

Guattari's Diagrammatic Thought

Writing Between Lacan and Deleuze



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This book is dedicated to the surviving faculty, staff, and students of the Department of Foreign Languages and Literatures at Virginia Tech, in loving memory of those we lost on April 16, 2007.

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* * *

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About translations

Whenever available, published English translations have been cited. All other translations are my own. I provide English pagination followed by the French, separated by a slash; the abbreviation “tm” indicates my modifications of existing translations.

I have for the most part used Brian Massumi’s translations for terms found in *A Thousand Plateaus*. Otherwise, I have chosen English terms according to the domain from which Guattari seems to have borrowed his idiosyncratic technical language (linguistics, information theory, physics, anthropology, psychoanalysis, etc.). This has resulted in some heavy modification of existing English translations, so as to convey the specialized lexicon of the original.

A number of recurring terms pose problems either because they have been translated in different ways in past publications, or because multiple meanings differ from French to English. The following are worth noting:

<i>auto-</i>	auto- (as in <i>auto-référence</i> , <i>auto-organisation</i> ; could be translated self-, but I wish to retain the affinity with autopoiesis and autonomy, and in some cases to avoid the psychological overtones)
<i>a-signifiant</i>	a-signifying (sometimes translated as “non-signifying”)
<i>agencement</i>	assemblage (sometimes translated as “arrangement”)
<i>fluxes</i>	flows (this is the translation used in <i>AO</i> ; in <i>CM</i> it is translated “fluxes”)
<i>foncteur</i>	functor (sometimes translated as “function”; Guattari uses both <i>foncteur</i> and <i>fonction</i> , which designate two different mathematical concepts)
<i>instance</i>	agency, authority, (psychic) formation
<i>matière</i>	matter, purport (from Hjelmslev), material, subject-matter (as in university coursework)
<i>modélisation</i>	modeling (many translators have rendered this very ordinary French term as “modelization,” which is a

neologism in English; I instead use “modeling,” so as to reflect Guattari’s borrowing from standard social science terminology)

métamodélisation

metamodeling (these terms are neologisms in both languages)

Abbreviations

AH	Guattari, <i>Les années d'hiver, 1980–1985</i>
AO	Guattari with Deleuze, <i>Anti-Oedipus/L'Anti-Oedipe</i>
AOP	Guattari, <i>The Anti-Oedipus Papers/Écrits pour l'Anti-Oedipe</i>
ATP	Guattari with Deleuze. <i>A Thousand Plateaus/Mille plateaux</i>
CM	Guattari, <i>Chaosmosis: An Ethico-Aesthetic Paradigm/Chaosmose</i>
CS	Guattari, <i>Cartographies schizoanalytiques</i>
CY	Guattari, <i>Chaosophy</i>
DS	Guattari, "D'un signe à l'autre"
E	Lacan, <i>Écrits: The First Complete Edition in English</i>
GR	Guattari, <i>The Guattari Reader</i>
IM	Guattari, <i>L'Inconscient machinique: Essais de schizo-analyse</i>
MB	Guattari with Rolnik, <i>Molecular Revolution in Brazil</i>
MR	Guattari, <i>Molecular Revolution: Psychiatry and Politics</i>
PIP	Guattari with Oury and Tosquelles, <i>Pratique de l'institutionnel et politique</i>
PT	Guattari, <i>Psychanalyse et transversalité: Essais d'analyse institutionnelle</i>
RM	Guattari, <i>La Révolution moléculaire</i>
S1	Lacan, <i>The Seminar of Jacques Lacan, volume 1, Freud's Papers on Technique</i>
S2	Lacan, <i>The Seminar of Jacques Lacan, volume 2, The Ego in Freud's Theory and in the Technique of Psychoanalysis, 1954–1955</i>
SS	Guattari, <i>Soft Subversions</i>
TE	Guattari, <i>The Three Ecologies/Les Trois écologies</i>
tm	translation modified
WIP	Guattari with Deleuze, <i>What is Philosophy?/Qu'est-ce que la philosophie?</i>

Introduction: schizoanalysis as metamodeling

Félix Guattari, writing both on his own and with philosopher Gilles Deleuze, developed the notion of schizoanalysis out of his frustration with what he saw as the shortcomings of Freudian and Lacanian psychoanalysis, namely the orientation toward neurosis, emphasis on language, and lack of socio-political engagement. He came to define schizoanalysis as “metamodeling,” a process of examining the social, psychic, and scientific models currently in place, then recombining or replacing these models with something that might work better. This emphasis on modeling seems especially curious given Guattari’s stance on structuralism, whose schemas he found dangerously reductive. I am defining “structuralism” quite simply as the mode of analysis prevalent in the social sciences in France during the 1950s and 1960s, and which was based on identifying and describing structures, the repeated patterns which shape language, culture, behavior, and the psyche. Structuralism was intentionally reductionist, suspicious of developmental accounts of individuals or societies, and above all distrustful of the knowing subject. Although Guattari had no sympathy for the defunct Cartesian subject, and although he recognized the existence and importance of structure, he rejected structuralism’s celebration of universal laws, a predilection which for him was epitomized by Jacques Lacan, Claude Lévi-Strauss, and Louis Althusser. He was troubled by these thinkers’ schematic paradigms modeled on those of the hard sciences and by their emphasis on language at the expense of other forms of expression. Guattari above all rebelled against Lacan’s oft-repeated maxims that “the unconscious is structured like a language,” and that a “signifier represents a subject for another signifier.” Lacan illustrated these ideas with his own algebra of the unconscious and with elaborate topographical figures.

Paradoxically, even as Guattari rebelled theoretically and practically against Lacan’s “mathemes of the unconscious” and topology of knots, he ceaselessly drew his own diagrams, schemas, and models. To the simplifying models of structuralism, Guattari opposed his complexifying metamodeling. The idea of metamodeling describes not only Guattari’s analytic practice, but also his very unique way of thinking and writing. Deleuze once said

of Guattari that “His ideas are drawings, or even diagrams.” Deleuze with his concept-oriented thought was strangely attracted to Guattari’s prolific production of new diagram-like ideas. “Between Félix with his diagrams and me with my articulated concepts, we wanted to work together” (Deleuze 2006: 238). This comment suggests two different ways of thinking, one diagrammatic and one conceptual. Many Deleuze commentators have voiced a reluctance to separate his ideas from Guattari’s in the co-authored writing, citing the authors’ own insistence that such a separation is impossible, because of the way they worked together, and because all writing is produced by a multiplicity, a “collective assemblage of enunciation.” While I would agree that it is not possible to assign sole ownership to any of their concepts, it is entirely possible to contrast their very different styles of thinking and writing, as well as the different concerns that motivate their work, together and separately. They certainly shared many interests. Guattari was a reader of philosophy, and Deleuze a reader of psychoanalysis. They were both drawn to literature, art, cinema, animal ethology, evolutionary biology, and the history of science. Guattari was the militant political activist, but Deleuze was always sympathetic to leftist and minority causes and became more active in his support under the influence of Guattari and Foucault. However, Guattari’s and Deleuze’s respective professional engagements in clinical psychotherapy and academic philosophy often resulted in unique perspectives, leading them to ask different kinds of questions. Guattari’s pursuits in linguistics also separated the coauthors. “I don’t personally think that linguistics is fundamental,” Deleuze tells an interviewer. “Maybe Félix, if he were here, would disagree. But then Félix has traced a development that points toward a transformation of linguistics: initially it was phonological, then it was semantic and syntactic, but it’s turning more and more into a pragmatics” (Deleuze 1995: 28). Guattari’s diagrammatic thought is inextricably bound up with his psychoanalytic practice and investment in the field of linguistics.

I attribute Guattari’s predilection for drawing schemas not only to personal taste or style, but also to three disciplinary influences: Freudian and Lacanian psychoanalysis; linguistics and semiotics; and the sciences of information, systems, and complexity. Lacan in particular was fond of drawing diagrams on the board during his seminars. Among the linguists that Guattari read, Chomsky was the most prolific generator of schemas, usually in the form of trees. Scientists routinely use diagrams and mathematical equations in their thought process; although Guattari does use many mathematical concepts, he relies most heavily on matrices and graphs which are visual rather than computational. In choosing to orient my study around

the question of Guattari's diagrams, I do not mean to dismiss other influences. This is just one path, but I am convinced that it is an important one, and as a consequence of my choice to pursue the questions raised by the drawings, my discussion revolves around psychoanalysis, linguistics, and Guattari's favorite sciences—cybernetics, information theory, ethology, systems theory, and far-from-equilibrium thermodynamics (which includes chaos and complexity). Inspired especially by the then-young science of cybernetics, Guattari launched his critique of structuralism by opposing machines to structure, which was one of the first ideas that he presented to Deleuze. Using Deleuze's terms, Guattari posits that machines involve repetition with difference, while structure consists in repetition of the same (for more on this point see Chapter 1). With a great deal of help from Deleuze, Guattari would spend the rest of his career opposing multiplicity, collectivity, and singularity against the general laws, discursive logic, and scientific paradigms of structuralism.

Above all, Guattari adds sociopolitical concerns to what he sees as the a-political leanings of the Lacanian version of structuralism. Although he was far more political than Deleuze when they first met, Guattari credits the latter with helping him combine his political, clinical, and theoretical concerns.

I felt a need, not to integrate, but to make some connections between these four ways I had been living [politics, clinic, Lacan, schizoid discourse]. I had some guidelines, how neurosis, for instance, had to be interpreted in terms of schizophrenia. But I didn't have the logic I needed to make the connections . . . What I was after in the work with Gilles were things like the body without organs, multiplicities, the possibility of a logic of multiplicities connected with the body without organs. In our book, logical operations are physical operations too. (Guattari in Deleuze 1995: 15)

In addition to his expertise in making connections, Deleuze was also adept at judiciously borrowing from other disciplines, an intellectual skill that Guattari recognized as essential to his projects. Even as they read and cite science, Guattari and Deleuze recognize the problems inherent in borrowing concepts from disparate domains. Guattari explicitly states that "my problem is to extract elements from one domain in order to transfer them into other fields of application. With the risk, of course, that this may miscarry nine times out of ten, that it may turn out to be a theoretical mess." He finds Lacan's conceptual borrowings especially troubling. "It may not

seem like a big deal, but conceptual transferences [*transferts*] from philosophy to psychoanalysis are not so easy. Lacan appears to be a virtuoso in this area, but despite appearances he has some weaknesses in philosophy, with the result that this gave us one more reductionist vision in the field of psychoanalysis" (CY9/AH 101; tm). Conceptual transfers from science present their own set of difficulties, a point I explore in Chapters 2 and 3. Deleuze makes an important distinction between scientific ideas attached to a particular domain, and those which already transcend their field. "There are notions that are exact in nature, quantitative, defined by equations, and whose very meaning lies in their exactness." Extracting such notions and using them elsewhere, is, claims Deleuze, "quite wrong, because they belong to exact science." He does, however, think it quite appropriate to borrow from another category of scientific notion, consisting in those which are "essentially inexact yet completely rigorous." These are "notions that scientists can't do without, which belong equally to scientists, philosophers, and artists. They have to be made rigorous in a way that's not directly scientific" (Deleuze 1995: 29). I am not claiming that Guattari unflinchingly follows this good advice when borrowing from science, but I do find that Deleuze's formulation "inexact yet completely rigorous" roughly describes the kinds of ideas that Guattari tends to borrow. I also find an affinity with Guattari's later characterization of his metamodeling activity as an "ethico-aesthetic paradigm," as distinct from a scientific paradigm, a point which I develop in Chapter 3.

This book is a reading of Guattari's solo writing, and in order to maintain this focus I provide little discussion of the joint work with Deleuze, despite obvious overlaps and mutual influence. This choice is also based on the existing body of criticism: whereas a great deal of illuminating commentary has already been produced from the perspective of Deleuze's philosophy, much more work needs to be done on Guattari, who has too often been dismissed, and occasionally even ignored outright.¹ For similar reasons, I talk more in detail about Lacan than about Deleuze. First, I am convinced that Lacan was a major influence on Guattari's diagrams. Second, little critical work has been done on the relationship between Lacan and *Capitalism and Schizophrenia*. There are two books, both written from the perspective of Deleuze (David-Ménard 2005; Kerslake 2007). As Daniel W. Smith has pointed out, Žižek provides little insight into the relationship between Lacan and Deleuze in his *Organs without Bodies* (Smith 2004; Žižek 2004). None of these sources consider Guattari's solo work, despite the fact that Guattari was a student, analysand, and practicing colleague of Lacan.

However, by situating Guattari between Lacan and Deleuze, I do not mean to elevate him to their status. Even though Guattari generated numerous original ideas, he certainly lacked Lacan's and Deleuze's genius for writing, their erudition, and their professional standing. Guattari had published little before he began the collaborative writing project with the already best-selling, academically established Deleuze. Guattari admits that writing had always made him "a little uncomfortable," that "talking with people, discussing things, that's okay, but writing." He recalls that writing with Deleuze "was a frenzy of work that I hadn't imagined possible until then" (CY 30–31/AH 85). If Guattari and Deleuze had not worked together, Deleuze would without a doubt have continued writing anyway. Guattari would more than likely have written much less. However, although he is a minor writer compared with Lacan and Deleuze, his independence from them should not be underestimated. Guattari had his own projects and his own agendas, which often appeared in his coauthored work but which he at the same time pursued on his own. I do not think that Deleuze was merely being generous when he said of Guattari that "I was working solely with concepts, rather timidly in fact . . . I myself thought he'd gone further than I had" (Deleuze 1995: 13).

The diagrammatic aspect of Guattari's thought that I am emphasizing may seem unfamiliar to many of his readers, even though I write this study at a moment when his single-authored essays and books are becoming better-known, in French and in English. The recent publication in both languages of *The Anti-Oedipus Papers* and *Molecular Revolution in Brazil* provides a more complete picture of his thought. However, his two major single-authored works, *L'Inconscient machinique* ("The Machinic Unconscious") and *Cartographies schizoanalytiques* ("Schizoanalytic Cartographies") have yet to be translated into English, despite their pivotal role in Guattari's corpus. Even for those who read French with ease, these two books remain difficult to digest, because of their dense jargon and complicated illustrations. Given the hard work of making sense of the two books when read on their own, my strategy has been to read them alongside the interviews, conference papers, and more journalistic commentaries with which many Anglophone readers are already familiar. Conversely, Guattari's less technical writings lack the theoretical rigor of his denser tomes, and so the theoretical writing and cryptic drawings in turn elucidate the way he theorizes his political, clinical, and aesthetic engagements.

Despite its awkward neologisms, frequent digressions, and obscure references, I do think that Guattari's writing is worth reading. I have often been surprised by the originality, insightfulness, and intellectual force of his

unusual thought process. Deleuze himself read Guattari carefully. Despite its concrete grounding in the concerns of the 1970s, Guattari's sizeable corpus remains surprisingly pertinent. First, the notion of diagrammatic thinking is important for our age of technology. Frankenstein and the cyborg do not provide adequate models for understanding the integration of contemporary information technology and globalized mass media into the everyday existence of living beings. Thought itself is undergoing a profound transformation, as Guattari argues. Furthermore, he recognizes the subjective dimensions of human animals, nonhuman animals, and technical machines. As a result, Guattari's ranks among the more interesting conceptualizations of what subjectivity might look like after the famous Foucauldian end of "man." Second, Guattari's diagrams map an affirmative ontology oriented toward the future, replacing lack (Lacan) and negation (Hegel) with the virtual and the possible. Deleuze conceptualizes such an ontology. Guattari draws one of his own, emphasizing and encouraging transformation on a historical scale (a point I address in Chapters 3 and 4). Change can of course be for the worse, but can also be for the better, as he repeatedly notes. Oppositional politics cannot function without a justifiable reason to hope for positive change, and I find that Guattari provides militants with theoretical justifications for desiring something better. Third, and perhaps most importantly for many of his readers, Guattari's writings shed light on many of the more perplexing aspects of *Capitalism and Schizophrenia*, and on Guattari's own more accessible essays. In *L'Inconscient machinique*, he worked through the details of several paradigms which would become the basis of key chapters in *A Thousand Plateaus*, including the plateaus dealing with linguistics, semiotics, faciality, and the refrain. In *Cartographies schizoanalytiques*, he worked out the ontological model which underpins *Chaosmosis*, his single-authored book most familiar to English speakers. The solo writing reveals a markedly "Guattarian" version of many seemingly familiar terms, such as (in addition to schizoanalysis, faciality, and the refrain) abstract machines, assemblages, black holes, the body without organs, chaos, the clinic, codes, flows, molar/molecular, and stratification. Each of these terms figures into one or more of Guattari's mad drawings, and can be situated in relation to Lacanian theory, even though each of these ideas "belongs" to Deleuze as much as to Guattari.

I mentioned a reluctance to separate Guattari from Deleuze, but one commentator has boldly done so. Alain Badiou is not alone among the French intelligentsia in considering Guattari to have been a distraction for Deleuze, luring him away from the properly philosophical work of the books he published prior to 1970. Vexed that so many readers ascribe to

Deleuze alone a number of concepts that were actually more Guattarian, Badiou provides a list of what he considers the nonphilosophical intrusions introduced by Guattari: anarchy, desire, politics, mass movements, promotion of the heterogeneous multiplicity of desires, encouragement of the unrestrained realization of desires, respect and affirmation of differences, conceptual critique of totalitarianisms, preservation of the rights of the body against terrorizing formalisms, commendation of the Open and movement, experimentation without preestablished norms, admission of only cases and singularities, standing against the crushing abstractions of the dialectic (Badiou 2000: 2, 9). Indeed, as Wlad Godzich has remarked, “all those who have taken Deleuze to be the apostle of desire, flux, and animal anarchy will have apoplexy reading [Badiou’s] book,” which presents Deleuze as “an aristocrat of thought, very much dedicated to rehabilitating the metaphysical project in our day.”² These same readers, those who are primarily interested in the Deleuze who figured as spiritual leader of the May ‘68 “anarcho-désirants,”³ would do well to read more Guattari. However, such readers may be surprised by the theoretical density of much of Guattari’s work. There is in fact no anarchy, and Guattari actually points out that “anarchistic, spontaneist” political actions “generally lead to failure and sterility” (*MB* 248). He is decidedly not an advocate of unrestrained desire, and states categorically that “I have nothing to do with any liberating mythology of desire for desire’s sake” (*MB* 248). There is, however, a great deal of discussion of chaos, whose complex organization he loves to diagram. This latter point lies behind much of the difference between Badiou and Deleuze-Guattari: the former’s elegance of subtraction versus the latter’s commitment to complexity. Guattari’s pursuit of ever greater complexity is the topic of Chapter 3.

This book’s title phrase “diagrammatic thought” relies on three interrelated notions which Guattari uses in idiosyncratic ways: metamodeling, mapping, and diagrams. Before proceeding further, I will define each of them.

Metamodeling

Guattari’s tendency to think in diagrams is directly related to what he calls “metamodeling.” It is well-known that in the *Anti-Oedipus* Guattari and Deleuze invented schizoanalysis as a critique of psychoanalysis. Less familiar is Guattari’s later redefinition of schizoanalysis in terms of metamodeling (*GR* 122/*PIP* 49). He declares that schizoanalysis “is not an alternative

modeling. It is metamodeling,” and explains that it is “a discipline of reading other systems of modeling, not as a general model, but as an instrument for deciphering modeling systems in various domains, or in other words, as a meta-model” (*GR* 133/*PIP* 72; *CS* 27). The term “model” here harbors negative undertones, suggesting the schematic reductionism which for Guattari characterizes both structuralism and the capitalist axiomatic. Metamodeling is offered as a more complex and enabling alternative to prevailing social and psychic models, as will be demonstrated in the chapters which follow. Guattari understood the term “model”—which in French can also mean “pattern”—in roughly two ways. In its normative sense, the model is a learned pattern of behavior inherited from family, institutions, and political regimes, and which in the end functions as a prescriptive norm imposed by a dominant social order. In its descriptive sense, and in keeping with the social sciences, a model is a means of mapping processes and configurations. To state matters perhaps too schematically, as a practice, psychoanalysis transmits socializing models (first, normative sense of the term), even while as a theory, psychoanalysis models (second, descriptive sense) by mapping the processes and formations of the psyche. For example, Guattari understands the Oedipus complex as a model in both senses of the word. He and Deleuze fully acknowledge that psychoanalysis did not invent the Oedipus as a model of behavioral norms, as when they note that “the subjects of psychoanalysis arrive already oedipalized, they demand it, they want more.” The normalizing Oedipal model is imposed by “other forces: Global Persons, the Complete Object, the Great Phallus, the Terrible Undifferentiated Imaginary, Symbolic Differentiation, Segregation” (*AO* 121/144). At the same time, the topologies and schemas of psychoanalysis provide models (descriptive sense) for analyzing the workings of the Oedipal models (normative sense) which shape their patients’ interpersonal relationships.

