

Architectures of Time

Toward a Theory of the Event in Modernist Culture

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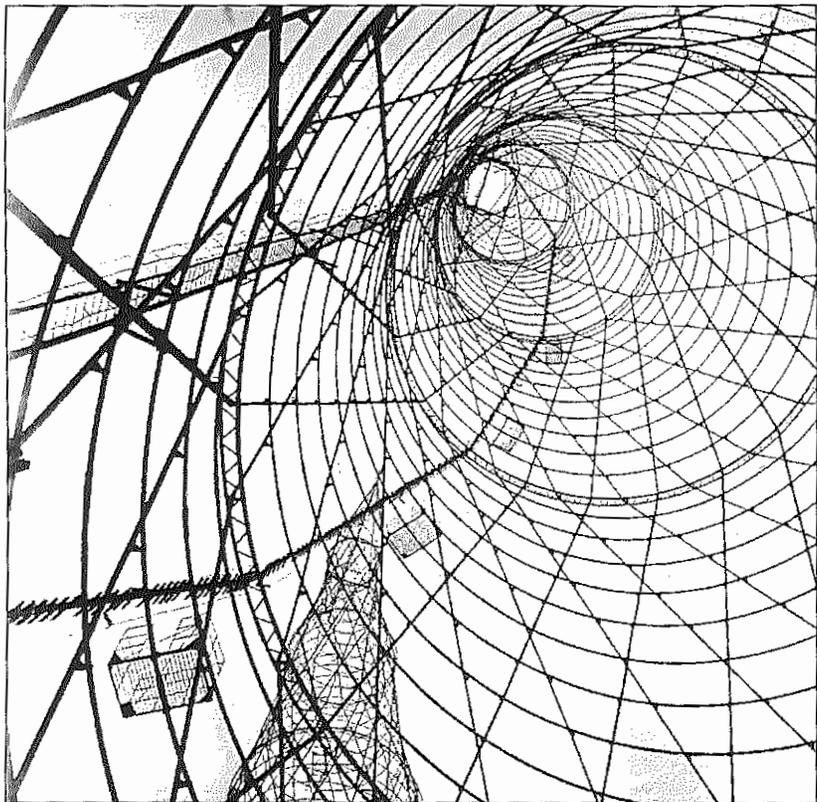
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*To my mother,
who taught me how to use tools*



2.1

Vladimir G. Suchov, *Electrical Towers*, c. 1922

2

Modernist Space and the Fragment

*What is real is the continual change of form:
form is only a snapshot view of a transition.*

— HENRI BERGSON

Modernism and Modernity

THE PHRASE "MODERNIST SPACE" is used here to serve as a more modest decoy for what is the truly intended subject of the following chapters: the problem of "modernity" itself. Unlike many standard treatments of the subject today, the present one seeks to cast the problem of modernity as a philosophical problem and not primarily one of historical periodization.¹ According to this approach, "modernity" would need to be distinguished from any of the various historical modernisms whose empirical aspects—whether the result of social or aesthetic avant-gardes or else technical or scientific revolutions—are at best complex, contradictory, and indeterminate. What they have in common cannot be discovered on this empirical level but only at the more abstract plane of relations that underlie them and that form what might be called their "conditions of possibility."

It is to this level that the following analyses are directed. For embedded within most modernisms there may be discerned something deeper and more nuanced than the mere, apparent "break with the past." What is more, it is at these moments that the very notion of "past" and of historical time generally nearly always undergo a subtle, sometimes imperceptible, but nonetheless fundamental transformation. It may even be said that it is only in the fleeting but marvelous density that characterizes the actual instant of such "breaks" that modernism and "modernity" may be said ever to coincide. For the philosophical, or ontological, problem of modernity, as I will try to develop it, can perhaps be shown to reside in some specifiable condition that actually renders possible such breaks, transformations, or changes. If these historical breaks involve more than just a break with a past (a previous epoch, regime, or paradigm) it is because they often imply, somewhere within their intricacy, a more irregular and untimely break with a far

1 The spectrum of approaches here is rich and wide, running from Oswald Spengler to Daniel Bell, Paul de Man, Ernest Mandel, Matei Calinescu, Jean-François Lyotard, Fredric Jameson, Ihab Hassan, etc. An extensive bibliography may be found in Matei Calinescu, *Five Faces of Modernity: Avant-garde, Decadence, Kitsch* (Durham: Duke University Press, 1987).

more expansive tradition, metaphysic, or worldview. In short, the concept of modernity that will be developed here would need to be understood as a reverse stream that is present *virtually* (but relatively rarely actualized) throughout history, emerging here or there as a kind of counterhistory or counterpractice. Modernity, then, clearly must be more than a mere, benign synonym for "new" or "contemporary," for the problems it raises conceivably can be addressed to any work in any historical period. What's more, its function as countermemory connects it with those elements in a given culture that necessarily go beyond a dialectical relation with a previous historical period, or with an allegedly hegemonic ideology. It is precisely for this reason that the modernisms, at once deeply entrenched in the social and existential crises of the nineteenth century as well as the more sanguine, emancipatory humanisms of the post-Renaissance period, might comprise less the object than the site of a more fundamental yet always emergent modernity.

