is mine. This is a quote from Plato’s Republic, 499-500 and the Meno 77c1, 784. As an aside, the Gorgias is perhaps the first place in which there is a distinction between rational desire (boulesis) and sensuous or appetitive desire (epithymia). Aristotle later adds a third kind of desire, desire that is connected with anger or pride (thymos). All of these are species of the more general form of desire (orexis). See Kahn, “Plato’s Theory of Desire,” The Review of Metaphysics 41, no. 1, (1987): 77-103.
particular worldly beautiful and good things toward that which is truly beautiful or good, that
which makes all other things beautiful or good. These are transcendent objects, beyond time and
place, beyond any particular desire or desiring being. Even though we may seem to desire this
beautiful body or appear to desire to do that virtuous act, what we really desire is not this
particular body or that particular act. Instead, we desire, according to Platonism, that which
makes the body beautiful or that which makes an act virtuous. So, Platonic desire is a desire for
something beyond, something transcendent. Moreover, this model of desire implies that the
desire is defined not in terms of what it is but in terms of what it lacks. Socrates says this in the
*Symposium*, “desire desires something of which it is in need… if it were not in need, it would not
desire it.”

To use Socrates’ own examples, only a short man desires to be tall, only a weak
man wants to be strong, only a sick man wants to be healthy. When the healthy man says he
desires to be healthy, Socrates claims, what he really means is that he desires to continue to be
healthy, to be healthy in the future. In sum, there are two basic features in the structure of
Platonic desire: desire is aimed at a transcendent object and desire is itself empty, lacking, or
deficient. Such a structure thus places the only thing that could fill up this lack eternally beyond
reach. Structurally, Platonic desire can never be completely satiated; it is eternally empty and
unfulfilled. In short, Platonic desire is self-defeating.

The Epicurean model of desire, however, is quite different. For Epicurus, desire is not
directed at a transcendent object but at real causes and real effects of singular modes of
existence. Epicurus pulls the location of the object of desire down from on high and back to this
world; it is no longer stuck in an unattainable beyond, but is instead situated completely in this
world. In short, Epicurean desire is immanent. As Epicurus says, “one should not spoil what is

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present by desiring what is absent.” One of the reasons why Epicureanism develops a model of desire that is not based on lack is to avoid one of the characterizations of the rival Cyrenaic school, that is, a life based on the constant strivings to fulfill one’s desires. Plato, for example, mocked such a picture of the ideal Cyrenaic life through the metaphor of a leaky jar that constantly needs to be refilled. In order to avoid this characterization, Epicurus does not conceive of desire in terms of a model of lack and fulfillment, but in terms of actual modes of existence.

Moreover, there is a difference in the object of desire. One of the first lessons of an Epicurean symptomatology is to draw up a typology of desires, and one of the primary means for organizing this typology is in terms of different kinds of objects of desire: transcendent and immanent objects. The natural desires are those that arise from nature, and the objects of natural desires are products of nature; such desires and their objects begin and end in this world. This illuminates one part of the famous Epicurean tetrapharmakos (four-part cure): “what is good is easy to get.” As we will soon see, what is good is a healthy, pleasant, and joyful life. Such a good is easy to obtain because it is located in the natural world. The good, for Epicureanism, is not an unreachable beyond but is a way of living in, with, and through nature. A transcendent good, since it is unattainable, since it is supernatural, is not easy to get. In fact, it is impossible to get while we exist in this world. As Socrates says in the Phaedo, “the one aim of those who practice philosophy in the proper manner is to practice for dying and death,” that is, precisely in

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275 Epicurus, The Vatican Sayings, 6.35.
276 For most on the Cyrenaics, see Diogenes Laertius’s Lives of the Philosophers, II. 65-104. The Epicurean Colotes’ indirectly responses to the Cyrenaics in Plutarch’s Colotes, 1120c-1121c.
277 Plato, Gorgias, in Complete Works, 493a. Lucretius later uses this imagery of the leaky jar in order to explain one of Epicurus’ main targets. DRN, 6.9-24.
278 Philodemus, Herculaneum Papyrus 1005, 4.9-14. This is the whole passage: “Don’t fear god, Don’t worry about death; What is good is easy to get, and what is terrible is easy to endure.”
order to attain the object of desire.\textsuperscript{279} One must die in order to reach such an object.

The reason why certain desires are harmful or empty is that they ignore the limits of nature and are instead structured in terms of an eternal emptiness in relation to an unattainable object of desire. No natural object can ever fulfill them. These unfulfillable and stymieing desires lead to an unfulfilled and stymied life. “Insofar as you are stymied,” Porphyry says of Epicureanism, “you are stymied because you forget nature; for you burden yourself with unlimited fears and desires.”\textsuperscript{280} The Platonic structure of desire, since it aims at a transcendent object beyond the limits of nature, binds us to an unfulfillable and stymied form of life.

For Epicurus, natural and necessary desire is less intentional and more expressive of the productive power and organization of nature. It is in this sense that Epicurean desire is productive. Desire produces, or at least contributes to the production of, forms of life: natural and necessary desires produce natural and pleasant forms of life; empty and insatiable desires produce stymied and painful forms of living. This is why Epicurean ethics focuses on developing desires that reach an accord with nature. Natural desires emerge from nature, while unnatural or empty desires are perversions of nature and so lead away from the natural world, toward unreachable or transcendent objects. An Epicurean seeks to confront the immanent organization of nature in order to reveal the power of nature in itself and the forms of life it generates. We thus use the typology of desires in order to isolate those desires that lead away from nature, to the supernatural. Desires that lead to the supernatural result from mistaken beliefs, and the next part of this Epicurean symptomatology is to locate false beliefs.

\textsuperscript{279} Plato, \textit{Phaedo}, 64a, in \textit{Complete Works}.

Etiology: false beliefs

The second part of the Epicurean symptomatology is a natural etiology. The Epicurean etiology claims, in short, that false beliefs produce empty desires and true beliefs produce natural desires. To see this, we should first remember some of the claims we made in the last chapter about the role of truth and falsity. As we said, all beliefs, whether true or false, are involved in productive processes, either as products themselves or as processes that produce other things. Truth and falsity are thus evaluated in terms of how they were naturally produced and, we are now claiming, in terms of what they themselves produce. We can also apply this to beliefs. Beliefs are not, in themselves, true or false. They are natural products, and so are only considered false insofar as they produce empty desires and unpleasant forms of living. This should remind us of how we construed the status of the truth or falsity of beliefs. Beliefs are not true or false insofar as they accurately or inaccurately correspond to certain states of affairs. Instead, beliefs are true or false depending on what kinds of desires follow from them. This means that a belief is true if it leads to empowering and attainable desires, and a belief is false if it leads to debilitating and empty desires. So, false beliefs and illusions are those that produce disempowering kinds of desires and enslaved forms of life, and true beliefs are those that lead to natural desires and liberated forms of life.

Let’s look at how these beliefs become sedimented. In the last chapter we looked at the ways in which atomism tried to naturalize three types of simulacral illusions: theological, oneiric, and erotic. If we do not recognize that there are natural explanations for these illusions, then we lack an adequate understanding of the cause of these illusions. On the basis of such an inadequate or mistaken understanding, a belief begins to develop. Eventually, after long periods of uncritical circulation of these false beliefs, they condense into even larger sets of false beliefs.
These larger sets of false beliefs then appear under three basic etiologies: superstition, religion, and mythology. Let us look at each of these in turn.

In the beginning of the first book of *De rerum natura*, Lucretius praises Epicurus as the first man to truly challenge superstition. Because of him, “superstition [*religio*] is now in her turn cast down and trampled underfoot” (*DRN*, 1.78-9). At this early point in the text, Lucretius is speaking directly to Memmius about what it means to become atomist or Epicurean, what it means to begin an “apprenticeship to philosophy” (*DRN*, 1.81). One of the first things to learn in this apprenticeship, in this becoming-atomist is that widespread superstitions are major causes of pain, sadness, crime, etc. This is one reason why this second part of the Epicurean symptomatology is an etiology. Superstition is one of the most pernicious of false beliefs. As Lucretius writes in one of the most poignant lines of *De rerum natura*, “so potent was Superstition [*religio*] to cause [*suadere*] evil deeds” (*DRN*, 1.101).

Lucretius points to a specific instance of the causal power of superstitious beliefs: Agamemnon’s unnecessary and needless sacrifice of his daughter, Iphigenia (*DRN*, 1.84-101). Due to the manipulative effect of superstition, Lucretius notes, the violence and power that Agamemnon usually expressed outwardly against his enemies was turned inwardly, thereby enacted on himself and his family. According to Lucretius, such dreadful acts were the result of the false belief in dangerous superstitions. In a natural explanation, Artemis (Diana) did not intentionally detain Agamemnon’s fleet. It was, rather, the non-intentional and natural movement of the wind and the sea, that is, drifting and churning pockets of atomic composites. Ignoring this natural explanation, superstition keeps us in a constant state of anxiety, a state in which we are primed to commit terrible acts of violence against others and ourselves. Fear of jealous or

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281 Lucretius, however, does not write the name ‘Iphigenia’ but instead calls her ‘Iphanassa.’

