What Is Abstract?

Today one is told that abstraction can still surprise us, that its history is still before it, that it is still a live question. It is as though the world of abstraction had been reopened. But this means that it must be rethought, breaking loose from conceptions that have long framed its discussion. Not so long ago, abstraction seemed "dead" question, even a question of "dying"it was supposed to play

four Abstraction

a fatal if heroic part in a drama through which painting exposed and exhausted all its formal possibilities, leaving it with no other game than an endgame. But we don't have to conceive of abstraction in this manner; we don't have to see it as an avant-garde post in a progressive advance to extinction. We may think of it rather as an untimely

point in a complicated history, which goes off in several directions at once, redistributing the sense of what comes before it and what may yet come after. But for this, we need other, lighter, less mortuary ways of thinking. To rethink abstraction, we need another kind of theory, another picture of what it is to think "abstractly"!

In this situation, the philosophy of Gilles Deleuze becomes quite telling. Rather in the manner of fellow anti-Platonist Ludwig Wittgenstein, Deleuze advances another image of what abstraction means in philosophy, more "empiricist," more "immanentist," more "experimental"; at the same time he sketches another view of what abstraction means in art, more chaotic or formless, no longer defined in opposition to figure or image. These two kinds of abstraction intersect in many ways, forming part of a new way of doing art-connected philosophy. In both cases, we find a departure from the view

of abstraction as a process of extracting pure or essential Forms, emptying a space of its concrete contents, toward another kind of abstraction and another sense of "abstract": an abstraction that consists in an impure mixing and mixing up, prior to Forms, a reassemblage that moves toward an outside rather than a purification that turns up to essential Ideas or in toward the constitutive "forms" of a medium. For Deleuze, philosophy itself becomes a practice of this abstract mixing and rearranging, a great, prodigious conceptual "And . . ." in the midst of things and histories. Thus he says that philosophy is impoverished when reduced to being merely about the arts, reflecting on their forms of judgment; for it has a much more vital role to play together with them, linking up with them in odd places, interfering and intersecting with them through "encounters" prior to settled judgments. To transform the picture of what it is to think abstractly is to transform the picture of the relations that abstract thought may have with the arts and so with abstraction in the arts. Thus Deleuze arrives at a picture of abstraction unlike the one that comes with the tragic story of this strange, self-possessed purity in the sea of kitsch, calling out to the painter-hero, obliging him to surrender until death.

## Nots and Ands

The standard story of modern abstract painting rests on a particular conception, haunted by the empty canvas as Mallarmé had been by the blank page. Abstract is what is not figurative, not narrative, not illusionist, not literary, and so on, to the point where one arrives at a sanctifying negative theology in which "art" (or "painting") takes the place of "God" as That to which no predicate is ever adequate and can only be attained via the via negativa. Such things as the decline of religion and the rise of photography are commonly said to be responsible for this

turn to the negative way, which would lead, through various routes, to the endpoint of the monochrome—Kasimir Malevich, Ad Reinhardt, Frank Stella's black paintings, etc. After such monochromatic emptiness, all would be parody, quotation, "irony," eclecticism—in other words, "postmodernism." Thus abstraction would bring an end to the canvas, authorizing a turn to "art" in an unspecific sense, without painting or instead of it—a turn from being (just) a painter to being an artist or "anartist" with no particular medium—which would be consummated in New York in the sixties, after abstract expressionism, with pop and minimalism. 1

In this now-familiar drama, abstraction means stripping away of all image, figure, story, "content" to reach the empty or flat canvas. That is the root of many familiar ideas: abstraction as illusionist space from which the illusion has been removed, pure form without content;

pure, self-referential "literalness" opposed to any "decoration" or "theatricality"; a bride stripped bare. What the late Clement Greenberg called modernism is perhaps the most influential variant of this conception, connected to a story about cubism and the flattening of classical illusionist space, which Greenberg adapts from Hans Hofmann, adding, as motivation, a horrified escape from the world of kitsch toward a kind of optical puritanism, in which the eye, "abstracted" from all admixture with the other organs of the body, would itself become pure, formal, and so abstract.

