Democritus' Materialism of Touch

The Eleatic philosophy, with Parmenides at its head, consistently posited the One as the common denominator of the multiplicity of beings — *ἕν καὶ πᾶν* — presupposing that Being is one and indivisible, and that, unlike non-being, it cannot not be. Atomism, on the other hand, possesses neither the principle of the One nor a single principle, but rather a *schism* of Being itself — its split and doubling into non-being. For Democritus, in fact, established as the principle of Being both the "full" and the "void," that is, "being" and "non-being" simultaneously. Aristotle describes this beautifully in his *Metaphysics*:

Leucippus and his associate Democritus assert that the elements (*στοιχεῖα*) are the full (*τὸ πλῆρες*) and the void (*τὸ κενόν*), reckoning one as being, the other as non-being; for of the two, the full and solid are being, the void and rare are non-being (thus they say that being no more is than non-being, since the void exists just as much as the body does). For these are the causes of beings as matter.(*Metaphysics* A 985b 3–10)

The being of the "full" is further divisible into the smallest existent particles, which are themselves indivisible — *ἄτομος*— and move through the void of non-being, the "empty," which, crucially, is just as existent as the "full." In short, the non-being of the void is paradoxically granted the status of Being.

  Democritus, through his theory of atoms and the void — a genuine attempt to think Being and non-being on the level of ancient atomism — is regarded as a forerunner of modern materialism, as it later emerges in French philosophy with Descartes, is completed in German classical philosophy from Hegel to Marx, and subsequently reappears on the French scene during the heroic age of structuralism. It was then that Althusser, with his "materialism of the encounter," returned not only to "Father Marx" but also to the "proto-father Democritus," along with several others — from Deleuze, who in his *Logic of Sense* touched upon the "declination of atoms," all the way to Lacan, who explicitly declared himself a "materialist" in the always striking *L'Étourdit*. There, he addresses Democritus's definition of the atom as *den* — one of the greatest enigmas of ancient atomism:

Democritus, in fact, gives us the *atomos*, the radically real, from which he excludes the 'not' [*pas*, *mê*], yet in its subjunctive mode — the mode appropriate to demand. *Den* was thus in truth the stowaway [*clandestin*], and its cry [*clam*] is now our destiny [*destin*]. In this, one is no more materialist than anyone endowed with some sense — say, myself or Marx. (Lacan, 2001: 494)

  Before proceeding to the matter itself, however, it must be clarified from the outset that labeling ancient authors as "materialists" involves a considerable anachronism. While it is true that ancient atomism is often regarded as part of the materialist tradition — "materialism is as old as philosophy itself," writes Lange in his *History of Materialism* (1866) — materialism in the strict sense designates a very specific historical period that begins only with Descartes. The Cartesian epistemic break, whereby the intangible *res cogitans* ("thinking substance") is separated from the tangible *res extensa*("extended substance"), affirms the autonomy of the thinking subject (Descartes, 2004), yet simultaneously opens a chasm between "mind" and "body" from which all subsequent misunderstandings of "Cartesian dualism" derive.

  Spinoza approached this problem by inverting the relation between subject and substance, such that the subject becomes a *modus existendi* of substance. With his *deus sive natura*, he thereby as much "naturalized God" as he "divinized nature" (Spinoza, 2004), thus contributing to the later (mis)designation of materialism as "pantheism" — the "identity of God and nature." Soon after, another (equally mistaken) label was added: "atheism," particularly in connection with French philosophers such as La Mettrie, who in *L'homme-machine* reduced the entire existence of man, including his mental life, to the material plane of nature's mechanical functioning (La Mettrie, 1981) — though he would later retract this view in *L'homme plus que machine* (La Mettrie, 2004).

It appears that at the very core of modern materialism lies a certain misunderstanding of "matter," which, especially in vulgar-materialist interpretations, is identified with body and substance — hence all the aforementioned confusions. Yet if one were to seek the source of one of the most enduring philosophical misconceptions — namely, that "matter" possesses the status of "substance" — one must turn to Aristotle's understanding of Democritus: that is, to his interpretation of several key concepts from which we may extrapolate an at times implicit, at times entirely explicit *materialism of touch*.

Atoms and the Void : the Material of Touch

It seems that the original interpretive sin was committed by Aristotle himself, who in one and the same gesture subsumed the doctrines of both Leucippus and Democritus, beginning with his treatise *On Democritus*, as preserved by Simplicius (68 A 37 DK): "Democritus believes that the nature of eternal realities consists of small entities (*substances*, *mikrai ousiai*)," which are "infinite in number," and that they "exist in another space, which is itself infinite in extent"; for space he uses terms such as "void," "nothing," "the unlimited," while the individual "entities he calls 'something,' 'solid,' 'being.'" In a second step, Aristotle attributes to the atoms properties that are entirely products of his own *Metaphysics* (Z 13, 1039a9): "They possess every kind of shape, every kind of figure, and differences in size," and from these "indivisible magnitudes" Democritus "makes arise and combine masses that are visible to the eye and perceptible by the senses," that is, tangible. In the third step, corporeality is retroactively imposed upon the atoms themselves, when Aristotle further claims that "the cause of these entities remaining together for a time lies in the interlacing and adhesion of bodies (*tas epallagas kai tas antilepseis tōn sōmatōn*)." Thus, through Aristotelian categories of size and form (*being = magnitude = body*), the "corporeal atom" is ultimately joined to matter in the "materialist" sense of the word.

It was not Marx, as one might expect, but Hegel (!) who first opposed this mistaken modern identification of ancient atoms with corporeal particles. In the first book of the *Science of Logic*, devoted to Being, near the end of the section on Quality, Hegel added a note in which he called the "materialist" understanding of ancient atomism an *abstraction* (in the characteristically Hegelian sense of the term):

In this form the One constitutes that stage of the category which among the ancients appeared as the atomistic principle, according to which the essence of things is the atom and the void (*to atomon* or *ta atoma kai to kenon*). The abstraction condensed into this form acquired greater determinacy than Parmenides' Being and Heraclitus' Becoming. However high this abstraction may rise when it makes this simple determinacy of the One and the Void the principle of all things — when it reduces the infinite manifoldness of the world back to this simple opposition and presumes to know on that basis — it still remains easy for representational reflection to picture here atoms and beside them the void. (Hegel 2001: 161–162)

Against such misunderstanding, Hegel in his *History of Philosophy* defined ancient atomism as "idealism in a higher sense" (Hegel 1971: 359) — not as materialism, as one might expect — and thus regarded the atoms as concepts to be grasped intellectually rather than materially: "The atom can be taken as something material, yet it is un-sensuous, entirely intellectual; Leucippus's atoms are not *molecules*, that is, physical particles." (Hegel 1971: 358). Consequently, the void in which these "non-sensuous" atoms move cannot be equated with empty space in the Aristotelian sense: "Atoms and void are simple concepts. We cannot see or find in them anything other than the formal aspect which posits, in general, the most simple universal principles — the opposition of the One and continuity." (Hegel 1971: 362). The atoms from which composite bodies are formed only *appear* to be "the smallest bodies," while "representational reflection easily imagines atoms and, beside them, the void"; in truth, however, these are *concepts* through which ancient pre-Socratic

atomism sought to grasp the principles of the world.

If one were surprised that Hegel here diverts the atomic current into his own idealist mill, one might summon in his defense Democritus himself — more precisely, the title of one of his treatises, *On Ideas* (*Peri ideōn*), about which Plutarch explicitly writes (*Adv. Col.* 8): "What, indeed, does Democritus say? That beings, infinite in number, indivisible, without differences, without qualities, and impassive, are scattered and move through the void," and that "these indivisibles, which he calls *ideas* (*atómous idéas*)." One can hardly help but scratch one's head when reading that Democritus, the supposed "proto-father of materialism," turns out to be, in a sense, a "Platonist": for in this conception, the atom is not a "smallest body," but an (intangible) *idea* that gives rise to (tangible) bodies.

Democritus's "idea of the atom" largely slipped through unnoticed, as Wismann observes, because it did not fit the established materialist interpretations: "Since they did not know how to fit it into the Aristotelian equation *atomoi ousiai = atoma megethei = atoma sōmata*, most preferred to see in it the equivalent of *shape* (*schēma*), belonging to every body that has size." (Wismann 2012: 81–82). Certain ancient authors, of course, allow such a reading, yet the heart of the matter lies in three Democritean terms that define the "idea of the atom," later reinterpreted and translated by the Aristotelian tradition. Simplicius, citing Aristotle's pupil Theophrastus, attests that Leucippus and Democritus "assume that the indivisibles are the matter of beings, while deriving other properties from their differences," of which there are three: *rhismós* (configuration or motion), *tropē* (turning or inclination), and *diathigē* (contact or touch). The commentator then translates these in Aristotelian fashion as "shape, position, and arrangement" (*Phys.* 28, 15). Aristotle himself, in *Physics* (A 5. 188a22), as taken up by Theophrastus and Simplicius, writes that "Democritus speaks of the solid (the full) and the void, claiming that the full is being and the void non-being; further, he distinguishes the elements by position, shape, and arrangement."