282 This “turning inward of violent tendencies” might remind us of Nietzsche’s own symptomatology of bad conscience and *ressentiment* in the second treatise of his *Genealogy of Morality*.
irritable gods leaves us in a state in which we are continuously ill at ease, always looking over our shoulders, up to the fickle gods in the sky. This is why it is the “fear of [divine] punishment that taints the prizes of life” (DRN, 5.1151). Rather than feeling pleasure in our highest achievements and most courageous actions, we feel bad or even guilty for acting. In an Epicurean spirit, Spinoza echoes this critique of superstition: “nothing forbids our pleasure except a savage and sad superstition.” Superstition turns life into a state of perpetual fear and guilt, never free of the dreaded possibility that we might have offended the gods. Chained to superstition, we live life cowered and cowardly.

The term that is translated as ‘superstition’ in Lucretius is religio. While this term can also correctly translate into English as ‘religion,’ Epicurus and Lucretius do not aim to blindly attack religion. Instead, they critique religion insofar as it constrains and enfetters the many. The Latin term religare means “to bind down, to fix, to obligate.” The religions of which Lucretius are so critical are the ones that bind us to painful affects, the ones that inhibit pleasure and joy and spread pain and sadness, the ones that chain us to harmful desires and false beliefs. Such is the mark of the religion of the “majority” (EM, 123–4). Such a majoritarian religion is where superstition and false beliefs fester, ulcerate, and then are released into the populace in the form of a deceptive but noxious belief system. Religion and its priests feed on the sickness it spreads to the many. They need, Deleuze writes,

… our sadness to make us slaves. The tyrant, the priest, the captors of souls need to persuade us that life is hard and a burden. The powers that need to repress us no less than to make us anxious… Those who are sick, in soul as in body, will not let go of us, the vampires, until they have transmitted to us their neurosis and their anxiety, their beloved castration, the resentment against

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283 Spinoza, Ethics, IV.P45S2.
life, filthy contagion.\textsuperscript{284}

In this way, false beliefs and illusions, Lucretius writes, are “overborne by the terrific utterances of priests” (DRN, 1.103). These priests and sponsors of superstition use fear and false belief to make us slaves to unfounded fears and empty desires; they prey on our fears and misunderstandings about the causes of things. Through the manipulation of these superstitions, the priests exacerbate these debilitating fears and false beliefs in order to make us think life is hard and painful. This is why Lucretius asks, “what groans [\textit{gemitus}] did they [the religious men] create for themselves, what wounds [\textit{volnera}] for us, what tears [\textit{lacrimas}] for generations to come!” (DRN, 5.1196-7). Spinoza’s later critiques of religion echo Lucretius’ own sentiment: “Granted, then, that the supreme mystery of despotism, its prop and sway, it to keep men in a state of deception, and with the specious title of religion to cloak the fear by which they must be held in check, so that they will fight for their servitude as if for salvation.”\textsuperscript{285} This “prop and sway” is religion’s abuse of superstition, which is how religion spreads supernatural and confused ideas about causation. In sum, religion binds its followers to false beliefs by organizing and spreading elaborate narratives of superstitious causes. Put differently, religion enacts a mystifying, rather than clarifying, etiology that covers up the atomic explanations of natural events and inserts mythological stories that make us fearful and anxious creatures.

Mythology is what results when religion turns false beliefs and simulacral illusions into the epic histories of jealous and warring gods that the priests use to fetter the many. Through mythological narratives, Lucretius claims, the most important achievements of humans – language, writing, fire, justice, law, pleasure, war, metals, etc. – as well as the great wonders of nature – the stars, the heavens, the changing seasons, lightning, hail, thunder, etc. – assumed a

\textsuperscript{284} Deleuze and Parnet, \textit{Dialogues}, 61-2.
mythic origin and etiology (DRN, 5.1241-1457, 5.1183-93; LS, 278). Again, the confusion etiological: natural vs. supernatural causation. The belief in mythic explanations is thus false because they confuse the true causes of things. The pain and sadness that result from the false beliefs that were so widespread in Greco-Roman life were, Deleuze writes, “inseparable from the myths which render them possible” (LS, 278). This is why an Epicurean symptomatology distinguishes religious myths from natural life, and the importance of this distinction is why Deleuze considers atomism to be a full-fledged naturalism. “To distinguish in men what amounts to myth and what amounts to Nature… such is the practical and speculative object of naturalism. The first philosopher is a naturalist: he speaks about nature, rather than speaking about the gods” (LS, 278). Rather than introducing new myths and religious explanations to compete with the old myths, Epicurean ethics and physics fully affirm the living power of nature and matter to account for everything we see, think, experience, feel, believe, etc. Epicurus is very explicit about what will correct these false beliefs, thereby causing natural desires and a pleasant form of life: “it is sober reasoning [logismos] that searches out the causes for every pursuit and advance and drive out the beliefs from which a very great disturbance seizes the soul” (EM, 132). Sober reasoning or logismos requires a natural and immanent, rather than supernatural and transcendent, etiology.

The Garden is the site of the affirmation of the power of nature and the elimination of the power of superstition, religion, and myth. It is the site where Epicurus initiates what Deleuze calls “the practical critique of all mystifications” (LS, 279). This practical critique involves the denunciation of superstition, the disestablishment of religion, and the critique of mythology. Overburdened with fears and gods, religious lives end up killing joy and pleasure, either outright or by degrees. In sum, superstition, religion, and mythology betray nature and life in the name of death and the supernatural. They do so by instilling and prolonging a false etiology. In contrast to
all these “opinions of the many,” Lucretius and the subsequent great tradition advocate an image of the pleasant, joyful life in the Garden (EM, 123). One of the most important ways of doing this is to remedy false beliefs about the causes of things with natural explanations. Once false beliefs in supernatural causes are eliminated and natural causation is affirmed, Epicureanism begins the cultivation of modes of life replete with true pleasure, and this is the third part of this Epicurean symptomatology.

*Therapy: modes of existence*

The symptomatology of desires and the etiology of beliefs come together in the third part of the Epicurean symptomatology: the therapy of modes of existence. This therapy aims to convert forms of life filled with empty desires and false beliefs into lives characterized by natural desires and true beliefs. This conversion occurs through the selection of encounters and relations. The goal of such a therapeutic practice is to cultivate a facilitative and pleasant style of life, and Epicurus thought that the best way to cultivate these goals was withdrawal from public life in the Agora and entrance into the Garden.

The Garden is where the three parts of this Epicurean symptomatology coincide, a coincidence that demonstrates the immanent character of both Epicurean and Deleuzian ethics. We call these kinds of ethics immanent insofar the beliefs, desires, and their living modes of expression coincide. Beliefs and desires are expressed in ways of living, and ways of living express beliefs and desires. More specifically, beliefs are false and desires are empty if they produce unpleasant and joyless lives, and lives are unpleasant and joyless if they express empty desires and false beliefs or illusions. This means that there is still a sort of hierarchy in Epicureanism, wherein certain desires, beliefs, and modes of existence are considered “higher”
than others. Still, even this hierarchy is immanently ordered. Rather than measuring one’s
distance or degree of removal from some normative universal or transcendent good, as is the case
in transcendentally ordered hierarchies, Epicureanism employs an immanent order that evaluates
beliefs, desires, and forms of life in terms of the affective experience of pleasure or pain. This
means that desires and beliefs are meaningless if they are divorced from affective forms of life.
We evaluate desires and beliefs in terms of the modes of existence and sets of affects in which
they are expressed. In sum, Epicurean symptomatology always stresses the immanent evaluation
of modes of existence and sets of affects.

We thus evaluate a mode of existence in terms of its capacity for affection, and the two
basic affects that guide such an evaluation are the affects of pleasure or pain. Determining this
capacity requires the implementation of the Epicurean symptomatology. This method leads us to
ask a number of questions. We ask, for example: Does this mode of existence have the capacity
to select necessary and natural desires, or is one slavishly attached to unnatural and unattainable
desires? Can some form of life produce joy, gratitude, and pleasure or does it lead to sadness,
complaints, and surrender? Does one contribute to a facilitative and pleasant community, or does
one create a toxic and inhibitive community fraught with guilt, shame, and fear of punishment?
The point of these questions is not to determine universal norms or general foundations for such
evaluations but to discover the specific material and social-political conditions under which
joyful, pleasurable, and novel modes of existence are made possible.

Symptomatology and the Garden

Epicureanism insists that desires and beliefs are never abstract or independent of social
formations in which certain styles of living are made possible, if not encouraged, while others
are made difficult and discouraged. Different social formations organize and assemble sets of desires, beliefs, and affects in many ways, making different forms of life possible. So, various social formations set multiple conditions for the production of individual modes of existence, or what we can call subjects. Part of the Epicurean strategy is to construct a social formation in which sets of desires and beliefs are ordered according to the typology and divisions we saw above. We call this social formation “the Garden.” The Garden encourages the cultivation of the affects of pleasure and joy, the defining marks of the Epicurean form of life.