Yet despite Greenberg's eye for the "quality" of the likes of Kenneth Noland and Jules Olitsky, the heroes of abstract expressionism come to seem the last heroes of this kind of abstraction, this kind of "modernism." After abstract expressionism appear various attempts to depart from the whole idea of the painter-hero who creates from nothing—from the anxiety of the blank surface or

and, therefore, from an aesthetic erotic analyzed by Lacan around the same time. For in his seminar of 1960, Lacan defines sublimation as an attempt to recreate in an object the emptiness of the lost Thing, much as God had created the world out of nothing, ex nihilo. That is why the strange things we call art objects incorporate an emptiness surrounded by affects of anxiety, melancholy, mania, or mourning; it is why the fame that accrues to creators of such objects is so odd, rooted in envy.<sup>2</sup>

Yet it is not clear that the work that prides itself on coming after the supposed monochromatic endgame of abstraction (after modernism or formalism) really breaks with this anxious-heroic erotic, this negative theology of art, this "not." On the contrary, one can argue that postmodern art remains, as it were, haunted by the spirit of the abstract painting; it only repeats this game as farce, through quotation, parody, irony, alternating between mania and melancholia. Indeed the very idea of appropriation, and of what Jean Baudrillard called "the simulacrum" is fully impregnated by the tradition of melancholy and panicked reaction to loss or absence; in this respect it is quite unlike the idea of the simulacrum that a forgetful Baudrillard had appropriated from Deleuze, which involves not a loss but an *intensification* of the real, linked to a condition of things prior to Forms. In short, it is as though first in modernism, and then in postmodernism, the tale of abstraction were a long, sad illustration of Nietzsche's thesis linking asceticism and nihilism: that one would prefer to will nothing than not to will at all.

Of those who have written on abstraction, Deleuze is perhaps the least affected by such ascetic "nots" He remains singularly unseduced by the secrets of the "virgin" canvas—by the whole negative-theological picture

of abstraction and its anxious erotic of an imperious Art approached only through negation, this virgin whose purity means death. Instead of the nots of negative theology, he prefers to see the "folds" of Neoplatonic complicatio as a source for abstraction. For in them he sees something that cannot possibly be made to "participate" in the purity of Forms and the sorts of abstraction that attain them. He finds another minor tradition of such abstract complication in Proust's signs, in Leibniz's "minimalist" monads, and in Spinoza's treatment of divine names, where it is linked to "the problem of expression," important for Deleuze's own view of abstraction. One finds something of Spinoza's "god or nature" in the manner Deleuze comes to formulate the problem of abstract expressionism in Jackson Pollock—as a problem of expressing something that can't possibly be figurative (hence can't possibly be a mere absence or lack of

figuration), which can be shown only in an "ungrounded" (effonde) space, through a "plane of composition" rather than a "plan of organization," without beginning or ending, finality or totality! Pollock's "all-over" would be like Spinoza's infinity—a substance that just is the endless composition, decomposition, and recomposition of its finite modes, rather than something static that would underlie, enclose, or organize them.

Deleuze's view of the "space" of abstraction is, in short, not based on the great "not"—on the absence of figure, image, or story. Rather than absence and negation, abstraction has to do with the affirmation of "the outside" in the sense that Foucault develops from the thought of Maurice Blanchot in the sixties, explicitly contrasting it with the tradition of negative theology. In effect, Foucault argues that modernism does not consist