To grasp the logic of Aristotle's procedure, we may turn to *On Generation and Corruption*, where we again encounter a dialectic of *touch*, akin to that found earlier in Plato's *Parmenides*, arising from the problem of "the divisibility of body and magnitude" (A 2. 316a13): "It might seem," Aristotle writes, "that Democritus was convinced by his own natural explanations. What we say will become clearer later. For if one assumes that a body and magnitude are entirely divisible, and that such division is possible, one is driven into an aporia." To summarize and simplify a lengthy argument: Aristotle asks what remains when we divide a body. His answer: either magnitude or a point. "If the body as a whole is such, let it be divided. What, then, remains? Magnitude? That is impossible, since something undivided would remain; but if nothing of body or magnitude remains and division still occurs, then the body must either consist of points — parts without magnitude — or of nothing at all." The conclusion is radical (for Aristotle): "If, then, it has arisen from nothing, and is composed from this, the whole will be nothing other than an illusion." Nor does the other option — that the body is composed of points — fare better: "For if points touched, and that were a single magnitude, even when all were together, they would not make the whole any larger […]. Thus, though all points were joined, they would not form any magnitude."

In short, no qualitative leap can arise from quantity alone if only points count; and conversely, if we "subtract body from magnitude" (and thus attempt to think pure space), we arrive at the same impasse, only articulated differently: "In what way, then, is magnitude divisible? If it has not lost body, but only a form or state separable from matter, and if magnitude consists of points and contacts which are affected by it, it is absurd that magnitude should arise from what is non-magnitude." What, then, remains of magnitude once corporeality is removed? Only points and the contacts between them — which, however, have no *substrate*, literally no "place to be": "Further, where will the points be — at rest or in motion? Any two things always have but a single contact, for apart from contact, division, and point, there is something else." Touch, therefore, is that precarious point around which the entire paradox of the relation between (abstract) magnitude and (concrete) body revolves — and Aristotle's argument can in fact be inverted to say that *touch* is precisely what distinguishes the tangible reality of body from the intangible quality of magnitude.

That touch introduces the differential trait between the tangible and the intangible — between "body" and "magnitude," or, in Aristotelian translation of Democritean language, between "atoms" understood as constitutive of the magnitude of the "void" — is a point to which we will return repeatedly. For now, however, let us see what happens if we hold to Democritus's original diction and do not translate it into Aristotelian categories. The translation of meaning from Democritus's original terms has long-term consequences for the entire materialist understanding of ancient atomism, as Wismann repeatedly emphasizes: by replacing the three differentiating features of the "idea of the atom" with Aristotelian categories — in *Metaphysics* (A 4, 985b4), "shape" (*schēma*) appears instead of *rhismós*, "position" (*thesis*) instead of *tropē*, and "arrangement" (*taxis*) instead of *diathigē* — the entire "idea of the atom" is shifted into the "rigid framework of geometric representation" (Wismann 2012: 83–84). One of the most problematic consequences of this "geometric representation" of the atom, as we have seen, is its spatialization and consequent contamination with corporeality, effected, as shown above, through the (mutual) *touch* of atoms. In short, even if Aristotle eliminates Democritus's diction, the moment of touch nevertheless persists, returning again and again as an irreducible "return of the repressed."

To adhere to Democritus's diction is certainly more difficult than to adopt Aristotle's, which is, after all, well established and almost "naturalized." Yet let us attempt it nonetheless: *rhismós* first of all means "motion" (as in "the motion of water," in the sense of "undulation"; later also "mood," and more broadly, the "ups and downs" of life), and in the present context designates the "motion of atoms," their capacity to "ripple" (anticipating?). *Tropē*, further, means "turning" or "return" (for instance, the "turn" or "return" of the sun in its course — a "revolution" in the astronomical sense), and here designates the capacity of atoms to "return" cyclically to the same place, albeit always in new configurations of generation and decay of the matter they affect ("eternal return of atoms"?). *Diathigē*, finally, expresses the act of "touching, coming into contact with something by traversing it," thereby marking precisely that key property of atoms: their ability to enter into *contact* with one another, in which a "qualitative leap" occurs from their intangible dimension to the palpable corporeality of matter.

This is also the point at which we may introduce something we have thus far postponed: the analogy between atoms and letters, to which Aristotle alludes in *On Generation and Corruption*, citing Democritus's claim that "tragedy and comedy arise from the same letters" (A 2, 315a26). It seems that from here stems the famous comparison with letters in the above-quoted passage of Aristotle's *Metaphysics*, where the "translation" of Democritus's terms occurs: "A differs from N by shape, AN from NA by arrangement, and Z from N — or I from H — by position" (A 4, 985b4). Moreover, Wismann himself relies on this analogy when interpreting the three Democritean definitions of the "idea of contact." He notes that the most interesting usage of rismós can be found in Herodotus (V, 58), where the term "refers to the flow of writing." This, he says, "allows us to infer the natural analogy that exists between atoms and the letters of the alphabet." He then links this to diathigé, in which "it is not difficult to recognize the constitutive moment of the formation of letters through writing" (in the sense of the contact between the stylus and the surface on which the letters are inscribed), and also to tropé, insofar as "to form the distinctive contour of a letter, the line must 'turn' at least once" (in the sense of the bends that shape the differentiating strokes of letters). "Tropé thus produces diathigé, and their connection constitutes rismós. The process allows for both variation and iteration of figures, thereby perfectly corresponding to the symbolic description of the infinite character of atoms." (Wismann, 2012: 84–85) In short, the process through which matter comes into being by *"mutual intertwining"* is precisely the same as the process through which writing itself is generated.

The analogy between atoms and letters—and the specific problem of language—is a massive topic i cannot dwell upon, and therefore, let's inssist on that crucial *touch* through which intangible atoms are "transubstantiated" into the tangible world of perception.

Clash of Atoms : Interlacing of Touch

We have seen that the crucial moment is precisely the point at which atoms pass into material corporeality—where the problem of touch arises in the form of the question concerning the *status of the collision of atoms*, and where, once again, the original Greek diction proves essential for describing this process.

If we turn once more first to Leucippus, we find in the continuation of the passage that introduces the universe as "void and full bodies," the following statement in Diogenes Laertius (IX 30): "Worlds come into being when bodies (*somata*) fall into the void (*kenon*) and interweave with one another (*periplekomenon*)." If we set aside the conventional (and mistaken) identification of atoms with bodies and focus solely on their activity of *mutual intertwining*, we can first note the haptic quality of the verb *peripléko*, which means "to wrap (oneself) around" something, but also "to clasp" or even "to embrace," so that the sentence could easily be translated as "mutual embracing."

The passage then continues with a more detailed description of this process of such "mutual embracing": "Worlds come into being in this way: many bodies of diverse shapes, separating off from the infinite (*ek tēs apeirou*), move into the great void (*mega kenon*) and, having gathered together, form a single vortex, in which they collide, whirl about in every direction, and thereby separate out the similar from the similar." Then a part of the bodies moves off into the "outer void, as if strained (through a sieve)," while the rest "remain together (*simmenein*)" in such a way that "by interweaving, they flow together (*periplekomena sugkatatrechein*) and form the original spherical aggregate."

Here the notion of "interweaving" or "embracing" reappears, but this time as an adjective modifying the verb *sugkatatrechein*—an exceptionally interesting verb not found in the lexicon, for it is a compound made up of two prefixes, *sug-* and *kata-*, and the verb *trechein*, "to run." The translation should therefore more properly read something like: "the atoms run into an embrace."

The spherical aggregate that arises from the mutual embracing of atoms then "casts off a kind of skin (*himena*), which encloses within itself bodies of every sort"; and as, due to the "repulsion from the center, these (bodies) begin to whirl, the skin that surrounds them grows thinner," for "through contact with the vortex, the neighboring (bodies) constantly flow together." And thus—since "the bodies that moved toward the center remained together (*simmenonton*)"—the Earth came into being.

We can observe that the location of this crucial contact, following the "atomic embrace," has somewhat shifted: it now lies between the already formed bodies and the "vortex" that seemingly sets them in motion. What remains as a residue of this operation is this curious entity—the "skin" (*himena*)—which "continues to increase through the discharge and inflow of external bodies"; and since it too moves within the vortex, it "acquires (*epiktasthai*) everything it touches (*epipsausi*)." We can thus see that, in the moment of discrete contact—that "atomic embrace" in which (metaphorically) the body condenses—the hapticity of previously intangible atoms proliferates in all directions, as if touch, at the very moment of its birth, had (metonymically) expanded outward, infecting everything it touches, much like a virus.

I will return later to the material and metonymic proliferation of touch, but for now I must make at least a brief digression to clarify the pertinent connection between touch and viral contagion, which is by no means accidental. The Latin word *contagio* directly evokes touch, as it literally means "contact" (*con-tango*), insofar as infection takes place on a material basis—since the virus spreads contagiously through touch and all its more abstract, elusive derivatives of "coming into contact." It is therefore telling that Lucretius' *De rerum natura*, which presents Epicurean atomism in the form of a poem, begins with atoms falling through the void and concludes with the theme of the plague. It is likewise hardly surprising that the word *virus* originally meant "poison," and only from 1728 onward came to denote the "agents of infectious disease," at first referring primarily to sexually transmitted infections. The virus thus designates an excess of pleasure, an

excessive touch devoted to enjoyment—one that is itself "contagious," both in the sense of material transmission and of mimesis (a direct infection at the level of physical contact as well as an indirect one at the level of "bad example"). In this context, it is noteworthy that materialism and virology share the same historical date of origin: in 1726 J.G. Walch coined the term *materialism* in his *Philosophisches Lexikon* to name a new philosophy that was spreading contagiously across Europe, while at the same time morally condemning its blasphemous reduction of all spirituality to mere "mechanical" materialism. The main target of this misguided attack was said to be Descartes, though in truth it was La Mettrie.

The proliferation of touch at the level of emerging bodies, then, retroactively contaminates even the atomic collisions themselves, which later authors describe in greater detail with various expressions in which the haptic element is not difficult to discern—for instance, in the following passage from Simplicius' *Physics* (925, 10):

"They move through the void, overtake one another, collide (*sigkrouesthai*), and some rebound (*apopallesthai*) wherever they chance to meet, while others intertwine (*periplekesthai*) in proportion to their shapes, magnitudes, positions, and arrangements, and remain together (*simmenein*), thus producing the generation of composites."

