



Glarus 49 Graphite Cubes (7 × 7), 2007
Galerie Tschudi, Glarus
49 carbon cubes on floor
4 × 27½ × 27½ in (10 × 10 × 70 cm)
Collection Beyeler Museum

Carl Andre's Atomism

Brooke Holmes

The first principle of Epicurean physics is “nothing comes from nothing.” It is a principle as suited to history as to physics, with one crucial difference. In atomism, everything comes down to what Lucretius, in *On the Nature of Things*, an Epicurean primer for Roman elites and one of the most brilliant poems ever written, calls the too-small-ever-to-be-seen “first-beginnings of things.” From these primary elements, he says, “nature creates all things and grows and nourishes them, and then into which nature resolves them when they are destroyed.”¹ The atoms, together with void, are all that genuinely exists. The subterranean plane of historical causes is, by contrast, crowded and messy. But the atom has its place there too. Beginning with the first Greek atomists, Leucippus and Democritus, the atom has long fed what philosopher Louis Althusser called “an underground current” in the West, a “materialism of the encounter” that runs contrary to and subverts the dominant idealist traditions.² The atom is not just a seed; it is a historical provocation.

For more than half a century, Carl Andre has been making sculpture in the spirit of the materialism of the encounter. He has called himself over the years a materialist by nature and a matterist by vocation; he has defined sculpture as “matter mattering” and described his own works as “composed of atoms, that is, identical parts which form a molecule created within, and existing for, the context of art.”³ He does not, however, restrict himself to the atom itself, which belongs as much to twentieth-century physics as it does to ancient philosophy (“The atoms of Democritus were equipped with little hooks and ours with whirling clouds”⁴). Matter for Andre is just as likely to consist of molecules and particles, wood and Styrofoam, or the periodic table of elements (which he and Hollis Frampton once imagined exhibiting on the central ramp of the Guggenheim, each element shown in its purest form).⁵

In fact, ancient atomism may seem altogether too remote to encounter in Andre’s work. “Everyone knows, everyone concedes,” Michel Serres has written, “that atomic physics is an ancient doctrine but a contemporary discovery.”⁶ But Serres ends up refusing to concede this point, insisting on the resonance between Lucretius and modern physics in part by developing a theory of history as “aleatory and stochastic . . . cloud . . . noise,” but also organized by the formation of systems and orders.⁷ Serres’s theory casts the underground current of materialism as

turbulent and nonlinear—more poetry than prose, if by prose we mean what Andre does when he describes it as “a method of connecting proximate and distant points by certain tacit increments which each must justify itself.”⁸ (Andre once wrote that his own mind “moves by no means of prose.”⁹)

Turbulence is part of what makes the atom so provocative. The aleatory history of atomism does not undermine the genealogies of Andre’s materialism that look to the specific historical, intellectual, socioeconomic, and political contexts of the early 1960s, but, rather, allows them to be haunted by a longer *durée*. Nor is the return of atomism mere repetition of the past; rather, it is the classic expression of one of the pivotal concerns not just for Andre but for Minimalism in general: the series.

Early in his career, Andre stopped carving things. In what is probably his most famous gloss on that decision, he says: “I realized that the thing I was cutting was the cut. Rather than cut into the material, I now use the material as the cut in space.”¹⁰ What Andre meant has been endlessly debated and revised in light of his later remarks. But in a basic sense, by suspending the cut, Andre is trading the sculptor’s traditional medium—matter to be worked by the tool—for the atom, literally for what is uncut or uncuttable (the Greek word combines the alpha privative with *tom*, a verbal root that means “to cut”). The shift toward making the sculptor’s selection of “particles” the starting point of the creative process adapts the idea of atoms as the building blocks of reality to the principles of artistic practice. These blocks, in their massing, cut into space as if into void.

Of course, it is more accurate to say that the materials Andre selects are not uncut but pre-cut. He does not start with raw material, nor does he perform the labor that transforms it into “man-made” units. Where that leaves his relationship to matter is an open question. In a 1976 video portrait made by his former gallerist Virginia Dwan,¹¹ Andre, having proposed to a rather reluctant Dwan that he read to her about portraiture, picks up a copy of H. P. L’Orange’s 1957 study *The Antique Origin of the Medieval Portraiture*, which had been lying on the table next to him, and starts reading aloud about the technical development of sculpture in the later Roman Empire. In the passage Andre reads, L’Orange is discussing the preference of late antique artisans for the “mechanical drill” over the chisel, the signature tool of classical Greek sculpture. It is

tempting to locate Andre at a much later point in this historical trajectory, after the pragmatic, disembodied, protoindustrial mindset of the Romans has been fully realized in the industrial revolution and transported to the mines and shipyards of Quincy, Massachusetts: Carl Andre, artworker, photographed in his blue workman's overalls as the coda to L'Orange's history of sculpture.