in an internalizing reversion to the medium but, on the contrary, in an opening of the medium out from itself, to the point where it becomes "beside itself." He thinks that this externalizing "madness" in modern works-this absence d'oeuvre opening to an "outside"-entails a certain blindness that enables a whole art of seeing.4 Thus modernity doesn't consist in a melancholy purification of the means of representation, turning within to proclaim an enclosed autonomy; on the contrary, it is about untimely forces that announce other new outside possibilities, and so introduce a certain "heteronomy" in mediums. For Deleuze the basic question of modernity becomes how to think, how to write, how to paint such other or outside forces. Thus, in the "minority" of Kafka, the "chaosmos" of Joyce, and the épuisements of Beckett, he identifies an abstraction quite different from the self-purifying kind—that of those "abstract" machines" that push art forms beyond and beside themselves, causing their very languages, as though possessed

with the force of other things, to start stuttering "and . . . and . . . ". He connects this stuttering abstract "and" not with dying or heroic self-extinction but with a strange anorganic vitality able to see in "dead" moments other new ways of proceeding. And this sort of vitality, this sort of abstraction, he thinks, is something of which we may still be capable, something still with us and before us.

So Deleuze declares the page is never blank, "the canvas is never empty." To think in those terms is to have a mistaken idea of what it is to paint (or to write) and so of abstraction in painting (or writing). For before brush is put to canvas, there is the "avant-coup" of a long preparatory work that consists in getting rid of the ambient clichés in the studio and beyond; the canvas thus always starts off covered over with too many givens, too many probabilities, from which one must extract a singular space that allows for the chance of an "après-coup"

of strange new virtualities, unpredictable or unforeseeable. This is what makes the act of painting always hysterical. To paint one must come to see the surface not so much as empty or blank but rather as intense, where "intensity" means filled with the unseen virtuality of other strange possibilities—one must become blind enough to see the surface as mixed or assembled in a particular transformable and deformable manner, rather than as just "flat." One can then see abstraction not as elimination of figure or story but rather as an invention of other spaces with original sorts of mixture or assemblagea prodigious "and" that departs from classical illusionism and eventually even from figure/ground principles of composition. Flatness thus becomes only one possibility of the canvas among others, quite compatible with figuration. In fact Deleuze finds one sort of flattening spatialization in Francis Bacon—the use of aplats to make the figures appear next to, rather than within, the space the surrounds them, thus allowing the force of their strange matter-of-fact figurality to emerge.<sup>6</sup>

Another modernity, another abstraction. When in 1980, writing with Félix Guattari in the last plateau of A Thousand Plateaus, Deleuze asks directly the question "What ought one to call abstract in modern art?",7 it thus comes after a long rethinking of the very idea of the modern and the abstract, whose logic Deleuze had set out in the 1960s-around the same time "after abstract expressionism" in New York, when it was it was thought that painting might be coming to an end. This logic (later reelaborated in terms of "abstract machines") describes rather well the unheroic, almost automatic series that one sees emerging in pop and in minimalism at that time in New York. To understand properly the

answer Deleuze and Guattari give in A Thousand Plateaus to the question of what should be called "abstract" in modern art—"a line with variable direction, which traces no contour, and delimits no form"8—one needs some sense of this larger change in conceptual terrain. One needs to have rethought abstraction in its logic.

## The Two Abstractions

The central frame for the notion of the abstract in the philosophical tradition has been that of a taxonomic tree of distinct classes or kinds. One abstracts as one moves up to higher levels of generality, just as one concretizes or instantiates as one moves downward toward particulars or specific instances of types. Thus the dialectic that Plato attributes to Socrates consists in the effort to track down the higher, more general Forms in the lower, more particular things that "participate" in them, by making sure that the lineages are pure or unmixed, following the divisions of the tree; ideas of both analogy or

resemblance and of force or potential (dynamis) would be made to conform to this arborescent picture. Deleuze argues that neither the transcendental idea of a priori conditions nor the dialectical idea of a whole of contradictions would in fact really break away from such Platonism, for neither allows a sense of "abstract" that permits one to move away altogether from general taxa, transcendental categories, or dialectical totalities and find things for which there exists no such "abstract" model or type (what Deleuze terms "multiplicities" and "singularities"). For that, one must reverse Platonism and see Forms (and later conditions or totalities) as belonging to an unlimited abstract space that precedes and escapes them—a space that is "larger" than the highest genera and has components "smaller" (or more "minimal") than the lowest species (such, in the terms of Duns Scotus, would be the indifference of Being and the existence of "haeccities").