A distinction must therefore be made between the "critical" task of many *modernizing* or avant-garde movements and the more fundamental project of modernity, whether avowed or not, of a "transvaluation of all values." The first project addresses at best the specific institutions and systems of representation in which history and power have become incarnate; the second addresses their very conditions of possibility. Insisting on the distinction between them makes it possible to see beyond the exaggerated "critical" project of the modernisms toward a preliminary descriptive ontology of modernity itself.

Modernity and Time

Such a conception of modernity is admittedly problematic, especially as I have said, in its relation to time—its roots, dispersed throughout history may be linked to thinkers such as Lucretius, Bruno, Spinoza, Vico, Nietzsche, and others—but it is precisely in its relation to *time* that its complexity can and ought to be apprehended. Though undeniably heterogeneous in many ways, these thinkers can be said to share a common task: the attempt to think Being free of any transcendent unity and without reference to anything outside itself as its cause or ground. In other words, it is, in its first instance, a *structural* repudiation of the concept of transcendence, ultimately determined in each case by the specific historical conditions in which it arises, that characterizes the notion of modernity that will be developed here, though always and necessarily in relation to the counterflow of *tradition* whose time and space belong to late Greek and

early Christian cosmology.² These latter, strictly derived forms of time—eschatological, primordial, “historical”³—will be seen to give way to increasingly sophisticated theories of immanence in which time no longer remains spatialized in order to furnish the stable ground or backdrop for phenomena, but meshes inextricably with them, and forms the new rule of their endless and aleatory proliferation. Thus space too will be shown to undergo an exactly analogous emancipation from its metaphysically determined relations (body/nonbody, inside/outside, center/periphery, whole/part) as it weds with time to become intensive, dynamic, or continuous.

In short, by the end of the nineteenth and the beginning of the twentieth centuries, the world was no longer constructed in quite the same way as it had been and its elements would no longer combine as they once did. Thought was now forced to move beyond its abode in the philosophy of transcendence—for too many of the sacred emblems of this tradition such as God, Nature, and Truth had by now been sacrificed to the “modernizing” processes of the nineteenth century⁴—and there arose, amid the vertigo and malaise, a fundamental ontological change that would have important effects on the nature of knowledge, perception, and representation. Nothing was any longer considered absolute and every element was capable of reorganization, redistribution, and revaluation. Space and time no longer carried with them their fixed categories of intelligibility, nor did they distribute their contents in quite the same ordered way. What is more—and this was the most unthinkable thing of all—they would no longer remain separate from one another, but had merged to create a new field, one that would characterize the rest of our century, yet for which a properly solid map never emerged and will certainly never exist.

Fragmentation vs. Multiplicity

If it is true that early Greek cosmological thought centers around the problem of the One and the Many, then our own modern era, with its fixation on the social and epistemological complexities that bear on the relations between totality and

- 2 The present definition makes no attempt to situate or understand “modernity” beyond the most rigorously local Western context to which it is, by definition, indigenous.
- 3 By “history” I understand the magical substratum through which events allegedly communicate with one another and in relation to which they are said to occur.
- 4 Industrialization, rationalization, urbanization.

fragmentation constitutes what could be called a kind of “neo-Hellenism.”⁵ For the Greeks, it was the task of accounting for the phenomenon of change that became the central problem, to explain or reconcile the “corruptive,” transformative effects of time in relation to the doctrine of essential and immutable forms. Time ultimately had to be abolished from the ontological schema as an effect of mere illusion (Zeno, Parmenides, Plato) in favor of a theory of participation of Ideal Forms in their imperfect, worldly reflections (copies). Things—the Many—were, if chaotic, at least reassuringly “participated” by the One—the latter conceived as a static, timeless plenitude. But the banishing of time, and the elision of the problem of change, meant that Greek thought would no longer try to think the Many, or the Multiple, in and for itself, that is, free of a reassuring totality that existed *in another domain*.

It is a cliché that bears repeating at this time, that our own modernity is inseparable from the self-conscious project of “thinking outside of metaphysics.” What this entails, of course, is an attempt to think phenomena—the Multiple, or the profusion of events and things—independent of an external, totalizing, foundational schema. But it is just at this moment, as the stabilizing *grid* of transcendence dissolves and is drawn away, that Forms themselves vanish and remerge into the chaotic flux of unstable aggregates and events.