As before, we again encounter *periplekesthai* ("mutual intertwining" or "mutual embracing" in our translation), now set in contrast to its opposite, expressed through "collisions" and "rebounds." Atoms that are similar "embrace," while those that are dissimilar repel—thus yielding two kinds of atomic contact: one that repels and one that unites. From the latter arise (tangible) bodies, while from the former comes their (intangible) dissolution. The problem of the double atomic contact—embrace or repulsion—thus stands at the very center not only of Aristotle's *On Generation and Corruption*, where he deals extensively with the Abderite atomists, but also of the much broader and more general cosmological framework of Empedocles, who saw in Love (*Philia*) and Strife (*Neikos*) the two principles by which the four elements of water, air, earth, and fire combine and separate. Finally, echoes of this same idea can also be found in a more modern version of it—namely, in Freud's late theory from *Civilization and Its Discontents*, according to which the world is governed by an eternal struggle between Eros and Thanatos.

If, however, we attempt to remain within our own line of reading of this much broader problem with its own long history, we can discern—in the difference between atoms that attract and intertwine, and those that collide and repel (and, *mutatis mutandis*, in the difference between the two types of touch)—the general ancient Greek insight that "like is joined with like." In its most general form, this statement—that "the same joins with the same"—can, of course, be found in Homer, more precisely in the seventeenth book of the *Odyssey*: "Yes, the gods ever bring like to like!" (Homer, 1982: 248 [P 218]). In a pre-Socratic, more philosophically articulated form, we find it in Empedocles' poem on Love (Aphrodite), where he writes (DK 21):

In Strife, all things are apart and differ in form,
In Love, they come together and yearn for one another.

In Plato's *Symposium*, a similar logic of love as attraction between similars appears in the famous speech of Aristophanes, who develops his myth of love as the "search for the lost half." He begins with a description of human nature, which once was not as it is today: "At first there were three sexes, not two as there are now—male and female—but in addition a third, which combined the qualities of both." (189d) Furthermore, "each human being was entirely round in form"—we might add, quite like the atoms themselves—"for he had a rounded back and circular sides," but also "four arms and an equal number of legs." (189e) These "three sexes—and such as they were—existed because the male sex was originally the offspring of the sun, the female of the earth, and the one participating in both was the offspring of the moon, for the moon shares in both." (190a) According to this Platonic version of the modern myth that "men are from Mars, women from Venus," the well-known dramatic turn soon follows: these "perfect beings" attempted to "attack the gods," and

Zeus punished them by cutting them in two: "When human nature had been divided in two, each half longed for the other, for each sought its own half." (191a) Zeus's solution? Love, of course: "Such is the ancient love that dwells in us, implanted by nature: love that seeks to make one out of two, to heal the human nature that was once whole. Each of us, then, is but a half of a human being, sliced from one into two, like the flatfish, and each forever seeks his own half." (191d) So much, in brief, about Plato, who through Aristophanes' comic tale presents the tragic dimension of love.

In Aristotle's *Nicomachean Ethics*, we can read something similar in Book VIII: "Yet there are many questions concerning friendship. Some hold that friendship is a kind of likeness, and that like people are friends. Hence the proverb: like is joined with like." (Θ 1155b) The reference, as we have seen above, is to Homer; but Aristotle also cites "examples from natural philosophy," quoting both Heraclitus' aphorism that "opposites attract" and Empedocles' dictum that "like tends toward like," and so on. Yet he immediately abandons "questions of natural philosophy," for they are "foreign to the style of the present inquiry," and instead develops his theory of three kinds of friendship according to what they have in common—utility, pleasure, or goodness—the last of which constitutes, for him, "perfect friendship": "Perfect friendship is that between good men, alike in virtue." (Θ 1156b) Instead of the immediate attraction grounded in the general (natural-philosophical) principle that "like is joined with like"—or "the similar with the similar," depending on how one translates the highly polyvalent Greek noun *autos*—there now intervenes between the bodies an object they share, which determines the mode of friendship in "human affairs."

Yet what cannot be reconciled on the scientific level—at least not in the sense conceived by Aristotle, who strictly delimited the spheres of inquiry into "human affairs" and "natural philosophy," thus "dissecting" philosophy into individual disciplines (*Ethics*, *Politics*, *Rhetoric*, *Physics*, etc.)—may still be reconciled in literature, which has no difficulty in traversing between these registers, a notable case being, of course, Goethe and his *Ellective Affinities*.

Let us, however, return to our question of the *"atomic touch."* In the above-cited passage from the plain-spoken Simplicius and his *Physics* (925, 10), we can now easily recognize the complex imprint of Aristotle himself—*Aristotle's touch*, as one might tellingly put it in English:

"They move through the void, overtake one another, collide (*sigkrouesthai*), and some rebound (*apopallesthai*) wherever they chance to meet, while others intertwine (*periplekesthai*) in proportion to their shapes, magnitudes, positions, and arrangements, and remain together (*simmenein*), thereby producing the generation of composites."

Here we can clearly discern the geometricization that spatializes atoms and the void, translating the entire process of atomic collision into the logic of bodies moving through space. Once such an understanding of atoms and the void is presupposed, it naturally gives rise to that crucial Aristotelian question of motion, as posed in *Metaphysics* (A 4, 985 b 4):

"Those who posit the underlying substrate (*hypokeimenon*) as one, and derive other things from its affections—since they make the rare and the dense the principles of these affections—thus also (Leucippus and Democritus) hold that these differences are the causes of other (things)."

For Aristotle, the essential issue is "the question of motion—whence it comes and how it is present in beings—which they too, like others, have thoughtlessly neglected." We must specify that this does not concern the explanation of motion *as such*—its cause, after all, is the void—but rather precisely that *"collisional"* movement of atoms which generates bodies. We can confirm this not in Aristotle's *Metaphysics*, but rather in his *Physics*:

"For some have doubted whether chance exists or not, maintaining that nothing comes to be by chance, but that there is a definite cause of everything which we say comes to be spontaneously or by chance." (195b 36)

The targets of this criticism are once again the atomists of Abdera. In his polemic with them, Aristotle formulates his celebrated theory of *týchē* and *automaton*—"chance" and "spontaneity."

Within the broader discussion of the pre-Socratic *physiologoi* and their search for the first principle (*archē*), two basic possibilities emerge: in a well-ordered cosmos, chance is either a cause we happen not to know—a cause "concealed from human understanding, as being something divine and more-than-natural" (196b 5–8)—or it is "spontaneity," which excludes a determinate reason. The latter, Aristotle ascribes to the atomists, saying that "some attribute the cause of the existence of the world and the heavens to spontaneity: through spontaneity arose the vortex and that motion which separated the elements and set the universe in order." (196a 25–28)

At least one among the many problems that Aristotle introduced into ancient atomism—namely, the question of the cause of atomic motion—was resolved by Epicurus, who assigned to the atoms the property of weight. Yet in doing so, he produced a new series of difficulties, for he thereby fell back into the assumption that these were "bodies," thus becoming one of those who paved the way for the speculations of modern materialism.

Clinamen: Declination of Touch

According to Diogenes Laërtius, in *Lives and Opinions of Eminent Philosophers*, Epicurus "took up philosophy out of disappointment with his teachers, since they were unable to explain to him the Chaos in Hesiod"—that is, the beginning of cosmology in the *Theogony* (Hesiod, 2009: 11 [verse 116])—but later, when "he came across the books of Democritus, he plunged into philosophy." (Laërtius, 2015: 581) Because of his doctrine that "the goal of life is pleasure" (Laërtius, 2015: 585), he enjoyed a somewhat dubious reputation in philosophical circles, as evidenced by many accounts—perhaps most of all by his attitude toward dialectic, which he deemed "superfluous" in philosophy. In its place, he proposed as "criteria of truth" the *aisthēseis* (sensations), *prolēpseis* (preconceptions), and *pathē* (affections), to which other Epicureans later added the "representational applications of reason" (*phantastikè epibolè tês dianoías*). (Laërtius, 2015: 593) What concerns us here, of course, is his treatise *On Atoms and the Void*, in which he continues the atomist tradition.

In the *Letter to Herodotus*, as summarized by Laërtius, one can clearly see Epicurus' continuation of the theory of atoms and the void, as well as the procedure that proceeds from sensory perception to the deduction of indivisible particles—particles to which he (erroneously) attributes a bodily nature: "The totality of reality consists of bodies and void. That bodies exist is demonstrated on all sides by sense perception," yet on this basis, "reasoning must infer the non-evident." And note the self-evidence of the inference he draws concerning what is non-evident: "For if there were not what we call void, space, and intangible nature, bodies would have nowhere to exist and through which to move, as is manifestly seen to be the case." (Laërtius, 2015: 596)

The difficulty arises when he attempts to grasp the parts out of which bodies are composed: "Among these bodies, some are composite, others are the parts of which the former are composed," and these parts are "indivisible and unchangeable"—for indeed, "not all things can be destroyed into non-being"—and at the same time "sufficiently strong to remain even when the composite bodies are dissolved," since they are "by nature solid and cannot be cut or dissolved anywhere or in any way." From this, he concludes that "the principles are therefore necessarily indivisible by nature." (Laërtius, 2015: 596–7)

The premise of Epicurus' mistaken inference concerns the nature of the parts from which bodies are composed: from their "indivisibility and unchangeability," he infers the same corporeal nature possessed by the bodies themselves, insofar as he defines them as "solid." In short, because composite bodies cannot dissolve into non-being but leave behind smallest indivisible particles, he concludes that these must simply be beings.