Thus Deleuze draws a picture of an abstract logical space anterior to the divisions and up/down, high/low movements within the great Platonic tree—a space that includes a force or potential that constantly submits its branches to unpredictable, even monstrous variations. In Logique du sens, he offers a picture of such variations as "series." A series differs from a set, a class, a type, or a totality in remaining open to such forces of divergence and deviation, which alter its contours and the sorts of things to which it can be linked.9 A series may then be said to be composed of indistinct singularities rather than the distinct particularities from which general abstractions are made; and conversely a singularity is what enters into a series rather than falling under a class or particularizing a universal. Series are thus impure mixtures that complicate and depart from pure lineages of given ones, and in this respect are like the deviations

or swerves of what Lucretius called the clinamen. Logique du sens is Deleuze's attempt to show that the potential for such deviation and ramification forms an uneliminable anonymous layer of meaning, prior to sense, reference, and elocution. Différence et répétition then attempts to show that when "difference" is freed from making "distinctions" or "oppositions" within or among the fixed classes of the tree, it discovers a complex sort of repetition—a whole complicated time and movement that includes a nonprobabilistic "nomadic" kind of chance, which no throw of categorical dice can ever abolish.

One might then say that there are two sorts of abstraction in Deleuze, two senses of what it is to abstract and to be abstract. The first is the Platonic sense of abstract Form. It is the object of the "critique of abstractions" that Henri Bergson shared with his contemporary

William James, and that Deleuze himself formulates when, saying that he is an empiricist in the tradition of Alfred North Whitehead, he declares, "The abstract does not explain, but must itself be explained."10 To explain by abstractions is to start with abstract Forms and ask how they are realized in the world or extracted from it. But to explain those abstractions themselves is to reinsert them in a larger (and smaller) "pluralistic" world that includes multiplicities that subsist in Forms and induce variations in them, altering their connections with other things. In this way one shows that they are abstract in the invidious sense of being incapable of complication or movement-such is the critique. Thus one attains a complicated condition in things prior to Forms, which Deleuze likens to the space traced by one of Pollock's lines, which "does not go from one point to another, but passes between the points, ceaselessly bifurcating and diverging."11 One arrives at another question: not how are Forms are extracted from or realized in

things, but under what conditions can something new or singular be produced "outside" them? Thus one comes to the second sense of the abstract in Deleuze, developed along with Guattari through the concept of abstract machines and "opposed to abstract in the ordinary sense" 12—the sense of the "and" that moves outside. To pass from the first critical sense of the abstract to this second, "affirmative" one is to transform the very idea of the abs-tractus—the act of withdrawal or turning away.

For as long as one thinks of the abs-tractus as Form withdrawn from matter, one thinks in terms of possibilities and their realizations (or later transcendental or dialectical conditions of such possibility). The basic assumption remains that the world is logically congruent with possibilities given by abstractions, even if all such possibilities are not realized or instantiated or if all categories under which they fall are not known. But once one allows for a world that is disunified, incongruous,

composed of multiple divergent paths, one can think in terms of abstract virtualities that, in contrast to such abstract possibilities, are quite real, even though they are not actualized. One starts to see the force or potential of things for which there exists no abstract concept, since their effectuation would go off in too many directions or "senses" at once. Deleuze calls such potentia "virtual" in a sense that contrasts with the "possible" developed by Bergson in his critique of abstractions. 13 Thus the virtual may be said to be "abstract" in a different sense from the possible: unlike abstract "mechanisms," abstract machines are said to be "real although not concrete, actual although not effectuated,"14 comprising a sort of "real virtuality" in things. They have the abstraction of immanent force rather than transcendental form-the abstract virtuality within things of other different things, of other "possible worlds" in our world, other histories