Why doesn’t Guattari merely invent and disseminate alternate social and psychic models (both normative and descriptive), rather than proposing the inelegant and potentially superfluous term “metamodeling”? In his view, metamodeling is different in that it is adapted to each singular situation. Whereas psychoanalysis applies to a great many patients a limited number of psychic models, schizoanalysis “tries to understand how it is that you got where you are.” Guattari describes how metamodeling works in the psychotherapeutic setting:

“What is your model to you”? It does not work?—Then, I don’t know, one tries to work together. One must see if one can make a graft of other

models. It will be perhaps better, perhaps worse. We will see. There is no question of posing a standard model. And the criterion of truth in this comes precisely when the metamodeling transforms itself into automodeling, or auto-management, if you prefer. (*GR 133/PIP 72*)

A model can only be evaluated on the basis of its usefulness in a particular application. This is why “schizoanalysis does not . . . choose one way of modeling to the exclusion of another” (*CM 60–61/88–89; tm*). As he himself puts it, “all systems of modeling are equal, all are acceptable, but only to the extent that they abandon all universalizing pretensions” (*GR97/CS 12, tm*). Guattari calls instead for a “metamodeling capable of taking into account the diversity of modeling systems” (*CM 22/40*).

Schizoanalytic metamodeling takes lessons from the strategies used by schizophrenics to reassemble a functional universe. Since psychotics are completely unable to live according to dominant social models, they are forced to build their own models. “Thus it’s not simply a matter of remodelling a patient’s subjectivity—as it existed before a psychotic crisis—but of a production *sui generis*” (*CM 6/18*). To build new models is to build a new subjectivity. In a way, says Guattari, “subjectivity is always more or less a metamodeling activity,” or “a process of auto-organization or singularization” (*CS 27–28*). Metamodeling, then, does not presume “to promote a didactic program,” but rather aims to constitute “networks and rhizomes in order to escape the systems of modeling in which we are entangled and which are in the process of completely polluting us, head and heart” (*GR 132/PIP 71*). Productive metamodeling liberates subjectivities from normalizing models.

Standard psychoanalytic and capitalist modeling differ from schizoanalytic metamodeling in several ways. Guattari’s metamodeling promotes a radical, libratory politics. It creates a singularizing map of the psyche. It recognizes and even borrows from existing models. It allows one to construct one’s own models. It can transform an existence by showing paths out of models in which one may have inadvertently become stuck. Rather than looking to the past, it looks to future possibilities. “What distinguishes metamodeling from modeling is the way it uses terms to develop possible openings onto the virtual and onto creative processuality” (*CM 31/51–52*). Metamodeling produces, creates, finds new paths. This may be Guattari’s best description of schizoanalysis as metamodeling:

Nothing was further from my intention than to propose a psycho-social model with the pretention of offering it as a global alternative to existing

methods of analyzing the unconscious! . . . my reflection has had as its axis problems of what I call *metamodeling*. That is, it has concerned something that does not found itself as an overcoding of existing modeling, but more as a procedure of “automodeling,” which appropriates all or part of existing models in order to construct its own cartographies, its own reference points, and thus its own analytic approach, its own analytic methodology. (*GR 122/PIP 49*)

The idea of appropriating “all or part of existing models” best describes what Guattari does with the topologies, schemas, and formulas of psychoanalysis. His writing forges new, singularized models with new references, often to the so-called hard sciences, as will be explored at length in Chapters 2 and 3.

Mapping

In Guattari's parlance, “metamodeling” is closely related to “mapping,” as evidenced in the above-cited paragraph which includes the word “cartographies.” He in fact characterizes schizoanalysis not only as metamodeling, but also as map-making, a process of building “*a map of the unconscious—* with its strata, lines of deterritorialization, and black holes.” Guattari's emphasis on cartography (as for example in the title *Cartographies schizoanalytiques*) can be placed within a larger poststructuralist vogue of mapping which presupposes “the unremitting deconstruction of representational thinking” and therefore “excludes a metaphysical definition of mapping in the classical mimetic sense.”⁴ Recognizing this rejection of representation and mimesis is crucial to understanding how Guattari defines modeling, mapping, and the diagram. The distinction between map and tracing in *A Thousand Plateaus* reiterates this rejection of representation in favor of cartography (*ATP 12–15/19–24*; see *IM 176–182* for Guattari's earlier version of this distinction). Metamodeling can be understood as a very special form of map-making. It consists in making maps that are not content to merely illustrate, but which also create and produce. Understood in this way, “the analytic map can no longer be distinguished from the *existential territory* that it engenders” (*GR 134/PIP 74*). According to Guattari, each subjectivity combats alienation (a term he uses often in his earliest writing) by constructing its own “existential territory” out of the various semiotic materials and social connections available, holding everything together through means such as the “refrain” (*CS 27*). Mapping produces

the existential territory. Mapping can likewise produce new kinds of social practices, claims Guattari, who opposes structuralist social analysis (such as dogmatic Marxism) to the creation of “analytic-militant cartographies” (*GR* 132/*PIP* 71). Schizoanalytic cartography therefore plays a therapeutic as well as a libratory role, depending on the terrain and scale of its deployment.

Unlike psychoanalysis, which constructs generalized topologies and schemas, schizoanalysis makes a new map “for each case and each situation” (*IM* 177). The maps of schizoanalysis must not only be made fresh every time, they must also change over time, such that, as Guattari puts it, “the map . . . will be easily disassembled, connectable, reversible, subject to constant modification” (*IM* 17). Understood this way, mapping has to do with “systems of transformation” (*CS* 41). His mappings are therefore never meant to be read as still images, but as momentary snapshots. Echoing Guattari’s characterization of schizoanalytic cartography as situational, dynamic map-making, John Mullarkey describes the role of the “diagram” in what he calls “post-continental philosophy.” I should point out that Mullarkey’s “diagram” corresponds not to Guattari’s diagram, but to his cartography, for reasons which I will clarify in a moment. Mullarkey writes that the philosophical “diagram” (Guattari’s “map”) “works as a drawing, a process, a procedure, a temporary moment in between; not the shape of a thing but the outline of a process (of thinking). Hence, dia-grammes should be always seen as moving forms, whether or not they are static” (Mullarkey 2006: 157). The processual movement of Guattari’s drawings is made manifest in the examples of metamodeling included within each of this book’s four chapters.

Diagram

Like Guattari’s metamodeling and mapping, his diagram produces and creates, bringing new entities into existence and thereby serving an ontological function. This means that the diagram also shares the quality of operating outside of the realm of representation and must be similarly understood as a dynamic force rather than as a static image. However, while I think that metamodeling and cartography can be used almost interchangeably within Guattari’s lexicon, the notion of the diagram comes from a different line of thought. The **diagram** is, for Guattari, a component in a general semiotics, and plays a crucial role in his thinking about science and technology in relation to contemporary subjectivity. In Chapter 1,

the diagram is discussed within the context of Guattari's general semiotics. For the moment, it will be useful to provide a working definition of what he meant by "diagram," a notion also used in the joint work with Deleuze, in order to define what I am calling his own "diagrammatic thought."

The concept of the diagram appears in *A Thousand Plateaus* (ATP 141–144, 531 n. 41/176–180, 177 n. 38), but the details of its development are found in Guattari's writings of the 1970s. The notion was adapted from Charles Sanders Peirce, who includes the diagram among the icons in his index-icon-symbol model of the sign. Peirce identifies three types of icon: image, metaphor, and diagram. For him, the icon operates through a relation of resemblance between the sign and its referent. Guattari would agree that the image and the metaphor signify through resemblance, which is to say representation, but his version of the diagram functions differently because as he defines it, the diagram does not signify; it is "a-signifying" (this will be discussed further in Chapter 1). Examples of the diagram at work include the algorithms of logic, algebra, and topology; as well as processes of recording, data storage, and computer processing; all of which are used in mathematics, science, technology, and polyphonic music. Neither mathematics nor musical notation are languages—rather, both bypass signification altogether. Already in his notes for *Anti-Oedipus*, Guattari senses that Peirce's diagram is somehow special, that it unleashes "deterritorialized polyvocality," that it must be understood as distinct from the image because the diagram is a site of production (AOP 72, 214, 243–245/97, 308, 346–349). He continues reflecting on the powerful, productive diagram in *Révolution moléculaire* and *L'Inconscient machinique*, concluding that diagrams "are no longer, strictly speaking, semiotic entities." Their "purpose is not to denote or to image the morphemes of an already-constituted referent, but to produce them" (IM 223, 224). In other words, diagrams do not represent thought; rather, they generate thought. Diagrams abound in experimental science, he says, because it is "a sphere where signs have a direct effect on things," involving "both material technology and a complex manipulation of sign machines" (MR 166/RM 303). The diagrammatic consists precisely in this conjunction between deterritorialized signs and deterritorialized objects.

On several occasions Guattari illustrates the notion of the diagram with the example of theoretical physics.⁵ He vehemently disagrees with those who would call mathematics the "language" of physics, because for him the diagram operates outside of language. On this point, he cites theoretical physicist Jean-Marc Lévy-Leblond, who argues that mathematics does not represent or record the concepts of physics, but that instead mathematics

operates in a dynamic relationship to physics in the production of concepts (Lévy-Leblond 1989; cited in *MR* 122/*RM* 317). Says Guattari, “We thus wind up with a physics-mathematics complex that links the deterritorialization of a system of signs with the deterritorialization of a constellation of physical objects” (*MR* 123/*RM* 319; tm). The discovery of new sub-atomic particles would be a case in point. He notes these particles are often only theoretically formed, discovered through mathematics rather than through experimentation. In some instances, these particles are later detected through observation and experiments, or are produced in particle accelerators, and may not be detectable directly, but only by their effects. Their existence may be brief. “Physicists ‘invent’ particles that have not existed in ‘nature.’ Nature prior to the machine no longer exists. The machine produces a different nature, and in order to do so it defines and manipulates it with signs (diagrammatic process)” (*MR* 125/*RM* 322). This “diagrammatic process” makes use of signs, but not language, and therefore uses neither signifiers nor signification.

To my knowledge, Guattari never claims that the drawings which illustrate his books are “diagrams,” according to his concept, but his drawings do figure heavily in his analytical writing. His drawings work like diagrams in the sense that they at times seem to generate ideas, as if they were operating on their own, like little machines. Each term that he adds to one of his tables or schemas calls forth another; each movement sets off another. It is very easy to lose sight of what the original drawing was for in the first place. To my mind the drawings embody and enact his concepts of metamodeling, mapping, and diagrammaticism. This is the process of “diagrammatic thinking” that I aim to demonstrate in this book.

* * *

Each of my four chapters includes one or more drawings related to a specific metamodeling project: a semiotic matrix, a series of capitalist triangulations, a set of ontological quadrants, and a variety of revolutionary schemas. As argued in Chapter 1, Guattari identifies the limitations of Lacan’s illustrations, most of which convey the primacy of the signifier in interpersonal relations. He counters by drawing a matrix which presents a general semiology inspired by his professional clinical experience, both in a psychiatric institution and in a private psychoanalytic practice. Chapter 2 explores a series of triangular drawings with which he theorizes the specific mechanisms of capitalist subjectivation. As discussed in Chapter 3, Guattari’s metamodeling enterprise produces a new set of drawings in *Cartographies schizoanalytiques* and *Chaosmosis*, based on a graphic version of

the plane of consistency. Chapter 4 highlights a matrix and a graph which partake in Guattari's ongoing grappling with questions of historical transformation in light of his revolutionary politics, a concern which occupied him throughout his writing career. His metamodeling always includes a transformative dimension, drawing variously on historical materialism, cultural anthropology, genetics, and the history of science and technology. In the Afterword, I suggest that in *The Three Ecologies* Guattari once again reworks his cartographic ontology, proposing "ecosophy" as yet another way of articulating the relations among the psychic, the social, and the "natural" (both animate and inanimate). This, then, is the path that I have forged through Guattari's writing, by following the machinic evolution of his drawings. These chapter topics are not meant to inventory or systematize his thought, but I hope that they will help me convey a sense of its originality, its cosmic scope, and its continued usefulness for a vigilant critical analysis which remains simultaneously aware of the sociopolitical, the subjective, and what could be called the bio-material.

Chapter 1

Lacan's couch, Guattari's institution: accessing the real

Guattari presented his first major cosmic-scale ontological drawing as part of a paper given at Lacan's École Freudienne de Paris, and later published as "The Place of the Signifier in the Institution" (*GR* 148–157/*RM* 277–290).¹ Although, if I understand Guattari correctly, no one schema can constitute a metamodel because metamodeling is an always ongoing analytic process, I think that the building of this 1973 semiotic matrix (Figure 1.1) can be understood as a key moment in metamodeling, because the matrix was targeted at a specific problematic, and then it was immediately reworked

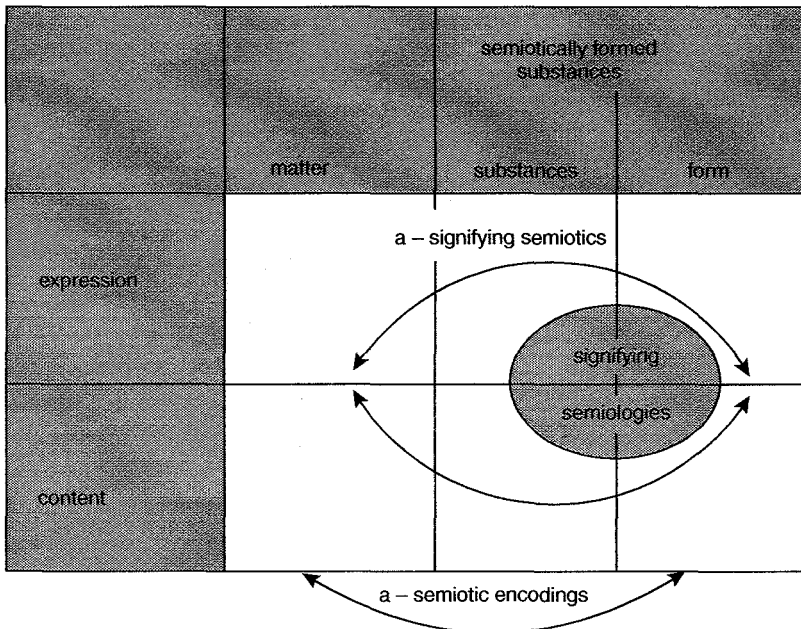


FIGURE 1.1 The place of the signifier in the institution. *Source:* Félix Guattari, *The Guattari Reader*, ed. Gary Genosko, © Blackwell Publishing, 1996.

into another series of drawings which will be discussed in the following chapter. This chapter will examine the unfolding of the analytic enterprise which resulted in this drawing, which informs much of Guattari's later writing, including *A Thousand Plateaus*. The components of this matrix were collected over many years of reading and writing, and incorporate pieces and mechanisms borrowed—always with modifications—from the La Borde clinic, institutional psychotherapy, Sartre, Freud, Lacan, Deleuze, cybernetics, theoretical physics, genetics, and semiotics. The resulting apparatus can be read as a remapping of Lacan's symbolic order onto a grand blueprint of the universe. The matrix also reveals a great deal about Guattari's thought process, the thinking in diagrams that so attracted Deleuze.

The theoretical remapping which produced this ontological matrix makes manifest Guattari's movement away from Lacan and toward Deleuze. However, as I will argue, there was not a full rejection of the former's teachings, nor would there ever be a full melding with the latter's. It seems to me that Guattari oversimplified matters when he used the word "demolition" to describe what he did with his Lacanian training (*CY 30/AH 85–86*). Or perhaps it would be more accurate to say that Guattari neglects to mention the second step which follows the demolition, that of salvaging what still works, of recuperating that which remains in usable or repairable condition after the dismantling. I therefore propose that the idea of "remodeling" might more accurately render what happens to Guattari's thinking around the time of the writing of the *Anti-Oedipus*.²

Even as he took his distance from Lacan, Guattari retained many lessons learned from his famous teacher-analyst, including a *modus operandi*: theoretically dense writing accompanied by a proliferation of mad drawings and schemas which at times drive his thought, rather than merely illustrating it. Lacan drew graphs, wrote "algebraic" formulas, and tied knots, all of which were at least in part intended as models of the play of signifiers in the dual analytic relationship in the private consulting room. Guattari was demonstrably inspired by Lacan's formulas and topologies, but he realized early on that because they were reductive and too focused on structure, they did not adequately account for the analytic situations that he found in the psychiatric institution. As Guattari himself once put it, "The customary psychoanalytical family-based reductions of the unconscious are not 'errors.' They correspond to a particular kind of collective assemblage of enunciation" (*SS 199/AH 135*, tm). Whereas Lacan maps only one kind of "collective assemblage of enunciation," Guattari maps a wide array of assemblages, some human and others animal, physical, or technological. Genes, insects, birds, dancers, artists, children, mathematicians, elementary particles, galaxies, and psychotics engage in many acts of expression that bypass

language, using “semiotic components” other than the signifier, and yet they are not stuck in the Lacanian imaginary either. Guattari’s matrix (Figure 1.1) includes all sorts of semiotic components, and so it relegates representation and linguistic signification to a small area. Most importantly, his matrix opens up the possibility of access to the real, which, he argues, Lacanian analysis closes off in order to safeguard the tranquility of the couch setting as well as the sociopolitical status quo. To Guattari’s way of thinking, both institution and revolution require access to the real, as do creativity, production, and change.

Reflecting on this phase of his own thought in a 1985 interview, Guattari remarked that he “gradually came to question Lacanism, but less on theoretical grounds than in practice” (CY29/AH84). In the *Anti-Oedipus* he and Deleuze rethought psychoanalysis in terms of psychosis rather than neurosis. In his single-authored writing, Guattari develops a second distinction between psychoanalysis and schizoanalysis, rethinking the one-on-one therapy sessions in a private office in terms of the more collectively organized psychiatric institution.³ The neurosis/psychosis and couch/institution distinctions provide the simultaneously practical and theoretical basis motivating Guattari’s gradual questioning of Lacanism [*mise en question progressive*], which occurs in roughly three phases. It begins with pre-Deleuze texts written during the 1960s, in which Guattari considers the practical problems posed by the adaptation of classical one-on-one Freudian analysis to the larger institutional setting. This phase produces four original theoretical breakthroughs, each defined in relation to a Freudian and/or Lacanian concept: institutional analysis (as an expansion of one-on-one analysis), transversality (as an alternative to transference), a preliminary dissection of semiotic components (as a sort of genesis of the signifier), and the machine (as the flipside of structure). The second phase of revisionism corresponds to the writing of *Anti-Oedipus* with Deleuze, which coincides with a shift in the orientation of Lacan’s teaching, away from the psychiatrists among his followers and toward the philosophers. The third phase, spanning the 1970s, consists in Guattari’s impassioned search for an alternative to Lacan’s “unconscious structured like a language.” The first two phases will be covered in the this chapter, and the third phase in Chapter 2.

Clinical contexts

Working as a professional psychotherapist throughout his adult life, Guattari treated both psychotics and neurotics in two distinct settings, the experimental psychiatric clinic at La Borde, and a private office practice.

Many of the conceptual schemas which inform *Anti-Oedipus* and *A Thousand Plateaus* first surfaced during his earliest years as a clinician, as evidenced in the essays gathered in the collection *Psychanalyse et transversalité*. A recurring motif in this body of writing is the comparison of analysis on the couch to analysis in the psychiatric institution. Biographical accounts of these years are available from various sources, and so I will present here only those aspects of Guattari's clinical practice which directly bear on my own arguments.⁴

In the psychiatric institution, the young and already politically engaged Guattari found a new militant cause, a place where intellectuals gathered for lively discussions, and a career. From the early 1950s until the time of his death in 1992, he worked at the La Borde clinic with psychiatrist Jean Oury, who convinced him to give up his pharmacy studies to pursue psychiatric work. Oury made him second in command at the clinic despite his total lack of formal training at that time.⁵ La Borde was experimental, with close ties to the post-war psychiatric reform movement pioneered in France by François Tosquelles at the Saint-Alban hospital where, as Guattari put it, "a new attitude, a new militant approach to mental illness was born," resulting in a "revolution both practical and theoretical" (*PT*40). Guattari's predecessors, the post-Liberation psychiatric reformers associated with Tosquelles, first learned about the inner workings of institutions from experiences in the Scouts, youth hostels, Communist youth parties, and (as counter-model) Nazi concentration camps (*PT* 68). Guattari himself was involved in the youth wing of the French Communist Party, the youth hostel movement, and the student social security movement (Oury 1970; Genosko 2002: 4–11; Oury and Depussé 2003: 193–207). These were the circumstantial origins of what would become known as "institutional psychotherapy."

Never having completed a university degree, Guattari the "libertarian autodidact" received the bulk of his intellectual formation in this psychiatric and psychoanalytic arena, which had long been attracting the French intelligentsia (Polack 2007: 131). Saint-Alban had been frequented by intellectuals, surrealists, doctors interested in Freud, and militant Marxists (*PT* 39). Similar groups gathered at La Borde for animated discussions which never stopped at psychiatry, but went on to include politics, philosophy, and more. According to Oury, from the beginning in the 1950s Guattari's presence heightened the intellectual vigor of conversations at La Borde, thanks to his passion for ideas, which were fueled by his appetite for reading. "Since you don't want to do pharmacy, you must read lots of things," Oury reportedly told his young colleague, giving him a long list of books which included Sartre, Lacan, Merleau-Ponty, and literature.