That is the perspective of *decay*; let us now consider how the problem appears from the opposite perspective, that of *generation*: "The atoms are in perpetual motion through eternity, some moving apart at great distances from one another, others vibrating in place when caught in the entanglement of surrounding atoms," while the cause of their motion is, as already indicated above,

"the nature of the void, which separates each atom but cannot provide them with support." Meanwhile, "the solidity in atoms causes them to rebound upon collision at a distance proportionate to that permitted by their mutual entanglement," with Epicurus emphatically adding that "there is no beginning here, since atoms and the void are eternal." (Laërtius, 2015: 597) In short, the point of conversion from the smallest indivisible particles into tangible and perceptible bodies through atomic collision has no beginning but exists from all eternity. Yet the nature of the atoms remains doubtful—despite their further, and this time more cautious, definition as having "none of the qualities of perceptible things save shape, weight, magnitude, and whatever necessarily follows from shape." (Laërtius, 2015: 600) For just as from the perspective of decay their irreducible corporeality was presupposed (since bodies cannot disintegrate into non-being and there must therefore remain some residue), so too here, from the perspective of generation, it is presupposed that, if they are able to combine into bodies, this must be because they possess weight, which sets them in motion; shape, through which they interlock; and—what is in fact crucial—magnitude, which grants them extension within (empty) space.

On the basis of Epicurus' theory of atoms that "move ceaselessly through eternity," Lucretius, in his epic philosophical poem *De Rerum Natura* (*On the Nature of Things*), forged the metaphor of the "rain of atoms" together with their declination (*clinamen*), in order, as the first Roman to do so in his native Latin, to explain in the Greek manner nothing less than the enigma of the creation of the world and of humankind.

In an equally Greek fashion, the poem opens with a hymn to a goddess—thus evoking both the Homeric poetic tradition of invoking the Muses and the pre-Socratic one—except that here, instead of summoning the Parmenidean goddess of Truth, the poet-philosopher invokes the Empedoclean goddess of Love:

"Mother of the race of Aeneas, delight of men and gods,
nurturing Venus, who beneath the gliding signs of heaven
fills the sea bearing ships and the fruitful lands with life—
for through you every kind of living creature is conceived,
and, born into the light, beholds the shining of the sun."
(Lucretius, 1959: 3 [verses 1–5])

A poem whose aim is to uncover the riddle of the world's creation thus appropriately begins with the goddess of creation, generation, and conception. This is, to be sure, quite unusual, given that Lucretius—like Epicurus before him—was regarded as an "atheist," as practically all the subsequent verses attest, describing the creation of a world in which there is no room for gods. As Sedley remarks, "It would hardly be an exaggeration to say that he spends the rest of the poem undoing the damage caused by the first forty-three lines." (Sedley, 1998: 16) How to reconcile the irreconcilable—the divine principle with natural elements—if not from a Spinozist standpoint, as Dolar suggests in passing: "One could say that Lucretius, seventeen centuries before Spinoza, sets against his *deus sive natura* a *Venus sive natura*, and thereby takes a definite position as to what kind of god is at work here. Not a god, but a goddess." (Dolar, 2012: 117) Along these lines of interpretation, Venus is as much incorporated into the natural order of things as that natural order is itself divinized. As Schmidt aptly notes, drawing attention to "the link between Venus and the *clinamen*": "Venus signifies the earthly power that is the very capacity for the declination of atoms; Venus symbolizes the slight deviation within her power of creating the world and life." (Schmidt, 2007: 154) In short, although the "rain of atoms" and their *clinamen* appear only later, the same logic of declination can already be discerned at the very beginning, personified in Venus, the goddess of love.

After the opening hymn to Venus, Lucretius calls upon Memmius to listen, offers praise to Epicurus, denounces popular religion, and acknowledges the fear of death, before admitting that he faces a difficult task of natural explanation—one that is, above all, linguistic in nature: "I do not err

in knowing how hard it is for a Roman to explain in Latin verse the dark discoveries of the Greeks." (*Lucretius*, 1959: 6 [verses 136–137])

Only then does the true natural-philosophical discussion begin. Lucretius takes his point of departure implicitly from Epicurus' *Letter to Herodotus*, for both assert that in generation as in decay, bodies do not dissolve into the "nothing" of non-being, but rather assemble and disassemble into the "something" of being—succinctly recapitulated in the axiom that "nothing can be born from nothing" (*Lucretius*, 1959: 6 [verse 155]), and likewise that "nature resolves each thing again into its elemental particles, and never annihilates anything completely." (*Lucretius*, 1959: 8 [verses 215–216]) The elemental particles of which he speaks are, of course, the atoms (*Lucretius*, 1959: 9 [verses 265–270]):

> Now I have taught you, surely, that nothing is born from nothing,
> and further, that what is born never returns to nothing.
> Yet lest this teaching awaken in you some skepticism—
> because the primal particles of matter cannot be seen with the eye—
> learn still more about the bodies which you yourself must admit
> are necessarily present in things, even though they are not visible to sight!

We can see that, although the primordial elements are defined as invisible, they are still (erroneously) conceived as *bodies*, as evidenced by the expressions Lucretius employs—for instance, when he contrasts the wind and the rivers (*Lucretius*, 1959: 9–10 [verses 271–297]). The winds, which "sweep over sea, land, and the clouds beneath the sky, driving all before them in their swift whirling motion," are described as *invisible bodies* (*corpora caeca*), standing in sharp contrast to the "mighty rivers" that "visibly have corporeality" (*aperto corpore*). His diction becomes far more precise only when he introduces the notion of "void" (*Lucretius*, 1959: 10 [verses 329–330]): "Yet the substance of things is not everywhere dense, compressed into solid mass: for there is 'void' in things" (*Nec tamen undique corporea stipata tenentur omnia natura; namque est in rebus inane*) —the Greek *kenon* translated into Latin as *inanis*.

A few verses later, this void is defined more closely and thereby (again mistakenly) identified with space, whose essential property, however, remains its intangibility, as is clear both from the translation and from the Latin original: "Thus there is space (*locus*), which is intangible (*intactus*), formless (*inane*), and empty (*vacansque*)." (*Lucretius*, 1959: 10 [verse 334]) Lucretius thus reproduces the (Aristotelian) conception of atoms and void, according to which the atoms are "bodies" and the void is "space."

In what follows, he responds in Epicurean fashion to the question of causality by assigning to the same void the role of "the principle of motion" ("for, if it did not exist, things could by no means move"), distinguishing between atoms, which possess weight, and void, which does not: "For it is essential to bodies that they all press downward toward the earth, whereas the nature of void—by contrast—remains without weight." (*Lucretius*, 1959: 11 [verses 362–363])

A little later, other "essential properties" (*propria principiorum*) are also defined, which differ from those that merely "accompany" things accidentally in that, once they are removed, the object itself perishes: "An essential property is that which can never be separated from a thing without fatal destruction—for example, weight from a stone, heat from fire, moisture from water, further, tangibility from body, and intangibility from void." (*Lucretius*, 1959: 13 [verses 451–453])

As before, we can observe that tangibility constitutes the essential distinction between tangible bodies and intangible void—*tactus corporibus cunctis, intactus inani*—and that the problem of *contact* will come to a head precisely at the point of the world-forming encounter of atoms within the void, as Lucretius describes it in the second book of his *De rerum natura*(*Lucretius*, 1959: 34 [verses 217–224]):

When atoms, by their own weight,
through the void move downward straight,
at indeterminate times and at places uncertain,
they swerve ever so slightly from their path—
so little that one might say their motion is changed.
For if no such swerve existed, they would all fall
through the infinite void, parallel as raindrops fall;
no collisions, no impacts would occur between them,
and Nature would never have created anything.

To restate the thought in non-versified prose, keeping the Latin original in mind: the atoms (*corpora*, "little bodies") move downward through the void (*cum deorsum rectum per inane feruntur*) by their own weight (*ponderibus propriis*), and at indeterminate times and places (*incerto tempore ferme incertisque locis spatio*) they deviate (*declinare*) from their path just enough for one to say that their motion is altered (*tantum quod momen mutatum dicere possis*). Otherwise, they would fall like raindrops through the deep void (*imbris uti guttae caderent inane profundum*), and there would be neither collision (*offensus*) nor impact (*plaga*) of the first principles (*principiis*), and Nature would never have created anything (*ita nihil umquam natura creasset*).

Now—returning to verse—precisely for this reason, "it is necessary for atoms constantly to incline" (*inclinare necessest corpora*), though only "by a very small amount, no more than a minimum" (*nec plus quam minimum*), with Lucretius emphatically declaring that this "is as clear as light and, one might say, palpable to the hand." (*Lucretius*, 1959: 34 [verse 246]) It is noteworthy that in Lucretius the concept of *clinamen* first appears as a verb, which through repeated use gradually becomes a noun: *declinare*, describing the atoms' swerve, which would otherwise "fall like raindrops through the deep void," gradually assumes the nominal form *clinamen*. It is posited as a principle only when the discussion turns to mind: "its origin is this minute swerve"—*clinamen principiorum* in the original, literally "the principle of declination"—"occurring at no fixed place and at no determined time." (*Lucretius*, 1959: 34 [verses 251–261]) It is telling that this term appears only once in the entire poem—and not only in Lucretius' poem, but in the entire corpus of classical atomist literature(!)—and then in a most significant collocation that turns declination itself into a "principle of deviation."