Much of our (modernist) culture clung exuberantly to this new world, but often only as a radical, new form of totality that was comprised no longer of oppressive, passé, or falsely consoling forms but of *fragments*. This gesture came to represent nothing less than an apparent rebirth of matter and meaning, for suddenly anything seemed again possible, the old laws no longer applied, the new

- 5 The immense power of Nietzsche’s modernizing gesture in the history of thought is explicit in the radicality of its genealogical method: to descend *against the grain* of history and Western thought to those moments when transcendence (dialectics, morality) was first introduced into man’s being by way of Socratism and Christianity. Nietzsche, like many after him, allies himself with the pre-Socratics, Homer, and the tragedians. See especially *Philosophy in the Tragic Age of the Greeks*, *The Birth of Tragedy Out of the Spirit of Music*, and the *Genealogy of Morals*, bk. 3, no. 25. The anti-Platonist theme is central to the theory of modernity being developed here. This tradition of Nietzschean modernity seems to reproduce this gesture of descent and return as if by programmatic necessity. See Michel Foucault’s espousal of the sophists and Gilles Deleuze’s strategic use of both stoicism and sophism, in Michel Foucault, *L’Ordre du discours* (Paris: Gallimard, 1971) and “Theatrum Philosophicum,” in *Language, Counter-Memory, Practice*, ed. D. F. Bouchard (Ithaca: Cornell University Press, 1977); Gilles Deleuze, *The Logic of Sense* and appendix, “The Simulacrum and Ancient Philosophy” (New York: Columbia University Press, 1990).

ones were yet to be invented; all was polyvalency, possibility, and promiscuity. But this exuberance of experimentation was seldom separable from an almost universal anxiety of loss, of disenfranchisement and disorientation. Fragments after all were shards, ruins—at best, brave traces of a past or future plenitude. Fragmentation and its attendant spectacle of polyvocality was perhaps an incomplete consolation for a world that would never again serve as a home.⁶ Yet are we not still far from the Greek world of happy immanence where delight in phenomena and appearance was everything? Can our own “condition,” typified and expressed through the modern emblem of the “fragment,” ever be conceived free of the nihilism embedded both in myth and memory, a nihilism by whose agency we define ourselves (and our world) *always in relation to what we are not* (and never were)—that is, *unitary and constant beings*? Fragments, for the moderns—though still for us today—are too often “thought” in terms of a world and a Wholeness to which they no longer have any relation. Is it not possible, however, to restore to the fragment that which is properly its due, to develop it in the element of its positivity, as a specific characterization of matter within a continuous, fluctuating, and time-imbued multiplicity?

It is precisely this project, this tendency, that I have sought to characterize, on the one hand, as constituting the work of “modernity” itself, and on the other, that I have sought, descriptively as it were, to embody in the present study. The best way to embark on such a descriptive project, it seems to me, is conceptually to isolate, even partially or provisionally, certain moments and elements or even aspects of moments and elements within historical modernist culture where this “modernity,” understood as a specific approach to the fragment and multiplicity, appears to emerge.

Time, Space, and Force

The apparently heterogeneous field of “modernist culture” seems susceptible of any number of different types of division. It would be possible, for example, to perform a triage by which different movements, or rather, *tendencies within different movements*, could be seen as oriented toward, or dominated by, one of three basic axes: that of classical time, that of space, and that of movement and complexity, or force. The “time” axis, for example, would concern principally those aspects of modernist culture in which the subject is endowed with a fully transcendental radicality: mean-

ing, origins, and tradition serve as the primary elements within such a configuration, providing a ground for interpretation and exegesis, which then become the principal heuristic activities. To this category belongs much of both psychoanalysis and phenomenology, as well as the type of historicist/symbolistic modernist practice associated with the works of Joyce, Eliot, Pound, surrealism, and so on. To say that this modernism is one of *radical transcendentalism* is to describe the mode by which the subject is newly invested to form the ground, the domain, and the condition of possibility of knowledge. For time here is always a subjective time; tradition (“history”) is *tradition-for-the-subject* (for this reason it may seem collapsed, spatialized, though in fact it is only reinvented at another scale). The historical significance of this development consists in having reorganized experience and reality into homogeneous and coextensive domains—reality is drawn within the subject to become but one more element of a fluid consciousness, everything is dissolved within the single element of receptive interiority.⁷

If the classical temporal axis, then, is dominated by relations bearing on the subject, the second, spatial axis indeed is oriented almost fully toward developing relations in the object. Here it is possible to group most of the modernist formalisms, as well as the tendencies, present in many forms and through a diverse range of phenomena, toward mathematical logic, and to ideality. The concept of tradition is here no longer the dominant epistemological category but is replaced by what might be called a rationalist-genetic model. Neo- (Carnap) and logical- (Ayer, Wittgenstein, Russell) positivism, structuralism, formalism (Russian and Czech), but also Cubism, the modern movement, aspects of De Stijl, constructivism, and all aspects of simultaneism in poetry and elsewhere belong in whole or in part to this tendency that excludes both time and the subject from the field of the work in order to maintain, on the one hand, a certain transcendence of the object, and on the other, a certain positivistic transparency of knowledge and perception. The significant historical transformation effected here is once again the following: though this perspective dismisses the subject and its accompanying temporality and

7 Indeed it is arguable that Brentano’s theory of cognition and Husserl’s “intentionality” were in part formulated in order to de-interiorize consciousness, to discover it out there in the world of things; but the noetic framework with which they sought to reconcile subject and object-domains is still the most perfect example of the “single element” or time-based continuum that I have here called, perhaps infelicitously, “interiority.” Franz Brentano, *Sensory and Noetic Consciousness*, trans. M. Schatle and L. McAlister (London: Routledge, 1981); Edmund Husserl, *Cartesian Meditations*, trans. Dorion Cairns (The Hague: Martinus Nijhoff, 1973).