Guattari read all of it (Oury et al. 1978: 27; Oury and Depussé 2003: 198). Also at Oury's urging, in the early 1950s Guattari began attending Lacan's weekly seminars.⁶ He also took some philosophy courses at the Sorbonne, where his fellow students nicknamed him "Lacan" because of his obsession with the latter's ideas, which he found much more interesting than his Sorbonne philosophy courses (Guattari in Stivale 1998: 203; Dosse 2007: 51). By the 1960s, it was Guattari who was bringing what seemed like all Paris to La Borde, often to Oury's chagrin (Oury and Depussé 2003: 207, 224–225).

From its beginnings, institutional psychotherapy had been Lacanian in orientation. One aspect of the post-war psychiatric militants' proposed reforms was the reintroduction of psychoanalysis into the psychiatric setting (*PT* 39–40). Psychiatry and psychoanalysis had long before evolved into separate domains, to the point that it is too easy today to forget that Lacan was himself trained as a psychiatrist. Tosquelles arrived at Saint-Alban with a copy of Lacan's doctoral thesis on psychosis under his arm (Oury et al. 2007: 35). Polack recalls that "When I first arrived at La Borde one didn't have the right to speak if one had not gone over Lacan with a fine tooth comb" (Polack in Guattari et al. 1977: 21, cited by Genosko in *GR* 9). Treatment at La Borde included Freudian and Lacanian methods, which at the time were rarely practiced in hospitals (*PT* 60). As Guattari puts it, "we do not think it impossible to use Freudian techniques inside a hospital" (*PT* 87). Oury considered psychoanalysis and psychiatry to be indissociable. He notes, for example, that Lacan always called himself a psychiatrist, not a psychoanalyst (Oury et al. 1978: 40). Oury had met Lacan in 1947, and was his analysand from 1953 to 1980. Guattari began his own training analysis with Lacan in 1962 and was present in 1964 for the founding of Lacan's new school, of which he remained a life-long member.

Institutional psychotherapy was perhaps never Freud-Lacanian in any orthodox way. Tosquelles had set himself the challenge of adapting psychoanalysis to the psychiatric institution's twin challenges of psychosis and collective life. Guattari adopted a similar program of adaptation. While *Anti-Oedipus* made it clear that Guattari found mainstream psychoanalysis too orientated toward neurosis, during the 1960s he was perhaps even more focused on rethinking Freud's clinical legacy from the point of view of the group nature of the institution, where numerous patients constantly interact with various staff members performing round-the-clock services, including dining and hygiene. The collective aspect of life at the clinic was made into an object of reflection and critique at La Borde. Inspired by the "club" which brought together patients and staff at Saint-Alban, Oury originally hired Guattari to create such a club at La Borde (Oury et al. 1978: 13;

Oury and Depussé 2003: 205). Guattari was constantly creating, dissolving, and recreating clubs and committees whose function was not only to promote social interaction, but also to help guard against institutional dangers such as the rigidifying of hierarchies among the personnel and the segregation of patients from staff or from each other. As an additional safeguard against institutional sclerosis, Guattari was also charged with maintaining a “grid” of rotating duties that changed at least weekly. The grid enacted the Labordian principle that “required all service personnel work to be integrated with the medical work, and that, reciprocally, medical staff be drafted for material tasks such as cleaning, cooking, dishwashing, maintenance, etc.” (CY 190). The constant struggle against hierarchies was both political and therapeutic. In his work of the early 1990s, Guattari is still citing these methods of constant institutional readjustment as an instance of socio-therapeutic “metamodeling” (CM 69–71/99–101).⁷

Based on his commitment to institutional psychotherapy as collective practice, Guattari became increasingly concerned by the tendency of psychoanalysis to focus on the one-on-one therapy session, with the analyst-analysand duo enclosed together in the private consulting room, barricaded behind the doors of a cozy office. Even though Lacan had begun his career in a psychiatric hospital, in his seminars he promoted analytic techniques which presumed one-on-one treatment. However, although Guattari was convinced that the group nature of the institution necessitated adjustments to the techniques of individual therapy, his initial intention does not seem to have been a departure from Lacan. It is important to recognize that when Guattari speaks of psychoanalysis and psychoanalysts, he is often referring to Freudianism, and even then not necessarily to Freud himself. His specific references to Lacanian analysis generally include the name Lacan or Lacanism, or the words structuralism or structuralist.

Although his critical writings prior to the very late 1960s did not directly target Lacan or even the Lacanians, Guattari was, along with Oury, one of a number of institutional psychotherapists who urged Lacan to include a psychiatric internship as part of the training of analysts at his *École Freudienne* (Oury and Depussé 2003: 252–253). Guattari shared Oury's frustrations with the way analysts were being trained, writing that “the training of therapists is at present conceived of from a strictly individual perspective, which hardly predisposes them toward a future of team work” (PT 62). Both their classical therapeutic methods and their conceptual framework would need to be modified, to the point that “A traditionally-trained psychoanalyst would not be able to undertake treatment in a hospital ward without radically modifying not only her technique, but also her theoretical aims in

regard to psychopathological matters" (*PT*87; see also *PT*60, 89). However, a decade later Guattari's tone is openly defiant as he insists that "access to neurosis, psychosis, and perversion requires other routes than this type of dual relation" advocated by the "esoteric, pretentious" Lacanian brand of analysis (*CY* 204). The attitude toward Lacan himself changes, but his initial position remains essentially unchanged when in the same essay he writes that "Psychosis can show its true face only in a collective life developed around it within appropriate institutions" (*CY* 188–189).⁸ In other words, he considered the collective nature of the institution to be therapeutically necessary to the treatment of psychosis.

Guattari found the couch setting limited not only therapeutically, but also politically. He observed that his fellow psychoanalysts preferred to ignore politics, which they could easily do, ensconced safely within the confines of their private offices. In contrast, the institutional psychotherapist must confront on a daily basis political and social issues brought inevitably into the institution's doors by the large staff, the state health-care system, and the psychotic patients who "hallucinate History" (*PT* 155). Politics and the *socius* are harder to ignore from within the institution, which cannot provide the barricaded shelter of the private office. Guattari mocked the de-politicization of psychoanalysis and what he saw as the prevailing attitude among private clinicians, that "Reality must remain at the door of the consulting room" (*CY* 217/*RM* 23; see also *MR* 257). He further accused mainstream analysts of limiting their practice to "a certain category of neurotics," almost to the point of wishing to treat not the mentally ill, but only bureaucrats—or better yet, to psychoanalyze only their fellow psychoanalysts. He judges this sort of analyst woefully out of place in the psychiatric institution. "Grabbing a psychoanalyst by the collar and putting him in an asylum would be like taking a medieval priest and putting him in a factory, or in a swimming pool!" (*PT* 49). In the end, he would find that the Freudian and Lacanian model of the psyche served as its primary purpose the protection of the comfy couch, writing that "All this sordid paraphernalia"—such as splitting of the ego, lack, castration, name of the father, accession to the symbolic order—"is there only to safeguard the comfort of the couch" (*CY* 216/*RM* 22; see also *MR* 257).

The re-politicization of mental health care was from the beginning a fundamental aim of institutional psychotherapy. As early as 1955, Guattari and Oury, both with militant and Marxist backgrounds, voice a concern for psychiatric workers. They compare, for example, the relationship between nurses and doctors to that between workers and bosses in factories (*PT*7–8). In 1969, Guattari defines "the school of institutional psychotherapy" in

terms of its “determination never to isolate the study of mental illness from its social and institutional context” (*MR 208/PT 230*). The movement thus implicated all social and political institutions, including left-wing political parties and workers’ unions. Guattari adopted the broad definition of “institution” advocated by Tosquelles, who remarks that all of us, ill or healthy, move among several institutions, from school to the family to the neighborhood and beyond (Oury et al. 1985: 132–133). Again under the influence of Tosquelles and Oury, Guattari came to see the psychiatric institution as much more than a space where individual doctors analyze patients. Rather, and this constitutes the essence of institutional psychotherapy, he and his colleagues believed that the institution itself should be an object of analysis, as well as a collective analyzing agent comprised of procedures, infrastructures, and multiple interpersonal encounters (*PT 40, 46, 63, 87*).

“Institutional analysis” was a term that Guattari used to identify an analytic framework loosely shared by institutional psychotherapy (as practiced at Saint-Alban and La Borde), institutional pedagogy (as pioneered by Fernand Oury), and other emancipatory social movements (*GR 121 or SS 268; PIP 47*).⁹ As reflected in his writings from the 1960s, Guattari participated actively in this project of critical analysis, which was simultaneously theoretical, practical, and sociopolitical. He described institutional analysis as “a virtual enlargement of the institutional practice of subjectivity-production” to include “urban areas, schools, hospitals, prisons, etc.” (*CY 193–194*). Even as he insisted that analysis in and of institutions should include social and political dimensions (*PT 47, 91; MR 208/PT 230*), he advised radical political movements to pay more attention to matters of the psyche, especially desire and subjectivity (*MR 184/PT 183*). He envisioned a revolution of the institution within the much broader “framework of a revolutionary transformation of society” (*PT 65, 66, 91*).

Sartre meets Freud in the psych ward

The concept of “institution,” then, was expanded beyond the mental health arena to include schools, research groups, trade unions, political parties, and militant organizations—to name but a few examples. Guattari found all of these institutions prone to the problems of rigid hierarchization, segregation, and inertia. These frustrations led him to seek a solution both therapeutic and theoretical, and so he invents a strategy that he calls “transversality.” As Gary Genosko has shown, this term takes on many new dimensions and uses in Guattari’s subsequent writings, but here I will focus

on its earliest formulation, as originally developed in relation to the classic psychoanalytic notion of transference (Genosko 2002: 66–121). Transference at its most basic refers to the study of the analytical situation, examining the complexities of the interpersonal relation between analyst and analysand. With “transversality” Guattari tackled transference and language, the “twin pillars” of psychoanalytic treatment, seeking an institutional alternative to Lacan’s “individual treatment” which works through the “symbolic order’ by transcendent routes of interpretation and transference” (Dor 1998: 2; *CY* 204). To interpret is to put symptoms and desires into language. However, as Lacan himself taught, mere verbalization, especially that offered by the analyst, will not necessarily advance the treatment. Guattari asks how transference works in the institutional setting, then decides that a new technique is needed, presenting his conclusions in two 1964 papers, “Transference” and “Transversality,” both addressed to his peers in professional psychotherapy. These essays can be read as a formal theoretical presentation of the principles of therapeutic practice at La Borde, a view held by Oury who, even while fully recognizing Guattari as the author of the transversality essay, says that at the same time he feels as if they co-wrote it, because it so reflects their clinical work together (Oury and Dupessé 2003: 230). The two essays also include many references to other types of collectivity, such as militant political groups.

Since, as noted above, Guattari conceives of therapy within the institution as implicating multiple collectivities, both essays rely heavily on his notion of the group. For example, in institutional psychotherapy there are groups of patients, nurses, interns, administrators, doctors, cooks, other caretakers, and visitors. Guattari needs a typology of the group because, in his view, merely collectivizing care does not eliminate the problems of identificatory transference, individualism, elitism, and the therapists’ tendency to retreat from politics because, unfortunately, the psychiatric institution’s therapeutic collective tends to be hierarchized, which causes its own clinical and political problems (*PT* 40–41, 47, 61–64; *AOP* 90/135). Guattari therefore urges his fellow militants in psychiatric reform to join him in the search for “new relationships between patients and caregivers, nurses and doctors, doctors and patients’ families, etc.” (*PT* 40). He warns that existing caste-like hierarchies within the institution can mirror and even transmit class oppression in society at large (*PT* 64–65).

In theorizing collective formations, Guattari draws on Freud’s group psychology with its anthropological totems and history of civilization, and on Sartre’s grand universal history of collective human existence as laid out in his *Critique of Dialectical Reason* (1960). As Guattari would write in 1972,

defying the then-fashionable pronouncements about the end of the reign of existentialism, "Sartre is a man of history and real engagement" (*GR* 40; see also *CY* 168). It is the dimensions of history and engagement that Guattari seeks to insert into—or rather, around and beyond—Lacan's elegantly simple triangular model of analyst-analysand-signifier. However, as was typical of Guattari's theoretical writing at this time, the 1964 essays' vocabulary and overall framework remain decidedly Lacanian. Even though Guattari will go on to abandon his theory of groups (*SS* 227–228), it is important to discuss it here because it was a crucial conceptual precursor of the machines in *Anti-Oedipus*, of the assemblages in *A Thousand Plateaus*, and of the singularizing processes in *Chaosmosis*. Before discussing Guattari's Freudo-Sartrean group typology, I will first turn to its counter-model, Lacan's individualizing notion of transference.

Whereas Lacan taught that one-on-one analysis consists in the management of transference, Guattari defined institutional analysis as the management of transversality within and between groups. This difference in approach does lead Guattari away from orthodox Lacanism, but at the same time, by the very act of critically examining transference, he was in a sense following Lacan rather than dissenting from him, since complaining about the inadequacies of mainstream psychoanalysis was in fact a very Lacanian activity, and one which filled his seminars with lengthy critiques of various other versions of Freudianism. This is especially true of Lacan's lectures on transference, which is in many ways *the* fundamental Freudian therapeutic concept, since it specifically addresses the analyst-analysand relationship and the "direction of the treatment," to borrow the title of the most clinical essay in the *Écrits*. Lacan found that his peers (outside of his own circle of followers, of course) grossly misunderstood and misused transference in their writings and practice.¹⁰ Lacan devoted his 1960–61 seminar to transference, which was also one of the "four fundamental concepts" of the 1963–64 seminar (Lacan 1991b; Lacan 1998). To appreciate "transversality" as a clinical concept, it will be helpful to review Lacan's teachings on transference.

Taking issue with the psychoanalytic mainstream, Lacan describes what he considered to be the "crudest" use of transference in practice, namely the approach of making "transference into the succession or sum total of positive or negative feelings the patient has for the analyst" (*E* 503). This happens when analysts bring everything back to themselves, as person or as ego. Bruce Fink succinctly explains, glossing Lacan, that this amounts to "collapsing the symbolic transference into the imaginary. Such analysts appeal to the 'healthy part of the ego' . . . which Lacan sarcastically refers

to as 'the part that thinks like us.' They try to get part of the patient's ego to model itself on their own ego, a notion that Lacan critiques extensively. Analysts engage here in a narcissistic project of self-duplication" (Fink 2004: 8, citing *E* 494). Lacan objects to this sort of analytic dwelling in the imaginary because it blocks the analysis by shutting down the analysand's production of new signifiers. To dwell on feelings or to engage in identification is to remain stuck in an imaginary relation, whereas for him it is essential that analysis fosters the play of the signifier in the structural relations among subjects and their others, which means moving on to a symbolic relation (*E* 184). This is precisely what he formulates with his famous L-schema (see below).

Guattari too objects to this sort of imaginary transference in the form of analysts setting themselves up as models for their analysands, but his complaint is primarily sociopolitical. He explains that in the private practitioner's office, transference can serve a protective function, further contributing to the sanctuary effect of the couch setting, while at the same time transference transmits mainstream behavior. As he explains it, on the one hand, analysts holding private sessions can "take refuge in their office and hide behind transference so that the treatment unfolds in isolation, so that nothing from the outside creeps in" (*GR* 78/*RM* 285). On the other hand, he finds that even as mainstream analysts bar politics from the consulting room by hiding behind transference, this same mechanism produces an opening through which politics can return. As he says in his own essay on transference,

[r]egardless of the particular psychoanalytic curriculum, a reference to a pre-determined model of normality remains implicit within its framework. The analyst, of course, does not in principle expect that this normalization is the product of a pure and simple identification of the analysand with the analyst, but it works no less, and even despite him . . . as a process of identification of the analysand with a human profile that is compatible with the existing social order. (*GR* 65–66/*PT* 56–57)

Whereas Lacan saw an improperly managed transference as working through imaginary identification to stifle the production of new signifiers, Guattari sees in identificatory transference a conservative reproduction of the status quo, given that the analyst, necessarily though often unwittingly, transmits the social norms of the existing dominant order.¹¹ It could be said that for Guattari, an analyst-analysand pair stuck in identification transfer to each other not so much affect, but, more concretely, they transfer

behaviors, expectations, and values which lead to real social and political outcomes.¹²

Guattari goes on to explain that the mainstream analyst's task is not limited to the dissemination of norms, but that first and foremost "His work is . . . to forge a new model in the place where his patient is lacking one," a duty made necessary because "the modern bourgeois, capitalist society no longer has any satisfactory model at its disposal" (*GR* 65–66/*PT* 56–57). The models that the analyst constructs and transmits through transference are necessarily compatible with the dominant capitalist order because "[f]rom the start, psychoanalysis tried to make sure that its categories were in agreement with the normative models of the period," as Guattari writes in 1975, by which time the gap between he and Lacan had widened significantly. He further declares that psychoanalysis was not a creative innovation of individual geniuses, but a socio-political apparatus of repression which "arrived in the nick of time, just as cracks were appearing in a lot of repressive organizations—the family, the school, psychiatry and so on" (*MR* 85/*RM* 245–246). The couch thus (re)produces bourgeois individuals ready to take their places as cogs in the gargantuan machinery of contemporary consumer capitalism (*ibid.*). Thus conceived, the couch's reinforcement of the status quo through individualizing identification goes hand in hand with psychoanalysts' aristocratic snobbery and their class loyalties toward their self-selecting bourgeois clients, private psychoanalysis being in effect limited to fairly well-off patients who can afford to pay for and who have time for multiple sessions per week, hence its mostly neurotic, inevitably docile patients (*PT* 60, 83).

For Lacan, as well as for the Guattari of 1964, speech is the key to transforming a bad analysis into a good one. First Lacan. While acknowledging that transference certainly does involve the affects as well as imaginary effects in the analytic relationship, Lacan insists that the analyst should always deal with transference in the symbolic register. He takes as his example Freud's famous case study of Dora, who, he says, identifies with her mother's impotent lover (Herr K.) and with her analyst (Freud), manifesting aggressive feelings toward both men, and without being able articulate in speech her true lesbian desire for Frau K. Noting Freud's admitted failures in the Dora analysis, Lacan warns that if transference is allowed to remain in the imaginary realm, getting stuck in identification and affect, then the "direction of the treatment" will be impeded (*E* 181, 183–184). Of course, with Dora and many other hysterics, this type of imaginary transference does involve speech, but it is "empty speech," or "the call of emptiness itself, in the ambiguous gap of an attempted seduction of the other by

means in which the subject manifests indulgence, and on which he stakes the monument of his narcissism." The analyst must not fall into such seductive traps, and must always resist filling in the gaps, remaining silent if necessary (*E* 206, 207). Lacan suggests that this interpersonal dialectic is implicated in every speech act, even outside the consulting room. "In its essence, the efficacious transference which we're considering is quite simply the speech act. Each time a man speaks to another in an authentic and full manner, there is, in the true sense, transference, symbolic transference—something takes place which changes the nature of the two beings present" (Lacan 1988: 109). The difference between full and empty speech is not so much that one expresses the truth and the other not, for the whole point of analysis is to pinpoint the latent truth manifested in empty speech. Therefore for Lacan, "full speech" is not necessarily speech which utters the truth, but rather "speech which performs."¹³ The truth of the interpretation proves to be much less important than its role in advancing (or not advancing) the analysis, by transforming imaginary transference into symbolic transference.

In adapting Lacan's teachings for use in the institutional setting, Guattari borrows the distinction between full and empty speech in order to differentiate between two kinds of groups: subject groups and subjugated groups.¹⁴ What follows is a summary of Guattari's theory of social collectivities. He complains that, unfortunately, most institutions are dominated by subjugated groups, resulting in bad transferences which cause all sorts of problems. The subjugated group belongs to Sartre's "practico-inert," which is to say that it incarnates the sedimentation of previous praxis, because such a group is "conceived according to rigid schemas, according to a ritualization of the quotidian, a regular and terminal hierarchization of responsibility" (*CY* 191–193). These rituals and hierarchies allow the group's members to avoid nothingness, to evade the ultimate meaning of their engagements, and to defend against solitude or anything bearing the mark of the transcendental. Putting it in psychoanalytic terms, Guattari says that one belongs to the group in order to hide from desire and death, engaging in collective neurotic obsession. The subjugated group cultivates its symptoms with rituals. Combining Sartre with Lacan, Guattari finds that such groups are at once subjects and objects of their own statements. The group's non-meaning, or in other words its death, comes from the outside, since such a group receives its law from the exterior, and its group fantasies function as false windows onto the exterior. Alienated from other groups, it endures its hierarchization as it adjusts itself to the other groups. The subjugated group is incapable of articulating its desires. Alienated from discourse, it will not

risk facing non-meaning, and takes comfort by putting on a show of rationality, hiding behind slogans. Using Lacanian terms, he says that the subjugated group remains stuck in empty speech.