Even more remarkable is the fact that the *clinamen principiorum* appears in the context of introducing nothing less than the moment of *free will*, which, as the principle of mind, emerges virtually in the same breath as the creation of the world, immediately following the declination of atoms (*Lucretius*, 1959: 34 [verses 251–261]):

Lastly, if every motion is ever but a link in a chain,
and each new link connects to the last in determined order,
further, if there is no swerve of atoms to break the chain,
no first beginning of motion to shatter the law of fate,
then from eternity cause would follow cause unending.
Whence, then, I ask, comes this freedom of the will
in living creatures? From where this power wrested from fate—
the power by which we move ourselves where desire leads,
and make deviations too, not at fixed time,
nor in fixed direction, but by the act of mind itself?

Just as declination arises in nature, so too in the human being there arises an inner force (*innata potestas*) that resists all external necessity—both natural and fated—and thus requires a *principle of declination* (*clinamen principiorum*), which has neither determinate place nor time (*nec regione loci certa nec tempore certo*). We thus arrive at the notion of "declination" only when a minimal "swerve" first occurs structurally within nature, and only subsequently—when this swerve, as it were, "repeats itself" within the human being—does it consolidate into a principle.

It appears that here Lucretius faithfully follows Epicurus, at least if we can trust the Epicurean Diogenes of Oenoanda, who says of the principle of freedom (DK 68 A 50): "If anyone were to employ Democritus' account and claim that the indivisibles, because of their mutual collisions, possess no freedom of motion and that this shows they all move by necessity," one must reply that "the indivisibles do in fact possess a certain freedom of motion (*eleutheran tina en tais atomois kinesis einai*), which was not discovered by Democritus but brought to light by Epicurus, who, on the basis of phenomena, demonstrated that there exists a (force of) declination." The Greek *parenklisis*, exactly corresponding to the later Latin *clinamen*, attests to the inner connection between the "mental freedom" of the human being and that specific freedom by which atoms "freely decline."

Already in Democritus we find a link between atoms and the soul, in the sense that souls are likewise composed of atoms, just as are all other aspects of being. Thus a Greek commentator writes: "Democritus asserts that (the soul) is a fiery mixture composed of elements perceptible only to thought, spherical in form (*ideas*), and possessing the power of fire—that is, that it is a body (*soma einai*)." (DK 68 A 102) Or in another, later, Latin commentary: "Democritus (says) that (the soul) is breath inserted into indivisibles (*spiritum insertum atomis*): a breath possessing such swiftness of motion that it passes through the whole body." (DK 68 A 103)

In Lucretius too, the atoms constitute the point of contact between the psychic and the physical, but not "in themselves"—not as "raindrops falling parallel through the void"—but rather at the point of their declination, where both natural and spiritual causality are interrupted. This necessitates the conceptualization of a different kind of cause—a "sensibly supra-sensible" principle that cannot be simply incorporated into an ordinary (vulgar-)materialist understanding of the world. At least not without a certain remainder, which we must still endeavor to reach.

In subsequent philosophical tradition, there have appeared both those who saw in ancient atomism a form of Platonist idealism *avant la lettre*, as well as those who, conversely, recognized in it the earliest beginnings of modern materialism. Among the eminent representatives of the first group we can, as already noted, find Hegel, who was consistently—particularly in his *Lectures on the History of Philosophy*—enthusiastic about the dialectics of ancient atomism, even calling it "idealism in the higher sense." Among the latter, however, we should mention first among equals the young Karl Marx, who in 1841 defended his doctoral dissertation *The Difference Between the Democritean and Epicurean Philosophy of Nature* at that very same University of Jena, where Hegel had lectured some thirty years earlier.

We have seen that Hegel regarded ancient atomism as a formulation of the question of the One as *in its very origin split* between atom and void, between "being" and "non-being." He added that this was an "idealist" resolution, since the idea of the One divided within itself and surrounded by the void precisely corresponds to the paradoxical character of the idea as such: "The principle of the One is wholly ideal (ideell), belonging entirely to thought, even if one were to insist that atoms exist. The atom may be taken as something material, yet it is in truth something non-sensible (unsinnlich), wholly intellectual." (Hegel 1971: 358) The principle of the One, both in Eleatic philosophy and in ancient atomism, is thus "entirely ideal—not in the sense that it exists only in thought, in the head, but rather in the sense that thought is the true essence of things." (Hegel 1971: 358–359) Hence the continuation of the oft-cited formulation that ancient atomism is "idealism in the higher sense, not subjective idealism." (Hegel 1971: 359)

In this regard, the modern dilemma between idealism and materialism is misguided from the very outset, for the issue is not whether the idea of the atom should be understood as the subjective intellectual achievement of ancient philosophy, while its actuality belongs to the side of its material existence, confirmed only by modern science. Rather, the point is that the "One that splits into two" marks the intersection of both the subjective and the objective, the ideal and the material: thought introduces disturbance into the tranquil flow of being through the notion of "non-being," which is always already inherent to "being" itself (atoms could not move without the void). Thus, the question is not one of privileging one side over the other, but rather of their point of contact—the

touch of thought and being—and it is precisely this that constitutes materialism in the noble sense of the word. Unlike vulgar materialism, which simply equates matter with substance (or more simply, with corporeality), this sense of materialism seeks to sustain the paradox of being and non-being as a thought inherent to matter itself.

In a haptic sense, we might say that Hegel's *contact* between thought and being is a short circuit—and, just as earlier in the Platonic context, I do not mean this as a metaphor. In electrical engineering, a "short circuit" (*short circuit* in English, *court circuit* in French, *corto circuito* in Italian—literally a "short current") is defined as an *ideal contact*, differing from a *real contact* precisely in that it does not actually exist. Why? A short circuit occurs when two parts of an electrical current that do not belong together come into contact, and the electrons, always following the path of least resistance, overheat the flow. It is defined as an *ideal* connection between two nodes forced into the same voltage, whose result is a null degree of resistance, thereby eliminating both voltage and connection. In *real* electrical currents, resistance is almost zero, yet it still exists; the short-circuit current is *ideal* because, in fact, there is no current at all—electricity does not flow but rather *jumps*—precisely like that Platonic spark that "leaps and already feeds itself," thus introducing a rupture on the level of thought that coincides with a rupture in the real.

From this perspective, Hegel's philosophy of the relation between thought and being—out of which we have extrapolated their short circuit—differs sharply from Parmenides' axiom that posits between them a simple relation of identity: *to gar auto noein estin te kai einai* (Parmenides 1995: 46). This becomes clear in the very passage where Hegel discusses Epicurus and the question of atomic motion: "The split (Unterbrechung) is the reverse side of the atom, the void. The movement of thought is such a movement that it already has the split within itself (thought in man is precisely that which atoms and the void are in things, its interior [das Denken ist im Menschen eben das, was die Atome und das Leere in den Dingen, sein Inneres])." (Hegel 1971a: 311) In an almost ancient-atomist manner, Hegel thus claims that "thought in man is precisely what atoms and the void are in things," yet he adds, in his own fashion, that this is not a simple Parmenidean identity but their inner *Unterbrechung*: "Thinking is the rupture of being, its *Unterbrechung*, its interruption; and what thought and objects have in common is precisely this rupture that breaks objectivity by introducing the void." (Dolar 2012: 125)

Yet Hegel's *Unterbrechung* goes structurally in the exact opposite direction of *clinamen*: in Lucretius' poem, declination functions to bring atoms—already "raining" through the deep void—into contact; whereas in Hegel, the function of rupture is to differentiate the One at the outset into the "being" of atoms and the "non-being" of the void. From the standpoint of the "touch of the One" that concerns us here, we might say that *Unterbrechung* touches the real by splitting it into atoms and void, thereby creating the conditions of possibility for *clinamen* as declination, which then produces all subsequent "collisions of atoms."

In the *Logic*, we can observe the same dialectic developed through the example of atomic motion: "The atomistic principle in these thinkers did not remain at the level of mere externality, but alongside abstraction contained the speculative determination that the void was recognized as the source of motion," which "implies an entirely different relation between atoms and the void than mere juxtaposition and mutual indifference," so that "the position that the cause of motion lies in the void contains the deeper thought that the cause of becoming belongs to the negative." (Hegel 2001: 62) For Hegel, it is not that the One is indivisible, but that indivisible is the very division that constitutes the principle of the One; thus: negativity is the internal condition of positivity, unity is split unity, and being and thought touch precisely in this split. Viewed through the lens of the "touch of the One," the "positive" contact of thought and being occurs in the "negative" rupture of the One —a rupture to be understood as the "non-being" of touch that gives rise to its "being."

In this respect, *clinamen* as a concept appears, if not superfluous, at least too brief to grasp the problem of "the One that splits into two," since it addresses the issue *post festum*, even though it seems to refer to the beginning itself—namely, it speaks of the contact between atoms and void only after the split has "already occurred."

A number of ancient and later medieval authors criticized Lucretius' poem and the notion of *clinamen*, from Plutarch and Cicero through Plotinus and Augustine to Kant and Hegel (Schmidt 2007: 53–60). The crown of this venerable critique belongs to Cicero, whose rhetorical brilliance is evident across several works dealing less with natural science than with theological questions. In *De finibus bonorum et malorum* (I, 19), he calls the idea of declination "an arbitrary, childish fantasy," since "Epicurus claims, on the one hand, that atoms decline without cause"—and "for a physicist, nothing is more shameful than to admit that something happens without cause"—and on the other hand, that "atoms, without cause, are exempt from all bodily motion." In *De fato* (46), he mockingly asks: "What, do atoms draw lots among themselves to decide which will decline and which will not? And why do they decline by the smallest possible interval and not by a greater one? This is fancy, not argument." In *De natura deorum* he is even harsher (I 24, 66):

Such are also the shameful doctrines of Democritus, or even of Leucippus before him: that there exist certain tiny bodies, some smooth, others rough, some round, others angular or hooked, still others curved and concave inward, from which heaven and earth were formed without any natural compulsion, but by a certain chance collision.