6 Georg Lukács, *The Theory of the Novel*, trans. A. Bostock (Cambridge: MIT Press, 1971; orig. 1920).

complexity, it does maintain the univocal nature of phenomena; it replaces the subject-as-ground with apodictic forms—formal logic, “rational” genetic systems—whose basis nonetheless remains transcendent-ideal.

The third axis, that of movement or force, actually breaks with the preceding classical aesthetic schema; it implodes the opposition of terms such as subject/object and space/time. Its epistemological principle is neither that of tradition nor that of a rationalist/genetic ideality but one of a radical perspectivism. This perspectivism is *not* subject-based, but is rooted in a dynamic cosmology based on multiplicity, chance, and hazard (the unforeseeable and unexpected) and a universal *immanent* individuating principle that governs these. In the words of Nietzsche—perhaps the dominant figure of this axis—“Only that which has no history can be defined.” In other words, once an object or sign is embedded within the streaming, chaotic world of force, its so-called meaning must give way to a pure affectivity: the capacity to bear, transmit, or block and turn inward, a unit of Will to Power. In this domain there exist only dynamic metastabilities or meaning-events (accidents, convergences, subjugations); matter, form, and subjects (“doers”) come only later, reintroduced at a second order level, not as ground but as produced *effect*.

From Nietzsche onward, what works of this nature have in common, far more than just a critique of transcendence, is the elaboration of a concrete new field endowed with an “immanent transcendental”—that is, “things,” phenomena, though sundered from the metaphysical structure that grounds them in “meaning,” now find their principle of being nowhere else but within themselves. Both the temporalist and spatialist axes strived for something similar to this, but because they were caught within a classical, oppositional, and especially *exclusive* framework, they could achieve this only incompletely. Space and time structures, essentially hierarchical, here give way to the flatness of a pragmatic or “evental” multiplicity (abstract becoming) where everything occurs on and among surfaces (surfaces swathe objects in relations, seize them, individuate them, orient them, but neither define them nor immobilize them indefinitely) according to the law of “exteriority” (according to which every “thing” marks the clandestine site of a willful “doing”).⁸ The heuristic model is neither exegetic nor deductive here, but genealogical/cartographic.⁹

8 The concept of multiplicity is developed in chapter 3, that of exteriority and surface in chapters 4 and 5, and of the “event” and “becoming” throughout.

9 Precisely, in Foucault’s sense, “archaeological.” See especially chapter 4, note 48.

Here then is the real meaning of perspectivism: the vertigo of the radically multiple (not subjective) *inside* viewpoint. One maps the very reality with which one is inseparably intertwined, because no external viewpoint or image is possible. In this as well lies the difference between genealogy and history: the latter describes the river, its life and its form; the former swims through it upstream mapping its currents. The one is linear, the other turbulent.¹⁰

Space and Time Are Not Categories

Still, so much of the theory of modernity remains deeply bound up in eighteenth-century (classical German) aesthetics. Consider the following passage from an early seminal study of modernist representation:

In both artistic mediums [plastic arts, literature] one naturally spatial and the other naturally temporal, the evolution of aesthetic form in the twentieth century has been absolutely identical. For if the plastic arts from the Renaissance onward attempted to compete with literature by perfecting the means of narrative representation, then contemporary literature is now striving to rival the spatial apprehension of the plastic arts in a moment of time. Both contemporary art and literature have, each in its own way, attempted to overcome the time elements involved in their structures.¹¹

Here the rendering fundamental of the categories of space and time (Kant), or more explicitly the opposition of space *versus* time (Lessing), determines the entire analysis. These presuppositions are at the root of nearly all theories of modernism, which almost invariably assert some new, powerful primacy of space.¹² Interestingly, without deviating an iota from these same received notions

10 The revival of interest in turbulence both in science and philosophy has played, as should now be clear, a determining role in the formulation of the problems addressed in the present study.

11 Joseph Frank, *The Widening Gyre: Crisis and Mastery in Modern Literature* (Bloomington: Indiana University Press, 1963), p. 57.