In "Transversality," Guattari describes a typical subjugated group, such as those which often dominate psychiatric institutions. This passage is perhaps as interesting for its vocabulary (see italicized phrases) as for what it actually says:

As expression of a *death drive*, the *unconscious desire* of a group (for instance, that of a dominant group in a traditional hospital) will probably *not be such as can be stated in speech*, and will instead produce a whole range of *symptoms*. Though these symptoms may be '*articulated like a language*' and describable in a structural context, to the extent that they tend to obscure the institution *as subject* they will never succeed in expressing themselves otherwise than in incoherent terms from which one will still be left to decipher *the object (totem and taboo)* erected at the very point at which the emergence of *true speech* in the group becomes an impossibility. (MR 15–16/PT77; tm, my emphasis)

There is something of Sartre's practico-inert in Freud's "death drive," as well as in the Lacanian impossibility of "true speech," this impossibility being the ineffable unspeakability of unconscious desire. The subjugated group constructs a totemic object to block any articulation of its desire, thus circumventing true (or full) speech. There is nothing more Freudian than unexpressed desires emerging as symptoms. As unconscious emanations, symptoms could be conceived as "articulated like a language," as in Lacan. Guattari has not yet developed his own language for analyzing social formations, such as machines or the assemblage. His basic problematic, though, is already evident: how to free up blockages that prevent the unleashing of transformative productive creativity leading to positive social engagement.

The subject group, in contrast, is brave, efficacious, and self-directed, boldly taking the floor to speak (*prend la parole*), because it lucidly accepts the finality of dealing with other groups, as well as its own finitude, dispersal, and death. (I am summarizing several related Guattari texts.) This lucidity comes with a price, however, since opening onto other groups creates vulnerabilities. Subject groups therefore offer their members less reassurance, less protection. This is a very Sartrean vision, recalling the existentialist account of the heavy responsibility that comes with freedom, as compared with the easy route of *mauvaise foi*, or self-deception. Subject groups are produced by "bringing forward the sort of activities that favor an assumption of collective responsibility and yet are founded on a re-singularization of the

relation to work . . . and personal existence" (CY 191–193). The subject group therefore bravely assumes its own nonsense, but in so doing, opens up the possibility of expressing its unconscious desire, of taking the risk of making its object of desire clear. In other words, the subject group acknowledges the above-mentioned indecipherable totemic object which was erected at the very spot where full, or true, speech becomes impossible. The gap occupied by the ineffable object is precisely where the group's creativity could spring up, and therefore the nonsense of empty speech must be assumed by the group in order for it to produce effective statements. The very formation of such a group is singular because one belongs to it owing to a particular, transitory problem (and not out of an eternal anxiety or death drive). The subject group—articulate, communicative, responsible, effective—is one which has managed to organize itself according to the structure of transversality. Guattari invented transversality as a tool to foster the development of subject groups, which means warding off of the subjugation of the group.

Guattari declares the idea of transference too "ambiguous" for use in the institution, probably because he applied the term to both patient-caregiver and caregiver-caregiver relations. In the patient-caregiver relation, he found out through experience that "[p]sychotic transference can really lead to disaster sometimes. The same is true of interpretation." Transference proved to be equally problematic in relations among staff. In the typical mental facility staff and staff-patient hierarchies constitute "an obligatory, predetermined, 'territorialized' transference onto a particular role or stereotype," with the doctors at the top and patients near the bottom. Guattari finds this social transference more nefarious to treatment "than a resistance to analysis" (MR 17/PT 79).¹⁵ As he describes the situation metaphorically, hierarchies "blinder" (like horses) the institution's staff and patients, blocking interaction and communication among them, because the blinders prevent their awareness of each other. The blinders stifle the voices and creativity of those at the bottom of the hierarchy (MR 16–17/PT 78–79). Guattari declares that as a result, the psychiatric institution often misses out on therapeutic opportunities by overlooking the ongoing, close interactions between patients and nurses, and even more so ignores relations between patients and hospital attendants or cleaning staff or fellow patients (Oury 1970; Polack 2007: 133). Transversality explains why institutional psychotherapy is defined as a collective undertaking, actively involving every person in the institution, including the other patients (PT 89).

In describing the fostering of transversalized interpersonal relations in the psychiatric institution, Guattari raises two kinds of issues related to speech: the nature of psychotic disturbances, and the importance of

communication among staff. As for the first type of speech problem, psychosis is marked by extreme difficulty with social intercourse, making any interpersonal interaction with a psychotic patient significant, lending added importance to any speech produced by a psychotic patient, even if it is merely an exchange of banalities or nonsense with the person making the bed. In a 1957 essay on one of the many patient-staff committees at La Borde, Guattari remarks that in the institution, which is by definition “a network of verbal exchange,” nothing is ever in fact exchanged. Even though the clinic is in the end a “machine of empty words,” such arbitrary non-exchanges of nonsense help the patients escape from themselves, and to make themselves recognized and understood (*PT* 37).¹⁶ This is another example of empty speech whose efficaciousness transforms it into performative or full speech. With in-patients this kind of collectively administered therapy can happen 24 hours a day, and not just during the occasional patient-doctor sessions. What’s more, severely mentally ill in-patients do not recognize social distinctions among those around them. Schizophrenics pay absolutely no attention to fancy diplomas, observes Oury.¹⁷ As Guattari points out, the idiot of the ward can supply the efficacious interpretation (*MR* 17/*PT* 79). As for the second aspect of speech in the institution, communication among all staff members takes on an added importance precisely because absolutely any interaction with severely impaired patients matters. It is therefore crucial that those engaged in all functions and on all shifts meet to discuss the patients in their care. Transversality therefore aims to foster maximum communication among different levels of the hospital hierarchy (*MR* 18/*PT* 80). It is a “principle of questioning and re-defining roles” (*MR* 21/*PT* 83).

Although Guattari does warn that a group must be defined by its specific aims, and that there is no one formula for how to organize a group, for him the subject-subjugated distinction operates for most any sort of group. The concrete results of the application of this theory were mixed. While the La Borde clinic still operates according to many principles related to “transversality,” his attempts to organize transversalized research groups met with more limited success. He relied on his theory of the subject group when he extended “institutional analysis” well beyond the psychiatric hospital by bringing together about 20 research groups cooperating under the umbrella first of the FGERI (Fédération des Groupes d’Étude et de Recherche Institutionnelle) then the CERFI (Centre d’Étude, Recherche, et Formation Institutionnelle).¹⁸ These groups, which included architects, urbanists, sociologists, and economists, explored institutions from many different angles. This extension of analysis into domains far beyond the walls of the psychiatric hospital “implied that the analysis of formations of

the unconscious did not only concern the two protagonists of classical psychoanalysis, but could encompass other, more ample social segments" (CY 195; CY 27–29/AH 80–81). Despite some real accomplishments, these groups were not without conflicts, both personal and professional. Guattari withdrew from active involvement when he and Deleuze began writing *Anti-Oedipus*. Gradually, he came to question his ideas about groups, with the help of his new collaborator. "Deleuze, carefully, with a light touch, broke down a kind of myth about groups that I had had," he wrote in 1985 (CY 30/AH 87).

Meanwhile back on the couch, Guattari became a full-fledged Lacanian analyst in 1969, also joining the *École Freudienne* and beginning a private practice with clients who were mostly neurotic (CY 10–11, SS 48–49). He quickly realized that he much preferred the psychotics. "When I became an analyst, a member of the Freudian School . . . I gradually discovered the other side of the analytic myth . . . What a scene! What had I gotten myself into?" (CY 11/PT 103).¹⁹ This reinforced what he had already begun to conclude based on his institutional practice. In a 1977 interview about the La Borde clinic, Guattari explains that his dissatisfaction with psychoanalysis "had been brewing for a long time," and had been set off by his "giving psychotherapy to psychotics." Not only was transference disastrous (see above), but Guattari also found Lacan's principle of analytic neutrality to be often impossible to follow with psychotics:

Neutrality! What the hell are you supposed to do when a lamp hits you in the face? Professional ethics go out the window. The psychotherapeutic care of schizophrenics is in fact completely opposed to all of the sacrosanct principles of psychoanalysis. For me, then, the calling into question of Freudian practice occurred prior to the theoretical calling into question. (Guattari in Guattari et al. 1977: 21)

To summarize this chapter up to this point, by the time he met Deleuze in 1969, Guattari had discovered serious shortcomings with the core psychoanalytic practices of transference, interpretation, and neutrality. He was ready to take on all of psychoanalytic theory from the perspective of the collective treatment of psychosis.

Purloined letters to Lacan

Late in his life, Guattari enigmatically remarks in passing that Lacan had originally "initiated" (*a amorcé*—started up, fired up, primed) the theory of

desiring machines (CH 95/132). This comment is to say the least striking, given that the desiring machine is an anchoring concept of *Anti-Oedipus*. My aim in this section is to show how Guattari teased the desiring machine out of Lacan while writing two essays, "D'un signe à l'autre" (1961, 1966) and "Machine and Structure" (1969), both of which were initially addressed to Lacan. As early as 1957, Guattari had characterized a patient-staff organizing committee at La Borde as an "enormous socio-therapeutic verbal machine," but he would not begin developing the idea of machine until a few years later (*PT* 35).

Even while he was inventing institutional analysis and transversality as correctives to standard Lacanian practice, Guattari was simultaneously hard at work raising difficult questions about Lacanian theory, starting with the core ideas of the sign and of structure, the topics of the two essays mentioned above. Neither of these texts specifically written for Lacan ever truly reached its intended destination, since Lacan showed no particular interest in them, and did not give Guattari the encouragement he seems to have expected. In his introduction to *Psychanalyse et transversalité* Deleuze declared the essays on the sign and on structure to be the most important in the collection (Deleuze 2004: 203/*PT* 11). As Polack puts it in regard to the second of these essays—but I think that this is true of the articles on transversality and the sign as well—in "Machine and Structure," Guattari "conducts a devastating lawsuit against Lacan's structuralist subject, with the intention of merely explicating Lacan's own thinking" (Polack 2007: 133). This "lawsuit" does not, however, eliminate Lacan's structuralist subject, which Guattari finds alive and well all around him. Guattari's project is, rather, to seek out alternative subjectivities which may work even better than capitalism's structuralized subject, and his critique of the sign is part of this project.

"D'un signe à l'autre" (From One Sign to the Other) began as an actual letter sent to Lacan in December 1961. It was published in the journal *Recherches* in 1966, and is only partially reproduced in *Psychanalyse et transversalité* (*DS*, *PT* 131–150). It has not to my knowledge been translated into English, perhaps because of its poetic density. A decade after having sent the letter-version of the essay to Lacan, Guattari will realize that "originally in 'From One Sign to the Other' I was criticizing Lacan" (*AOP* 34/47). He had already been looking for the "general semiology" that he would only later develop with the help of Louis Hjelmselv and Charles Sanders Peirce, which will be discussed further in the following section.²⁰ Guattari explains that he wrote this letter/article in response to Lacan's April 26 1955 "Seminar on the 'Purloined Letter'" (*DS* 33 n. 1).²¹ Interestingly, he

discusses not Lacan's famous reading of the Edgar Allen Poe short story, but rather the published seminar's introduction, a text which describes variations on the children's game of even and odds, as well as by Freud's *fort-da* game from *Beyond the Pleasure Principle*. Oury recalls that he and Guattari happened to love inventing and playing these types of combinatory games and that together they made their own even-odd game based on this Lacan lecture (Oury and Depussé 2003: 199, 203). I suspect that Guattari also draws on several other sessions of Lacan's 1954–55 seminar, which was devoted to *Beyond the Pleasure Principle*, and which ends with a lecture on cybernetics, the scientific field devoted to theorizing the most modern type of machine, one based on binary combinatorics and which makes use of memory as well as repetition, the very mechanisms of Freud's repetition automatism (S2).²² Whereas Lacan's other commentators have been more interested in Poe's misplaced letter, Guattari much preferred the mathematical game and the cybernetic machine.

Early on in the course of this year-long seminar, Lacan presented his audience members with a "little model"—an "image"—in order to help explain his ideas about the nature of repetition automatism, the compulsion to repeat that inspired Freud's hypothesis of the death drive as the beyond of the seeking of pleasure. The model that he chooses is the adding machine, which is "an essentially symbolic creation" and which "has a memory" (S2 88). He notes that Freud had already conceived of the organism as a machine, and had discovered that "the brain is a dream machine" (S2 79, 76). He goes on to explain that "Models are very important" even though "they mean nothing." Humans respond to models because "that's the way we are—that's our animal weakness—we need images." But why does Lacan call this use of the image of the machine a "model" rather than a metaphor? And why does he note that models "mean" nothing? I would argue that this is because the model demonstrates a common mode of functionality, rather than designating other kinds of shared qualities. To use terminology that Guattari would develop many years later, the model does not signify, but rather, it "diagrams" (for a definition see my Introduction and below). The subsequent lecture on *The Purloined Letter* was part of his demonstration that the machine model shows "the meaning of man's need for repetition. It's all to do with the intrusion of the symbolic register" (S2 88). Lacan's adding machine model, like compulsive repetition in humans, operates according to the same mechanisms as the symbolic order itself. It does not "mean" or signify, but rather it incorporates processes. "The machine embodies the most radical symbolic activity of man" (S2 74).

By pointing out the machinic nature of the symbolic order, Lacan calls into question man's freedom to choose, suggesting that humans, like machines, are caught up in an external determinism, of which repetition automatism would be a symptom. "It would be very easy to prove to you that the machine is much freer than the animal. The animal is a jammed machine" (S2 31). Psychoanalytic treatment is premised upon and made possible by the external determinism to which man is subject, as evidenced by the involuntary return of that which was repressed in the unconscious, in the form of slips of the tongue, dreams, or obsessional behaviors. "What is the nature of the determinism that lies at the root of the analytic technique?," Lacan asks. He replies that analysts "try to get the subject to make available to us, without any intention, *his thoughts*, as we say, his comments, his discourse, in other words that he should intentionally get as close as possible to chance" (S2 296). Lacan can compare psychoanalysis to cybernetics because both access chance by way of memory—as we now know very well in the age of pervasive computerization, even a simple adding machine has a memory (S2 88). Memory allows machines—not only those of the 1950s but also Blaise Pascal's seventeenth-century algebraic machines—to play games of chance. "To understand what cybernetics is about, one must look for its origin in the theme, so crucial for us, of the signification of chance" (S2 296).

The "radical symbolic activity" shared by humans and calculators alike is demonstrated not only in the determining displacements of Poe's purloined letter, but also in the game of even and odds that the fictitious detective Dupin explains to the tale's narrator. Dupin tells the story of a schoolboy who always wins at guessing the number of marbles (two or three) in his opponent's hand through a technique of identification, by which he manages to think like the other by adopting a similar facial expression. For Lacan, identification belongs the imaginary order. He thus points out that this identificatory technique would not be available to a machine capable of playing even and odds, and that thus the machine plays the game entirely on the level of the symbolic (S2 181). Even/odd, presence/absence, Freud's *fort/da* from *Beyond the Pleasure Principle*, the on/off of an electronic circuit, the 0/1 of computerized messages, Pascal's gambling calculus—cybernetics is the science of machines capable of playing this schoolboy's game strictly by manipulating symbols. In other words, for Lacan cybernetics is the science of the symbolic order, since "Everything, in the symbolic order, can be represented with the aid of such a series" (S2 185).

Lacan drafts two members of his seminar audience to play even and odds, then records, transcribes, and transcodes the results, according to a set of combinatory rules of his own devising. He first notes the even/odd guesses

as pluses and minuses, which he groups into threes. He then transcodes these patterns twice more, first into 1s, 2s, and 3s, then into Greek letters, all according to a set of strict transformational rules. He points out that the resulting patterns are determined by a mathematically limited number of combinational possibilities. He connects the dots to show the restricted trajectory of the symbols which have been subjected to the rules of his game. The short but complicated demonstration is meant to illustrate the mechanistic way that the signifier determines interpersonal relations among subjects. He points out the “similarity” between this demonstration and his famous “L-Schema” which shows the relations between a subject and its O/others as a crisscrossing of imaginary and symbolic relations (*E* 31, 39–41).²³

In sum, both humans and machines remember and repeat, and can therefore both play such guessing games. Remembering and repeating are not thinking, however, as Freud had already amply demonstrated. “We are very well aware that this machine doesn’t think,” adds Lacan.

But if the machine doesn’t think, it is obvious that we don’t think either when we are performing an operation. We follow the very same procedures as the machine. The important thing here is to realise that the chain of possible combinations of the encounter can be studied as such, as an order which subsists in its rigour, independently of all subjectivity. (*S2* 304)

This rigorous “order” which subsists independently of subjectivity is the symbolic order itself. “The passage of man from the order of nature to the order of culture follows the same mathematical combinations which will be used to classify and explain.” He recalls that Lévi-Strauss calls these “mathematical combinations” the elementary structures of kinship. “Man is engaged with all his being in the procession of numbers, in a primitive symbolism which is distinct from imaginary representations” (*S2* 307). Humans too can function like cybernetic machines. Lacan’s model works.

In 1954–55, Lacan’s sign is much more playful, open, and interesting than it will later seem, once his structuralism subjects it to the *matheme* and algebraic topology. Guattari’s letter-turned-essay was inspired by this earlier sign, about which Lacan writes in regard to the symbol-transmitting, game-playing cybernetic machine:

Freud is the first to notice that a number drawn from the hat will quickly bring out things which will lead the subject to that moment when he slept with his little sister, even to the year he failed his baccalaureat because

that morning he had masturbated. If we acknowledge such experiences, we will be obliged to postulate that chance does not exist. While the subject doesn't think about it, the symbols continue to mount one another, to copulate, to proliferate, to fertilise each other, to jump on each other, to tear each other apart. (S2 184–185)

The machinic combinatory which governs these copulating, combative, enumerated symbols does not preclude the involvement of libidinal desire. The chain of numbers itself pulls along pieces of repressed affect and memory. What is subjectivity, if not the very intersection of this messy meeting point of signs and signifying residue irrupting from the unconscious? Guattari recognizes that despite the powers of these ciphers and symbols, they are not yet signifiers.

Guattari was clearly fascinated by these copulating, combative, enumerated signs which seem much less structuralist than the signs of Lacan's later formalisms. In "D'un signe à l'autre," he develops a hypothesis of sexually reproducing signs, which he then maps with a playful series of dots, letters, pluses, and minuses. His game becomes an ambitious genetic search for "a prototype sign which, all by itself, can account for all of creation" (DS 38). His aspirations, then, far exceed those of the Lacanian project: whereas Lacan merely seeks to demonstrate the constitution of a subject grounded in language, Guattari is looking for an ontology of the universe. Guattari begins his essay by breaking the sign down into constituent parts, and in so doing borrows from Lacan's June 1961 lecture on Freud's *einen einzigen Zug*, or the *trait unaire*, translated into English variously as "unbroken line," "single-stroke," or "unary trait."²⁴ This lecture was part of Lacan's 1960–61 seminar on transference, during which he painstakingly schematized the intersubjective relations involved in one-on-one analytic treatment. Lacan redefines Freud's *trait unaire* as a "minimal sign" which is not yet a signifier. Freud had introduced the *trait unaire* (*einen einzigen Zug*) in his discussion of the partial identifications of love and rivalry. He hypothesized that a subject caught up in a relation of love or rivalry may identify with a "single trait" of someone else, as for example when someone adopts another's symptom. Since Lacan considers love and rivalry to be imaginary identifications, and since for him symbolic identification consists in an identification with a signifier, he concludes that imaginary identification consists in the introjection of only a partial signifier, the *trait unaire* (Lacan 1991b: 417–418). Guattari shows little interest in identification, but he seizes on the notion of the *trait unaire* as partial signifier, around which he builds an ontology.

The value of this *trait unaire* for Guattari lies in its “primordial” status in relation to the sign (Lacan 1991b: 418). However, he seems to find that it is not primordial enough. He wonders at what moment the minimal sign is actually born, noting that a splotch (or blob, blot), a bar, a mark, or a point do not become “signifying material” until “they are used in another system” (DS 33). Between the almost accidental creation of a splotch and yet prior to the development of Lacan’s minimal sign, or *trait unaire*, Guattari defines a “sign-point” or “point-sign” (*point-signe*) as unique, undividable, and “engendered by two mother splotches processed by the vacuum [*vide*]” (DS 35). This begetting of the sign is thus a “phenomenological-mathematical” (DS 34) operation, dependent on the notion of the “vacuum” which Guattari seems to borrow simultaneously from philosophy and particle physics.²⁵ These splotches do not yet signify, but they do copulate and, with the help of the phenomenological-mathematical void or vacuum, produce offspring composed of elementary particles. Guattari then decomposes the newborn sign-point by hypothesizing that it has a false interior and several false parts, a cavity and anti-cavities (DS 35). This strange sign-point is the “raw material of the sign, and not a signifier in itself” (DS 43). Sign-points can, though, form chains, he claims. When, in turn, two sign-points mate, they engender the *trait unaire*, Lacan’s “primordial symbolic term.” This genesis of the sign is what Guattari models in his essay. Three sign-points make up a “basic sign” (*signe de base*), he says, and an enchaining of basic signs according to strict rules yields a variety of patterns which he transcribes with pluses and minuses. Guattari is thus borrowing some elements from Lacan’s even/odd game, but he does not seem interested in questions of chance. His manipulations of patterns, which he also links by drawing geometric lines, eventually lead him back to the sign-point, which he breaks down again, this time into elementary particles charged negatively or positively.