In a similar mocking tone, Hegel writes in the aforementioned *Lectures* that, for Epicurus, atoms "turn aside in a crooked line (*in einer krummen Linie*) from the straight course in order that they may collide with one another, producing thereby only a superficial unity (*eine oberflächliche Einheit*), which does not arise from their essence." (Hegel 1971a: 313) In the *Encyclopaedia*, his words are even harsher: in the context of the doctrine of being, he describes the standpoint of ancient atomism as "the Absolute, insofar as it determines itself as Being-for-itself (*Fürsichsein*), as One (*Eins*), and as many Ones," in which atoms, in their function of "unifying the many into the One," do not cohere through attraction—or repel through repulsion—but "by chance (*Zufall*), that is, thoughtlessly (*Gedankenlose*) and in a wholly external manner." (Hegel 2000: 253 [§98]) For Hegel, to say that a cause is "by chance" is equivalent to saying "without thought"—in keeping with the traditional critique of causality, according to which "unknown causes" are merely "unrecognized causes," i.e. causes not yet known.

But there remains another possibility, one we have already touched upon: Aristotle's conception of "chance," which seeks to think precisely the "chance cause" in the distinct terms of *tyche* and *automaton* (Aristotle 2004: 136–142 [196b–198a]). Whereas *automaton* refers to the "spontaneous chance" of nature, *tyche* denotes the "fortunate accident" that can befall only an acting human being. In this duplication—*tyche* as the special repetition of natural *automaton* within the sphere of human affairs—we can discern a venerable anticipation of Lucretius' theory of *clinamen*, where the "free collision" of atoms is repeated or doubled on the plane of human affairs as the "freedom of mind."

In contrast, Marx found in ancient atomism an ally for the materialist critique of what was then—and, under the influence of the Anglo-Saxon tradition, partly still is—understood as "Hegelian idealism." Indeed, he seems to have been the first within the materialist tradition to defend *clinamen* against criticism in his doctoral dissertation *On the Difference Between the Democritean and Epicurean Philosophy of Nature*:

Cicero, and following him Plutarch and many other ancient authors, reproach the claim that the declination of the atom occurs without cause; and what could be more shameful, says Cicero, for a physicist? Yet, first, the physical cause desired by Cicero would throw the declination of the atom back into the order of determinism, from which it was precisely meant to emerge. Thus the atom is not yet complete until it is posited in the determination of declination [Dann aber ist das Atom noch gar nicht vollendet ehe es in der Bestimmung der Deklination gesetzt ist]. To ask for the cause of this determination is therefore to ask for the cause that made the atom a principle—a question that is obviously nonsensical for one to whom the atom is the cause of all things, and hence itself without cause. (Marx 1989: 38)

Marx's critique of the critique of *clinamen* is strikingly precise: to attribute any cause to declination other than itself would entangle it within the ordinary causality of the physical world. Instead, it must be understood as belonging to the essential determinations of the atom itself, alongside weight and collision, as Lucretius himself makes clear: "The same must be admitted regarding the atoms: apart from blows and weight, there is a third cause of their movement, which is the source of the power innate in us." (Lucretius 1959: 35 [verses 284–286])

Deleuze, appearing here not only within this discussion but within philosophy more generally as a kind of deviation from the Marxist tradition, refers in the appendix on Lucretius in *The Logic of Sense* precisely to these verses when he writes that *clinamen* "has nothing to do with some oblique motion that would, by chance, alter a vertical fall," since it "is not a secondary motion nor a secondary determination of motion arising at a certain time and place," but rather "the original determination of the direction of motion of the atom." (Deleuze 1998: 252) We are not far, then, from the concept of the *ligne de fuite*—one of Deleuze's trademark notions—which reappears in *Difference and Repetition* in a slightly different form when he reiterates the same interpretation of declination: "In this respect, *clinamen* is by no means a change of direction in the atom's motion; still less an indetermination testifying to some physical freedom; it is rather the original determination of the direction of motion—the synthesis of motion and its direction, a synthesis that directs the atom toward another atom." (Deleuze 2011: 293) As Dolar rightly observes, Deleuze— who professes to be anti-Hegelian—often produces more Hegelian sentences than Hegel himself: instead of the ancient "physical freedom" of the original text, the modern interpretation of atomic declination becomes nothing less than "the synthesis of motion and its direction," by which the atom is directed into the embrace of another.

And since we have imperceptibly moved from classical German philosophy into structuralism, psychoanalysis à la Lacan is not far behind. Let us therefore also mention Althusser, who in his later years, up to his death, took up the concept of *clinamen*. Shortly before his death, he began to write an unfinished text without a title, which his editor later published as *Le courant souterrain du matérialisme de la rencontre* ("The Underground Current of the Materialism of the Encounter"). Its opening sentence reads *Il pleut* ("It is raining"), an evocation of the "rain of atoms," followed by an explicit programmatic statement specifying his subject: "the 'rain' (Lucretius) of Epicurus' atoms falling parallel through the void; the 'rain' of the parallelism of infinite attributes in Spinoza; and also in many others—Machiavelli, Hobbes, Rousseau, Marx, and even Heidegger and Derrida." (Althusser 2000: 159) A curious—one might even say bizarre—list of names. Immediately thereafter follows the extrapolation of a certain materialism that, as he adds, "has always been repressed," making the topic "completely unknown": the materialism "of rain, deviation, encounter, and adhesion." (Althusser 2000: 160) Contrary to what we might expect—that he would grasp *clinamen* as the point of human freedom within a world of necessity—he draws the diametrically opposite conclusion: that one must insist upon the contingency of declination occurring within a pre-historical void, preceding all being and history. "Hence the primacy of the 'void' over every 'form,' and of aleatory materialism (*matérialisme aléatoire*) over every formalism." (Althusser 2000: 185) An editorial note informs us that this sentence was added posthumously, suggesting that the term *aleatory materialism* derives from his 1986 essay *Du matérialisme aléatoire*. What matters here, however, is the sequence that Althusser sketches through his "four fundamental concepts" of aleatory materialism—rain, deviation, encounter, adhesion— which does not represent a diachronic succession but rather a synchronous, structural simultaneity that is both timeless and spaceless (faithful to Lucretius' poem). Moreover, the atom *is* its own declination; thus to its "unity," already split into the being of "fullness" and the non-being of "void," must be added *clinamen*, which is neither one nor the other, but becoming itself. *Clinamen* is therefore not an accidental addition—it belongs to the very essence of the atom—and here lies a strikingly modern turn linking Althusser with Deleuze: not as the atom's proper moment of freedom opposing necessity, but as a moment of pure chance, contingency, whose repetition produces regularity irreducible to ordinary physical causal determinism.

In contrast, Badiou, in his *Théorie du sujet* (Theory of the Subject), argues that the clinamen

should be understood as a singular, one-time event: "It is absolutely necessary that the clinamen itself is abolished," since "any particular explanation of any particular thing must not rely on the clinamen, even though the existence of things in general is unthinkable without it" (Badiou, 1982: 79). Translated into haptic terms, which are our concern here: if we want to account for the particularity of touch, we cannot invoke the clinamen, even though it remains indispensable for thinking the tangible existence of things in general. The atom is "affected by deviation, sexualizing the Whole without leaving any trace of this act. Better yet: the effect is the retroactive realization of the cause," whereby "deviation, which is neither atom nor void, nor the act of void, nor a system of atoms, is unthinkable" (Badiou, 1982: 80). For Badiou, the clinamen is a singular, non-repeatable act, a constitutive exception that, in atemporality and aspatiality, sets the tangible world in motion, only to withdraw from it without leaving any trace of the touch it initially affected. How, then, can such a touch (without) touch be conceived?

In (post-)structuralist interpretations of atomic declination, we are confronted with at least two positions (Dolar, 2012: 120–121): either the clinamen constitutes an original, non-repeatable gesture of differentiation between being and non-being, inherently unrepeatable and only retroactively reconstructible—without which the material world could not be conceived, yet from which the declination must nevertheless be expelled—or perhaps the clinamen is repeatable at every threshold where materiality dissolves into the indeterminate difference between being and non-being. From the perspective of touch: the clinamen is certainly not a mere deviation causing the meeting of atoms—the touch that produces tangible corporeal connections—but rather either an original deviation producing only the difference between being and non-being at the level of atoms and void, doubled into the difference between tangible and intangible, or the persistence of a moment of contingency that reclines matter from (in)tangibility into (in)tangibility through the constant oscillation of the relation between being and non-being.

What, then, is touch in these terms? It seems useful, at least for orientation, to draw on the etymology of the modern term "contingency," which derives from the Latin *contingere*, meaning "to happen"—in the sense of an event that surprises us, occurring "by chance" in contrast to predictable, habitual occurrences. Yet the word itself is composed of *con-*("together") and *tangere* ("to touch"), so that tactility is inscribed at the very heart of contingency: one might say that what happens to us, or more precisely, what befalls us by chance, touches us in an emphatic, almost literal sense.

Dén : *Objet a* of Touch

Oscillating between the being and non-being of touch, we are presented with a third option, directly offered by Democritus himself through his neologism **δὲν (dén)**, which designates the specific "non-being of atoms" as opposed to "being-non-being of the void," thereby indirectly enabling a novel articulation of touch.