12 See, e.g., Roger Shattuck, *The Banquet Years: The Origins of the Avant Garde in France 1885 to World War I* (New York: Vintage, 1968); Sharon Spencer, *Space, Time, and Structure in the Modern Novel 1880 to 1917* (Chicago: Swallow Press, 1971); Joseph Kestner, *The Spatiality of the Novel* (Detroit, Mich.: Wayne State University Press, 1978); Umberto Eco,

the following writer posits—apparently innocently—the diametrically opposed thesis:

The waning of affect however, might also have been characterized, in the narrower context of literary criticism, as the waning of the great high-modernist thematics of time and temporality, the elegiac mysteries of *durée* and of memory. . . . We have often been told however, that we now inhabit the synchronic rather than the diachronic, and I think it is at least empirically arguable that our daily life, our psychic experience, our cultural languages, are today dominated by categories of space rather than by categories of time, as in the preceding period of high modernism proper.¹³

This latter reflection notwithstanding, it may be said that no idea so dominated postwar thought on the modernist period as that of simultaneism and juxtaposition. Regardless of whether such emphasis on an antitemporal spatiality¹⁴ was applied to works of modernist or so-called postmodernist persuasion, one thing remained entirely consistent: the felicitous (even if illusory) harmony, unity, and fullness of phenomena was understood to have been sundered by the rapidly reconfiguring technological milieu of the modern world. From now on there would be only incompleteness, discontinuity, *fragments*. Roger Shattuck's *The Banquet Years* (1955) was, and remains today, the quintessential formulation

L'Opera aperta (Milan: Bompiani, 1962); Steven Kern, *The Culture of Time and Space* (Cambridge, Mass.: Harvard University Press, 1983); Colin Rowe and Robert Slutzky, "Transparency: Literal and Phenomenal," in *The Mathematics of the Ideal Villa and Other Essays* (Cambridge, Mass.: MIT Press, 1982); Paul Virilio and Sylvère Lotringer, *Pure War* (New York: Foreign Agents, 1983); and Gregory Ulmer, "The Object of Post-Criticism," in *The Anti-Aesthetic*, ed. Hal Foster (Port Townsend, Wash.: Bay Press, 1983).

- 13 Fredric Jameson, "Postmodernism, or The Cultural Logic of Late Capitalism," *New Left Review*, no. 146 (July–August 1984).
- 14 This theme would finally receive an almost paranoid refinement in Michael Fried's "Art and Objecthood," in *Minimal Art: A Critical Anthology* (New York: Dutton, 1968) and *Absorption and Theatricality: Painting and Beholder in the Age of Diderot* (Berkeley: University of California Press, 1980). A less strident development of these same themes may be found in Stanley Cavell, *The World Viewed: Reflections on the Ontology of Film* (New York: Viking, 1971) and *Must We Mean What We Say?* (New York: Cambridge University Press, 1976, orig. 1969).

of this thesis. For Shattuck the arts of the twentieth century are dominated by a type of asymmetrical assemblage of elements from which it is specifically the connective *transitions* that are missing. Formerly the arts were structured principally around expressed transition or "the clear articulation of relations between parts at the places they join." Things, events, apparently once flowed symmetrically in logical sequence and according to a univocal trajectory, while today all is said to be abruptness, interference, indeterminacy, and above all, stillness.¹⁵ Gone with the unity and seamlessness of the arts of yesterday, however, is the monumental and closed work limited by a clear beginning, middle, and end. The modern work is proclaimed to be open.¹⁶ With such openness comes ambiguity, polysemy, and a new boundlessness that seems capable of including anything, that is, *reflecting* anything, even the chaotic, hazardous processes of creation—yet not, notably and by design, actually *incorporating* time itself. Juxtaposition is said to be the law of such works; it replaces succession with a new type of unstable, hypersaturated moment—at once a profuse surplus of data that must instantaneously be absorbed into the field of the work and an inverse dearth of narrative "time" through or across which to effect a deferment. The result is conflict and disorder, which in turn lead to a dramatic multiplication of (ostensibly creative) random or chance effects. Yet for Shattuck all this disordering, radicality, conflict, and destabilizing supersaturation is nonetheless still reducible to a new unity, a new "intimacy" of the organic world of the "unconscious." Everything multiple, complex, and chaotic is so only apparently, he seems to argue, and is in any case ultimately resolved elsewhere, *in another dimension*.¹⁷

It is true that the concept of a modernist antitemporal stillness (less a fact than a skewed mode of historical understanding) did help to render intelligible the proliferation and indeterminacy of relations that were then beginning entirely to surpass and exceed the physical limits of the artistic work. The modernist work's insistence on autonomy and self-sufficiency made of it, on the contrary and more than ever before, a mere thing among the other things of the world. Indeed the "dehumanization" of the work actually bestowed upon it a

15 Shattuck, "The Art of Stillness," in *The Banquet Years*.

16 This de-hierarchization of the work into a field of multiple, receiver-determined entries is the thesis of Umberto Eco's *The Open Work* (Cambridge: Harvard University Press, 1989).