But this is not how Andre reads the story. What interests him is the difference between the fluid, plastic art of the Greeks and the "relatively clastic" art of the drill, its "point, point, point, rather than flow." The language of the clastic had, by the time the video portrait was shot (or, as Andre puts it, "drilled"), become a fixture in Andre's lexicon when talking about his work. The word is originally Greek (but not atomist), from the verb *klaō* ("I break off"). Andre may have borrowed it from geology, where it is used to describe rocks made from fragments of other rocks and minerals. But he uses it most of the time to refer to broken or preexisting materials put together and taken apart without joints or bonding agents, usually with regard to the combinatory logic of his own trademark pieces.

The clastic, then, is one way of demarcating the domain of the precut (prefabricated, "broken" matter enlisted in a practice of combination) against the uncut. Just as the precut stands against the uncut, the clastic would seem, in turn, to stand against the atom, defined as it is by its integrity, its immunity to the cut. In fact, it is precisely by recasting the atom as a fragment that the clastic paradigm moves it out of physics and makes it available to art, a point I return to below. But first I want to go back to the terms in which Andre embeds the clastic in his remarks on the history of sculpture, when he opposes it to the plastic mode of the Greeks.

If the plastic privileges the fluid emergence of form from matter, the clastic is a challenge to form as both origin and telos. In the case of the drill, Andre frames this as "breaking" the image in an act of literal iconoclasm. But in his own work, iconoclasm translates into the displacement of form from both the start and the finish of the sculptural act. "The forms of my work have never particularly interested me," he has said. "What has always been my search really is for a material, a particle of a material. . . . I never in my mature work start with a form, a completed form."¹² The rules for the work do not derive from an idea or concept (Andre's contempt for the "conceptual" label runs



deep). He leaves the "perfect Platonic polyhedron" to Robert Morris.¹³

What is at stake here? The reference to Plato implicates Andre's rejection of the chisel in another opposition with ancient roots: idealism versus materialism. Part of what makes this battle so relevant to Andre's own practice, and to the practice of sculpture more generally, is that in antiquity it turned largely on two competing concepts of matter whose differences give further depth to the clastic/plastic opposition: the continuum theory of matter associated with the Platonic-Aristotelian tradition and the protoparticle physics of atomism.

For both Plato and Aristotle, matter is anarchic, disruptive, and ideally passive—precisely why it has to

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Redan

be subjected to the organizing logic of the form or the idea. Far from being entirely pliable, matter at times overwhelms the form-making powers of the creative seed (as in Aristotelian embryology, with its fear of the form-canceling power of feminine matter). The hope, however, is that form will prevail, imposing order on disorder. The odds, at any rate, are stacked in order's favor. Plato's cosmology in the *Timaeus* is an extended argument for intelligent design, and even as Aristotle shows little patience for Plato's Demiurge and the eternal Ideas that guide his creation, he elaborates the concept that bodies are organized by an end or "final cause." In the Hellenistic period, the Stoics would take up the idea that a providential logos organizes the cosmos and run with it.

The atomist opposition to these principles makes them the abiding scandal of Western philosophy. The transgressive lesson of *On the Nature of Things* is that there are only atoms falling through the void: we are nothing but epiphenomena, born in contingency and nullified by death. The world was not made for us, nor is it organized for a final purpose. Perhaps most important for a clastic art, form in atomism emerges from the bottom, that is, out of the turbulence of individual atoms, rather than being imposed top-down onto a continuum of matter. The atoms collide by chance. If the form is viable, they cohere until, through time or accident, the body dissolves back into its constituent parts. Nothing is given in advance except the atom.

In rejecting the plastic art of carving or chiseling, then, Andre takes his distance not just from form but also from the Platonic-Aristotelian idea that matter passively

awaits the imposition of form. He ends up with a radically different concept of matter that stands against the hegemonic ontologies of Western philosophy. No longer a continuum that takes the imprint of the idea, matter is particulate and so primary.