A second-hand reference to **δὲν** appears enigmatically in Plutarch's *Moralia* (4, 1108 F), where he polemicizes against a certain Kolotes, a student of Epicurus known only from a single, bizarrely titled treatise, *It Is Not Possible to Live by the Doctrines of Other Philosophers* (ὅτι κατὰ τὰ τῶν ἄλλων φιλοσόφων δόγματα οὐδὲ ζῆν ἐστιν). Plutarch reports that Kolotes accused Democritus of "introducing confusion into life" by asserting that "no thing is more what it is than it is otherwise," failing to recognize that Democritus was precisely combating such views in his engagement with the sophist Protagoras. Kolotes was misled by Democritus' claim that something (*dén*) does not exist more than nothing (*medén*), where "something" (*soma*) refers to body and "nothing" (*medén*) to the void (*kenón*), as if the latter also possessed a distinct nature (*phísin*) and substance (*hypóstasin*). Terminological confusion, which we have already examined, continues here, as Plutarch substitutes *soma* ("body") for *atomos* ("indivisible"), leading to the misleading

conclusion that both "something" and "nothing" exist at the level of being, as if both possessed a nature and substance, whereas in fact it is the opposite: "nothing" (*medén*) is not defined as less than something, but "something" (*dén*) is defined as less than nothing.

A third-hand reference appears in Simplicius' *De Caelo* (294, 33), summarizing the otherwise lost Aristotle treatise *On Democritus*: "Democritus holds that the nature of eternal things consists of small beings (*mikrás ousías*), which are innumerable in multitude, presupposing that they reside in another space, infinite in size," termed with expressions such as "void (*kenõi*), nothing (*oudenì*), infinite (*apeíroi*)," while the smallest beings are "something (*denì*), solid (*nastõi*), existing (*ónti*)." Atomism deals fundamentally with multiplicity, so all terms are plural in Greek, and the relational sequence is properly maintained: the derivation of "fullness" (*denì-nastõi-ónti*) proceeds from the void (*kenõi-oudenì-apeíroi*), rather than the reverse, as Plutarch erroneously suggests.

The kernel of the matter concerns a linguistic peculiarity: **dén** is a curious fragment of **medén**, itself one of two ways of negating **hén** ("One"), with the added "d" serving as a separator between two vowels. Greek contains two modes of negation, *oudén* (objective negation) and *medén* (subjective negation). **Dén**, despite its opposition to *medén* as a "negation of negation," actually encompasses both, as it does not specify what is negated—the objective *ou* or the subjective *me*—making it an almost avant-garde instantiation of the Hegelian axiom "substance is subject" within ancient atomism. In Slovenian translation as "nekaj" ("something"), some of this nuance is lost: **dén** is not "non-something" but "non-nothing." In this respect, Sovrè's older translation of the Presocratics proves surprisingly more precise than modern renditions:

"Democritus holds that the being of these eternal teles is an immeasurable multitude of small substances. For him, another space, infinitely large, is imagined. He names it: empty, nothing, infinite; and each smallest teles: ič, solid, existing." (Sovrè, 2002: 197)

Heinz Wismann, in *Les avatars du vide*, emphasizes the problem posed by **dén**, asserting that "the real, evoked by the rudimentary expression (*den*) invented by Democritus, owes its existence solely to the withdrawal of the negation (*me*), inherent both conceptually and lexically to the reality of 'nothing' (*medén*)," so that "being is merely a privative state of non-being [l'être ... n'est qu'un état privatif du non-être]; its positivity is a mere trap" (Wissmann, 2010: 65). The foundation of negation is not some positive being from which the void's negativity is subtracted; rather, it is negated void, itself a negation—*medén*, which negates *hén*, the non-being negating being—"a subtraction beginning from nothing [soustraction opérée à partir de rien]," wherein the atom is conceived as a transformation of the void (Wissmann, 2010: 65). This speculative maneuver is striking: from the Parmenidean expulsion of non-being as a negation of being to Democritus' conception of being as a byproduct of the negation of non-being, condensed in the **dén** of the atom. The atom is thus not a "body" but, as a "transformation of the void"—or literally, an "avatar of the void"—produces tangible being, for instance through declination.

In short, **dén** is a negation of a very particular kind, noted also by Alain Badiou and Barbara Cassin: "By its inherent amalgamation of the final letter of negation with negated positivity, it compels us to understand that the atom is neither affirmation nor position, being nor one, nor negation, for it has no 'nothing-ness' or consistency [rien]; rather, the atom is literally less than nothing, so that it should be called 'ien': *dén* is the name of the atom to the extent that it cannot be equated with ontological being or the elemental body of physics" (Badiou & Cassin, 2010: 81). Dolar adds that this is not mere negation but subtraction—not of being but of nothing: "It is not a subtraction from being that introduces the void, nor the residue of failed negation of being, but a subtraction from non-being, a negativity that erases itself. In this failure of negativity, something arises that is not something, has no positivity or identity, yet this is precisely the being of the atom" (Dolar, 2013: 23–24).

In our terms, **dén "touches being" through the negation of non-being, from which it is subtracted**, thus liminally embodying the very touch traced from atoms falling in the void like raindrops to their clinamen into tangible reality. The atom, in this sense, is neither the positive existence of tangible being nor its negation as intangible void, but the negation of the intangible, something "non-non-tangible," something "less-than-nothing" of touch, which nevertheless touches. If **dén "touches being" not merely via negation but through subtraction from non-being,** then what, in the genitive, is this "less-than-nothing," this **dén of touch**?

Expressed in a "Presocratic mode," one would proceed not merely by negation but by subtraction: from touch, one subtracts the moment of its "positivity," expressed in the prefix *do-* as the completion of contact. In Slovenian declinational terms, what remains of the Greek negation-me insertion is not merely the "d" but also an "a." A?

Lacan mentions Democritus' *den* in the context of his seminar on *The Four Fundamental Concepts of Psychoanalysis*, where in the closing remarks of his legendary lecture of 12 February 1964, he speaks of the atom as *den* and its *clinamen* in relation to his specific interpretation of the problem of repetition through Aristotelian terms *tyche* and *automaton*, which point to that moment "at which pre-Socratic philosophy attempted to motivate the world itself":

Somewhere it required a certain clinamen. Democritus—when he tried to define it, already positioning himself as an opponent of the pure function of negativity in order to introduce thought into it—tells us that the essential is not *meden*, and adds [...] the essential is not *meden*, but rather *den*, which in Greek is an artificial word. He did not say *en*, in order not to speak of *on*, he said—what?—answering the question that was today our question, the question of idealism, he said—Nothing, perhaps? Not—perhaps nothing, but not nothing. (Lacan, 1996: 61)

The passage is extremely condensed, to put it mildly, as it intertwines four fundamental concepts we have addressed so far—atom, void, *clinamen*, *den*—and, in the broader context of the lecture, also references various authors explicitly or implicitly (Aristotle, Democritus, Epicurus, Lucretius). It thus represents a kind of knot that would require a much longer, and above all more detailed, discussion, which I do not intend to undertake here, but I merely want to highlight what seems key for the present question.

Lacan "translates" Aristotle into psychoanalytic categories, defining *tyche* as "the encounter with the Real," which is "beyond the automaton, beyond return, the return of the instance of signs, where the pleasure principle obviously directs us," so that "the Real is that which always lies beyond the automaton" (Lacan, 1996: 52–53). Aristotle's distinction between "subjective" *tyche*, which may affect the acting agent, and *automaton*, which denotes the "objective" self-movement of nature, is interpreted in terms of the Freudian unconscious, in which the boundary between "subjective" culture and "objective" nature is blurred:

The function of *tyche*, the real as encounter—an encounter to the extent that it can be missed, to the extent that it is essentially a missed encounter—first appeared in the history of psychoanalysis in a form that is in itself sufficient to attract our attention—in the form of trauma. (Lacan, 1996: 53)

Precisely at the point of trauma is the problem of repetition, as originally discovered by Freud in *Beyond the Pleasure Principle*, when, in studying "traumatic neuroses," he was forced to revise the theory of the pleasure principle, according to which the psychic apparatus "tends toward pleasure," which cannot account for the fact that the traumatized subject, in dreams—or other productions of the unconscious—returns to the scene of misfortune, thereby "repeating" the discomfort of the original trauma (Freud, 1987: 248). The compulsion to repeat, which brings traumatic neurosis closer to hysteria—since in both cases it is true that the subject "repeats what cannot be remembered," i.e., unconsciously repressed—leads Freud to further explore various cases (child's play, artistic performances, clinical cases), ultimately bringing him to the "death drive,"

which acts counter to the "life drives," forming, as is widely known, the basis for his, let us say, "pre-Socratic theory" of Eros and Thanatos in *Civilization and Its Discontents* (Freud, 2001: 89–96). What Freud could apprehend conceptually as the problem of the compulsion to repeat, which produces not only discomfort but also a certain additional pleasure, he could not capture at the level of language, as in German he always operates with *Lust*, which semantically covers both pleasure and enjoyment. It was necessary to wait for Lacan to introduce the distinction between pleasure (*plaisir*) and enjoyment (*jouissance*), which carries a certain deadly supplement.