17 Shattuck, *The Banquet Years*, p. 342.

new, rather than a lesser, intimacy: the work no longer led one back (through representation) to the daily world;¹⁸ it actually comprised (some of) the world itself.¹⁹

Reductionism and Complexity

Yet much of modern art stands or falls in relation to a single question: does it or does it not introduce complexity—the complexity of real things—into the domains of the work specifically and of aesthetics generally? It is here that so much of modernity seems to be at stake, because this term “complexity” invokes nothing less than all that within nature or the cultural world that is irreducible to any rigid or finite schema of intelligibility, either mathematical or phenomenological.²⁰ Complexity, at the first level, always implies the presence within a given system of a surplus of variables whose interactions cannot be correlated or predicted ahead of time with any degree of certainty. Modern scientific culture since the renaissance, as we have seen, has on the contrary always oriented its models in the other direction, toward the simple, the repeatable, and the universal—the criterion of intelligibility demanded that the singular in phenomena always be routed and brought back into relation with sameness, with regular known quantities or constants. But the necessity of grounding a theory of nature within the Same and the Elementary meant relegating it to a certain easily controllable though always iso-

18 Ortega y Gasset, “The Dehumanization of Art,” in *The Dehumanization of Art and Other Essays on Art, Culture, and Literature* (Princeton, N.J.: Princeton University Press, 1968, orig. 1948).

19 The use of the partitive mode (e.g., /some water/, /some wood/) here and in works of this nature marks a transformation of a relation not just to the “sign” as many have argued, but to the activity of signifying itself. It signals a new indeterminacy—the whole is indeterminate, just as is the “part” (the some that indicates it)—and a new materialist and a-signifying approach both to assembling and apprehending work and world. The partitive describes a multiplicity’s mode of being in relation to what is external to it, that is, to the world.

20 To be sure, even the most apparently simplifying, reductive, rationalist tendencies of modern art such as the works of Bauhaus, De Stijl, or the International Style movements in architecture were conditioned by a deep reflex toward complexity: the desire to annex or absorb influence from disparate and unorthodox domains of cultural production, i.e., technical industrial culture, politics, and modernization processes in general.

lating timelessness. Extracting individual realities from the complex continuum that nourished them and gave them shape made them manageable, even intelligible, but always in essence transformed them. Cut off from those precarious aspects of phenomena that can only be called their “becoming,” that is, their aleatory and transformative adventure *in time* including their often extreme sensitivity to secondary, tertiary, global, stochastic, or merely invisible processes, and cut off as well from their capacities to affect or determine effects at the heart of these same processes—the science of nature has excluded time and rendered itself incapable of thinking change or novelty in and for itself.

This idea of modernity in itself is hardly new, for it lies inchoate at the basis of much thought beginning with the modern economic historians Max Weber, Werner Sombart and Georg Simmel,²¹ the social historian Lewis Mumford, and the philosopher Martin Heidegger. What is more, this idea certainly played a constitutive role in much work on the history of science since World War II, in that of Alexandre Koyré, Ernst Cassirer, and Georges Canguilhem; though foremost by far, this theme is reflected in the work of Henri Bergson, whose *Creative Evolution* explicitly confronts the conventional scientific worldview for its inability to think about temporal phenomena in general and novelty in particular. Yet not even this, we have seen, compares in importance to the more recent phenomenon in which empirical scientific advances have legitimated and actualized the rationalistic, speculative, or intuitive claims of the earlier work. For what the various pieces of literature on stochastic processes, dissipative structures, dynamical or nonlinear systems, chaos theory, bifurcation theory, turbulence, etc. have in common is an attempt to incorporate and manipulate abstract structures whose correlations—probabilistic, global, transductive—can be apprehended only through and in time understood as an asymmetrical and irreversible flow.²²

21 Marx’s analyses of value in volume 1 of *Capital* are clearly seminal and determinant here.

22 In addition to the works cited below see F. Eugene Yates, ed., *Self-Organizing Systems* (New York: Plenum Press, 1987); John Briggs and F. David Peat, *Turbulent Mirror* (New York: Harper & Row, 1989); Arthur T. Winfree, *When Time Breaks Down: The Three-Dimensional Dynamics of Electrochemical Waves and Cardiac Arrhythmias* (Princeton, N.J.: Princeton University Press, 1987); Leon Glass and Michael C. Mackey, *From Clocks to Chaos: The Rhythms of Life* (Princeton, N.J.: Princeton University Press, 1988), and all of the published proceedings of the Santa Fe Institute in the Sciences of Complexity (Redwood City: Addison-Wesley, 1987–93). These works as well as most listed below contain extensive bibliographies on the subject, while the field continues to expand exponentially.

Time and Information

Some have claimed that a new theory of nature is emerging today²³ though it is one whose roots, whose anxiety, go back to the heart of the modernist moment, to physicist Ludwig Boltzmann's failure to put his H-theorem on a solid foundation,²⁴ even to Bergson's prescient but equally failed attack on Einstein's theory of time.²⁵ If time was excluded along with other "flow phenomena" at the origins of classical physics,²⁶ it reemerged with a vengeance in the nineteenth-century science of thermodynamics and theory of evolution. From that moment on, time could grow only increasingly problematic, for the infrastructure—both scientific and cultural—of our classical worldview became increasingly incapable of accounting for the phenomena that it offered up. Time, began to function increasingly as a

23 Such claims were first advanced by, among others, Ilya Prigogine and Isabelle Stengers in *La nouvelle alliance*, 2nd ed. (Paris: Gallimard, 1986, orig. 1979), and by James Gleick, *Chaos: The Making of a New Science* (New York: Viking, 1987).