While Epicureanism evaluates modes of existence in terms of the desires and beliefs expressed therein, the criteria for this evaluation is pleasure. This is the ultimate goal of Epicurean ethics: to eliminate pain and cultivate pleasure. Such a criteria takes the body as its model. Every form of life is evaluated in terms of its capacity to feel pleasure or pain and cause pleasure and pain in others. These corporeal evaluative criteria replace moral juridical criteria. Consider what Deleuze says of Spinoza: “Ethics overthrows the system of judgment. The opposition of values (Good-Evil) is supplanted by the qualitative differences of modes of existence.” In Spinoza, joy and sadness replace good and evil; in Epicurus, pleasure and pain replace a right and wrong or noble and base opposition. For both, there is no good or evil in nature. Nature is just a plane of relations distributed by naturally occurring singularities. It is only when we refer to particular organisms or to this or that form of life and its associated affects that we talk about good or bad. Epicurus says this explicitly, “all good and bad consist in sense experience,” that is, the experience of pleasure and pain (EM, 124). All that is painful is bad for some mode of existence; all that is pleasurable is good for that mode of existence. The sense of pleasure is the truly ethical sense of the good. The primary question of Epicurean ethics is thus: What forms of life lead to a maximum of pleasure and minimum of pain? It is a question of

286 Deleuze, Expressionism, 23.
practice. As Epicurus says, “One must practice the things that produce happiness” (*EM*, 122). The place for such practice is the Garden.

Life in the Garden nurtures forms of life characterized by pleasure and joy. For the Garden is a distinct affective community in which relations are selected that increase one’s capacities for living a pleasant and happy life. As Morel says, “The community in question is a continuous community of affects, and thus also of physical states, such that the soul is continuously strengthened in its disposition.”

The various relations structuring the community are selected insofar as they facilitate lives of pleasure and joy, rather than pain and sadness. The Garden is a plane of relations among friends, throughout which affects of pleasure are transmitted. Just as atoms enter into relations with each other so as to compose a larger aggregate, various individual bodies enter into enabling and liberating relations with each other in this affective community and so come to compose the larger body of Epicurus’ Garden. The entire Garden is then the expression of bodies that agree with each other, that is, that enter into relations that express pleasure and joy. The whole functioning of the Garden emerges out of the interaction of its individual bodies. Withdrawing from the Agora and entering the Garden is thus a way of entering into a social formation that encourages choosing those relations that increase the capacity for pleasure.

**Health, pleasure, and affirmation**

**Great health**

While Greco-Roman imperial rule produced sick and diseased forms of life, the Garden set conditions for convalescence from this sickness, that is, it tried to foster what Nietzsche would

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later call “great health.” Such a form of health is ‘great’ in that it is fully affirmative and so not constituted in opposition to negation. While affirmation certainly does not operate in terms of denial, threat, or constraint, it is equally not a sort of Candide-like naïve optimism or careless dismissal of pain and anxiety. Affirmation is also not simply a psychological perspective; it is not just thinking “yes” to oneself. It is instead a complete re-orientation and transformation of one’s corporeal and cognitive habits, beliefs, and relations so as to reach an accord with the immanent organization of the natural world. It is the full cultivation of health and pleasure in terms of the power and organization of nature. As we will now argue, affirmative health is not constituted in opposition to illness, and affirmative pleasure is not defined simply in opposition to pain. To live such a healthy mode of existence, for Epicureanism, is to live a life of pleasure, and we will now offer just such a non-oppositional account of health and pleasure. This account, we will claim, is meant to prevent the implementation of a false cure, one that does not really cure but instead contributes to the sickness itself. This non-oppositional, fully affirmative, interpretation of health and pleasure is one of the key insights of Epicurean ethics. To understand what this means, we will first distinguish three false forms of health.

First, recall Deleuze’s Nietzschean reading of the rise of Platonism from Chapter 1 and earlier in this chapter. This reading shows that the Platonic cure was not really a cure at all, but just another version of the same sickness, a sickness in the guise of a cure. While Socrates also saw himself as a sort of cultural physician, a self-proclaimed midwife to knowledge, his cure was tinged with disease. That is, while Socrates offered a seeming cure, the transcendent ideas, for testing true lovers of wisdom from false claimants, his cure only contributed to their weakened state. It left them grappling with a different kind of transcendence, one that produced empty desires and false beliefs. In our terms, the Socratic means for judging an immanent agonistic

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community made recourse to a transcendent domain. In sum, while the Socratic cure, consisting of his special brand of irony, dialectic, and *elenchus*, was supposed to cure the ills of that age, it ended up making his patients sicker. It is thus not surprising, as Nietzsche agrees, that Socrates’ last request was for Crito to give a cock to Asclepius, the Greek god of medicine and healing. The Socratic cure is not a more pleasant life but the escape from life: death is the ultimate Socratic remedy.

Second, “great health” also does not mean we are condemned to being “chronically healthy,” as many modern diets and workout regimes try to convince us. It is not a willful of denial of pain and suffering in favor of an addiction to a relentless fitness. The quality of a life is not simply the result of more and more efficient treatments of illness. Interestingly, Plato himself also criticizes this false form of health in the *Republic*. “Excessive care of the body,” Socrates says, “is pretty well the biggest obstacle of all… for it makes a person think he’s ill and be all the time concerned about his body.” Such “cures,” are not really cures at all, but merely fashionable programs governed by the same empty logic of sickness, sadness, and pain. One of the best examples of this is the cure offered by the ascetic priest as it appears in the last treatise of Nietzsche’s *Genealogy of Morality*.

Third, Deleuze and Guattari give another example of false health: hypochondria (*ATP*, 186). The hypochondriac is obsessed with health. He is so taken with the idea of a perfect state of health that his very *will to health* is a worse sickness than the one he seeks to avoid. Due to the blind obsession with an unattainable health, the hypochondriac exaggerates his symptoms. The ideal health, health as perfect essence, is based on the postulation of a prior unity or wholeness.

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290 Plato, *Republic*, 405c-408c.
291 Ibid., 407b–407c.
that has since been lost, which is why the hypochondriac is full of unnecessary and unfulfillable desires. Since such an ideal health is never attainable for any form of life, every symptom is a sign of an inner failure. Rather than a critical symptomatology, this is a paranoid practice, itself the result of striving for a goal or object that is always beyond reach. Hypochondriacs are so obsessed with hunting out any hint of sickness that they render health impossible. This focus on an ideal health beyond particular modes of existence thereby renders all of life sick. The hypochondriac’s cure for the sickness it fights is itself a false cure; the obsessive fear of sickness is itself a sickness. The hypochondriac is thus the result of a botched implementation of the Epicurean symptomatology.

In order to avoid the danger of a collapse into such hypochondria, Deleuze and Guattari advise the practice of an “art of dosages,” and one good example of this is a careful Epicurean therapy (ATP, 198). According to the Epicurean therapy, we must carefully strip away unnecessary and unnatural desires, and we must slowly dismantle the false beliefs undergirding and sustaining these desires, in order to produce lives of joy and pleasure. Epicureanism thus does not advocate such false forms of health. For the obsessive will to become healthier, a sort of “will to health,” can delude us into thinking that we have already achieved health. Such a delusion is, in itself, almost already a sickness. As Epicurus says, “we do not need the semblance of health but true health.”292 Instead, Epicureanism teaches us to bend away from faux health, empty desires, and false beliefs, and confront the nature as natural creatures ourselves. That is, we see ourselves as parts of nature, as products of the natural world. This is what we affirm.

Affirming ourselves as natural products of the natural world reveals a concept of health beyond or before a healthy-sick opposition. This is a kind of health that is not “what it is” only in juxtaposition to what it is not. Health is not simply the opposite of sickness; it is not sickness

292 Epicurus, The Vatican Sayings, 54.
turned inside out. This is why, unlike the Platonic cure or the hypochondriac obsession, Epicurean health is independent of the health-sick opposition. Health is beyond negation, as well as the negation of negation. It is an affirmation without negation; it is pure affirmation. What does it affirm? Nature. Instead, health is the affirmation of nature, within and without. Epicurean health is a mode of existence that expresses the affirmation of nature. The defining mark of a healthy Epicurean life is the cultivation of pleasure and the elimination of pain. In order to understand Epicurean health as the affirmation of nature, we thus need to understand what Epicurus means by the concept of pleasure.

Pleasure

The concept of pleasure, for Epicurus, is somewhat puzzling, and interpretations of it remain controversial. Before we address these puzzles in order to offer a full account of Epicurean pleasure, we will first consider some features of this interesting concept of pleasure. In light of these, we offer a rather Deleuzian understanding of Epicurean pleasure. The peculiar concept of pleasure that Epicurus is trying to develop is fully affirmative. Rather than the opposite of pain, Epicurean pleasure is a pure affirmation beyond the pleasure-pain or positive-negative dyad. Let us see if we can make this account convincing.

The first thing to note is that while Epicureanism does take the body as the starting point of ethics, this does not mean that it advocates a life of unrestrained sensual indulgence or decadence. “For,” Epicurus says, “it is not drinking bouts and continuous partying and enjoying boys and women, or consuming fish and the other dainties of an extravagant table, which produce the pleasant life” (EM, 132). Instead, without advocating utter abstinence, Epicurus claims that sober reasoning (logismos) produces the pleasant life (EM, 132). The importance of
such reasoning, rather than Cyrenaic opulence, shows that Epicurean hedonism requires great
discipline, a careful art of dosages. As we will soon see, sober reasoning about the truth of nature
means, in our language, thinking and learning about the atomic idea, that is, about the ways in
which nature, according to the three-part problem structure of the idea, produces the world. Such
reasoning leads to Epicurean pleasure because it initiates an act of liberation from painful affects,
false beliefs, and empty desires.