After several pages of tedious combinatorics, Guattari turns to concrete applications, but on a much grander scale than his teacher Lacan. Whereas the latter is content to model interpersonal relations on the intimate scale of the one-on-one psychotherapy or the family, rarely mentioning society at large, Guattari speaks of the insertion of machinic processes into capitalist production and mass consumption, and the potential effects on human subjectivity. He finds binary enchainment at work in poetry, phonetics, and musical notation. One segment of his game-playing involves a binary encoding based on phonetics, in order to show that a “mechanism” of transcription into pluses and minuses can “articulate” into binary chains “any type of ambiguity regarding rhythms, accentuations, intonations, letters, phonemes,

morphemes, semantemes, etc.” (DS 50). He gives a musical example, suggesting that a good musician would be able to recognize the title and composer of a symphony, solely by studying an amateur listener’s careful notation of the sounds produced by the bass drum, cymbals, and triangle during the performance—contingent of course on the listener transcribing enough information. Guattari then connects this semiotic problem of “transcription” and “codification” to the far-reaching consequences of “machinic” processes in contemporary technological society. Lacan was most interested in cybernetics as a model for the symbolic order, although he does mention in passing that technological progress is radically changing the very idea of the machine and its relationship to humans (S2 31–32). Guattari, in contrast, devotes significant passages of his essay to the historical transformations being brought about by growing interconnections between machines and signification. He speaks of the insertion of machinic processes into capitalist production and mass consumption, and the potential effects on human subjectivity, claiming that “signifying rationality” has taken hold especially in the commodified domains of mass consumption. In regard to production, he indicates that machines are rapidly replacing the human gesturality of assembly-line work with signifying articulation. Summing up the woes of contemporary historical conditions, he argues that the problem lies not with technical progress in itself, but with the social order’s incapacity to effectively dealing with subjects and subjectivity (DS 50–53).

Guattari thus theorizes components and parentage for Lacan’s *trait unaire*, suggesting that it is not the most basic signifying entity, then extends the consequences far beyond the interpersonal relationship between analyst and analysand. He wants to build a bigger, better model than Lacan’s cybernetic version of the L-schema. Thus the disciple is taking apart his master’s machine model, and scattering the parts all over the place. The tiniest pieces intrigue him the most. In order to better understand them, the disciple turns not to his master’s cybernetics, but to theoretical physics. Guattari observes that physicists machinically manipulate symbolic material in order to produce and reproduce not just symbols, but physical elementary particles. This observation leads him to propose a semiotic theory of the atomic and cosmic universe:

The collective enunciation of theoretical physics . . . continuously composes and recomposes a gigantic signifying machine in which machines themselves and the signifier are indissolubly intertwined. This signifying machine is capable of intercepting and interpreting all theoretically

aberrant manifestations of elementary particles. These particles not only reveal an inability to plausibly explain their behavior, but, in the most recent cases, it seems that their coming into existence depends on the technical-theoretic enterprise itself. (*DS* 53)

Theoretical enunciation precedes material existence, an idea that will resurface in Guattari's writings of the 1970s. Guattari has strayed far from the purview of Lacan's seminar on narcissistic identification, and has begun formulating his yet-to-be-named notions of a-signifying semiotics and the diagrammatic, which will be discussed further in the following section of this chapter.

Within the much more limited scope of Lacanian theory, the sign is important only for its subjugating effects on the subject, although the latter's deviousness is nonetheless well-known to psychoanalysts. However, Guattari insists up front that the subject is never completely imprisoned by signifying chains, thereby deviating from at least some interpretations of Lacan (*DS* 58). Guattari finds that the subject is "fundamentally perverse" and that "signs hold a grudge against the subject because the later does not conform to them unreservedly" (*DS* 54, 61). The dialectic itself "plays on the futilities, accidents, and pustules of nonsense" which emerge from "a big body of signifying determinations of all sorts" (*DS* 51–52). Lacan's subject is likewise perversely disobedient, but Guattari seems much more drawn to its nonconformist side. While he does not dispute the "signifying determinations" that Lacan discovered by playing even and odds, he shows much more interest in contingencies, nonsense, and the geopolitics of technology.

Guattari would not again explore the relationship between subjectivity and the machine until his 1969 text destined for Lacan, "Machine and Structure," in which he finally introduces "desiring machines" (*MR* 111–119/*PT* 240–248). It has been reported that Lacan himself solicited "Machine and Structure" for his journal *Scilicet*, having wanted Guattari to write a response to Deleuze's most recent books. Lacan never published it, so Guattari took it to Deleuze.²⁶ According to their friend Jean-Pierre Faye, these are the circumstances under which the philosopher and the militant analyst first met.²⁷

Although Guattari defines "machine" in relation to "structure," he insists that the two are inseparable because dependent on one another. The human being is caught where machine and structure meet (*MR* 114/*PT* 243). Echoing the discussion of the machine in "D'un signe à l'autre," he suggests that contemporary technological advances are impacting

human subjectivity in unforeseen ways, a theme which will continue to appear throughout his subsequent writing. In 1969 his vocabulary and theoretical support remained Lacanian, as when he writes that “this unconscious subjectivity as a split which is overcome in a signifying chain, is being transferred away from individuals and human groups toward the world of machines” (MR 113, 114/PT 242, 243), or when he transforms Lacan’s formula of a signifier representing the subject for another signifier: “It is a signifier detached from the unconscious structural chain that will act as a *representative* to represent the machine” (MR 114/PT 243). This, he says, is the essence of the machine. The homage to Lacanism runs deep in this essay, which recognizes that Lacan was not only an expert on structure, but that he also knew something about machines: Lacan’s *objet petit ‘a’* “breaks into the structural equilibrium of the individual like some infernal machine” (MR 115/PT 244). Guattari even equates “desiring machines” with “*objets petit ‘a’* returning to the surface of the phantasy body” (MR 116/PT 245), hence the statement that Lacan “initiated” the desiring machine, as cited at the beginning of this section.

In this same essay, Guattari also finds machines in Deleuze, whom he had not yet met, and who had just published *Logic of Sense* (1968) and *Difference and Repetition* (1969). In a footnote of “Machine and Structure,” Guattari offers a bold reworking of Deleuze’s thinking, mapping the latter’s two new books onto the machine/structure distinction (MR 111 n. 1/PT 240 n. 1). Interestingly enough, Guattari does not comment on Deleuze’s lengthy discussion of the psychoanalytic theory of psychic repetition in *Difference and Repetition*, but goes straight to the heart of Deleuze’s core concept of repetition, in which, with its singularities for which there can be no exchange or substitution, Guattari recognizes his own machine. Likewise, Guattari sees his own category of structure as equivalent to Deleuze’s “generality,” defined as the domain of the exchange or substitution of particulars (Deleuze 1994: 1, 96–115). This level of theoretical engagement is typical of Guattari, who tends to work with the broad outlines of theories, rather than picking apart the details. Having thus swallowed up an essential thesis of *Difference and Repetition* in one sentence, in the same footnote, he goes on to take issue with the characterization of “structure” in *Logic of Sense*, in effect correcting Deleuze. Guattari agrees with Deleuze that the “minimum conditions determining structure in general” include the presence of two heterogeneous series (condition one of structure) whose terms exist only in relation to each other (condition two) (Deleuze 1990: 48). However, the militant psychoanalyst reclassifies the philosopher’s third condition of structure, writing that the “two heterogeneous series converging upon a

paradoxical element that acts so as to differentiate them,' relates, on the contrary, exclusively to the order of the machine" (MR 111 n. 1/PT 240 n. 1). Like Lacan, Deleuze understood quite a lot about machines, in Guattari's view. Unlike Lacan, Deleuze was fascinated by Guattari's notion of the machine, did not mind it being used to revise his own major theories, and was willing to incorporate these revisions into his own thinking.

Deleuze was attracted not only to Guattari's desiring machines, but also to his critique of psychoanalysis. He later explained to an interviewer that "Oddly enough, it wasn't me who rescued Félix from psychoanalysis; he rescued me" (Deleuze 1995: 144, see also 13, 15). Deleuze had commented extensively on various aspects of Freud and Lacan in *Difference and Repetition*, *Logic of Sense*, and his study of masochism but as Christian Kerslake has shown, Deleuze did not necessarily follow the twentieth-century intellectual mainstream in his approach to the unconscious, which was arguably as indebted to Leibniz, Janet, Bergson, and Jung as to Freud (Kerslake 2007). Although he credits Guattari with the departure from Lacanian orthodoxy, Deleuze's pre-1969 writings are not particularly Freudian or Lacanian, or even psychoanalytic. Still, neither did he show any motivation to dismantle Freudian or Lacanian theory, until he met Guattari (Roger 2000: 44).

Although Guattari was already reinventing psychoanalysis, he was still criticizing Freud and Lacan using Freudian and Lacanian vocabulary and ideas. Deleuze therefore suggested that he find new concepts, so that his machines could function even better (Deleuze 1995: 13–14). In addition, Deleuze provided a much-needed "philosophic shoring up," and, just as crucially, some much-needed scholarly discipline. The analyst has described how writing with the philosopher was

[b]oth a careful and scholarly enterprise, and a radical and systematic demolition of Lacanism and all my previous references; clarifying concepts I had been "experimenting with" in various fields, but which couldn't reach their full extension because they were too attached to their origins. It was necessary to impose a certain "deterritorialization" of my relations to the social, to La Borde, to the concepts of matrimony and psychoanalysis and to the FGERI,²⁸ so that concepts like "machine" could be given enough room to develop. (CY 30/AH 85–86; my emphasis)

Guattari's "previous references" included not only Freud and Lacan, but also Marx, Trotsky, and Sartre (MR 25/PT 152; GR 121). At Deleuze's insistence, he read and took notes on numerous books, many of them newly

published, including Lacan's *Écrits* (1966), Deleuze's *Expressionism in Philosophy: Spinoza* (1968), and contemporary works of linguistics and semiotics. Guattari's old friends from his institutional analysis circles recognized this renewed investment in reading as a radical change brought about by Deleuze (AH 81). It is noteworthy that in referencing his conceptual "demolition" Guattari uses the term "Lacanism," and not the name Lacan. This neologism can be read as targeting the "orthodoxy built up around" Lacan, as Deleuze put it in an often-cited interview (Deleuze 1995: 144). Deleuze acknowledged that both he and Guattari owed a great deal to Lacan, remaining indebted to his "creative side," and borrowing heavily from his line of thought even as they proceeded with their "demolition" (Deleuze 1995: 14). This may help explain why, despite its often aggressively oppositional tone, their jointly-authored *Anti-Oedipus* has no harsh words for Lacan himself (Stéphane Nadaud in *AOP* 18/22; Smith 2004: 639).

Meanwhile, even as Guattari was slowly moving away from Lacan's teachings by following the path of the machine, Lacan was moving away from psychiatry and from the treatment of psychosis. It should not be forgotten that Lacan's own teaching, practice, and theorizing were still evolving at the time, becoming increasingly distant from his earliest work on criminal paranoia, and moving toward impossible *jouissance* and the topological demonstrations which came to dominate his final seminars. Although he had written and published a doctoral thesis on paranoia (1932) and had devoted a year of his seminar to the psychoses (1955–56), Lacan on the whole provided very little guidance on the psychoanalytic treatment of psychotics (Nobus 2000: 140–143). Between 1964 and 1969 Lacan's shift in interests paralleled the changing composition of his seminar audience. Having lost access to the lecture room at the Sainte-Anne psychiatric hospital, he began lecturing at École normale supérieure, where he was drawn to the philosophically trained students, including his future son-in-law Jacques-Alain Miller. In 1969 Lacan was obliged to move his seminar again, this time to the law school lecture hall across from the Panthéon in the heart of the Latin Quarter, where his audience further grew in size and diversity. He was now a star on the lively Paris intellectual scene. His lectures became markedly more formulaic and mathematical after 1969–70, the year his seminar focused on the "four discourses," which are based on algebraic combinatorics and which he insists exhaust the possibilities for mapping intersubjective relations among speaking subjects.²⁹ Mathematical concepts were already present in Lacan's work from the earliest prewar period, but it was not until 1971 that he introduced the notion of the "matheme," a conception of the unconscious which troubled Guattari (Cochet 1998;

Burgoyne 2003: 81, 82). He first presented the Borromean knot in 1972 and grew increasingly fascinated with this and other topological figures, to the dismay of many of his followers (Clément 1983: 33; Schneiderman 1983; Vanier 2000: 73).

Miller was by now Lacan's closest disciple. Around 1973–74 he also became a powerful force in the department of psychoanalysis at Vincennes, leading to dissent among Lacan's followers, many of whom felt that he was treating them disrespectfully and/or unfairly (Schneiderman 1983: 43–45). Deleuze, who taught at the same university, called Miller's leadership "Stalinist" (Deleuze 2006: 61). One loyal follower who resented Lacan's attachment to Miller and his fellow academics was Oury, who felt that the *École normale supérieure* students on the rue d'Ulm had seduced Lacan and led him astray, because these young, well-funded students had time to read books, unlike the busy professional clinicians who had made up the audience of Lacan's early seminars. Oury and Lacan exchanged angry words over their differences, but the former maintained that he had always remained loyal to the latter, claiming that he was trying to save Lacan by advocating the study of institutional psychotherapy at the *École Freudienne* (Oury and Depussé 2003: 250, 253). Guattari himself maintained that he broke with the Lacanians, especially Miller, but never with Lacan himself. He never renounced his membership in the *École Freudienne*. He explains that "Lacan . . . had a friendly and attentive rapport with me during the first years that I knew him. This is until it was ruined, particularly by the appearance of Jacques-Alain Miller . . . and of his group at the rue d'Ulm" (CY8/AH99). Miller's strong influence on Lacan directly impacted Lacan's thinking, in the view of Elisabeth Roudinesco. She explains that during the late 1960s at the rue d'Ulm, Miller gave several papers which recast Lacan's teachings by giving them a new, highly formalist framework.

Miller's interpretation shut the work in on itself . . . Lacan's gradually evolved concepts, detached from their history and stripped of the ambivalence that had been their strength, were now classified, labeled, tidied up, sanitized, and above all cleansed of their polysemic complexity. (Roudinesco 1997: 305)

Guattari continued following the Lacan rich in "ambivalence" and "polysemic complexity," rather than the new Lacan stripped down to structure.

Even after *Anti-Oedipus*, Guattari retained many basic psychoanalytic concepts and techniques, including the diagnostic categories (psychosis, neurosis,

obsession, hysteria, perversion), the unconscious (albeit it in a radically modified version), the superego, talk therapy, and the analysis of dreams. Although he disapproved of the psychoanalytic emphasis on identification, castration, the despotic signifier, the therapeutic use of transference, and the Oedipal triangle, he did recognize the presence and functioning of these phenomena in modern life, and therefore implicitly acknowledged the validity of the concepts; his objection was to the cultivation and encouragement of such psychic entities, in practice. I think it could be said that Guattari remained faithful to a sort of purloined Lacan—the maverick, perverse, slightly crazy cybernetician who, in Guattari's reading, regrettably lost his way. This purloined Lacan, the one who once spoke of copulating signs, remained a reference for Guattari, as evidenced in several passages of *The Anti-Oedipus Papers*. For example, "What's interesting in Lacan is that he is crazier than most people, and that, in spite of his efforts to 'normalize' everything, he manages to slip, and slip back into deterritorializing the sign" (AOP 89/135). Guattari notes numerous other instances of ambivalence like this one, where Lacan slips from his rigid, politically uncommitted structuralist mode into his guise as the mad inventor of the *objet petit "a"*. Lacan's "total conformism to institutions" belies his claim that statements of authority are guaranteed only by their own enunciation; Lacan's "interesting statements on the family" from 1950 were followed by his "stupidities on the name of the father" (AOP 35/38)³⁰; "in practice, [Lacan's] fanatical attitude of reducing analysis to language leads to the schizophrenization of analysis, which is of course positive" (AOP 71/95); Lacan is right to insist that the Other does not exist, but he stops short of deterritorializing the sign (AOP 128–129/184); Lacan transforms Freud's familial Oedipus into a symbolic one, which Guattari sees as an improvement (AOP 208/300). Perhaps Guattari painstakingly reads and cites Lacan's *Écrits* throughout *The Anti-Oedipus Papers* because he sees unrealized potential in these ambivalences, if only one were to follow the road which leads through primordial signs, cybernetics, deterritorialization, partial objects, authority grounded only in its own speech, schizophrenized analysis, and a de-mythologized family. Following the machinic sign down the paths which bypass the highways favored by the structuralist sign, Guattari discovers that "The theory of the object 'a' perhaps sows the destruction of the signifier's totalitarianism," and that likewise, it is unclear whether "the object 'a' in Lacan is anything other than a vanishing point, an escape from the despotic character of signifying chains."³¹ The *objet petit "a"* is a machine, and the A (big Other) is the full Body without Organs (MR 115/PT 244; AOP 128–132/183–189). This is Guattari's Lacan, or at least what is left after the

initial stages of the demolition. Has Guattari deviated from Lacan any more radically than Lacan deviated from Freud?

The place of the real

Deleuze once said that Guattari not only produced more ideas than anyone else he knew, but also that he “never stops tinkering with his ideas, fine-tuning them, changing their terms. Sometimes he gets bored with them, he even forgets about them, only to rework and reshuffle them later” (Deleuze 2006: 238). Such is the case of Guattari’s thinking about the sign. The sign-points in “D’un signe à l’autre” (1961, 1966) virtually disappear until *The Anti-Oedipus Papers* (written 1969–1972), where they become “power signs,” which do not appear as such in the final text of the *Anti-Oedipus*.³² These notions will not reach full development until the late 1970s, in a section of the *Révolution moléculaire* entitled “Semiotic Scaffolding,” which brings together a thematically related group of papers, notes, and essays, and whose semiotic musings finally coalesce in *L’Inconscient machinique* (1979) and *A Thousand Plateaus* (1980).³³ In assembling his “semiotic scaffolding,” Guattari pursues a “general semiology,” which he characterized as a crazy dream of Saussure’s which Louis Hjelmslev took seriously (*AOP* 207/299).³⁴ He began his careful reading of Hjelmslev around 1970, and became interested in Peirce as well. Guattari tells Deleuze that they must look to Hjelmslev and perhaps Peirce in search of the key to the disengagement from structuralism (*AOP* 38/52). If one follows Guattari’s passionate pursuit of a general semiology to the limit of its analytic ambitions, it could be used to map practically every interaction in the universe, recalling his search 20 years earlier for a proto-sign capable of accounting for “all of creation” (*DS* 38). Guattari’s aim: to unblock psychic and social constraints imposed by the dominant social order, so as to promote productive creativity in the arts, revolutionary politics, and mental health care. In pursuit of this aim, he pays increasing attention to the rapidly evolving machinic realms of scientific theory and information technology.

It may seem odd that in order to disengage from structuralism, Guattari draws what looks suspiciously like a structure, a simple six-square matrix (Figure 1.1) meant to show “the place of the signifier in the institution,” the title of the 1973 essay mentioned at the beginning of this chapter. Guattari begins this address given at Lacan’s *École Freudienne* by implicitly referencing the context of psychiatric institutions like La Borde. He notes that the position of the signifier in such a setting is “not identifiable from the

classical analytical perspective,” which is a bold claim to make at Lacan’s own school, given the pains with which Lacan had, as we saw above, mapped the trajectory of the signifier in private, office-bound analysis (*GR 148/RM 277*). Guattari therefore pulls together some of this tinkering with signs in order to reformulate his old problem of importing psychoanalytic techniques into the psychiatric hospital. He presents the matrix in support of the paper’s central premise that “dual analysis and institutional analysis, whatever their theoretical arguments, essentially differ as a result of the different range of semiotic means that one and the other bring into play. The semiotic components of institutional psychotherapy are much more numerous” (*GR 152/RM 283*). He finds that psychoanalysts are wrong to “have turned analysis into an exercise of the sheer contemplation of sliding signifiers” because, as he will later state in an interview, “The psyche, in essence, is the resultant of multiple and heterogeneous components. It engages, assuredly, the register of language, but also non-verbal means of communication” (*GR 153/RM 285; CY 204*). His essay enumerates and maps these additional kinds of “semiotic component” brought into play in the institution. I characterize this drawing and essay as “metamodeling” because they take bits and pieces of other models, in an attempt to solve a specific, singular problem.