24 Boltzmann's attempt to reconcile the timeless laws of classical dynamics with the asymmetrical processes of the second law of thermodynamics is recounted in S. G. Brush, *The Kind of Motion We Call Heat* (Amsterdam: North Holland, 1976); D. Flamm, *The Boltzmann Equation*, eds. E. Cohen and W. Thirring (Vienna: Springer, 1973); George Greenstein, "The Bulldog: A Portrait of Ludwig Boltzmann," *The American Scholar*, v. 60, no. 1, winter 1991; Karl Popper, *Unended Quest* (La Salle, Ill.: Open Court, 1976), pp. 156–162; Thomas Kuhn, *Black-Body Theory and the Quantum Discontinuity, 1894–1912* (New York: Oxford University Press, 1978), pp. 38–46; and I. Prigogine and I. Stengers, *Entre le temps et l'éternité* (Paris: Fayard, 1988). On the H-theorem in general, see Satoshi Watanabe, "Time and the Probabilistic View of the World," *The Voices of Time*, ed. J. T. Fraser (Amherst: University of Massachusetts Press, 1980, orig. 1966).

25 Henri Bergson, *Durée et simultanéité* (Paris: PUF, 1968).

26 On the counterhistory of hydrodynamics and flow phenomena from the time of Archimedes, see Michel Serrès, *La naissance de la physique dans le texte de Lucrèce: fleuves et turbulences* (Paris: Minuit, 1977) and *Hermès IV: La Distribution* (Paris: Minuit, 1977). Prigogine cites S. Sambursky's *The Physical World of the Greeks*, trans. M. Dagut (Princeton, N.J.: Princeton University Press, 1987, orig. 1956) for the assertion that the static view of the world is rooted in the Ancient classical origins of science. Ilya Prigogine, *From Being to Becoming: Time and Complexity in the Physical Sciences* (New York, W. H. Freeman, 1980), p. x. For Hans Reichenbach it derives from Parmenides and the Eleatic School; Hans Reichenbach, *The Direction of Time* (Berkeley: University of California Press, 1956), p. 11. "Flow phenomena" in the sense that I use it here refers to anything from hydrodynamics to weather, economics, or simple iterative feedback equations.

form of pure information: it is after all that which makes differentiation and morphogenesis (i.e., singularities, discontinuities, events) possible, by providing a communicative middle term—a metastability—affording exchanges and absorbing and transmitting tensions across many and various systems of influence. It is also as an informational element that time permits phenomena at great "distances" or at radically different "temporal domains" or scales of reality to react with one another and to be implicated with one another.²⁷ Thus time is not just a novel or superadded variable; it is that agency which multiplies all variables by themselves: systems communicate with one another—not just different systems distributed or adjacent at a moment in time—but systems now enter into communication even with themselves, that is, with the later or earlier states of the system that may now actually interact with any given present moment.²⁸

This new "complex" informational space is today often misnamed by the science that studies it as "chaos." What must interest us is this science's

27 Scaling is an important if little understood aspect of contemporary mathematics. The uncanny periodic appearance of identical elements or structures within apparently random processes has spawned so much interest since the mid-1980s that it has been hailed as a fundamental revolution in twentieth-century physical theory on the same order as relativity and quantum mechanics. It is arguable that these ideas in some form have been around for some time but that the technical conditions enabling them to emerge as full empirical scientific discoveries, as I have already noted, have only recently made their appearance in the form of the Texas calculator, the microcomputer, and the revolution in graphic modeling made possible by the interactive cathode ray tube. The increasing use of "phase-space" models of dynamical phenomena—where a static or moving two-dimensional sectional image is able to express all the information about a continuously evolving multi-dimensional system, including its capacity to mutate randomly in time—is undoubtedly of inestimable importance. On this point too, fractal geometry has played a crucial role. See James Gleick, *Chaos* (pp. 152, 171); Heinz Pagels, *The Dreams of Reason: The Computer and the Rise of Sciences of Complexity* (New York: Simon and Schuster, 1988); and David Campbell et al., "Experimental Mathematics: The Role of Computation in Non-Linear Science," in *Communications of the Association for Computing Machinery*, 28 (1985), pp. 374–384.