In light of the primacy of matter, Andre sets out to form his compounds according to the dictates of the particles, combining them, as he says, "in laws which are no more than the qualities that any one particle might have. No extraneous forces apply to the set to make them have properties which an individual particle does not have."¹⁴ The forms that arise, in other words, develop from the specific nature of the particles, rather than being transcendently imposed or providentially immanent. Take, for example, *Glarus Copper Delta* (2006), consisting of one hundred copper triangular units arranged as a triangle, which is distinguished from its Platonic counterpart by its seams (fig. 1). By staging the discontinuity of matter, Andre undercuts the coherence of the idea and signals the bottom-up emergence of form.

If there is no originary Idea or concept governing the creation of the work, its status necessarily undergoes a shift. The combination of elements, enacted by Andre within the space of the gallery, becomes an event that can be repeated serially without any one realization identified as the original or authentic work. In this sense, Andre's sculptures challenge the very logic of model and copy in Platonism, together with the long history of representation and man-in-the-image-of-god sculpture that it underwrites. The "same" sculpture created on different occasions at

Cuts

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different places obeys a principle of resemblance, but only in the way that Gilles Deleuze describes resemblance in a critique of Platonism first published around the same time that Andre was producing his breakthrough work—namely, as an external effect “inasmuch as it is built upon divergent series and makes them resonate.”¹⁵ The resonance of the series displaces the fidelity to the model as the mechanism of resemblance.

One of the corollaries of seriality is that the component parts of the work are interchangeable, replaceable, and recyclable. Andre refers to this principle as “anaxial symmetry” and illustrates it with molecules in a glass of water: “You can take any atom of the water and replace it with any other one. This has nothing to do with left or right hand or up and down. It’s central, anaxial, without axis.”¹⁶ At the same time, particles are routinely repurposed for new works. In 1965, as part of the *Shape and Structure* show at Tibor de Nagy Gallery, New York, Andre assembled the seven-foot-high *Well*, composed of wood blocks (fig. 2). Three days after its installation, as Andre later recounts, the sculpture was straining the floor to the point of collapse, and the artist responded by disassembling the work and recombining the parts to create the lower-lying *Redan*, a compound with a better chance of survival in its given milieu (fig. 3).¹⁷ (*Well*, in turn, can be re-created under more viable conditions.) The works are contingently, transiently realized.¹⁸

The ephemerality of Andre’s sculptures is exaggerated by his refusal to join or weld parts together. The upright structures of his early career figure the

precarious coherence of compound bodies especially effectively, but precariousness takes any number of forms. Anyone who walked on Andre’s *Cuts*, a “floor” of concrete blocks with irregular cutouts that he installed in Virginia Dwan’s Los Angeles gallery in 1967, would have been viscerally aware of the structure’s instability (fig. 4).¹⁹ In the 1976 video portrait, Andre refers to kicking elements of a sculpture back into place as part of the normal process of showing it. The tendency of the work to “wander apart” is a reminder that it will eventually be resolved back into its constituent elements, as is every compound body in an atomist ontology.²⁰

In a 1970 interview, Andre described his work as driven by a wish “to submit to the properties of my materials.”²¹ The language of submission captures the paradox of creative intervention in the world within a paradigm where the sculptor has ceded the privilege of imposing form. What does it mean to give priority to the atom, the particle, or the table of elements as a principle of aesthetic practice? What agency is left to the sculptor who forgoes concepts?

These are not new questions. In antiquity, atomist antiteleology was relentlessly attacked, much as evolutionary theory is today, for allegedly being unable to account for highly complex forms, especially works of art. One popular version of the argument ridiculed the idea that the *Iliad* was created out of a toss of letters in the air (a scatter piece *avant la lettre*). But for all the importance they afforded the aleatory, the atomists never believed that Homer was another name for chance (Democritus in fact praised him for building a



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“beautiful cosmos of words”²²). The intentional subject stands at the heart of Epicureanism. More specifically, the subject of Epicureanism is always an ethical subject, defined by his or her commitment to pursuing forms of knowledge and praxis that make it possible to create the space for a good life, a life of pleasure and freedom from disturbance (*eudaemonia*, *ataraxia*), within a cosmos indifferent to such human ends (and of course all ends). For this reason, the inquiry into the nature of matter is framed by Epicurus as an instrument of ethics, subordinated to the pursuit of living well. Lucretius, in turn, is a master strategist, manipulating language and meter to bring the atom to light for his audience in the hope of setting them on the path to the pleasure of existence.²³ The poem, read in this way, is an ethico-creative act of *disclosure*.