Guattari’s matrix models the coming into existence of the various “semiotic components” which for him constitute an inventory of raw materials and spare parts used not only by language, but also by many other types of messages, signals, modes of expression, or transmissions which are essential to many processes at work in social, ecological, cellular, and atomic systems. One of the main purposes of the matrix is to demonstrate the differences among these various components, because Guattari finds that linguists tend to interpret all message transmission in terms of language, for example referring to mathematics as the “language” of physics, or talking about “genetic writing.” He objects that “It would be ridiculous to suggest that the same system of signs is at work at once in the physico-chemical, the biological, the human, and the machinic fields,” and so he sets out to construct a semiotics which can account for signifying speech (*parole*), scientific signs, technico-scientific machinisms, and social assemblages (*MR 133/RM 336–337; MR 87/RM 248*). Encoding, transcoding, translating, communicating, transmitting information, expressing, speaking, writing—these acts are not all equivalent, are not carried out the same way in all domains, argues Guattari, nor do they all require language, or at least not always.

In his quest to establish differences among semiotic processes, Guattari divides semiotic components into three broad categories. The names of

these categories vary from essay to essay, and manifest his unfortunate shortcomings in naming concepts—a task which he seems to have often left to Deleuze. In the following list, I have pulled together the various names for the semiotic categories which Guattari painstakingly elaborated over the previous two decades. This and the discussion which follows have required citing many different Guattari essays written over time and whose terminology and concepts vary slightly, forcing me to pick and choose in producing a reading which I hope will be both coherent and faithful to the spirit of Guattari's thought.³⁵

Natural encoding

These “a-semiotic” transmissions of messages and codes operate at the biological, chemical, and physical levels, and do not involve any kind of human language.³⁶ Examples of natural, a-semiotic encoding include the operations of endocrine regulation, hormonal signals, endorphin release, and the genetic code.

Signification

These semiotically-formed substances of signification can be broken down into two sub-categories, “signifying semiologies” (language) and “symbolic semiologies” (includes gesture, ritual, nonsense, sexuality, body marking, song, dance, mime, non-verbal traffic signs, semaphores, and somatized feelings such as having a nervous breakdown or crying).³⁷ This category pertains especially to human interaction.

Diagrammatic processes

This type of “a-signifying” semiotics is used in information technology, science, and the arts transmitting ideas, functions, or intensities with no need to signify any meaning. Examples include mathematics, computer code, musical notation, and economic transactions. (See also my Introduction.)

Whereas many linguists would argue that “signification” operates in what is here labeled “natural” and “diagrammatic,” Guattari disagrees, and what's more, he perceives a political motive behind attempts to explain all encoding and message transmission in terms of linguistic language. For him, the acknowledgement of semiotic difference serves as a means of resisting the leveling effects of what he calls the capitalist axiomatic (*MR* 89–90/*RM* 252; *RM* 294). He warns against “contaminating all the different registers—nature, production, machinism—with meaning. And what Meaning at that,

precisely, if not the dominant meanings" (Guattari and Seem 1974: 40). To recognize non-linguistic semiotic modes, according to his schema, is to find ways of escaping the control of the despotic signifier, which imposes the stifling reign of representation, in collusion with capitalism. Guattari asks "under what conditions certain semiotic areas—in the sciences, arts, revolution, sexuality, etc.—could be removed from the control of the dominant representations, could get beyond the system of representation as such" (MR 100/RM 266).

The most important differentiating factor among these three categories of semiotic components is, for Guattari, their relationship to the real. He agrees with Lacan that the signifier remains cut off from the real, which is why the signifier can represent the subject for another signifier, but he at the same time insists that other semiotic components, such as those at work in nature and in science, can in fact directly connect to the real (MR 166/RM 303; RM 344, etc.). Finding the Lacanian real/reality distinction "way too massive," he uses Hjelmslev's terms to posit a "*dominant reality* stratified by various semiological substances of content and expression" as well as "non-semiotically formed *intensive matters*" (RM 342). He explains that the strata (a Hjelmslev term which will be familiar to readers of *ATP*) of dominant reality continuously strive to capture material intensities, disempowering them by extracting them from the domain of the real.³⁸ The components of natural encoding and diagrammatic processes escape this disempowering capture by the signifier, whose domineering ways are explained at length in *A Thousand Plateaus* (ATP 75–148/95–184).³⁹

Guattari's matrix (Figure 1.1) can be used to make this point about the engagement of various semiotic components with the real. To make the matrix easier to read, I have shaded in light gray the top and side headings, which correspond to Hjelmslev's categories (expression, content, matter-purport, substance, form), and whose intersections form six squares.⁴⁰ Trajectories drawn across the squares produce Guattari's three semiotic categories of natural encoding ("a-semiotic encodings"), signification ("semiotically-formed substances" and "signifying semiologies"), and diagrams ("a-signifying semiotics"). Guattari locates the real in the left-hand column, labeled "matter," which, liberally adapting Hjelmslev, he redefines as semantic and physical reality.⁴¹ He explains that semantic reality consists in "non-semiotized meaning" ("matter of expression," top-left square), not yet having been formalized into signified contents. The "continuum of material flows" ("matter of content," lower left square) includes intensities and physical materials (MR 99/RM 265; GR 149/RM 279, tm). Access to the real is achieved by following the matrix's two curved trajectories which pass

directly between “form” (right-hand column) and “matter,” bypassing “substance” (middle column); these are the trajectories of natural encoding and diagrammatic processes. “Substance” is a key word here, because whenever this middle column of the table is involved, there is signification, or meaning, which in turn precludes access to “matter,” and thus to the real.⁴² Human language (“signifying semiologies,” in the matrix’s dark-gray ellipsis) and nonverbal modes of expression (“symbolic semiologies,” in the four right-most squares) therefore limit their users to the realm of representation.⁴³ This is why Guattari locates creativity in the substance-free, meaning-free domain of diagrammatic a-signifying semiotics, which will be discussed further soon.

By positing natural encoding as a distinct category, Guattari takes issue with Roman Jakobson, who equates the genetic code with language. As biologist François Jacob argues in response to Jakobson, it is wrong to confuse biological encoding with language, because unlike a human speaker or writer, the genetic code knows neither emitter nor receiver. No one ever “wrote” the genetic codes. No one receives the genetic message (*MR* 166–167/*RM* 302–303).⁴⁴ According to Guattari’s analysis, *natural encoding* entails bringing form directly into contact with matter, formalizing material intensities along specific paths within a single highly specialized stratum, as when hormones transmit signals through a body. No translation is possible from one code to another, or from a natural code to a semiotics, because these codes are completely territorialized. Linguistic signs cannot directly intervene in the biological, physical, or chemical worlds (although language can of course mediate in related processes, such as scientific discourse about the natural world). Natural, a-semiotic encoding does not involve the semiotic strata at all, which is why Guattari draws it below and outside of the matrix’s squares. The curved arrow connecting columns one and three indicates that natural encoding involves only form and matter.

“Form” is the hero here, because for Guattari it is both creative and productive, which is why he recognizes “an imperialism” of form over the other components, as a corrective to Lacan’s imperialism of the signifier (*AOP* 202/294, 211/304, 206/298). The capacity to follow a trajectory across the matrix’s six squares is not shared by all semiotic components, and so most such traversals are accomplished by “abstract machines,” which Guattari equates with Hjelmslev’s “form,” and which effectuate deterritorialization, making and unmaking the strata along the way.⁴⁵ Form, as abstract machine, performs its greatest creative feats in conjunction with diagrammatic a-signifying semiotics. The two curved trajectories labeled “a-signifying semiotics” indicate that, with the diagrammatic, “form” interacts directly on

“matter” (unformed meaning as well as physical flows), with no recourse to signifying “substance.” Diagrams produce, reproduce, and engender by way of a reciprocal relation between material flows and the semiotic machine (*GR* 150–151/*RM* 281; *MR* 145/*RM* 353, tm).⁴⁶

Language and symbols (Guattari’s semiotically formed substances or the semiologies of signification), in contrast, manifest, actualize, and capture the super-powerful deterritorializing force of the abstract machine (*MR* 99/*RM* 265). According to Guattari’s analysis, language (“signifying signification”) is imposed by power formations, and therefore does not come from deep semiotic structures as Chomsky’s generative grammar model would seem to suggest.⁴⁷ Instead, argues Guattari, signification always arises out of an encounter between on the one hand, the formalizations of a given social sphere, and on the other hand a linguistic machine which systematizes, hierarchizes, and structures, in the service of the law, morality, capital, religion, and so forth. Signified content is thus produced by power, a reality which linguists tend to ignore, making it look like the formalization of signifiers is naturally accompanied by a similar formalization of content. Such is the illusion perpetuated by André Martinet’s notion of double articulation,⁴⁸ claims Guattari, for whom content consists in an aggregate of relations of force, entailing all sorts of compromises and approximations.

The modern social order has not seen fit to let its fully integrated subjects live outside of the signifying ellipsis, the egg-shaped area which I have shaded in gray on the matrix (Figure 1.1). This oval, for Guattari, demarcates the signifier’s limited domain, which is described very well by Lacan’s Saussurean S/s formula—the *matheme* of the unconscious. Viewed from within its contours, which is to say from within the dominant social order of contemporary capitalism, the egg-shaped area ruled by language seems much bigger than it is, because the signifier creates the clever illusion that all is representation. Here in the ellipsis, everything is indeed “structured like a language,” because the signifying machine has reduced all strata to two, the formalization of content and the formalization of expression, locked in a doubly articulated relation of biunivocity. This is why so many readers of Hjelmslev have confused his categories of content and expression with Saussure’s signifier and signified, which is a misreading, according to Guattari.

In his essay Guattari uses the drawing to argue that whereas the psychiatric institution must deal with all six squares of the semiotic matrix, as well as natural encodings (in the form of biological or physico-chemical processes,

such as medication or organic illness) on its periphery, psychoanalysis does its best to limit itself to the gray ellipsis, which encircles “the place of the signifier in the institution.” Whereas the institution encompasses all six of the matrix’s squares, including the relatively small ellipsis dominated by language, psychoanalysts instead locate their cozy consulting rooms well within the ellipsis of signification, where two subjects—analyst and patient—remain happily confined within a “signifying ghetto” (*MR 92/RM 255*). Anyone dwelling fully within the oval area must show evidence of full accession to the Lacanian symbolic order (land of the signifier), and those who need help getting there must report straight to the analyst’s couch. Here within the elliptical boundary line, speech or writing overcodes all other semiotic modes.

Guattari questions the therapeutic efficacy of the psychoanalytic tendency to translate patients’ involvement with matter. This, for him, amounts to an attempt to subjugate patients with signifiers, in order to pull them into the elliptical space of language. For example, psychotics, as well as children, often express themselves using what Guattari calls symbolic semiologies, such as gestures, screams, or behaviors, but “Experts, technocrats of the mind, representatives of the medical or academic establishments will not listen to such modes of expression.” Instead of listening to their patients’ non-verbal expressivity, mainstream analysts use interpretation to translate symbolic expression into language. “Psychoanalysis has worked out an entire system of interpretation whereby it can relate everything whatever to the same range of universal representations: a pine tree is a phallus, it’s of the symbolic order and so on” (*MR 168/RM 306; tm*). Guattari finds this practice repressive, because, he explains, “each time one goes from a pre-signifying semiotic [symbols] to a signifying semiotic [language], a loss of jouissance occurs” (*GR 155/RM 288*). If I understand him correctly, jouissance involves intensities, which are located in the “matter” column of the matrix. The pre-signifying semiotic preferred by the patient may involve not only material intensities, but also physical matter. For example, “Playing with one’s shit is participating in a kind of ‘matter,’” writes Guattari. Most analysts would not tolerate such a mode of expression.

When an analytic intervention attempts to transform this pleasure, to transform this matter into a translatable semiotic substance, subject to interpretation according to the dominant code, it ends up mutilating or abolishing it by fixing it on a “signifying semiotic semblance” which will substitute itself for the body without organs. Normative institutions have

always devoted themselves to programming individuals, conditioning them to an indefinite translatability of their desires. (*GR* 155–156/*RM* 288)

To find enjoyment in playing with excrement is to direct desiring energy toward flows of intensities and matter. As a zone of unformed fluxes or flows, Deleuze and Guattari's *Body without Organs* belongs to the column of matter, and in this sense it is of the real. To interpret, then, is to seal off the column of matter—the real—thereby disempowering desire by rendering the patient's material "praxis" into a substance which is "transmissible, indefinitely transposable."

This repression of intensities, *jouissance*, and matter operates through the suppression of multiple substances of expression in favor of a single signifying substance: language. Psychoanalytic interpretation thus follows the semiotic logic of capitalism, "inasmuch as it is based on laws which establish the equivalence and general translatability of all semiotic expression" (*GR* 156/*RM* 289). Signifying semiotics enables psychoanalysis to uphold the capitalist world order. "For the psychoanalyst, it has now become a crucially important question of power: all expressions of desire must be made to come under the control of the same interpretative language. This is his way of making deviant individuals of all kinds submit to the laws of the ruling power, and it is this that the psychoanalyst specializes in" (*MR* 168/*RM* 306; tm).

Even though psychoanalysis successfully represses by imposing language, institutional psychotherapy cannot simply eliminate it. Since the psychiatric hospital engages all six squares of Guattari's semiotic matrix, it includes within it the signifying ellipsis as well. While it is true that psychotics lack full access to this space due to their failure to accede to the symbolic order, administrators, staff, and visitors all employ language (signifying signification) whenever they converse or write reports. At the same time, those working in a psychiatric institution cannot afford to pay attention only to the play of signifiers, because in a live-in situation, the doctor cannot dominate the patient simply by manipulating transference. Patients and staff interact constantly, negotiating flows of nutrition, waste, and affect. Speech is not enough.

Though Guattari often seems to prefer the polyvocality of symbolic signification to the biunivocity of signifying signification, he in fact does not advocate that those living under the reign of global capitalism try to live as children, psychotics, or primitives. Such a return to a Rousseau-esque state of nature, if it were even possible, would not be desirable, since the reign of symbols entails forms of territorialization that in themselves limit freedom,

and sometimes even perpetuate cruelty. While multiple forms of expression coexist in the right-most four squares of the matrix, this, for Guattari, is still not the best place for unleashing the true creative potential of revolution or of art. What is missing here is the crucial dimension of unformed material flows. In the end, symbols provide no greater access to the real than do signifiers, because they remain mired in substance—the stuff of signification. Since it is impossible to return to primitive symbolism, and since humans cannot directly intervene in a-semiotic “natural” encodings, for Guattari the only hope for the liberation of desire lies in the domain of diagrammatic a-signifying semiotics.

These a-signifying diagrammatic processes do operate within the mental institution, where they can unleash creative productivity. “The institution sometimes succeeds in bringing into play a-signifying machines working toward the liberation of desire, as do certain literary, artistic, scientific machines, etc.” However, outcomes may not always be so positive and can be as dangerous as interpretation. “The a-signifying and diagrammatic effects, just as well as the effects of signifi-ance and interpretance, can assume much greater proportions than in a dual analysis, and eat away at the smallest nooks and crannies of everyday life” (*GR* 152/*RM* 283–284). Thus one must be cautious, even when operating within the potentially liberatory domain of the diagrammatic. Any practitioner of schizoanalytic metamodeling must take seriously Guattari’s caution that even the powerfully creative diagrammatic processes can result in poor clinical outcomes. No one kind of semiotic process can solve all analytic problems. Even when using the preferred processes (transversality, machines, the diagrammatic), analytic outcomes can always be good or bad. To dogmatically adopt any particular clinical technique or semiotic component would be to adopt a model. It is easy to transform metamodeling into a model, simply by halting the tinkering process. To turn any type of analysis into a metamodeling process is to experiment with a variety of components, tinkering and readjusting in a nonstop search for a combination that works, then continuously modifying the combination of components to make sure it continues working. This is what defines “institutional analysis,” schizoanalysis, and metamodeling as pragmatic machinisms.

I will conclude this chapter by noting that in the essays cited in this last section, Guattari has replaced much of his earlier Lacanian vocabulary with the terminology of Hjelmse and Peirce. His critique of Lacan’s Saussurean structuralism also draws on the numerous new, newly translated, or newly republished major works in linguistics and semiotics which had been appearing in Paris bookshops since the mid-1960s.⁴⁹ The matrix indicating

the signifier's place in the institution incorporates the semiotic models not only of Lacan, Hjelmslev, and Peirce, but also, as indicated all too briefly above, of Chomsky, Martinet, Jacob, Greimas, and Benveniste. More will be said about these appropriations in the chapters which follow, in which I continue to develop the idea that Guattari was less interested in language than in ontology.

Chapter 2

The cosmic psyche: capitalism's triangular traps

In the previous chapter, I read the first period of Guattari's solo writing as an adaptation of psychoanalysis for the couch to psychotherapy in the psychiatric institution. The couch setting was shown to be an enclosed space limited to the analyst-analysand duo, ruled over by the signifier, and cut off from the sociopolitical sphere. The psychiatric institution as conceived by Guattari and his colleagues is in contrast a collective mode of therapy, attentive to multiple substances of expression, and open to its sociopolitical surroundings. The couch-institution difference is then one of scope (limited versus open) and of components (linguistic hegemony versus expressive polyphony). I traced the slow elaboration of this argument from Guattari's earliest published writings in the late 1950s up through a 1973 paper given a year after the appearance in French of *Anti-Oedipus*. This chapter will be devoted to a second period, roughly 1969–79, during which time Guattari's critique of Lacan's structuralist psychoanalysis continues, often more palpably in his solo writing than in the joint work with Deleuze. My periods overlap because there are themes evident in *The Anti-Oedipus Papers* which are not fully developed until much later. The focus of this chapter will be Guattari's radical reconceptualization of the unconscious, which culminates in his first full-length solo monograph, *L'Inconscient machinique* (*IM* 1979). If there is an overarching aim in this strange book, it is surely the idea that we need to know how the machinic unconscious functions in order to bring about the "molecular revolution," the title of his 1977 essay collection (*RM*). Just as Guattari had enlarged the space of analysis by opening it up to multiple substances of expression and to the forces of the outside world, so he does with the unconscious, expanding its scope and componential heterogeneity. He does this painstakingly by dismantling and redesigning Lacan's famous unconscious "structured like a language."¹ Guattari counters that the unconscious is instead assembled from a

disparate array of machinic components. To be machinic is to be complex, cosmic, dynamic, and heterogeneously composed.

Guattari's expanded, heterogeneous psyche is made up of "an infinitude of components, of indices, of lines of deterritorialization, of abstract propositional machinisms: these are the objects of a new type of analysis of the unconscious" (*IM* 164). Thus redefined, the unconscious includes much more than language, and will therefore require an analysis capable of accounting not only for its complexities, but also for its vast scope:

I instead see the unconscious as something lurking all around us, in gestures and ordinary objects, as well as on TV, in the spirit of the times [*air du temps*], even—and perhaps especially—in the important problems of our era . . . Thus an unconscious at work inside individuals, in their way of perceiving the world, of living their bodies, their territories, their gender, and an unconscious at work inside the couple, family, school, neighborhood, factories, stadiums, universities. (*IM* 7–8)

This trans-individual unconscious spills over into the sociopolitical sphere. It is collective, not individual. It bears on the perception of the world, the body, gender. It operates not only in intersubjective relations, but also in relations with institutions of the community, the economy, popular culture, and the nation.

This pervasive schizoanalytic unconscious is defined in contrast to the Freudian and Lacanian psychoanalytic unconscious, the confined, circumscribed "unconscious of specialists of the unconscious" (*IM* 8). The expanded scope of the machinic unconscious exceeds the grasp of the psychoanalytic professionals. These same professionals resist revolutionary change by their orientation toward the past; theirs is "an unconscious crystallized in the past, gelled into an institutionalized discourse." In contrast, that of schizoanalysis is "an unconscious turned toward the future, an unconscious whose very fabric [*trame*] would be none other than possibility itself" (*IM* 8). This unconscious full of future possibilities can only be realized by refusing the linguistic, professionalizing, and temporal constraints of structuralist analysis.

The unconscious woven from "possibility itself" not only looks out toward the future, but also embraces the universe. As the "very fabric" of the unconscious, possibility "seeps from your pores [*à fleur de peau*], and . . . also seeps from language, the socius, the cosmos [*à fleur de langage, mais aussi le possible à fleur de peau, à fleur de socius, à fleur de cosmos*]" (*IM* 8). The image of possibility seeping from the pores of the cosmos inspired my chapter title, "the cosmic psyche." This is my own phrase, but for me it captures the scope

of Guattari's project. In the previous chapter I cited Guattari's lifelong interest in physics and his fascination with newly discovered elementary particles and black holes. This surfaces again in his reading of Proust, leading him to characterize *A la recherche du temps perdu* as a "scientific exploration." He compares the text's expeditions deep into the far reaches of the psyche to the standard science-fiction plot of the brain as condenser of "ambient cosmic thought" (*IM* 329). According to this view, the subjective universe cannot be separated from the cosmos at large. If the unconscious is to be found just about everywhere, as he claims, then a map useful to the explorer of the unconscious must include the entire universe. This is the ambition of the metamodeling project described and drawn in Guattari's publications of the 1970s.