For Epicurus, there are two kinds of pleasures: kinetic and katastematic. Cicero uses
the terms voluptas movens (moving pleasure) and voluptas stans (static pleasure) for kinetic and
ekatastematic pleasure. This sounds similar to Aristotle’s distinction in his Nichomachean
Ethics between, respectively, “pleasure in movement” and “pleasure at rest.” For Aristotle,
pleasure at rest is the kind of pleasure enjoyed by a god, and Epicurus, at least on the face of it,
does seem to take up this Aristotelian distinction. It is also true that Epicurus is closer to
Aristotle than to the rival Cyrenaics on this issue. For the Cyrenaics, all pleasure is kinetic,
which means that static or katastematic pleasures are not really pleasures for them. The
Cyrenaics, Diogenes Laërtius writes, thought “the removal of pain is not pleasure, as Epicurus
claims. Nor is the absence of pleasure pain. For both pleasure and pain… consist in stimulation
whereas absence of pleasure like absence of pain is not stimulation, since painlessness is the
condition of one who is, as it were, asleep.” Epicurus, however, recognizes both kinds of
pleasure, and contends that both the mind and body can experience them. In the end, as we will

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293 While most commentators agree that Epicurus himself held this distinction, Boris Nikolsky argues that this tradition was
294 Cicero, De finibus, Bks. 1-2.
295 Aristotle, Nichomachean Ethics, 1153a14-5. Long and Sedley do not assume that Epicurus was aware of Aristotle’s
Nichomachean Ethics. See Long and Sedley, The Hellenistic Philosophers, 123.
296 Aristotle, Nichomachean Ethics, 1154b27; LM, 123
297 Diogenes Laërtius, Lives of the Philosophers, 2.89.
see, Epicurus moves beyond Aristotle, the Cyrenaics, and every other conception of pleasure in the ancient world.

While kinetic pleasures, for Epicurus, are indeed associated more with motion or change and katastematic pleasure are associated more with rest or stability, things are more complicated than they may first appear. To see why, consider the sixth principle of the basic outline of atomic physics from Chapter 2: the principle of continuous motion. According to this physical principle, there is no such thing as an atom at rest. A katastematic pleasure thus cannot be a state of absolute rest, a physical impossibility for atomism. This means that katastematic pleasure must be closer to a certain kind of motion, a sort of static motion. To be precise, it is when all the atoms constituting a body assume an accordant, composed, and harmonious movement; it is when the whole atomic composite locks into a certain pattern of motion. Plutarch describes this kind of pleasure as “light and gentle movement.” 298 This does not mean that all katastematic pleasure reduces to kinetic pleasure, but rather that the ground of the kinetic-katastematic distinction is situated in movement itself. So, the difference between the two kinds of pleasure is not really a difference between movement and rest but a difference in kinds of movement. Kinetic pleasure is characterized by more chaotic and volatile movement, and katastematic pleasure is characterized by calmer and more harmonious movement. On this reading, pain would then be very chaotic, disorganized, and unrestrained movement.

This conceptualization of kinds of pleasure and pain in terms of different kinds of movement and organization also shows us that ethics is the practice of a certain style of composition or constitution of the subject. In fact, it might be better to translate the Greek term

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298 Plutarch, *Against Colotes*, 1122e.
Katásthēma not as ‘rest’ or ‘stable’ but as ‘constitution.’\textsuperscript{299} Katastematic pleasure thus denotes a specific process of constitution of oneself. So, while Platonism or Cyrenaism teach certain styles of composing a subject, Epicureanism teaches us how to compose our bodies and souls so as to lead pleasant lives in accord with the natural movement and organization of the world. Pleasure and pain are thus indices of the ways in which one has composed oneself: pleasure expresses when our bodies and souls are composed in accord with the constant movement of nature, and pain expresses when there is no such an accord. Moreover, although desires and beliefs are not themselves corporeal, they are always in immediate relation to atomic organization and movement. A pleasant mode of existence is thus composed not only of atoms in harmonious motion, but also natural and necessary desires and true beliefs.

Pleasure, then, expresses an encounter that organizes our mental and corporeal composition in terms of the constitution of nature. Kinetic pleasure is experienced in the temporary accord of an external body with body or soul. Kinetic pleasure is not completely chaotic and violent, but simply more chaotic and more violent than katastematic pleasure. As pleasure, it has a kind of organization, it is just that such an organization cannot sustain itself beyond the pain it is juxtaposed against. This is why it is a “temporary accord.” Katastematic pleasure, in turn, is the accord of oneself with an external body as well as the accord of the body and soul with themselves, and this is why it can sustain itself beyond a supposedly opposing pain. In this way, pain expresses a great disruption of our corporeal and mental composition, a discord with the world and with oneself. In general, pleasure expresses what is congenial to the way in which we are composed, and pain expresses what is uncongenial to our style of composition. Epicurus says this explicitly: “[T]here are two feelings, pleasure and pain, which

\textsuperscript{299} Interestingly, based on a number of searches through the Perseus Project and the Thesaurus Linguae Graecae, there does not appear to be any compelling evidence of usage of this term prior to Epicurus.
occur in every animal, the one is congenial [suggenikon] to us, the other uncongenial.” Morel puts it this way: katastematic pleasure is “what stabilizes the body and preserves the soul in their constitution.” Epicureanism thus stresses that pleasure is what affirms, or is congenial to, our atomic composition, while pain is what decomposes, or is uncongenial to, our bodies and minds. As we will soon see, what affirms or is congenial to our nature is nature itself.

With all of this in mind, we now reach the key feature of the Epicurean account of pleasure. Epicurus’ division into these different kinds of pleasures is meant to do one thing: to develop a conception of pleasure that is not constituting in opposition to pain. This is why kinetic pleasures, while still important to Epicureanism, are ranked lower on the hierarchy. Kinetic pleasures are closer to the experience of being relieved from pain. Such pleasure is kinetic in that it is characterized by the movement away from pain. In terms of movement, kinetic pleasures are the calming and organizing of the moving atoms composing the body and soul. Think of, for example, slaking one’s thirst after arduous exercise or finally eating a meal after a long and tiresome voyage. It is the pleasant sense of filling, completing, reaching, or compensating. Kinetic pleasure is closer to the satisfaction of an unfulfilled desire, and so closer to what we earlier called a Platonic account of pleasure. In short, it is the sense of relief. This means that kinetic pleasure is experienced only in relation to pain. Since this sense of relief is the return to a more composed and organized movement, and not that movement itself, it is more chaotic or violent than katastematic pleasure. Katastematic pleasure, in turn, is not experienced in juxtaposition to pain and so is, we will claim, fully affirmative.

This is where the nuance of this reading of Epicurean pleasure really begins. It is true that Epicurus describes katastematic pleasure in negative terms: pleasure is the “health of the body

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300 Diogenes Laertius, 10.34.
301 Morel, Épícure, 8. Morel also notices that the Greek word katastematiche itself can also mean “constitution, condition, or composition.”
and the freedom of the soul from disturbedness” (EM, 128). On the face of it, it seems like pleasure is defined in terms of what it is not, thereby defining pleasure in terms of pain. Epicurean pleasure is, so it would seem, the lack of disturbedness or hardship, the absence of pain and sadness. Yet we should not be fooled by the grammar of these terms: “undisturbedness” (ataraxia), “lack of hardship” (aponia), etc. For while Epicurus does define katastematic pleasure in terms of not being thirsty, of not being hungry, rather than the kinetic pleasure of the movement of slaking of thirst or satisfying hunger, what he is trying to do is to completely remove the reference to the pain of thirst and hunger from his concept of pleasure. He is trying do develop a concept of pleasure in which pain, anxiety, sadness, fear, etc. are completely eliminated from the Epicurean mode of existence; he is trying to articulate a kind of pure pleasure unmixed with pain or sadness. Yes, he uses the privative alpha in a-taraxia, as in ‘non-disturbedness’ or ‘un-disturbedness,’ but this should not confuse us. It is not easy, especially given the other accounts of pleasure then popular in Ancient Greece with which Epicureanism was in constant contact, to articulate the picture of a life of katastematic pleasure, a life of freedom and tranquility. Still, Epicurus does his best to create a new, albeit problematic, concept of pleasure.

Perhaps it is best to think of Epicurus’ use of absence or the alpha privative as indicating a withdrawal, as in the withdrawal from the sick forms of life under imperial rule and the entrance into the Garden. Epicurus does not deny that there will always be pain in our lives. He simply tries to develop concepts and forms of life that are “different from,” “free of,” or “other than” painful modes of existence. This absence is thus less of a negation and more of a difference or divergence. It is not so much that the Epicurean mode of life is defined by the absence of trouble, pain, or anxiety as is that trouble, pain, and anxiety are absent from the Epicurean
mode of life. The seeming rejection indicates less the negation of pain or disturbedness and more
the shift away from the whole pleasure-pain, positive-negative, distinction altogether; it swerves
away from, rather than opposes itself to, the lack-and-fulfillment cycle of empty desires Epicurus
identified as the very sickness then spreading through the Greek people.