Indeed, trauma is imagined as something that must patch, tampon, or stabilize the subjectivizing homeostasis guiding the overall functioning determined by the pleasure principle. Yet experience poses the problem […] of how, within the primary processes themselves, the instance of trauma is maintained and continues to recall itself. Trauma indeed reappears here, often in an unmasked form. How can dreams, carriers of the subject's desire, produce that which trauma awakens in repetition—if not producing its exact image, then at least producing a screen that signals the hiding of trauma? (Lacan, 1996: 54)

Later, when he addresses the primary process through the experience of the "break between perception and consciousness"—the break between the physical and the psychic—located in Freud's "other place, space, scene" (*Anderer Lokalität*), in which he situates the moment of awakening, i.e., the liminal state between the dream and waking of the subject, he returns to the aforementioned screen to define it as phantasm:

Now we must seek the locus of the Real, which extends from trauma to phantasm—since the phantasm is always only a screen, which conceals something functioning in repetition as always original, determining—explaining simultaneously the ambiguity of the function of awakening and the function of the Real in this awakening. The Real can be represented by misfortune, a minor noise, that—little—reality (*le peu-de-réalité*) attesting that we are not dreaming, yet it is precisely the other reality hidden behind the lack of what substitutes the representation—and this is the drive (*Trieb*)—so we must seek the Real beyond dreams—in that which dreams have dulled, veiled, which they have concealed, behind the lack of representation of which only a substitute remains—*Vorstellungrepräsentanz*—precisely there is the Real, which governs our activities more than any other, and psychoanalysis shows us this. (Lacan, 1996: 58)

The compulsion to repeat "pulses" (*pulzira*)—a term Lacan introduces much later when addressing transference and drive, translating Freud's *Trieb* into *pulsion*—emanates from this traumatic core of the Real. Yet, as each repetition passes through a "conduit of signifiers," something "new" is continuously produced:

For Freud—as much as for Kierkegaard—there is no repetition based on natural necessity, no return of need. […] Repetition requires something new. It turns to the ludic, which creates its own dimension from this new. […] Everything that varies or modulates in repetition is only an alienation of its meaning. Adults, or even more developed children, in their activities, in their play, always demand something new. Yet this sliding obscures what is the true secret of the ludic, obscuring the more fundamental diversity that repetition establishes. (Lacan, 1996: 59)

In psychoanalysis as practice, the aim is not the complete reconstruction of the repressed, corresponding to ordinary "repetition" insofar as each repetition—or attempt at conscious awareness—reveals that what is repeated is the very impossibility of reproducing the "originally repressed." Rather, it is a Kierkegaardian "repetition" in the sense of ludic creation of the new. Opposed to the commonsense understanding of psychoanalysis as a technique of remembering repressed traumatic events, filling the missing pieces of a fragmented world, Freud already specified that psychoanalytic work is in fact a reconstruction of the traumatic past not as it actually happened, but entirely anew, while Lacan added that the difference between these two conceptions corresponds precisely to the difference between Platonic reminiscence and Kierkegaardian repetition: if Platonic reminiscence implies a harmonious relation to the world as something assumed, psychoanalytic technique definitely affirms Kierkegaardian repetition as *creatio ex nihilo* (Dolar, 2006; Kolenc, 2014). Trauma is pure negativity, impossible to appropriate by recollecting something known and forgotten; it must be recreated as something entirely new, but not from

"something," rather literally from "nothing."

However, the problem of repetition would take us far, far beyond the present topic—also far from the relationship between Lacan and Deleuze, and far back to the difference in the concept of repetition between Hegel and Marx—so we return to Lacan, more precisely, to the end of his lecture.

Although we have taken a long detour to get back to the end of Lacan's lecture, which concludes with the mention of Aristotle's *tyche* and *automaton* in connection with Democritus' *den*, we can now finally clarify the context of this pre-Socratic influx, which is dual, as evidenced both by the passage on a biologistic understanding of developmental stages preceding the cited quotation, and by the sentence embedded in between, where Lacan refers to the problem of idealism introduced at the outset: Lacan, just before the cited passage, polemicizes with the idea of an "analogy between ontogenesis and phylogenesis," emphasizing that psychoanalysis has nothing to do with "psychological focus on so-called stages," if one observes development from the standpoint of biology, to the extent that development "can proceed due to chance, due to a snag of *tyche*, precisely to the extent that *tyche* guides us to that point where pre-Socratic philosophy attempted to motivate the world," upon which, toward the end of the interpretation of Democritus' *den*, it is stated that *den* answers "the question that was today our question, namely the question of idealism" (Lacan, 1996: 61), thus returning to the beginning, where the initial claim is that psychoanalysis is precisely **not idealism**, but … what? … **materialism**?

Yes, if we understand materialism in the noble sense of the word, that is, in the sense of Democritean thought, *den* functions as a liminal instance between being and non-being, arising from "some other scene," from the "negation of negation," and thus from pure negativity as such, so that through its declination—whose Lucretian Latin name is *clinamen*—it produces positive, objective reality without itself attaining a univocally positive existence that could be apprehended except at the level of thought. The unconscious, evidenced by traumatic formations in which the slopes of the physical and the psychic condense—*tyche* as the repetition of the encounter with the Real, emerging from the automatically recurring *automaton*—thus proves to be a thoroughly "materialist" instance, as attested by the bodily symptoms to which the subject of the unconscious is *malgré lui* subjected, through which the subject attains its concept in conjunction with substance, whereby neither is anything other than two different translations of the ancient Greek *hypokeimenon* ("substratum") into Latin, namely *sub-jectus* ("thrown below") and *sub-stanca* ("standing below").

In his most "Lacanian" text, *L'Étourdit*, in which he returns to *den*, Lacan writes in the passage cited at the beginning of this discussion: "Democritus gave us *atomos* as a gift, this radical real, with the elision 'not', me, but in a modality whose demand requires reflection. In this way, *den* was a stowaway whose shell now forms our destiny. In this, he was no more materialist than anyone else with sense, for instance, myself or Marx" (Lacan, 2001a: 494). Beyond the provocation, which we must not allow ourselves to be trapped by, one must discern the psychoanalytic appropriation of the materialist tradition—not the physical-scientific tradition concerned with atoms as the smallest particles with consistency, but rather an insistence on their negativity. Moreover, Lacan, perhaps surprisingly, positions himself on Marx's side rather than Hegel's, and in the same spirit, Badiou and Cassin continue: "*Den* can only be conceived as one, as an operation of subtraction and not as a source, split or otherwise. It cannot be subsumed under dialectics precisely because it is not a negation of negation, preserved and abolished at once, but as a subtraction based on negation […] it is not an entrance, but an exit, a way out that makes the origin stumble and divert the history of philosophy" (Badiou & Cassin, 2010: 83–84).

Yet, if we momentarily set aside the obsession of French philosophy with finding the "exit from the cave," there remains a small difficulty noted by Dolar, who adds that "*den* does not come purely 'as one,' but together with one, without forming two or nothing," for it is "the other of the one, which is neither the nothing of its negation nor the multiplicity of its proliferation. It resists counting, yet is dependent on 'one.' Minimal cut of the signifier" (Dolar, 2013: 25). On this basis, he concludes that *den*, as the cut of the negativity of the One, is precisely the alternative that

proposes the aforementioned paralactic perspective regarding *clinamen*, which is either Badiou's "foundational exception" or Deleuze's "universalized virtuality," insofar as it allows the emergence of a new object as the "stowaway of philosophy."

Lacan's name for this stowaway is *objet petit a*, the "object-cause of desire," a fragment of the Real as the remainder of a failed operation of symbolic capture of the imaginary reality, and hence a way of thinking within Hegelian dialectics something that cannot be negated through the process of *Aufhebung*.

Armed with *den*, the "less-than-touch" as Lacanian object a — the product of a failed symbolic operation, a "negation of negation" or subtraction of nothingness, which instead of capturing the Real produces an imaginary fantasy — we can now approach the conclusion of our endavour.

Through the long detour of attempting to think touch via the "underground" atomistic-materialist tradition, we saw that the touch in Democritus first appears as a schism of being and non-being, of atoms and void; then, with Epicurus and Lucretius, as their declination and tactile encounter and fusion into tangible matter; and finally, this encounter proves to fail precisely at the linguistic curiosity marked by **δεν**. **δεν-touch** thus drives the entire dialectic of touching through declination, which can be understood on both an atomistic and linguistic level: touch is the very declination of atoms, which in their encounter produce bodies and corporeality, while simultaneously it is the declination of the verb "to touch," which self-dissolves into the nominal concept of touch, producing as a byproduct the touch as object *a*.

At precisely this linguistic intersection of ontology and psychoanalysis, the touch of the real transforms into the real touch of object *a*, i.e., **δεν-touch**, which touches… whom, if not the subject already implicated in the very way we arrived at **δεν**? Greek, after all, knows two ways of negation: the first, "objective" or rather "impartial," using *οὐ*, and the second, "subjective" or "emphatic," using *μὴ*, so that *ἐν* as "being" can be negated in two ways, i.e., as *μηδέν* or as *οὐδέν*. Since no original Democritean fragment survives, we must rely on secondary sources, accumulated over centuries, indicating that *μηδέν* was used, which, through the specifically Greek method of subjective or emphatic negation, allows us, as it were, *in medias res* to see how the touch of the subject emerges together with **δεν-touch**.

The simultaneous emergence of the subject and object *a* corresponds in Lacanian psychoanalysis precisely to the fantasy formula $◆a, whose primary function is to cover the lack of the Other: touch is the fantasy of a "successful" touch (*il y a du rapport sexuel*), driven by touch as object *a*, which itself is nothing other than the result of a failed operation of touching (*il n'y a pas du rapport sexuel*), so that it is, as it were, "its own cause," demanding thought of causality outside the established causal order—exactly as the materialist tradition requires.

The paradox here is that touch as object *a* arises as a byproduct of a certain splitting, whose "reason for desire" results in the fantasy formula $◆a being reversed into what Lacan defined as the perversion formula: a◆$. The psychoanalytic definition of perverse touch is not something that can be apprehended at the imaginary level of some catalog of obscenities; rather, if anything, it is the ontological perversion of the cut itself, thus finding its ideal embodiment only in something as perverse as the Lacanian concept of jouissance.