in our history. That is why they are "rhizomatic" rather than "arborescent"-serial, differential, complicating rather than categorical, generalizing and purifying. That is why they can be expressed only through abstract "diagram" and not abstract "code." The whole problem is how to put them first, how to see them as first, for the two sorts of abstraction do not exist apart from one another. They are inseparable forces at work and at odds within any logical space, including that of Plato himself (for example, in the aporia of the "bastard logic" of the chora in the Timaeus). In the reversal of Platonism one is thus put first, reversing what it means to come first or be prior (priority of immanent condition rather than of transcendental form). That is why the passage from one kind of abstraction to the other involves a change in seeing: rather than seeing the Forms that the sun illuminates above, or the ideas that the natural light illuminates within, one must learn to see this prior, immanent condition that illuminates through multiple paths outside, "ceaselessly bifurcating and diverging," like one of Pollock's lines.

Deleuze then brings this second sense of "abstract" to his discussion of modern art-for example, to Jean-Luc Godard. For if Deleuze sees Godard films as abstract, it is not because they remove all narrative or diegesis and retreat into pure filmic self-reference but because they take singular elements from all over, past and present, and reassemble them, mixing them up in the strange nonnarrative continuity of an "abstract machine."15 The motivation is thus not the removal or absence of narrative but an attempt to attain an outside of other odd connections through a free, abstract "and," which takes over the movement and time of the film. That is one source of Deleuze's quarrel with the film semiology of Christian Metz. One must put this sort of

abstraction first, see it as first, and so take narration as only "an indirect consequence that flows from movement and time, rather than the other way around." For film is not a code of which abstraction would be the self-reference; it is an abstract machine that has movement and time as specific abstract virtualities, which then get effectuated in particular social and political conditions; narrative is only one restricted possibility of film. Thus what Deleuze counts as most specific to film—the forces of its time and movement images—is at the same time what opens original connections with other mediums, for example, with architecture, which Deleuze then sees as closer to film than is theater.

But it is the same with abstraction in painting. There too we find an abstraction of the "and" rather than of the "is," of the outside rather than of the absence of figuration and narration; and there too the problem is

to see such abstraction as first. Much as with Metz in film theory, in painting theory one might thus draw a contrast with Clement Greenberg's attempt to see in abstraction an apotheosis of autonomy and "opticality." For following Lessing's classical division of the arts, Greenberg argues, in effect, that abstraction in each art form (for which abstract painting takes the lead and shows the way) would achieve an absolute separation where each would stay in its place and appeal to one and only one sense organ; thus the "eye" of painting would at last be freed from all theatricality, and be shown only what is purely optical. Greenberg's contrast is with the Wagnerian Gesamtkunstwerk, which tries to put all arts and senses together in a totality. Deleuze is concerned to undercut the logic of this contrast, which opposes clear, distinct elements to total expressive forms. In his own logic, he allows for things to be inseparably connected while remaining singular and nontotalized and so

remains undisturbed by "paradoxical" objects that fall in between the supposed bounds of specific mediums, mixing them up anew; and he thus envisages other, lighter Nietzschean paths out of Wagnerian totality. 17

## Pollock's Lines

As narrative in film depends on the abstract virtualities of movement and time, so figuration or image in painting may be said to depend on how pictorial space is held together and comes apart—on how it achieves an order out of chaos. There are different kinds of abstraction and different types of "figurability" in painting, and these differences are more important to its logic than the gross opposition between the abstract and the representational Deleuze then tries to spell out this "logic of sensation" in painting.

Sation in painting.