Beyond negativity (pain) and positivity (kinetic pleasure), there is affirmation
(katastematic pleasure). A life of katastematic pleasure is free of negation and so utterly
affirmative. Katastematic pleasure is so withdrawn from negativity and pain that it is not even on
the positive-negative spectrum, which is why it is so difficult to speak of given the philosophical
vocabulary circulated at that time. Contrary to the Cyreniaks and Plato, it is not even a middle
position between kinetic pleasure and pain.302 “Epicurus,” Torquatus says in Cicero’s De finibus,
“did not accept the existence of anything in between pleasure and pain.”303 While the Cyreniaks
and Plato argued that such pleasure is affectively neutral, Epicurus tried to develop a completely
affirmative concept of pleasure.

Speculative and practical naturalism

Natural limits and thresholds

The Epicurean symptomatology, we have argued, is a method for the convalescence of body and
soul. This chart shows us our symptomatological findings:

1. Natural and necessary desires + true beliefs + life in the Garden = katastematic pleasure
2. Natural but unnecessary desires + mixture of true and false beliefs + life in both the Garden
   and the Agora = kinetic pleasure
3. Empty and harmful desires + false beliefs + life in the Agora = pain

As we know, the first item on this chart is the true Epicurean form of life. Having natural desires,

302 For the Cyreniac position, see Diogenes Laertius, 10.136 and 11.89-90. For Plato’s position, see the Republic 583c-584a, and
the Philebus, in Complete Works, 42c-44a.
303 Cicero, De finibus, 1.30.
true beliefs, and the kind of mode of existence that flourishes in the Garden leads to real and lasting pleasure. With this in mind, we can begin to situate these findings in terms of atomism’s relation to nature and the atomic idea. To get there, we should first clarify the specific sense in which pleasure is the ultimate end of Epicureanism. Once we do this, we will next consider the main argument given for identifying pleasure as the ultimate end, rather than, virtue, the good, reason, or some other ancient telos. This is the so-called “cradle argument.”

To take pleasure as our ultimate end should not be understood in the Aristotelian sense of a natural teleology. For atomism is distinctly non-teleological: there are no true teloi in the atomic world. Yes, pleasure is a “natural end,” but as Morel observes, the Epicurean use of ‘end’ (telos) is closer to the idea of a ‘limit’ or ‘threshold’ (peras). This is what Epicurus says:

The flesh took the limits of pleasure to be unlimited, and [only] an unlimited time would have provided it. But the intellect, reasoning out of the goal and limit of the flesh and dissolving the fears of eternity, provided us with the perfect way of life and had no further need of unlimited time. But it [the intellect] did not flee pleasure, and even when circumstances caused an exit from life, it did not die as though it were lacking any aspect of the best life.

The lack of limits is the drawback of kinetic pleasure, empty desires, and false beliefs. For all share this common characteristic of limitlessness. They take no heed of what it means to cross a threshold: pleasure is kinetic if it ignores limits; desire is empty if it seeks an unattainable, perhaps transcendent, object; beliefs are false if they make claims about things that exceed or are beyond nature. Epicurean pleasure, by contrast, is true because it recognizes natural limits, because it confronts thresholds organizing nature. This is one of the key Epicurean imperatives: to orient our desires, beliefs, and forms of life in terms of the limits of the natural world. This

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304 See EH, 129; Diogenes Laertius, Lives of the Philosophers, 10.137; Sextus Empiricus, Against the Professors, 11.96 and Outlines of Pyrrhonism, 3.194-5; Cicero, De finibus, 1.30.
305 Morel, Épicure, 188-9.
306 Epicurus, Principle Doctrines, XX.
means that a good Epicurean should attempt to locate these natural limits in conjunction with the findings in physical and metaphysical sciences, and so seek to live in accord with them. Since pleasure is one of the defining limits of nature, we should use it to orient and cultivate natural desires, true beliefs, and healthy modes of existence. In this way, pleasure is an end of nature not in the sense of a final goal of an ever-directed process, but in the sense of a natural threshold in the organization of the world. Given that the natural world, according to atomism, is open-ended, the sense in which pleasure is the ultimate end means that it is less a teleological end (for teleology is one way of closing the world so as to form a totality) and more a threshold or point at which many dynamic forces happen to converge and diverge. Morel puts it this way: “pleasure is a natural telos, but it is a telos without teleology.” In the language of the atomic idea, these natural thresholds are the singular points structuring the distributions of atomic relations in the natural world: for example, the points at which oxygen, fuel, and spark find just the right ratio so that fire breaks out; the point at which the density of a cloud and the temperature and pressure of the atmosphere cross a threshold and snow falls; or the point at which the nectar that bees collect, store, and regurgitate turns into sweet honey. Composing oneself in terms of these natural thresholds is what it means to take pleasure as the ultimate end.

Since it is a natural threshold, pleasure is connatural (sumphuton), the most natural feeling, the most natural part of ourselves, and pain is counter-natural, the most unnatural feeling, the most non-natural part of ourselves. To seek pleasure is then a way of being natural, of locating those limits and thresholds in ourselves and in the world and thereby living in accord with them. Put differently, composing our bodies and souls in terms of the singularities distributed throughout nature is what it means to “become-nature.” This should remind us of how we described learning in the last chapter. Becoming-nature “means,” Deleuze writes,

307 Morel, Épicure, 189.
“composing the singular points of one’s own body with those of another shape or element” (DR, 192). Composing ourselves in conjunction with the distinctive points of nature means allowing ourselves to reach an accord with the contour of the world. We no more need proof to demonstrate the naturalness of seeking pleasure and avoiding pain, Torquatus argues, than we need proof to demonstrate the “heat of fire, the whiteness of snow, and the sweetness of honey.” Pleasure is just as much of a threshold of nature as are the boiling and freezing points thresholds of water. The proof of this lies less in the power of reason and more in the immanent organization of natural, that is, the dynamic processes emerging from the atomic idea.

Thinking of pleasure as a natural limit sheds light on an important argument given in favor of the identification of pleasure as such a non-teleological telos: the cradle argument. Cicero’s Epicurean spokesman Torquatus formulates the argument this way: “As soon as every animal is born, it seeks after pleasure and rejoices in it as the greatest good, while it rejects pain as the greatest bad and, as far as possible, avoids it; and it does this when it is not yet corrupted, on the innocent and sound judgment of nature itself.” Without reason, without argument, every child and every animal spontaneously seek pleasure and rejects pain. In the animal and the child, there is no pause to think. Even Aristotle sees pleasure as a natural when he says that pleasure is “the activity of the natural state.” Plato, too, sees such a special link between pleasure and nature. In the Timaeus, for example, he explains that bodies experience “pains when they are alienated from their natural condition and pleasures when they are once again restored to it.” This connatural impulse expresses an original link between nature and pleasure. Lucretius puts

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308 Cicero, De finibus, 1.30; emphasis added.
309 Ibid. 30; emphasis added.
310 Aristotle, Nicomachean Ethics, 1153a14.
311 Plato, Timaeus, 64c6b-65a1, in Complete Works.
312 To avoid charges of equivocation, I readily admit that Aristotle and Plato’s respective uses of ‘natural’ or ‘nature’ most likely refer to “according to one’s native constitution” rather than the natural world. In response, though, we should remember that
it this way: “Nature screams [latrare] for nothing but the removal of pain from the body and the 
mind’s enjoyment of the joyous sensation when anxiety and fear have been taken away” (DRN, 
2.17-9). Since they are uncorrupted by the empty desires and false beliefs circulated by 
superstition and mythology, Children and animals simply follow the singular points of the 
natural world, and pleasure is one of the most important limits of nature. This is the supposed 
reasoning that was given in support of the selection of pleasure as a natural end, limit, or 
singularity. We say it is merely “supposed reasoning” because, Torquatus readily admits, there is 
“no need to prove or discuss why pleasure should be pursued and pain avoided.”313 To seek 
pleasure and avoid pain are the simply movements of nature within the human and animal body.

The figures of the child and the animal are important for thinking about Epicurean ethics 
not because they act as ethical models to emulate but because they are ways of attuning us to the 
movements of nature that produce mature human subjects: they reveal lines of individuations 
that directly link between nature and ourselves. To learn how to live in accord with nature we 
look to the child and the animal not because they are ideals but because they attune us to nature 
as a dynamic, open-ended, and immanent organization of matter that produces everything, 
including ourselves. In our language, they force us to consider the divergent lines of 
individuation emerging from the atomic idea. This makes sense if we consider where the child 
and animal are located in the order of nature. They are figures leading up to and away from the 
thresholds structuring the natural and human worlds (phasis and nomos). Calling attention to the 
child is thus a way of insisting on understanding the mature organism in terms of the divergent 
and open-ended genetic processes out of which it emerged. Prior to the child, the animal is an 
even earlier stage in a series of natural lines of individuation. So, in terms of the various and

atomism contends that one’s native constitution is the result of the natural world. That is, what agrees with one’s native 
constitution is such because of nature.

313 Cicero, De finibus, 1.30; emphasis added.
divergent lines of natural production we explored in Chapter 3, the child and the animal are embryonic moments, closer to what Deleuze calls “larval subjects,” and the adult is a comparatively fixed or stratified moment in these individuating lines (DR, 78). All of them are products of natural processes.