This thorough redefinition of the unconscious constitutes a second major metamodeling project, which in many ways extends that which culminated in his 1973 matrix (Figure 1.1) discussed in the previous chapter. He organizes his 1979 book around a proliferation of drawings and schemas which, to summarize their purpose somewhat simplistically, analyze the subjectifying mechanisms of capitalism on the basis of a genesis of semiotic components. Among the book's many illustrations, I have chosen a series of triangles which presents a theory of capitalist subjection. *A Thousand Plateaus* makes oblique use of this apparatus with the mention of black holes and resonance and occasionally incorporates some aspects of the triangles into its spiral or circular drawings (*ATP* 135, 137, 146, 185, 218/169, 170, 182, 226, 266). I will focus solely on the full, solo version of Guattari's machinic unconscious project, which I find interesting in its own right, but which is also of value because it constitutes a crucial phase of the collaboration with Deleuze. Guattari's dense prose and technical-looking drawings can be read as rough drafts for *A Thousand Plateaus*. The collaborative process of the writing of *A Thousand Plateaus* is less well-known than that of *Anti-Oedipus*, which Stéphane Nadaud has so usefully explained and demonstrated with the publication of the *The Anti-Oedipus Papers* (*AOP*). As Nadaud explains in its introduction, this collection reproduces the many texts that Guattari sent to Deleuze for incorporation into the joint work. Nadaud looked through Guattari's papers for a similar set of correspondence related to *A Thousand Plateaus*, and found none.² My own hunch is that the function of the earlier papers is taken on by the two French versions of Guattari's *Révolution moléculaire* (*RM*; Guattari 1980) and his *L'Inconscient machinique*. Long passages from these books can be seen reworked in the pages of *A Thousand Plateaus*, especially in the chapters devoted to linguistics, faciality, and the refrain ("plateaus" 3, 4, 5, 7, 11). In the many cases where ideas overlap, I have focused on the formulations in Guattari's solo work.

I am not claiming that Guattari alone invented all of the concepts and paradigms that I discuss in this chapter, but I do insist on the peculiarities of his use of them. For instance, one of the most important new concepts at work in Guattari's exploration of the machinic unconscious is that of the assemblage, which likewise plays a key role in his work with Deleuze. In fact, when asked by an interviewer what unifies *A Thousand Plateaus*, Deleuze replies: "I think it is the idea of an assemblage (which replaces the idea of desiring machines)" (Deleuze 2006: 177). As will be shown in a moment, the concept of the assemblage began evolving in the pages of *The Anti-Oedipus Papers*. Many aspects of Guattari's version of the assemblage seem to me to be related to his cybernetic understanding of the machine, which he carefully combines with notions borrowed from new thinking in biology, ethology, and physics.

I begin the chapter with an overview of Guattari's engagement with the so-called hard sciences, with which he increasingly supplements his borrowings from linguistics and semiotics. Scientific terminology has by the 1970s replaced much of Guattari's previous reliance on the vocabulary of Freud, Lacan, Marx, and Sartre. More significantly, drawing on domains like physics and biology helps Guattari render linguistics pragmatic. These sciences are not only fundamental to his way of thinking, but his use of them will also provide telling points of comparison between his thought and that of Lacan and Deleuze. Numerous commentators have noted the importance of scientific concepts in Deleuze's oeuvre. Chief among these, Keith Ansell-Pearson has done brilliant, pioneering work on the importance of biologists like François Jacob and ethologists like Jacob Von Uexküll in Deleuze's solo writing and in *A Thousand Plateaus* (Ansell-Pearson 1999). Manuel Delanda has done the same for physics and mathematics (De Landa 2002). I am very much indebted to both of these critics for their lucid explanations of so many difficult scientific notions. However, to my knowledge neither Ansell-Pearson nor De Landa cites Guattari's *Révolution moléculaire*, *L'Inconscient machinique*, or *Cartographies schizoanalytiques*, where these sciences figure prominently. I think that it is necessary to expand on their excellent work by examining Guattari's metamodeling enterprises with the aim of more fully understanding the impact of borrowed scientific concepts on the overall conception of animal, man, machine, the cosmos, and history that makes *A Thousand Plateaus* at once so fascinating and so difficult.³

"It's better to biologize"

Even as a child Guattari was interested in the philosophy of science, biology, and cybernetics (CY7-8/AH 99). As noted in the previous chapter, Lacan

shared Guattari's interest in cybernetics. They were also both followers of animal ethology. These sciences of machines and animals, respectively, are not unrelated, nor is it surprising that both Lacan and Guattari used them to theorize semiotics and semiology: note the full title of Norbert Wiener's popularizing book, *Cybernetics or Control and Communication in the Animal and the Machine* (Wiener 1958). Lacan and Guattari were certainly not alone in comparing the use of signs by animals, humans, and machines. Whereas they agree that all depend on signs in order to function, they differ in the priority given to human language, a value choice that Guattari considers political and ethical. The way each draws on the physical and life sciences directly corresponds to their differing semiotic valuations. Lacan did his best to distance psychoanalysis from Freudian biologism, by insisting instead on language. Guattari sides with Freud, quipping that "All things considered, I think it's better to biologize than to linguistify" (AOP 76-77/102, tm).

Lacan's commentators note that despite his early references and examples from cybernetics, biology, and ethology, as he came to embrace structure and structuralism, he turned his back on these sciences. Dany Nobus observes that Lacan initially defines the mirror stage in biological terms, but that he later revises his position by greatly reducing "its basis in the physiology of perception" (Nobus 1999: 120). Dylan Evans characterizes Lacan as having abandoned cybernetics, biology, ethology, and cognitive science after following Lévi-Strauss into structuralism, describing this as a move "away from the empirical world of biology to the metaphysical world of 'structures.'" Evans's assessment of this choice is harsh: "with the benefit of hindsight, we see Lacan wandering into a historical dead-end when he could so easily have helped blaze the trail of a future science" (Evans 2005: 48, 53). Guattari might have agreed with Evans that structuralism leads to "a historical dead-end." While I would not claim that Guattari managed to "blaze the trail of a future science," I think that it is fair to say that he followed certain paths which seem especially relevant today, such as the interest he took in theorizing the impact on human existence of computers and the mass media, as well as the significance of genetics and ecology.

A closer look at Lacan's references to the physiology of perception in his 1949 version of the mirror stage essay shows that even though he has not yet proclaimed the supreme power of the signifier in human relations, he is already countering the theories of biological instinct and innate behavior by demonstrating that both animal and human behavior is motivated by images (E 75-81). I would therefore characterize his move away from physical perception as a shift in focus from the Imaginary to the Symbolic.

He cites ethological evidence showing behavioral effects of the infant's perception of his mirror image which are common to animals and humans alike. This is based on a biological difference between human and animal, and that is man's "*specific prematurity of birth*," or in other words, "a certain dehiscence at the very heart of the organism, a primordial Discord betrayed by the signs of malaise and motor uncoordination of the neonatal months." Lacan goes so far as to refer to "psychosurgical operations" which show "the cerebral cortex" to be "the intra-organic mirror" (E 78/96–97). This mirror is especially important for human infants because, as compared to all other species, they have so little motor control over their bodies for such a long time after birth. In the mirror, the human infant perceives the "total form of his body" as a gestalt "whose power should be considered linked to the species" (E 76/95). The gestalt perception is physiological. Compared with the human, the more physically mature chimpanzee of the same age soon loses interest in its mirror image, whereas the infant human remains fascinated by his own reflection because the mirror image seems so whole and functional, as compared with his own still ill-formed and uncoordinated body.⁴

Lacan notes that evidence of the formative effects of this species-level gestalt can be found in "a biological experiment." He cites the gonad maturation of certain female pigeons and the development of gregariousness in migratory locusts as examples of phenomena brought about by exposing an individual to an image of another of its species: even a rudimentary simulacrum of a pigeon or locust—in other words, an image—can bring about a significant behavioral change (E 77). Ethologists, he says, have thus basically proven that reproductive behavior is set off by a signal, a gestalt, an image. Lacan concludes that animal mating belongs to the Imaginary order, and cannot be reduced to biology. His favorite example, which he cites in various papers and seminars during the 1950s, is the stickleback fish, whose female will respond sexually to a crude cutout of the male as long as certain colorful markings of the latter are reproduced, thus demonstrating experimentally that an image can set off sexual behavior.⁵ "The libidinal drive is centred on the function of the imaginary," and even "in the animal world, the entire cycle of sexual behavior is dominated by the imaginary" (SI 122, 138; see also 281). Arguing against the theory of the instincts, Lacan thus shows that animal sexuality, far from being confined to the physiology, indeed takes place in the realm of the Imaginary. The role attributed to the image allows Lacan to quickly retreat from the biological, taking refuge in the disembodied Imaginary order of the psyche, as he conceives it.

During the 1950s, Lacan goes on to argue that human sexuality does not remain in the Imaginary, but must necessarily move into the Symbolic. “Living animal subjects are sensitive to the image of their own kind,” but because humans are born underdeveloped, “the human being has a special relation with his own image—a relation of gap, of alienating tension.” The ego forms in this gap between the mirror image and the human infant’s own uncoordinated body, claims Lacan. “That is where the possibility of . . . the symbolic order, comes in” (*S2* 323). As an effect of this gap which opens up with the always-premature human’s perception of his image, humans cannot possibly engage in basic sexual relations without the support of the Symbolic order of language, argues Lacan. He thus concludes that for humans the Symbolic eclipses the biological, even in realms as seemingly instinctual as that of sexual reproduction. He recognizes that this runs counter to Freud’s teaching on the sexual instincts, and so he counters that “At the time Freud was writing, there was, as he himself says somewhere, no ready-made, ready-to-wear theory of instincts” (*S1* 121). This can be read as an attempt to distance Freud from his biologism on the pretext that he was limited by the science of his day. At least as great a deviation from Freud, however, is Lacan’s imposition of his own original Real-Symbolic-Imaginary schema, for which there is no equivalent in Freud. In positing the Imaginary, then showing that in humans it immediately gives way to the Symbolic, Lacan makes his return to Freud into a return to language by way of the unconscious—the unconscious as language. This is what Guattari means by “linguistify” when he says “it’s better to biologize” (quoted above). As Guattari notes, Lacan characterizes “the difference between animal desire and human desire” in terms of “the privileged relation that” humans maintain “with speech and the law” (which for Lacan constitute the Symbolic), while animals remain “fixated on systems of ritual fascination, and ostentatious expenditure stuck in a passive imaginary” (*IM* 120).

Lacan further uses ethology to differentiate between signs and human language by insisting on “the inadequacy of the conception of language as signs.” He supports his argument by citing “the very manifestation that best illustrates it in the animal kingdom.” He cites the “wagging dance” of bees, as investigated and explained by ethologist Karl von Frisch (*E* 245; see also Tinbergen 1955: 54–56). The dance, which indicates to the dancer’s fellow bees the location of food, serves as a message, a code, or a signaling system. “But is it a language, for all that?” asks Lacan. “We can say that it is distinguished from language precisely by the fixed correlation between its signs and the reality they signify,” whereas “in a language, signs take their

value from their relations to each other . . . in sharp contrast to the fixity of the coding [used by bees]” (E 245–246). The dance cannot be considered speech [*parole*], because of this direct relationship between the dance (Lacan’s “signs”) and a real material flow of nutrition (Lacan’s “reality”). In positing a correlation between the bee’s signaling and reality, Lacan shows this behavior to border on what Guattari categorizes as “natural encoding,” the direct signal-reality relationship that draws Guattari to coding in nature, which for him entails semiotic elements in direct relation to the real (see Chapter 1).

Although Guattari agrees with Lacan that the animal use of signs does not constitute a language, he has very different reasons for refusing to equate animal sign use with human language.⁶ Lacan seeks to “dispel the notion of ‘language as signs’” because he finds that this idea dismisses speech in favor of behavior, the position adopted by behaviorism in the social sciences. “It is in this way that the technique of speech has been discredited among us and we find ourselves in search of a gesture, a grimace, a posture adopted, a face made, a movement, a shudder—nay, a stopping of usual movement” (E 245). Guattari himself found ego psychology and behaviorism highly problematic, a point to which I will return later. However, Guattari revalorizes the nonlinguistic but symbolizing behaviors that Lacan brackets. The nonlinguistic symbols listed by Lacan (gesture, grimace, posture, facial expression, etc.) belong to what Guattari calls “symbolic semiologies” (his “symbolic” has nothing to do with Lacan’s, as explained in Chapter 1).

I think that Guattari turned to scientific theory in general, and to biology and ethology especially, in pursuit of the real that Lacan had relegated to the outside of linguistic signification. It seems to me that Guattari defines the real not as Lacan’s impossible traumatizing *jouissance*, but as referent, politics, flows, and intensities. These elements are foreclosed by Lacan’s very definition of the real. Guattari’s commitment to an immanent, material, political real constitutes a key element of the mutual attraction between him and Deleuze, who makes explicit the coauthors’ shared cosmic ontology when he states that “*Anti-Oedipus* was about the univocity of the real, a sort of Spinozism of the unconscious.”⁷ Borrowed from medieval theology, the concept of “univocity” designates an absolute commonality of essence. Tellingly, Deleuze finds Spinoza to be something of an ethologist, just as “Uexküll, one of the main founders of ethology, is a Spinozist,” and this because, observes Deleuze, ethology studies “sociabilities and communities,” concerning itself “with a symphony of Nature, the composition of a world that is increasingly wide and intense.”⁸ It is a matter of situating

a being in its milieu. “So an animal, a thing, is never separable from its relation to the world” (Deleuze 1988: 126). Lacan’s structuralism limits itself to the scope of intersubjectivity, whereas Guattari and Deleuze’s ethology addresses not only the Spinozist questions regarding what bodies can do, but also situates bodies in relation to the cosmos (Deleuze 1988: 125; Gatens 1996: 162–187).

However, although Lacan abandons biology and ethology, categorically rejecting Freud’s hope that psychoanalysis could position itself alongside neurobiology as a physical science of the mind, he shares Freud’s more general ambition of giving psychoanalysis the status of a rigorous science. Lacan places psychoanalysis within what he calls “a new order of the sciences,” a “new classification” whose “axis” will be “a general theory of the symbol.” Here, “the sciences of man [*sciences de l’homme*] will reassume their central position as sciences of subjectivity.”⁹ At the “heart of the movement” toward this new science, he says, lies the rethinking of anthropology in the light of “the symbolic function” (E 235). The reference is of course to Claude Lévi-Strauss, who first introduced Lacan to Roman Jakobson and to the ideas of Ferdinand de Saussure. Psychoanalysis has all along “played a role in the direction of modern subjectivity,” says Lacan, but it has fallen far short in addressing the fundamental “problem of formalization” which “must assure the discipline its place among the sciences” (E 235). Lacan proposes that “Linguistics can serve us as a guide here, since that is the vanguard role it is given by contemporary anthropology, and we cannot remain indifferent to it” (E 235). He further states that “the *reduction* of any language [*langue*] to a group comprised of a very small number of such phonemic oppositions” results in “an equally rigorous *formalization* of its highest-level morphemes,” which, he says, provides psychoanalysis with the “strict approach” that he claims it needs (E 235–236, my emphasis).

Guattari’s own relationship to science may seem contradictory and conflicted. On the one hand, he denounces Lacan’s formalist reductionism, and with it both his and Freud’s scientism. This scientific formalization is one of the primary targets of his *L’Inconscient machinique*, in which he complains that “The new psychoanalysts have developed models which are even more purified and sterilized than the old ones”—especially Lacan’s “mathemes” of the unconscious” (IM 7). Lacan reportedly introduced the neologism “*matheme*” in 1970–71, inspired by Lévi-Strauss’s “*mythemes*” (a myth’s minimal differentiating element) and the Greek word “*mathema*” (knowledge). His mathemes include the \S , A, a, ϕ , which correspond, respectively, to the split subject, big Other (*Autre*), the *objet petit* “a” (small other), and the phallus (Cochet 1998: 205–206; Nobus 1999: 136 n. 87).

On the other hand, even as he mocks the structuralists' scientific pretensions, Guattari himself avidly reads the history and philosophy of science, keeping abreast of scientific breakthroughs and referencing them liberally in his writing. Although he criticizes reductive mathematical formalism and the structuralist pursuit of scientific legitimacy, he does not reject science in general.

Abstraction, however, is not to be confused with reductive formalism, and this distinction may help make sense of Guattari's relationship to science and mathematics. Guattari maintains that abstraction "can only result from machines and concrete assemblages of enunciation" (*IM* 10). His search for a concrete mode of abstraction dates back at least to a 1972 essay entitled "Plane of Consistency," in which he opposes machinic consistency to mathematical consistency (*MR* 120–129/*RM* 314–328). Mathematical consistency, he explains, requires that an axiomatic be noncontradictory, whereas his own notion of machinic consistency fears no such contradictions (*MR* 120/*RM* 314). He proposes machinic consistency as the answer to Bertrand Russell's paradox: there is a set of all sets, says Guattari, but it is machinic, not logical (*MR* 120/*RM* 314). Machinic consistency forms a plane on which abstract machines can easily traverse the physical-chemical, the biological, the technological, and the semiotic domains. What Deleuze posits in philosophical terms with his reference to his Spinozist version of the medieval theology's univocity, Guattari posits in terms of the abstract machine which composes the semiotic, the material, and the social: "it is necessary to recognize the same type of abstract machine as the *common essence* of semiotic, material and social machines" (*IM* 67, my emphasis).¹⁰ As machine, this peculiar abstract entity necessarily intervenes directly in the material world, unlike the abstract universals against which Guattari defines them.¹¹

He introduces *L'Inconscient machinique* by comparing his abstract machines to a seemingly similar mathematical concept, the *logoi* of René Thom. The latter's catastrophe theory captured the imagination of many followers of math and science during the 1970s. I will take a moment to flesh out the comparison to Thom, although Guattari provides so little explication or elaboration that I will be filling in the gaps rather speculatively. Thom interprets the world in terms of dynamical systems, and proposes his catastrophe theory as a way of understanding the dynamics of change in physical, biological, animal, and human interactions.¹² This interpretation, widely prevalent in late-twentieth-century science, presumes that almost any object or entity in the world can be understood as a system, and any occurrence thus becomes an interaction between systems. Thom looks

at living organisms, cerebral activity, linear oscillators, the sentences of a language, and social groups as so many dynamic systems subject to change-inducing perturbation. Any perturbation that causes a change of state is, according to his theory, a “catastrophe.” Despite its dramatic name, catastrophe theory merely provides a mathematical formulation of changes in a dynamic system, as it moves from one (relatively) stable state to another. Crucial here is the stability or instability of the state of these systems, which of course interact constantly. It follows from this reasoning that the existence of a being depends on its stability as a system. In other words, “a being, an object—of whatever nature—can have access to existence, to be recognised as existing” only if it is “endowed with a minimum of stability” (Thom 1983: 173). A “logos” is, according to Thom, a mathematical entity which enables the very “existence” of any actual being (read: system), whether found in nature or in culture.

Many aspects of Thom’s “mathematical models of morphogenesis” seem very much compatible with Guattari’s views. For instance, in his non-mathematical description of what he is modeling mathematically, Thom evokes quantum mechanics, a field that fascinated Guattari (although he will not fully adopt chaos theory until the 1980s).

The Universe is nothing more than a brew of electrons, protons, photons . . . , etc., all beings, of ill-defined properties, in perpetual interaction. How can this brew settle down . . . into a relatively stable and coherent form far from the quantum-mechanistic chaos that the theory suggests? . . . [T]he stability of a form, as of a whirlpool in the Heraclitean flow of universal change rests definitively upon a structure of algebraic-geometric character . . . endowed with the property of *structural stability* with respect to the incessant perturbations affecting it. It is this algebraic-geometric entity that I propose, recalling Heraclitus, to call the *logos* of the form. (Thom 1983: 174–175)

The notions of “flow” and “change” are already inherent in Guattari’s ontological view of the cosmos. If I understand this correctly, Guattari’s version of the term “consistency” corresponds roughly to Thom’s “structural stability.” With its cosmic scope, “perpetual interaction,” “flow of universal change,” and “incessant perturbations,” Thom’s Heraclitean universe is not far in spirit from Guattari’s and Deleuze’s Spinozist “univocity of the real” and ethological “symphony of Nature.” Thom references Spinoza’s assertion “everybeing tends to persevere in his own being” (Thom 1983: 173).

Since Thom is arguing that attaining then maintaining existence requires a minimum of stability, he proposes his “logos,” an algebraic-topological entity endowed with structural stability, which in turn assures a form’s stability.

What Guattari finds problematic is the claim that any and all of these logoi can operate in the physical, biological, social, and semiotic domains, because he doubts their capacity for “‘smoothing’ a plane of consistency that allows all possible traversals!” (*IM* 9). Guattari reasons that entities as purely abstract as Thom’s logoi would never be able to engage both immaterial and material domains. He therefore doubts that these logoi “have an irresistible propensity to escape from the physical-chemical world” (*IM* 9). Guattari questions not the idea of “system” as such, as will be argued in more detail in the following chapter. What bothers him about Thom’s logoi is the way that they are meant to operate the same way for every kind of being, whether inert, living, mental, or virtual. For Guattari, pure abstraction is not capable of making such traversals between physical, virtual, and intellectual domains.