The priority of matter does not entail the tyranny of chance for Andre, either. He has shied away from the principle of randomness central to some of his contemporaries, above all John Cage.²⁴ Even the works that come closest to incorporating chance, the scatter pieces (fig. 5), are dismissed by Andre in the 1976 video portrait as “failures of imagination.” The title role Andre has traditionally assumed in installations of his work leaves little doubt as to the sculptor’s agency. This agency uncoils, crucially, in a domain that, as we saw earlier, is demarcated from the natural world (the precut versus the uncut, the clastic as atom-turned-fragment). Andre, in other words, is not working with particles or molecules per se. He is not a scientist:

Science is creating and comparing, and art is creating conditions that do not quite exist. That is why art is different from science. The ideal of science is to create at least theoretical models of things we hope have some correspondence with what exists; whereas with art, you try as a human being to create something that wouldn’t exist unless you made it.²⁵

If the scientist builds a model that corresponds to the physical world, the sculptor’s work is generated out of a swerve, the declination of movement that is a classic Epicurean figure of intentionality. Calculated as an intentional act, it stands at an incalculable angle to the world, neither copy nor representation nor analogue.

Andre has called himself an “admirer of Lucretius,” for reasons that cut to the heart of the Epicurean poet’s project of opening up the material world to sensory comprehension: “It is exactly these impingements upon our sense of touch and so forth that I’m interested in,” Andre has said. “The sense of one’s own being in the world confirmed by the existence of things and others in the world. This, to me, is far beyond being as an idea.”²⁶ Like Lucretius, Andre is motivated by the desire to disclose the nature of matter (the grain or “friction” of wood, the mass of lead or magnesium, the reflective surface of copper) by recruiting the impingements of matter on our senses—vision, in atomism, is a form of touch—within the domain of art.²⁷ The task, in short, is to exhibit matter as particulate and primary.

Of course, the idea of exhibiting matter as it is, like the idea of submitting the self wholly to its properties, subject to object, is a fantasy.²⁸ It is a fantasy because the relationship of Andre’s sculpture to the physical world is oblique, its act of disclosure always a strategic, nonlinear response to the stubborn invisibility of the atom. It is also the case that strategies for showing matter are necessarily implicated in materialisms and materisms. Andre’s materialism undoubtedly embeds him in the context from which his sculptural practice emerged—the idiosyncrasies of his education and his encounters. But his practice over the years (stutter and series) of selecting, combining, disassembling, and recycling transposed atoms and elements places him, too, in the current of aleatory materialism. Each work is local, and each is resonant.