Compare the role of the child and the animal to other figures selected by competing ancient ethical theories. Aristotle, for example, points to the mature adult male of practical wisdom as the ideal ethical figure. For him, the phronemos, Aristotle’s moral expert, requires a full life for achieving complete moral knowledge and proficiency. This shows the Peripatetic tendency to focus on the achievement of ends and on the directed movement towards completion and stratification. The end, in Aristotle, is there all along, guiding development of the organism from the beginning. Epicureanism, however, focuses less on the end and more on the divergent processes of individuation, on the genetic movements emerging from the atomic idea. This is why atomism tries to think of natural ends more as limits, thresholds, or singularities rather than fixed teloi. Atomism, that is, tries to strip natural ends of their teleological implications and rethink them as singular points. Again, unlike the Aristotelian phronemos, the animal and the child cannot be ethical models or ideals for Epicureanism because, in focusing on natural processes and thresholds, we do not find any models for proper human conduct. “Nature itself,” Morel writes, “does not provide us any model for conduct, any paradigm of happiness, any direction for guiding human action.” Instead, like nature, health remains problematic. It is not something to strive to resemble but something that must be cultivated or produced. In this sense, shifting the focus away from the mature adult and toward the child and the animal is a way of

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314 Aristotle, *Nicomachean Ethics*, 1141a26-8. What is most important for Aristotle is that animals and children are not able to make choices because they cannot deliberate. This excludes them from being ethically responsible and hence from ethics. Still, Aristotle does at least insinuate that the habits inculcated by a child have an incredibly large impact on the ethical character of the adult.

formulating the call to engage the atomic idea and the distribution of thresholds structuring the divergent lines of dynamic processes composing the natural world. In previous chapters we have addressed these theoretical elements in great detail. The new development in this chapter is to bring ethics on to the scene. The way to do this is to see that both theoretical and practical philosophy address the same object: nature.

Naturalism

On our Deleuzian inspired reading, this is what is happening in the Epicurean identification of pleasure as a natural end or threshold: both speculative philosophy and practical philosophy take nature as their shared object of study. As Deleuze puts it, “Physics is Naturalism from the speculative point of view,” and although Deleuze does not explicitly say it, we can add this: ethics is naturalism from the practical point of view (LS, 272/314). The child and the animal are larval expressions of natural lines of individuation that demonstrate the convergence of ethics and physics on the natural world. This convergence is the first thing that Deleuze notices in both versions of his article on Lucretius. “Following Epicurus,” Deleuze writes, “Lucretius was able to determine as ‘naturalism’ the speculative and practical object of philosophy. His importance in philosophy is tied to this double determination” (LS, 266). For Deleuze, what is most important about atomism to the history of philosophy is this double determination of nature.

With this claim, Deleuze challenges the standard position concerning the question of the prioritization of theory or practice in atomism. For some readers, speculative physics, or any branch of philosophy, is only important insofar as it serves practice. Theory, on this view, is then completely subordinated to practice. To an extent, this is true. For if the main task of

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317 Martha Nussbaum, for example, advocates this claim. See her Therapy of Desire, 121.
Epicureanism is to eliminate empty desires, false beliefs, and painful affects so as to produce pleasant and joyful lives, then atomic metaphysics, physics, epistemology, etc. must contribute to this task. While there is plenty of evidence for this reading, especially in Torquatus’ defense of Epicureanism in Cicero’s *De finibus*, things cannot be so simple. Yes, the ultimate end of human life is pleasure. Yet this is only the ultimate end because it is simultaneously identified as a natural threshold. The goal of human life is the result of the individuating power of nature, and the productive power of nature is understood only in terms of a full account of the atomic idea offered in physics and metaphysics. “Freedom from mental disturbance [ataraxia],” Epicurus says, “involves continuous recollection of the general and most important points [of the Epicurean system]” (*EH*, 82). What makes it possible for atomism to identify pleasure as the practical telos are the lessons of speculative philosophy. Further, it does not make much sense for Lucretius to spend so much time covering the finest of details of atomic speculative philosophy if it were simply subordinated to practice. Rather than merely an instrument for finding pleasure, theory is constitutive of the pleasant life. In atomism, ethics borrows from or rests on physics, and physics borrows from or rests on ethics. If anything is subordinated to anything, both speculative and practical philosophies are subordinated to nature. They are two variations on the same topic.

And yet, even this is not exactly correct. For speculative and practical philosophy are not separate or apart from nature. They do not stand outside of nature and make proclamations about an external object, but are instead themselves products of nature. Physics and ethics, just like rocks and trees, are all situated on the same surface: the plane of nature. Philosophy, from any point of view, is a natural product. While this does mean that every school of philosophy, whether it is Epicureanism, Platonism, Stoicism, etc., is equally a natural product, it is
Epicureanism, more than the others, which attempts to think nature as a problem. To think of nature as a problem means to think of this world as an immanently structured set of dynamic processes that make no recourse to transcendent, teleological, or providential explanations. The real world through which we have experience, about which we think, and in which we act is a diverse set of solutions to the atomic idea. The evaluation of atomism occurs not in terms of the truth or falsity of the solution but in terms of the power of the atomic idea to produce the diversity of the world of experience. The state of the atomic or Deleuzian world remains problematic, and this should not make us worry, cower in fear, or feel guilty, but to affirm it and to live joyfully, guided by the full affirmation of a life of pleasure. In sum, it is not that speculative philosophy is subordinate to practical philosophy, but rather that they are both products of and in nature, as are animals, plants, humans, and cities. For Deleuze, atomism, in both the theory and practical forms, is a thoroughgoing naturalism. Atomic naturalism, in sum, is the theory of the atomic idea.

We have now fully returned to the major concept guiding the larger story of the Deleuze-atomism encounter: the atomic idea. There are two planes composing nature: the atomic or micro-plane and the macro-plane. On the atomic plane, there are only relations of movement and direction between elements that are (relatively) undetermined, that is, between particles of matter. These multiplicities of pure matter distribute open-ended movements of individuation through which composite bodies and individuals emerge in the macroworld. Before it can be identified as a ‘tree,’ a ‘person,’ or any individualized form or quality, divergent lines of individuation must emerge from the atomic plane of nature. Nature, in this sense, is the smooth surface that is not yet formed or individuated, but is instead constantly in the process of informing and individuating; it is the set of atomic elements and relations that compose the plane
of nature. On the macro-plane, nature is the world of our human experience, the world in which we sense, think, and act. This plane and the processes that produce it are what we have been detailing over the last three chapters. Actualized atomic assemblages interact on this plane; being one of those assemblages, we sense, think, and act on this plane. One of the main advantages of using the Deleuzian theory of ideas to engage atomism is to see that these two planes are two registers of the same immanent domain: nature. They are not separate from each other, but instead are two sides of the same problematic process of composition and decomposition. Even better, the two planes are no more than variations on the same immanent domain: nature.

Looking back to the first few chapters, we saw how speculative atomism emerged from the atomic idea. In this chapter, we saw that ethics also emerged from, and advocates a return to, that same plane. In every chapter, and in all things atomic, there is an insistence that one act in accord with the atomic idea, whether it is from the point of view of theory, of practice, or from some other point of view. Whether it is from the speculative or practical perspective, nature remains a problem. In a way, atomic theory and ethics are solutions to the problem of nature. The question thus becomes, in Deleuze’s words, “How can we reach this ‘plane,’” or rather how can we construct it, and how can we draw the ‘line’ leading us there?” (ATP, 503). In atomism, everything emerges from and dissolves into the atomic plane of nature. Take any object, take these words you read right now, and read them in the letters and grammar of atomism. So, if the importance of atomism does, as Deleuze claims, lie in its thoroughgoing naturalism, and if the atomic plane of nature is structured according to the three parts of the atomic idea, then the importance of atomism to the history of philosophy is its creation of the atomic idea as an immanent, genetic ontological structure that explains the production of the world.
Deleuze’s five basic characterizations of atomism

To end this chapter and to conclude our story of the Deleuze-atomism encounter, we turn to Deleuze’s most direct statement about Lucretian atomism. This account, which appears in the very last line of his article on Lucretius, articulates what he takes to be the five basic characterizations of atomism: “Lucretius established for a long time to come the implications of naturalism: [1] the positivity of Nature; [2] Naturalism as the philosophy of affirmation; [3] pluralism linked with multiple affirmation; [4] sensualism connected with the pleasure in the diverse; and [5] the practical critique of all mystifications” (LS, 279/324). In this way, atomism, Deleuze argues, sparked a great tradition. In order to link Deleuze, the latest figure in this tradition, with Epicureanism, the earliest member of this tradition, let us take each item in Deleuze’s statement one-by-one and use them to wrap up this encounter between Deleuze and Ancient Atomism.

1) The positivity of nature. For the atomists and for Deleuze, nature is positive and productive. Such a position turns negation into an unfortunate illusion or perceptual error that results from false beliefs in transcendent objects, supernatural stories, sadness, pain, etc. Negation and lack are the tools of superstition, myth, and religion. These lead us away from the immanent structure of the world and so decrease our ability to feel pleasure in nature. Atomism, by contrast, reduces the illusion of transcendence, myth, and superstition to a natural explanation and thereby focuses on nature and nature alone in order to account for the emergence of the endless worlds and individuals populating the atomic picture. What appears to be negation is really the alteration of the movement and organization of the natural bodies composing some atomic aggregate. Naturalism, then, is the theoretical and ethical position that affirms the production of the diversity of the world out of the immanent structure of nature that we have
called the atomic idea.