One can think of pictorial space as built up from distinct simple elements or else as held together by expressive wholes or by figure/ground gestalts. But Deleuze's logic envisages another complicating possibility, prior to these or subsisting within them: he thinks that pictorial space can become ungrounded (effondé) and "disparated" in its composition, allowing for the force of indistinctions, in-between spaces, or "leakages" (fuites). In this case, pictorial space attains an uncentered, unbounded, and formless condition; it discovers the workings of nonprobabilistic chance in its composition; and it departs from the predominance of purely optisch frontal vision to discover more haptisch sorts of spatialization, which have multiple entrances and exits rather than being given to a single point of view. Thus Deleuze proposes to distinguish fixed visual plans of organization in delimited spaces from free, tactile planes of disparate distribution in unlimited or formless ones. What he finds important about Pollock's abstract line is

a passage from one to the other, or a reversal in which one is put first; he sees a turn from the centered, framed, figure/ground organization that European classicism took to be universal, to another uncentered, unlimited, informel, multiple sort of distribution in space and space of distribution. He says that Greenberg is quite right in pointing to the importance of the abandonment of the easel in this shift, for it is what made possible a "reversion" in pictorial space from "visual horizon" to "tactile ground." 18 But to give up the easel is more than to abandon the figurative or illusionistic relation to nature. It is to depart as well from delimitation (frames or borders), perspectival distance, and presumptions of symmetry or of organic centering; and it is therefore very odd of Greenberg to say that these changes result in a pure "opticality." For what in fact is at stake is the discovery of something prior to the con-

toured or delimited figure-something "first," which comes "before" the horizons of frontal vision and cannot simply be derived from a purification or flattening of the classical optisch perspective space. What Pollock discovers, according to Deleuze, is rather the "catastrophe" of the visual-catastrophe not as a content (as in romanticism) but as a force or potential inherent in pictorial space as such. For all painting passes through an experience of "the collapse of visual coordinates," as a condition bringing other singular visual sensations into being; such is the "blindness" that lets a painter see and show the things unseen before him. Remarking on how such catastrophe figures in Cézanne and Klee, Deleuze declares that painting is the art form closest to it. Thus he calls painting inherently hysterical in his study of Francis Bacon, where the catastrophe appears in the operational cluster of "asignifying" features, taches, zones, which Bacon terms the "diagram" in his works.

Because Pollock's line thus has variable direction, tracing no contour and delimiting no form, ceaselessly diverging and bifurcating, it requires a rethinking of the very idea of the abstract. Greenberg's story based in cubism, and the sort of three-dimensional space that allows one to see depths and contours, figures and grounds, is not sufficient. For just what matters in Pollock's abstraction are lines and taches of color that don't limit anything, that have no inside or outside, no convexity or concavity—and so are after all "Gothic" in a sense that Deleuze finds in the writings of Wilhelm Worringer rather than in surrealism. For this abstraction departs from geometric, rectilinear shape; it is less a spiritual purification of Form than an expressive decomposition of matter. It is thus "abstract" in a peculiar sense, which makes Mondrian's squares or Kandinsky's points, lines, and planes still seem strangely figurative, since they after all remain "figures" with delimited contours.

Indeed it is as though such earlier rectilinear kinds of abstraction were an attempt to reduce the forces of abstract diagram in painting, so as to attain the purity of an abstract code of primitive visual elements—a sort of spiritualizing escape from the potential catastrophe of the visual toward a fundamental language of the organization of color, form, and shape. Pollock then helps restore the diagram to abstraction, allowing one retrospectively to see a prefigurative, formless materialism already at work in the geometries of the earlier abstract work. Thus Deleuze detects "nomadic contourless" lines in Kandinsky, while the unequal thickness of the sides of Mondrian's squares suggests the possibility of a contourless diagonal. Deleuze's student Bernard Cache has gone on to try to see such possibilities in the baroque "inflections" of Klee's pedagogical sketchbooks, as well as in a strange Lucretian materialism that would precede

Kandinsky's official rectilinear spiritualism. In both cases Cache finds an abstract space composed through inflection, vector, and frame rather than organized by point, line, and plane. 19 At the same time the contourless, unlimited abstract space that Pollock attains changes the terms of the contrast between the abstract and the figurative. It helps us see other relations to figure, other kinds of "figurality," like that Deleuze finds in Bacon. Thus Deleuze says that Bacon departs from imagesgiven-in-classical-perspectival-distance in yet another way, different from the abstractions of either Kandinsky or Pollock-from a cliché-ridden "photographic" world he extracts an original kind of figure placed on a strange, intolerable surface from which it is always seeking release, as though subjected to the violence of invisible forces that undo its "faciality" and expose its "meat."