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1. Lucretius, *On the Nature of Things*, trans. W. H. D. Rouse, revised by M. F. Smith, rev. ed. (Cambridge, MA: Harvard University Press, 1992), 1.56–57.
2. Louis Althusser, "The Underground Current of the Materialism of the Encounter," in *Philosophy of the Encounter: Later Writings, 1978–87*, trans. G. M. Goshgarian (London: Verso, 2006), 163–207.
3. Phyllis Tuchman, "An Interview with Carl Andre," *Artforum* 8, no. 10 (June 1970): 60; Tim Marlow, "Interview with Carl Andre," *Tate Magazine*, no. 9 (Summer 1996): 38; Chantal Pontbriand, "Carl Andre: Fourteen Written Answers to Questions," *Parachute* 17 (Winter 1979): 67.
4. Carl Andre, letter to Reno Odlin, November 8, 1963, in *Cuts: Texts, 1959–2004/Carl Andre*, ed. James Meyer (Cambridge, MA: MIT Press, 2005), 238. On the twentieth-century concept of the atom, see Jonathan T. D. Neil, "Carl Andre, Richard Serra: The Problem of Materials and the Picture of Matter," PhD diss., Columbia University, 2010, especially chapter four, where Neil defends the claim that Andre's "picture of matter" is "an atomist one" (emphasis original, 175). On Andre's atomism, see also Alistair Rider, *Carl Andre: Things in Their Elements* (London: Phaidon Press, 2011), 83–85.
5. Paul Cummings, "Taped Interview with Carl Andre" (1972), in *Cuts*, 141–42.
6. Michel Serres, *The Birth of Physics*, trans. Jack Hawkes (Manchester: Clinamen Press, 2000), 3.
7. *Ibid.*, 77. The idea of "aleatory" materialism is central to Althusser's "materialism of the encounter."
8. Carl Andre, letter to Reno Odlin, June 17, 1963, cited by James Meyer, "Carl Andre, Writer," in *Cuts*, 12.
9. Carl Andre, letter to Reno Odlin, November 24, 1974, cited in *ibid.*, 3.
10. David Bourdon, "The Razed Sites of Carl Andre: A Sculptor Laid Low by the Brancusi Syndrome," *Artforum* 5, no. 2 (October 1966): 15.
11. Virginia Dwan, *Carl Andre: A Video Portrait*, 1976, 45 min., Collection of Virginia Dwan. The portrait was filmed in New York at the home of Dwan (no date).
12. *Cuts*, 99.
13. Patricia Norvell, Interview with Carl Andre, June 5, 1969, in *Cuts*, 154. Andre goes on to turn Morris into the font of Conceptual art.
14. Tuchman, "An Interview with Carl Andre," 57.
15. Gilles Deleuze, "Plato and the Simulacrum," in the *Logic of Sense*, trans. M. Lester with C. Stivale (New York: Columbia University Press, 1990), 262. The essay was first published as "Renverser le platonisme (*Les simulacres*)," *Revue de métaphysique et de morale* 71 (1966), 426–38, before appearing in the appendix of *Logique du sens* as "Platon et le simulacre," coupled with an essay on Lucretius and the simulacrum. On the series and seriality in Minimalism, see Hal Foster, "The Crux of Minimalism," in *The Return of the Real: The Avant-Garde at the End of the Century* (Cambridge: MIT Press, 1996), 62–68.
16. Tuchman, "An Interview with Carl Andre," 57.
17. *Ibid.*, 61.
18. "I can find a set of particles which I used ten years ago; from that set of particles I had made something that was satisfactory to me then. But then, let's say today, I take up the same set of particles again. It's entirely likely that I would want to combine them in a different way. Now the former piece is not being recovered, it's not altered. A new piece is being made with the same set of particles." *Ibid.*, 57.
19. See David Bourdon, "A Redefinition of Sculpture," in *Carl Andre: Sculpture 1959–1977* (New York: Jaap Reitman; Austin: Laguna Gloria Art Museum, 1978), 30.
20. "In a sense, my works have been a matter of taking sets of particles and then combining these particles according to the rules which were a property of any one particle. That excludes things like joining, welding, riveting, gluing. The particles always remain free, which is a convenience because then they don't break in the sense that a joint will break. They tend to wander apart, but then you have to retune the piece as one might retune a musical instrument in order to bring it back into proper pitch. My work's like that." Carl Andre, taped interview, New York, 1970, in *Cuts*, 99.
21. Tuchman, "An Interview with Carl Andre," 59.
22. H. Diels, ed., *Die Fragmente der Vorsokratiker*, 6th ed., revised by W. Kranz (Berlin: Weidmann, 1952), fragment B21.
23. Andre could also see letters and words as atoms, and his own poetry can be seen as of a piece with a larger atomist project; see Neil, "Carl Andre, Richard Serra," 223–46.
24. *Cuts*, 75.
25. *Ibid.*, 84.
26. Tuchman, "An Interview with Carl Andre," 60.
27. The relationship between ethics and aesthetics is here very close. Alistair Rider unwittingly characterizes Andre's "ethical imperative" in essentially Epicurean or Lucretian terms: "If there is a powerful ethical imperative underwriting [Andre's] art, then it is that this is work that aspires to teach us to see tangible physical things as they truly are, and that, once we have trained ourselves to do this, then we may be better equipped to shrug off the social and cultural ideologies of our current fashion-driven times." Rider, *Carl Andre*, 22. This is a stripped-down version of what Deleuze referred to as naturalism. See Brooke Holmes, "Deleuze, Lucretius, and the Simulacrum of Naturalism," in *Dynamic Reading: Studies in the Reception of Epicureanism*, ed. Brooke Holmes and W. H. Shearin (New York: Oxford University Press, 2012), 316–42.
28. "When I set out on the great adventure of my art I dedicated myself to the creation of work utterly free of human associations," Andre recalled. "It is exactly the absurd impossibility of that quest which made my work possible. If I had known that it is impossible to make art devoid of human associations because the essence of art is human association, I never would have been able to do what I have done." James Meyer, "Introduction: 'Carl Andre, Writer,'" in *Cuts*, 16.