Becoming-atomic teaches us how to affirm the power and structure of nature from both the speculative and the practical points of view. From the practical point of view, since pleasure is the end or limit of nature, becoming-atomic means orienting our desires, beliefs, and forms of life in terms of the thresholds of nature. From the speculative point of view, it means entering into a philosophical apprenticeship to the atomic idea. Both follow the lines of individuation emerging from the level of atomic elements, atomic relations, and the clinamen, that is, both grapple with the dynamic processes emerging out of the atomic idea, leading to plants and rocks, through the child and the animal, and eventually to Epicurean subjects. Put differently, Epicureanism encourages us to engage the material power of nature in order to immanently produce the diversity of our world. This is a call to learn from nature, to organize our bodies and souls in terms of natural limits and thresholds, to live in accord with nature in its full positivity. In a sense, to become-atomic means to become-nature. The first step towards doing this is to remove negativity from nature and affirm its positivity. As Deleuze says, atomism “deprived the negative of all its power” by affirming the “positivity of Nature” (LS, 279).

2) Naturalism as the philosophy of affirmation. How does atomism remove negativity from nature? For Deleuze, atomism does not negate nature, but digs below it, so to speak, deeper into nature, down to the plane of the atomic idea. For nature is the material organization that produces everything, including the illusions of negation, transcendence, superstition, mythic gods, etc. Atomism does not engage in a battle of negation and myth, but instead affirms nature in its full, positive power to produce truth, error, pleasure, pain, etc. Yes, atomism makes some seemingly negative formulations that are central to its position, e.g., “death is nothing to us,” “undisturbedness,” “absence of pain,” etc. Yet we have identified these as unavoidable linguistic
and cultural limitations. These seemingly negative formulations, we have argued, are not so much negations as they are divergences or differences. They do not really indicate a negation of pain or disturbedness but more the shift away from the whole pleasure-pain, positive-negative, set of distinction altogether. In this sense, *ataraxia*, for example, expresses a swerve away from, rather than the opposition to, the painful and debilitating lack and fulfillment of the Greek people. The famous dictum, “death is nothing to us,” is not really a negation of death but a way of affirming natural life. Since negativity has been stripped of its power, death is nothing in the sense that it is beyond the world. Atomism, as a philosophy of nature, encourages us to affirm the power of natural life itself. This affirmation of nature should, for Epicurus, lead us to affirm nature and find pleasure and joy in it. Atomism attempts to construct modes of existence that shift away from negativity and thereby lead to natural and necessary desires, true beliefs, and lasting pleasure. Rather than negate, atomism teaches us to swerve away from pain and sadness, and so cultivate lives full of pleasure and joy in accord with the natural world. Such cultivation is fully affirmative.

3) *Pluralism linked with multiple affirmation.* Deleuze holds that atomism not only affirms the power of nature to produce the infinite diversity of the macroworld, but that it also affirms the microworld as itself diverse. This means that the natural diversity of our world, and every world for that matter, is not circumscribed as a whole or totality. Instead, “the diverse can only be an infinite sum, that is, a sum that does not totalize its own elements” (*LS*, 267/308.) The dynamic processes leading from the atomic plane to the plane of experience and back are open-ended and multiple. This means that there is no complete combination that encompasses or collects all of nature at once, including the theory of atomism. Instead, nature is affirmed as a problematic distribution of difference and diversity. The difference between a distributive
diversity and a totalizing whole is the way in which the diverse elements are related. As we said in Chapter 2, atomic elements are related conjunctively, that is, through atomic relations. Insofar as atomism initiates the first acts of philosophical pluralism, thinking atomically involves “thinking with AND, instead of thinking IS.” What is affirmed is not this or that atom, nor the totality of all atoms, but the determinate relations among atoms that structure the plane of the atomic idea. Further, this affirmation of diversity or plurality is also multiple. An affirmation includes the organization of multiple, desires, beliefs, movements, bodies, etc. So, the affirmation of diversity and multiplicity is itself diverse and multiple. Linking pluralism to multiple affirmation is what it means to think nature in the form of a problem.

4) Sensualism connected with pleasure in the diverse. Not only is the diversity of nature linked to multiple affirmation, but for Deleuze, this diversity itself gives rise to pleasure. This is a fundamental reconfiguration of a mode of existence such that we do not feel pain or sadness in our inability to enclose nature in a totality. This is another reason why atomism considers nature in the form of a problem. To think nature in the form of a problem also means to eliminate recourse to any transcendent domain of perfect objects that is supposed to account for the production of the imperfect objects in the natural world. Engaging nature as itself a problem affirms the endless production, creation, or becoming of our world and its solutions in the very process of their becoming in nature. Thinking of nature as problem, then, should not make us worry, cower in fear, nor feel guilty, but instead affirm it so that we lead lives of pleasure. This is perhaps the defining movement for the process of becoming-nature from an ethical point of view: the divergent movement away from or beyond pain, loss, and negative passions so that it becomes possible to compose ourselves in terms of natural and necessary desires, true beliefs, and forms of life that express joy and pleasure. The Epicurean way to do this is to affirm the

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318 Deleuze and Parnet, Dialogues, 57.
diversity of the natural world from the bottom to the top, across the dynamic processes structuring nature. This does not mean Epicureanism advocates just any kind of sensualism or experience of pleasure. As we know, Epicureanism urges us to orient our lives in terms of one kind of pleasure: katastematic pleasure. Forms of life that express katastematic pleasures affirm the diversity of the world by engaging with the natural limits and thresholds distributed through immanent and genetic natural processes. Attuning ourselves to these thresholds leads allows us to compose our bodies and souls so that we live in accord with diversity of nature.

5) The practical critique of all mystifications. Deleuze also argues that Lucretian physics and ethics inaugurates the “enterprise of “demystification”’ (LS, 279). One of the problems with the type of supernatural and transcendent explanations offered by religion, myth, and superstition is the depiction of nature as an incomplete and imperfect mere copy, lack, or failure. Nature, for such a position, distorts truth because it is constantly in materially flux. When truth is located beyond the material world, nature is always already false, which is one reason why, Epicurus argues, sadness, pain, and anxiety ruled the Greco-Roman soul. Atomic naturalism, however, is the multiple affirmation of nature and the elimination of superstition, religion, and myth. The Epicurean Garden is where we extinguish the force of false beliefs and thereby cultivate the power of true beliefs to produce lives of true pleasure. The Garden is the site where Epicurus initiates what Deleuze calls “the practical critique of all mystifications” (LS, 279). Through such a practical critique, atomism sparks the great tradition Deleuze identifies. All the members of this tradition critique negativity, denounce superstition, undermine religion, and attack mythology. For atomic naturalism, to live filled with fear and anxiety caused by the false beliefs of superstition and mysticism is to abuse life. Overburdened with the fear of transcendent power, religious lives and their mythological etiology kill joy and pleasure and so betray nature and life.
in the name of death and the supernatural. In contrast to superstition, religion, mythology, and all these “opinions of the many,” Lucretius and the subsequent great tradition remedies a false etiology with true belief in natural explanations. Once false beliefs in supernatural causes are extinguished and natural and immanent causation is affirmed, Epicureanism initiates the cultivation of modes of life replete with affirmative pleasure.

Return to the Garden

Let us return to the Garden of Epicurus just outside of Athens. This time rather than imagining we are back in the ancient world, we should approach it from the perspective of twentieth century French philosophy. Today, the old Garden is gone, its plants and walls long ago crumbled and disappeared. Despite the best efforts of classicists and archaeologists, there does not seem to be any physical evidence of what actually happened in that place of philosophical and ethical convalescence. There is barely a trace of Epicureanism left, and what do remain are loosely connected anecdotes, collected maxims, letters to Epicurus’ friends, and various forms of doxography. The most substantial source we have, Lucretius’ *De rerum natura*, was written more than 200 years after Epicurus’ death and, what is worse, is wracked by lacunae. It only survived its tortuous history thanks to unexpected discovery by a fifteenth century Italian book hunter.

Despite the lack of physical evidence, philosophical and ethical atomism remains relevant. Even today, Epicureanism offers important methods, arguments, and lessons for composing healthy lives of pleasure and joy. While many of the details of atomic physics have been rejected by contemporary science (the clinamen, the simulacrum, etc.), the attempt to think of nature as an immanent and genetic domain composed in terms of the three-part problem-
structure of the atomic idea is still a powerful theoretical way to engage the world. Similarly, while Epicurean ethics might not achieve all of the tasks it set for itself (a fully affirmative concept of pleasure, the elimination of false beliefs and empty desires, etc.), it is still an important method for composing our lives so that we are free of pain, fear, superstition, and anxiety and instead express pleasure, freedom, affirmation, and peace. Speculative and practical atomism remain important to philosophy today because, as Deleuze claims, they both engage the same object as a problem: nature.

Perhaps the best way to call this account of Epicurean and Deleuzian ethics to a close is to turn to the famous Epicurean tetrapharmakon:

Don’t fear god,  
Don’t worry about death;  
What is good is easy to get, and  
What is terrible is easy to endure.