28 In addition to positive and negative feedback, reaction-diffusion systems, auto- and cross-catalytic networks, there exist other parasitical influences such as attractor states and what is known as "sensitive dependence on initial conditions," a heightened sensitivity at certain moments in the system to extremely minute perturbations capable of creating decisive, but entirely unpredictable qualitative fluctuations in the system's shape, activity, or organization.

willingness to engage such concepts as disorder, instability, randomness, interactivity, irreducible complexity, and especially *change* as positive (and not merely romantic) terms. For here, all systems are *open* systems; they are labile and suffused with temporality; they are sensitive and chaotic in the sense that they are creative and adaptive—they ceaselessly undergo change, produce novelty; they transform or transmit unactualized potentials to a new milieu, in turn giving rise to a whole new series of potentials to be actualized or not. Open systems are thus open not only to the “outside,” but to wild *becoming* itself—the outside of all outsides.²⁹

What then makes this possible? If time is a pure flow of information determining all actuality and in turn the production of all new potentials, then time is not only that through which matter derives both its capacities and its attributes but is that which can be realized only in matter caught in the throes of “passing out of step with itself.”³⁰ In fact there is no “time” per se that is distinct from extension, only a perpetual, simultaneous unfolding, a differentiation, an individuation *en bloc* of points-moments that are strictly inseparable from their associated milieus or their *conditions of emergence*. The temporal factor here is not “time” itself (Chthonos) but rather a general conception of nature as a “flow phenomenon,” a dynamical, richly implicated system of evental becomings (Aion).³¹ After all, if the real has a claim to make on our imaginations it is much less for any theory of what it *is* than for the fact that things *occur* within it. For when something occurs, it may be said that that which previously remained only a potential or a virtuality now emerges and becomes actual, though only in place of something else that could have arisen here at this time, but did not. This double “difference”—between what is here now but previously was not—and between what emerged and what did not, in all of its complexity and fatality and

29 The principal theme of Gilbert Simondon, *L'individu et sa g n se physico-biologique* (Paris: PUF, 1964); Prigogine and Stengers, *Entre le temps*; Michel Foucault, “Thought from Outside,” in *Foucault/Blanchot* (New York: Zone Books, 1987); and Deleuze and Guattari *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987). Cf. also Gilles Deleuze, *Foucault* (Minneapolis: University of Minnesota Press, 1988).

30 Simondon’s felicitous if difficult expression characterizing the movement or development through which individuation occurs: “une capacit  que l’etre a de se d phaser par rapport a lui-meme, de se r soudre en se d phasant.” *L’individu*, p. 5.

31 See Gilles Deleuze’s treatise on the multiple forms of Greek time in *Logic of Sense*.

in all of its own pregnant virtuality or potentiality is what I will call “the event.” The event is a principle of individuation, indeed *the* principle of individuation in a nature understood as complex and dynamic—it divides, limits, but especially produces.

However, to see nature in terms of events should not be confused merely with establishing a threshold beneath which classical objects, states, or relations cease to have meaning yet beyond which they are endowed with a full pedigree and privileged status. On the contrary, it will be seen how classical objects, states, and relations are in fact fully incompatible with a reality considered as a fluid in perpetual emergence. Indeed the units of such a theory of nature are closer to the medieval concept of the *haecceitas*—that is, singular, correlated, “evental” individualities—a concept that will be developed in chapter 5 in relation to the work of Franz Kafka.

Modernity and Ontology

There is an increasingly rich philosophical and scientific culture dedicated to the problem of time and the event. Our modernity is inseparable from this culture and undoubtedly also from its recent explosive growth. What we lack, however, is an explicit development or delineation of similar developments in the “softer” areas of our history and cultural life—in music, art, politics, literature. The present work is a rudimentary attempt to break some ground in certain of these areas, to see where analysis—and especially what type of analysis—might yield fruit, or at the very least unexpected results upon which a less blinded stab might subsequently be ventured.

From the perspective developed here, the ontology, as I am calling it, of modernity cannot be considered an entirely new one, though it is arguable that only in the twentieth century has it emerged with a specific historical force to become a dominant mode within culture. The individual studies that make up this book are indeed, in a perhaps less modest vein, an effort toward a description of this emergent ontology. Though they seem to announce less abstract objects—a visionary townplan by the futurist architect Antonio Sant’Elia, the literary works of Franz Kafka—it will soon become apparent that this is not, strictly speaking, to be the case. They seek rather to trace a number of themes that were emerging within physical theory at the turn of the twentieth century and to transfer them, however piecemeal at first, onto a single surface where their ultimate consistency can, at least in a preliminary or provisional fashion, be formulated.

In keeping with such a method I have rigorously avoided, even at the cost of a symmetrically paced exposition, the customary application of "theoretical" models to practical phenomena as well as the establishment of hierarchies of ideas where those in one domain are seen as determinant of those in another. Nor is there an equivalency being claimed between ideas developed in, say, physics and aesthetics in the early modern period. Rather, I am advancing the hypothesis that the most significant transformations in science, philosophy, and aesthetics of the time were those that most deeply expressed the characteristics of this newly emerging ontology rather than those that were content to reflect each another's surface features. Analysis will be directed therefore toward a partial reconstruction of this ontological basis rather than at the comparative level of relations where these disciplines can be shown, however dubiously, to be linked.