In A Thousand Plateaus Deleuze and Guattari thus declare that the emergence of the abstract line "with variable direction, that traces no contour, and delimits no form" requires that what counts as abstract be itself rethought along several lines at once. First, the gross exclusive opposition between figurative and abstract looses its centrality, and a good deal of its interest, in favor of kinds of pictorial space and the kinds of figurability they permit. For images or figures are not created out of nothing to match external models; they come into being from a compositional space that always departs from visual coordinates, creating strange new sensations. Abstraction is thus not in the first instance to be understood as the emptying of illusionist space of figures and stories; it is rather a "sensation" of this other larger abstract space that precedes and exceeds them. "Figuration" is a limiting case of the original abstract potential for "figurability" in painting. This, however, requires a change in the presumed

motivation of abstraction: not to strip everything away in self-referential abnegation, but to offer sensations of things that can be seen only through the experience of "the collapse of the visual" or the "blindness" of painting. In that sense, what one paints is always otherwise unseeable abstract forces. Finally, the "space" of abstraction is not originally or fundamentally geometric-"the abstract line is not in the first instance rectilinear."20 Geometric form looses its centrality in favor of more tactile, dispersed, uncentered, and unlimited sorts of space. Thus Deleuze and Guattari suggest that we think of the classical Athenian preoccupation with geometric or rectilinear form as only one possibility, preceded, according to Riegl, by an Egyptian one, and followed, according to Worringer, by a Gothic one; one can then see the classical space of perspectival distance in terms of the optisch/haptisch distinction rather than in simple terms of form and content. Yet there remains an idealism in the Kunstwollen offered by Riegl or Worringer, linked to the preoccupations of a German Eurocentrism. For in fact painting starts as abstract and is such already in prehistoric times. Thus Deleuze and Guattari draw attention to the argument advanced by André Leroi-Gourhan that "art is abstract from the outset and could not be otherwise at its origin."21 Classical European illusionism is thus only a late development in an inherently abstract art. For all of these reasons, Deleuze and Guattari say that, far from resulting from stripping illusionist space bare, abstraction is something prior to it-something that comes first. It is first historically, as Leroi-Gourhan shows; it is first in motivation, since all painting passes through a prefigurative or preformal "blindness"; and it is first logically, since the classical distanced, centered way of showing contours and forms is only a limited case of the larger potential in painting of a centerless, contourless, boundless, formless space.<sup>22</sup>

## The World of Abstraction

What is then abstract? Today the question arises in relation to what is known as the "information" age. Perhaps some new pragmatist will apply the critique of abstractions found in Bergson and James to the very idea of information and the computational paradigm to which it belongs. Two related postulates might be distinguished. The first says that information is independent of the material medium through which it is transmitted; the second says that simulation and reality come to the same thing. Thus one "abstracts" from material support and, by replicating processes, abstracts them from the particularities of their real existence; even "life" becomes only abstract information, which can be replicated and so

made artificially. The two postulates of immateriality and irreality then combine in the great conceit of the info era: that electronic devices will abolish real or material space and time and transport us all into another abstract, bodiless "space" or "reality," consummating the triumph of silicon over carbon.