It is tempting to dismiss this as simply naïve. To claim that it is easy to get the “good” and easy to endure the “bad” seems almost willfully ignorant. Yet what such a reading overlooks is the underlying atomic naturalism of the four-part cure. Each part of the tetrtapharmakon should be linked directly to the sole object of Epicurean speculative and practical philosophy. We should not fear the gods because they have nothing to do with the power of nature to produce the natural world. We should not worry about death because it has nothing to do with our lives. What is good is easy to get because nature is organized so that individuals emerge in milieus that sustain them. What is terrible is easy to endure because of the lessons of the Epicurean symptomatology can lead us to live in accord with what is necessary in terms of the immanent organization of nature.

Although the Garden of Epicurus is gone, the Epicurean mode of existence that the Garden cultivated is still possible today. Even without the Garden, it is still possible to denounce
superstition, mythology, and religion and the false etiologies on which they operate. It is still possible to use the Epicurean symptomatology to diagnose empty desires and false beliefs. It is still possible to affirm the power of nature to produce everything we see, feel, and think. It is still possible to discover the immanent structures and dynamic processes of nature.
Conclusion: The encounter

The central claim of this dissertation is that ancient atomism produced, in an important sense, major portions of Deleuze’s thinking and writing. We have now given an account of the details of the Deleuze-atomism encounter. We first saw how we could use the Deleuzian theory of ideas to understand atomism as more than just a stubborn insistence on an austere materialist philosophy. Understood as a theory of the atomic idea, we saw that it is, instead, a sophisticated account of the immanent production of the diversity of the nature without any recourse to transcendent forms or principles. Out of the elements, relations, and singular points that structured the atomic realm, the unlimited diversity of forms, qualities, and extensities emerged. In this way, the atomic idea accounted for the individuations or actualizations of the world. One particular individuation that we focused on was the sensing, thinking, and acting Epicurean subject. Since atomism aimed to develop a completely immanent materialist philosophical theory, it had to account for the production of creatures that articulate atomic theory. The same holds for Deleuze. In different places, we saw how many of the features of the account of the atomic idea and the production of the world resonate in Deleuze’s positions. While there are clear parallels and similarities among their various accounts, we have done more than identify a weak analogical relationship between Lucretius and Deleuze. Our claim is that ancient atomic theory led to the formulation of many of the defining features of Deleuze’s early thought. Each chapter of this dissertation has shown how atomism resonates in Deleuze’s metaphysics, epistemology, and ethics. Beneath these shared theoretical similarities, we have argued, there is a productive encounter. What do we mean in saying that atomism produced portions of Deleuzianism? Consider the term we have used to characterize this relationship: an ‘encounter’.
What is an encounter for Deleuze and why is it so important to this story of his engagement with atomism?

In *Difference and Repetition*, Deleuze uses ‘encounter’ to describe the transformative force of unrecognizable experiences (*DR*, 139). While encounters cannot be contained within a representation, they do provoke fundamental changes. What is encountered may be a philosopher (such as Socrates or Lucretius), a work of art (such as a Bacon triptych or a Bresson film), a poem or novel (such as those of Whitman or Proust), etc. Whoever or whatever is encountered, Deleuze claims not to write “about” or “on” some figure, film, novel, etc. To encounter someone or something does not mean we stand outside or in front of the object of the encounter and then merely reflect on that object. Instead, there is a sort of chance meeting that draws us in and changes us as we are. For Deleuze, this means that this meeting sparks the creation of new concepts, the experience of unfamiliar affects, or the production of different practices of living. To account for the encounter is to grasp those productive moments when, while reading a text or watching a film, the initial rumblings of a new thought or sensation begin.

In the late interviews with Claire Parnet, Deleuze described one such encounter from his adolescence.\(^{319}\) During the World War II, Deleuze was sent to a small seaside town in Normandy called Deauville (where his family spent summers) in order to protect him from the Germans. Out there on the northwestern coast of France, Deleuze was without his parents and younger brother. He was not doing well in his studies and the only thing that interested him was a silly stamp collection. Then something happened that awoke him and, in his words, “he stopped being an idiot.”\(^{320}\) When such a change happens, Deleuze claims, it is always occurs through an encounter with someone or something in particular, and this particular someone was a young

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\(^{319}\) Deleuze and Parnet, *L’abécédaire*, “E pour Enfance.”

\(^{320}\) Deleuze and Parnet, *L’abécédaire*, “E pour Enfance.”
teacher named Pierre Halwachs. Deleuze soberly recalls Halwachs appearance: he was a very thin, tall man with only one eye (Deleuze called him a ‘Cyclops’) and hair that curled like a goat’s. Despite this odd appearance and despite not even remembering exactly what year it was, Deleuze recalls his encounter with this odd man as a sort of revelation: an experience that simply overwhelmed his world and opened up unknown territories. Despite the warnings of suspicious adults, Halwachs and Deleuze quickly became quite close. They would take walks along the beach. They would often stop to read Baudelaire, Anatole France, or André Gide. Halwachs would scream the words off of the page and out to the waves crashing into the nearby rocks. The young Deleuze was often worried that someone else might stumble upon such a strange scene. This encounter provoked a complete transformation in Deleuze, and a new passion and desire to experience such invigorating moments was born. The force of the encounter was not so much in any particular truth or statement that Halwachs shared with the boy, but in the world and the mode of existence corresponding to the world that Halwachs revealed to him. Due to the transformative force of this childhood encounter, Deleuze began a lifelong philosophical apprenticeship and the rest of Deleuze’s life became a series of encounters with those figures that brought about provocative transformations.

While Deleuze’s encounter with the one-eyed teacher sparked his philosophical apprenticeship, his encounter with Lucretius was one of the first figures of that lifelong philosophical path. The first version of Deleuze’s article on Lucretius was published in 1961, which implies that he had been working on atomism, to some extent, prior to the 1960s. This early encounter was quite formative and it sparked a way of thinking of nature and matter from both the theoretical and the practical perspectives that resonated throughout almost all of his own writings and teachings. Since Deleuze did not write much explicitly on ancient atomism, it is
difficult to know the exact details of this encounter, but we have used Deleuze’s theory of immanent ideas to chart the unexplored domain of the Deleuze-atomism encounter.

We will conclude the story of the encounter with one final observation about why we selected Deleuze’s theory of immanent ideas. Consider Deleuze’s use of a concept with which we are now familiar: the simulacrum. Throughout his career, Deleuze constantly changed his vocabulary. The way in which he used a term or concept in one text might greatly differ from his use of that same term or concept in a different text. Despite this constant transformation, a number of features of Deleuzian theory remained relatively stable. Take, for example, the disappearance of the concept of the simulacrum from his philosophical vocabulary. He said this explicitly in 1993: “It seems to me that I have completely abandoned the notion of the simulacrum.”321 Before 1968, the concept of the simulacrum appeared throughout Difference and Repetition, Logic of Sense, Empiricism and Subjectivity, and other major and minor writings. After 1968, though, the term basically disappeared. Although Deleuze seemingly abandoned the language of simulacra, the force of the concept of the simulacra is a very accurate way to characterize his early philosophical project. If his early, single-authored work shaped his later thought, then his early encounters also structured everything after 1968. While Deleuze explicitly admits dropping the concept of the simulacrum from his vocabulary, he does not overtly mention the disappearance of the theory of ideas. Our claim is that the two are concepts are intimately linked. If we look at the trajectory of Deleuze’s ever-changing vocabulary and focus especially on those moments when terms and concepts are either dropped or introduced, we see that the language of simulacra and ideas disappeared from his texts at almost the exact same time. Why did this change occur?

The main reason is Deleuze’s early fascination with Nietzsche’s formulation of an Inverted Platonism. At least during those early years, this is a main form in which Deleuze construed his philosophical project. To accomplish this ‘inversion of Platonism’, Deleuze took what he took to be the most central idea to Platonism, what we have called Plato’s theory of transcendent ideas, and showed how it is possible to strip it of its transcendent character and yet maintain a theory of ontological structures that explain the production of the natural world. Rather than seeing material composites as imperfect copies that strive to imitate the ideal forms, Deleuze showed how it is possible to see the individuals of our world as actualizations of immanent and real (although virtual) differentially structured ontological fields. In order to stress the link to Platonism, Deleuze called these fields ‘ideas.’ Severed from a Platonic form, bodies are rendered simulacral. Following this line of argument, Deleuze developed a fully immanent and genetic materialist philosophy that appropriated Platonism in its inverted form. In this way, Deleuze made the idea into a problem, and concept of the simulacra emerged as a solution in that problematic context. In those early days, Deleuze accomplished this by selecting Plato as his interlocutor. Eventually, Deleuze chose other interlocutors and the language of ideas and simulacra disappeared. What remained, however, was a theory of the production of the world out of immanent, genetic ontological fields of genetic relations and singularities. We can call this an idea, a multiplicity, a plane of immanence, a body without organs, a machinic phylum, etc. Whatever name is used, this metaphysical plane retains the form of a problem. So despite a constantly changing vocabulary, Deleuze always insisted on the problem. This problem, we have argued, is the defining mark of ancient atomism. In Deleuze’s consistent insistence on the problematic form, we see that ancient atomism produced major portions of his philosophy.


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