By contrast in Deleuze one finds an abstraction concerned not with extracting information from things (as though the material world were so much clumsy hardware) but rather with finding within things the delicate, complicated abstract virtualities of other things. Such abstraction doesn't entail independence or transferability from material support and doesn't operate according to a logic of simulation. Rather inherent in materials it supposes the subsistence of connections that exceed the messages of a medium and ourselves as senders and receivers of them. Thus the abstract use of a medium is not when it itself becomes the message, but when it

starts to stammer "and . . . and . . . . " prior to message and transmission. In this way, abstraction belongs to the bodily material world and its unpredictable chaosmotic processes—processes so formless as to permit the operations of abstract machines with which computational devices may be then themselves be connected. Thus Deleuze has little sympathy for the reductive proposition, dear to computational neuroscience, that the mind just is the information program of the brain. To the Cartesian "ghost in the machine" that Gilbert Ryle ridiculed, Deleuze prefers what Spinoza called "the spiritual automaton"—this finite manner of being that composes and recomposes with others in an unlimited field, ever connecting and reconnecting the mind and the body through a whole "technology of the self." If then the brain is a connection device, it is not mind-programmed but plunged in a multiple, disunified, formless world. Its

logic is therefore not the purely computational one of which Alan Turing dreamed, but operates instead with form and formlessness, order and chaos, rather like what Deleuze finds in abstract painting and Pollock's line. The question of abstraction then becomes: To what sort of abstract machines do Turing machines belong, and with what sort of "desiring machines" are they connected?

One can then imagine other links to the space of abstract painting than the one proposed by neogeo (where "geo" simulates the irreality of "info") or than attempts such as Mark Johnson's to redescribe Kandinsky's abstract spiritual code in a language of cognitive psychology. Rather Deleuze is drawn to models in science and mathematics that come with strong software capabilities, that depart from distinct sets and expressive totalities to envisage things like catastrophe, chaos, and complexity. They can be used to generate topographical spaces more like Pollock than

Kandinsky—nongeometric or nonrectilinear, prior to the "simulation" of things. Info devices don't *have* to be used to assist smart weapons or to imagine what it was like to walk about in the Egyptian pyramids. There are other "abstract" uses.

The situation of our postindustrial info devices today is thus something like that in which Deleuze sees the new "industrial art" of cinema at the turn of the century, when Bergson proposed his own critique of abstractions. Bergson feared a "cinematographic illusion" of continuity, but already the real problem of cinema was not that of image and reality any more than of medium and message (or medium being the message). It was a problem of time and movement in the composition of space, and so of other, more diverging and bifurcating conceptions of continuity, taken up in Bergson's own philosophy. And it was just when cinema made such

"abstract" connections in its new industrial "material" that it discovered its most intense relations with abstraction in the other materials, in architecture and dance as well as painting and sculpture. Such were then the abstract virtualities in the medium, irreducible to messages, which unfolded within particular sociopolitical situations, punctuated by the experience of the war; such were the abstract forces in the medium that would figure in larger abstract machines, connected to an outside, exposing things unthought in our ways of being, seeing, and doing.

Perhaps the most intense relation our current info machines might have with abstraction in painting—old, new, yet to come—is of this sort. For the relation between mediums (and abstraction in mediums) is one not of negation but of connection—of "and" rather than "not." A new medium with its specific materiality never simply takes over the functions of older ones, as though

abstract information were being transferred from one means of delivery to another—photography depriving painting of its functions, video images killing off film images, everything being replaced by interactivity. Thus, for his part, Deleuze refuses to join certain influential directors or critics in making video responsible for the decline of the "abstract" cinema that came after the war with Italian neorealism, French new wave, and American experimental film. He thinks the problem is more general. What is at stake is a loss of the taste for the world given through the odd descriptive space that such "abstract" film opened up-a loss of the sense of the world, shown in philosophy at the same time by a retreat from conceptual movement into a meta-reflection on abstract norms of communication, in a replay of the neo-Kantian denunciation of Bergson by Julien Benda. 25

For this world is what abstraction is all about: abstraction as the attempt to show—in thought as in art, in sensation as in concept—the odd, multiple, unpredictable potential in the midst of things of other new things, other new mixtures.<sup>26</sup>