Abstract machines, in contrast, can make such traversals, claims Guattari, because they carry not only abstraction but also “points of singularity ‘extracted’ from the cosmos and from history” (*IM* 10). Generalized, universal abstraction cannot, in Guattari’s view, connect with the real. An abstract machine can, because it is singular rather than universal, particular rather than general, machinic rather than mathematic. An “abstract machine” is a “deterritorialized machine” which Guattari understands as “form” in Hjelmslev’s sense. Form as machine, abstraction as machine—this implies the machinic logic of deterritorialization, which allows for an immanent and yet abstract, virtual dimension compatible with Guattari’s materialism. The abstract machine as pure deterritorialization amounts to a materialist version of abstraction. This is why Guattari defines abstract machines against abstract universal laws: “There are no biological, economic, social, linguistic, or psychoanalytic universals . . . There are only abstract machines” (*IM* 27, ellipsis points in the original). In other words, it is not abstract laws that govern the universe, but rather abstract machines at work, making (and sometimes unmaking) the very components which coalesce into the fabric of the cosmos. Abstract machines are “made up of crystals of possibility catalyzing connections, de-stratifications, and reterritorializations in the animate and inanimate worlds. In short, they mark the fact that deterritorialization in all its forms precedes the existence of strata and territories” (*IM* 13). As deterritorialization, they can “cross different levels of reality, make and unmake stratifications” (*IM* 8–9).

The notion of “abstract machine” in many ways exemplifies Guattari’s mode of incorporating scientific notions into schizoanalytic metamodeling. He initially finds the notion in a linguist that even Lacan reportedly found overly committed to scientific formalism: Noam Chomsky.¹³ Chomsky famously posited an ingrained human capacity to generate an infinite number of sentences by organizing a finite set of elements according to rules which need not have been formally taught. Oswald Ducrot and Tzvetan Todorov therefore describe his generative grammar as an abstract machine which produces sentences.¹⁴ Guattari extends the domain of this abstract machine to the entire universe, molecular and molar, animate and inanimate, human and nonhuman, actual and virtual, material and semiotic. Just as Chomsky’s generative grammar is an abstract machine producing sentences from a limited number of elements, so Guattari’s abstract machines produce assemblages and strata from a limited number of components.

The abstract machine, in its capacity to traverse all domains, also provides an alternative to the theory of information. As described by French microbiologist François Jacob in his popular 1970 history of heredity, “information,” understood here as abstract entity, connects the various objects and domains studied by the different sciences and social sciences. Jacob, as does Thom, relies on the concept of system:

In an organized system, whether living or not, the exchanges, not only of matter and energy, but also of information, unite the components. Information, an abstract entity, becomes the point of junction of different types of order. It is at one and the same time what is measured, what is transmitted and what is transformed. Every interaction between the members of an organization can accordingly be considered as a problem of communication. This applies just as much to a human society as to a living organism or an automatic device. In each of these objects, cybernetics finds a model that can be applied to the others: a society, because language constitutes a typical system of interaction between elements of an integrated whole; an organism because homeostasis provides an example of all the phenomena working against the general trend towards disorder; an automatic device, because the way its circuits are geared defines the requirements of integration. (Jacob 1973: 251)

In short, cybernetics presents societies, organisms, and automata as so many systems which follow the same model of information exchange. As Jacob points out, the model relies on understanding information as

“an abstract entity” which serves as a “point of junction” between various domains or “types of order.”

This is exactly the kind of overly formalist general abstract model to which Guattari objects, and the reason why he finds information theory too reductionist for his taste (*IM* 10). Many social scientists, of course, consider this reductionism to be a positive quality, and an attribute necessary to their paradigms. “The very essence of information theory consists in cutting through the complexity of reality to find an intelligible conception, hence, to schematize reality,” says approvingly one prominent advocate (Moles 1966: 55). The reductionist ethos, however, runs counter to Guattari’s libratory politics, because of its aspiration to an “ideal of order, of the systematic formalization of all modes of semiotization, of the control of semiological flows, of the repression of lines of flight and of lines of dissidence” (*IM* 10). There is an intellectual problem as well, related to the elusiveness of the as-yet unfound unity of the sciences. The paradigms of sociology, biology, and physics are simply not interchangeable, explains Jacob: “although the study of man and societies cannot be reduced to biology alone it cannot do without biology any more than biology can do without physics,” because “with their codes, their regulations, their interactions,” cultural and social formations “transcend the explanatory schemes of biology” (Jacob 1973: 321). No single formalist schema can work across the sciences of man, nature, and matter, hence Guattari’s reservations regarding Thom’s logoi and the notion of information.

One might justifiably be skeptical of the claim that abstract machines can do what logoi and information cannot. To summarize Guattari’s argument, abstract machines partake of machinic logic and are endowed with machinic consistency, whereas logoi and information rely solely on mathematical logic and mathematical consistency. This is why Guattari does retain one basic tenet from information theory: “communication is material” (Moles 1966: 191). After all, information and communication theory originated as the study of the physical transmission of messages, in the service of the telecommunications and media industries who sought newer and better technologies for transmitting signals via wires or the airwaves. For philosophical reasons, in *Difference and Repetition* Deleuze insists on the materiality of signs and signals, maintaining that “the logical relation of causality is inseparable from a physical process of signaling, without which it would not be translated into action” (Deleuze 1994: 20). Similarly, Guattari declares that “Every day it becomes more evident that sign machines can function directly at the hearts of both material and social machines, without the mediation of signifying subjectivation” (*IM* 67). For Deleuze, logical causality

combined with physical signaling results in action. For Guattari, sign, material, and social machines function together, and are made of the same components and abstract machines. Guattari and Deleuze both put the sign “back into contact with the material and vital plane of consistency that constitutes it” (Zepke 2005: 121).

Genesis

Machines produce, *Anti-Oedipus* repeatedly reminds its readers, arguing that the unconscious is a factory and not a theatre. Guattari’s subsequent work provides this productive unconscious with detailed blueprints for the machinery that produces and reproduces its own parts—or, in his terms, abstract machines, components, assemblages, rhizomes. To use the machinic concept of assemblage to analyze the unconscious-as-factory is to recognize that although it does include words, the unconscious is made up of many other marvelous components and devices as well. “Why label it ‘machinic unconscious’? Simply to emphasize that it is populated not only by words and images, but also by all sorts of machinisms that lead it to produce and reproduce these words and images” (*IM* 8). In order to foster “multiple universes of machinic creativity,” this unconscious needs to be able to accommodate equally “the most highly diversified components of encoding and semiotization” (*IM* 206). Guattari thus declares with Biblical drama that “‘In the beginning’ of assemblages of enunciation, there is neither the Word, nor the subject, nor system, nor syntax, but rather components—of semiotization, subjectivation, consciousness-ization, diagrammatism, and abstract machines” (*IM* 43). The key terms here are assemblage and component.

I already cited Deleuze’s assertion that by the time of *A Thousand Plateaus* the assemblage had replaced desiring machines (although Guattari still uses the latter term occasionally, in limited circumstances). Whereas in the joint writing with Deleuze “assemblage” tends to appear on its own, in Guattari’s solo work it is often part of the phrase “assemblage of enunciation,” as in the citation just above. Guattari’s unconscious is machinic, not simply a machine, and this distinction is important. First advanced in Guattari’s 1969 essay “Machine and Structure” (*MR* 111–119/*PT* 240–248), the notion of the machine evolves considerably after the publication of *Anti-Oedipus*, where it bears much of the book’s theoretical burden. In my assessment, the machine as technical entity becomes an object of analysis in its own right because Guattari senses a need for a separate concept so that

the machine is not theorizing itself. This problem is further exacerbated by the original conceptualization of the desiring machine, which was an appropriation of Melanie Klein's partial objects and Lacan's object-cause of desire, the *objet petit "a"*. In *Anti-Oedipus*, this made for a difficult leap from the desiring machine to the great social machines. The more comprehensive concept of the assemblage, says Guattari, "can involve individuals, but also ways of seeing the world, emotional systems, conceptual machines, memory devices, economic, social components, elements of all kinds," including "functions, machines, diverse semiotic systems" (SS 228, GR 154/RM 286–287). He explains that the idea of the assemblage was advanced as a "broader, more all-encompassing" notion than Freud's psychic "complex," because the assemblage "doesn't only designate an unconscious formation, but also relates to imaginary representations, to language chains, to economic, political, aesthetic, microsocial, etc. semiotics" (CY 40/AH 155–156).

The notion of the assemblage serves many purposes, one of which is to provide a machinic agency for Guattari's cosmic unconscious. In the pages of *The Anti-Oedipus Papers*, Guattari struggles to develop a collective alternative to the denuded, split, thoroughly disempowered "subject of enunciation" around which structuralist psychoanalysis revolves. In these texts which Guattari wrote to Deleuze, the phrase "collective agent [*agent*] of enunciation" alternates with "collective assemblage [*agencement*] of enunciation." The two formulations, one with "agent" and the other with "assemblage," seem interchangeable, at least for a while. For example, assemblage [*agencement*] is used in a 1970 text (AOP 156/220), and agent [*agent*] is used a year later (AOP 194/277), even though in both cases Guattari is distinguishing between a collective agency of expression and an individuated subject of the statement. In a 1985 interview, Guattari explains that early in his career, he realized that it was "possible to remove analysis from the personological and family-based framework to account for *assemblages of enunciation* of another scale (either of a larger social scale, or an infra-individual scale)" (SS 269/PIP 49; also GR 122). The problematic of *Capitalism and Schizophrenia*, as he puts it, "revolved around the way pre-personal subjectivity works—below the totalities of the person and the individual—and the supra-personal, which deals with group phenomena, social dimensions and assemblages of enunciation involving 'machinic components,' such as computer components" (SS 269/GR 122). By 1973, the assemblage of enunciation has become a cornerstone of the ontological schema found in both *La Révolution moléculaire* and *L'Inconscient machinique*. It is still defined in contrast to the individual subject:

The *individuated subject of enunciation* remained a prisoner of meaning effects, or in other words a reterritorialization disempowered in signification. The *collective and machinic assemblage of enunciation*, in contrast, produces through the conjunction of power signs and deterritorialized flows. (MR 95/RM260, tm, my emphasis)

This passage indicates a domain of empowerment outside of signification, a machinic domain directly connected to matter and material flows—in other words, to the real.

The components of Guattari's machinic assemblage correspond closely to the semiotic categories which he derived from Hjelmslev and Peirce, as featured in the previous chapter's table, which classified the components and mapped their relationship to the real (Figure 1.1). *L'Inconscient machinique* adds a genealogy of these components of encoding and semiotization. Step-by-step, Guattari demonstrates each component's ability to produce new components by effectuating mutations. He argues that the unconscious-as-factory operates by means of the components which "manufacture the signs, symbols, indices, and icons" (IM 42). This genealogy is detailed in a copiously illustrated appendix which Guattari calls "a 'machinic,'" as opposed to "an axiomatic," evoking the above-mentioned distinction between machinic and mathematical logic. Guattari asks his readers to refer "constantly" to this "machinic genealogy" because he claims that it "in fact constitutes the central element" of this book (IM 16, 16 n. 5, 205; 205–235). The genealogy describes how each type of component is brought into being—given "consistency"—by an abstract machinism which enables "message entities" to pass between and among assemblages.¹⁵ These "message entities" recall the information exchanges described by Jacob in the passage quoted earlier, but the emphasis on "engendering" also recalls the genetic code, which for Jacob is nonlinguistic (Jacob 1973: 251; Jacob 1974). The genealogy presents a constant transformation of one component into the next. Those readers who are fond of diagrams may wish to consult Guattari's text to see the illustrations which accompany each engendering transformation (IM 207–233).

The engendering of components occurs in the following order: *iconic, indexical, of encoding, of semiotization, of subjectivation, of consciousness, and diagrammatic*. With the first type of component-engendering abstract machinism, an assemblage detaches a message entity from another assemblage, producing an *icon*. Examples include not only visual forms, but also physical-chemical signals, rhythms, and refrains. The icon's existence may be only virtual, as for example when one sees a lion in the clouds. If the

iconic message entity acquires enough existential consistency, passing from “a virtual possibility to a real possibility,” it becomes an *index*. Now the relation of the message entity to the assemblage is no longer a matter of projection, fantasy, or virtuality, because the index actually belongs to the assemblage from which it detaches, as in the case of smoke indicating fire. With the integration of the detached index into a receiving assemblage, the component becomes a “morpheme of the referent.”¹⁶ Any kind of assemblage can receive indices. However, with the next type, components of *encoding*, a specialized assemblage will send a particular kind of message entity to an assemblage “equipped” with a specialized receptor for receiving this kind of message. Systems of molding, catalysis, and induction rely on this type of highly physical encoding, which is common in the chemical and biological realms. *Semiotization* at last emerges when message entities line up in a series and are able to establish a two-way, reciprocal passage to and from assemblages which need no specialized emitters or receptors. These components of semiotization include nonlinguistic signs and symbols, from greeting gestures to stop signs. With this type of abstract machinism, “base” assemblages send message entities to a series of “components of passage” (*IM* 211). These nonlinguistic signs, symbols, and components of passage (such as faciality and the refrain; see below) are important in both animal and human sociality. Human language does not appear until the engendering of the components of *subjectivation*. This occurs with the deterritorialization of the components of passage involved in semiotization: the chain formed by the components of passage is pulled in opposite directions, toward “deterritorialized expression” and “reterritorialized content.” With the resulting organization of semiotic materials into expression and content, we have Martinet’s famous double articulation and the stratification of language. This moves us from semiotics to semiology. Note that semiology—language—emerges simultaneously with the birth of subjectivation. The next type, components of *consciousness*, appear “in reaction to” the subjective components. Guattari does not presume consciousness to be a given, and, moreover, understands it to be constructed differently in different sociopolitical regimes (*RM* 330).¹⁷ Finally, *diagrammatic components* undo the effects of semiology, offering a way of escaping the dominance of signification and subjectivation. The diagrammatic, it should be recalled, is the a-signifying mode of semiotization found in mathematics, music, and computer programming.

Having supplied this genealogy of components, Guattari might be expected to go on to explain how they can then be combined first into assemblages then perhaps into a machinic unconscious. This, however,

is not how things work because, for Guattari, there is no linear progression from simple to complex (*IM* 148).

“Descending” from pragmatic fields to assemblages, from assemblages to components, then from components to materials of expression, one does not necessarily go from the complex to the simple. It will never be possible to establish a definitive systematic hierarchy between the elementary and the composite. Under certain conditions, the elementary can always bring forth new potentialities, and begin to *proliferate*, leading to a shakeup at the heart of the assemblage. (*IM* 13–14)

In order to better understand Guattari’s refusal of a simple-to-complex progression, I once again turn to Jacob, whose lucid explanation of a similar idea may help fill in the gaps left by Guattari’s somewhat skeletal remarks.

The problem with thinking of complexity as composed of a simple addition of elementary elements can be understood in terms of the molar and the molecular. In a chapter entitled “The Molecule,” Jacob summarizes the historical development of the science of heredity, writing that molecular biology “deliberately established itself at one of the frontiers of the living world, at the limit of the inanimate. The level below is described in terms of chemistry and physics, and the level above in terms of organization, of logical system or even of an automated machine.”¹⁸ The “level below” corresponds to the Deleuzo-Guattarian dimension of the “molecular,” and the “level above” to their “molar.” As Jacob notes, physicists had long ago established a distinction “between the microscopic and the macroscopic.” These dimensions are inseparable, although they are not governed by the same operational or even ontological principles.

On the one hand, the variety of the living world, the wonderful diversity of forms, structures and properties at the macroscopic level are based on the combinative system of a few molecular species, that is, on very simple devices at the microscopic level. On the other hand, the processes that take place at the microscopic level in the molecules of living beings are completely indistinguishable from those investigated in inert systems by physics and chemistry. Only at the macroscopic level of organisms do special properties appear, imposed by the necessity of self-reproduction and of adaptation to certain conditions. (Jacob 1973: 299)

In other words, different processes take place at different levels, because the microscopic and the macroscopic function according to different logics

and different mechanisms. Even though there are only a few “simple devices” at the microscopic level, these partake in physical-chemical processes that produce a diverse array of macroscopic structures. This could be what Guattari means when he says that the elementary can bring about a proliferation of new potentialities which “shake up” assemblages. These molecular processes are invisible at the macroscopic level of organs and structures and, vice versa, organs cannot be perceived as such from the molecular level. The mistake of the structuralists, in Guattari’s terms, is the over-privileging of Jacob’s “forms, structures and properties” which only appear at the macroscopic or molar level. Structuralists ignore what occurs at the molecular level. The very title “molecular revolution” expresses Guattari’s deeply held conviction that political change must take place at the molecular level of the machine, and not just at the molar level of structure.

Guattari’s genealogical approach shares another important feature with Jacob’s account of modern microbiology: an equal emphasis on the synchronic and the diachronic. Rather than settling for a purely synchronic account of semiotics (as the structuralists tended to do), Guattari provides his genealogy of semiotic components, an account which is diachronic in the sense that it is evolutionary. This way of thinking is compatible with the complexity which lies at the heart of contemporary microbiology: “The description of a living system requires reference to the logic of its organization, as well as to the logic of its evolution” (Jacob 1973: 300). Jacobs associates the recognition of a being’s history with the passing of the “era of reductionism,” which he says is no longer plausible after the discovery of “the unity of physical and chemical processes at the molecular level” of living beings. As he puts it, “In the era of reductionism, to be really scientific, analysis had to exclude any consideration beyond the system immediately under study” (Jacob 1973: 299–300). Structuralist linguistics conducts its analyses according to this reductionist ideal, excluding from consideration any system beyond that of language. Structuralism’s privileging of the synchronic is, extrapolating from Jacob’s account, entirely compatible with this outdated reductionism. Guattari chooses complexity instead, and therefore his semiotics must include the molecular-level physical-chemical processes intrinsic to organic life.

Despite the similarities between his position and the remarks of Jacob, Guattari does not merely transpose a microbiological model onto his machinic unconscious. He instead adapts the logic of the molecular using his own conceptual tools of abstract machines and deterritorialization. Thus armed with this theoretical amalgam, Guattari explains that “[a]ttaining

‘greater complexity’” depends not on the mere addition of components but rather “seems in general to depend on the increased deterritorialization and abstraction of molecular machinisms” (*IM* 13–14). Guattari thus situates complexity at the level of the molecular. Deterritorialization and abstract machines work hand-in-hand at the heart of Guattari’s genealogy of assemblages, because abstraction is crucial to the coming into being (the acquisition of consistency) of components and assemblages. In this context, deterritorialization has less to do with the occupation (or abandonment) of space than with concrete processes of abstraction which can lead either to annihilation or to productive creativity. Components and assemblages acquire (and lose) consistency rhizomatically, molecularly, according to processes such as those described by Gilbert Simondon in regard to individuation: a biological being does not develop by adding ready-made parts; rather, the components form as growth proceeds, which is different at the level of molecules and cells than at the level of organs (Simondon 1995). Deleuze draws on Simondon when he describes such processes in *The Fold* (Deleuze 1993). Assemblages form similarly, if I understand Guattari’s genealogy correctly. Building assemblages is comparable to ontogenesis in evolutionary microbiology, not to architectural brick-upon-brick construction.

Further tying Guattari’s genealogy to the evolutionary microbiology of Jacob and Simondon, his assemblages cannot be separated from their context, just as a living organism depends on its environment for survival. Deterritorialization likewise expresses a dependence of assemblages on environmental interaction, this time by virtue of its relationship to the notion of territory, which Guattari (with and without Deleuze) adapts from anthropology and ethology (*CY* 39/*AH* 154; *IM* 109–154). Territory as a point of departure for thinking abstraction provides Guattari with a socio-political point of entry into signs, semiotics, and language. Context is inherent in the very idea of territory. Although deterritorialization does detach semiotic components from their territory of origin, it cannot free them of context.

Since, as Guattari maintains, connections to the physical, chemical, and biological cannot be assured by abstraction alone, “concrete machines” work alongside abstract machines in Guattari’s strange ontology. His primary examples of concrete machines are faciality and the refrain. Many readers will already be familiar with these two concrete machines, since full chapters are devoted to them not only in *L’Inconscient machinique* but also in *A Thousand Plateaus*. I present faciality and refrains here in their role within Guattari’s illustrated semiotic genealogy, in order to show the highly technical aspects of their earliest conceptualization. Defined briefly,

faciality designates the fact that language always emanates from a face, and cannot be understood outside of the context of that face. It provides a sense of recognition, and thereby serves as a means for classifying faces as belonging or not belonging, as acceptable or unacceptable.¹⁹ The refrain consists in a repeated motif or ritualized behavior, which can be used to mark a territory, or to otherwise provide a feeling of being at home. Faciality and refrains per se do not signify and do not convey information, although they work alongside semiotic elements like signifiers and information. This is not to say that one cannot glean information from faces or repetitive behaviors, but this informative function is not part of faciality or the refrain as concrete machines.

In Guattari's componential genealogy, concrete machines like faciality and refrains are also known as "components of passage," a phrase which emphasizes their ability to move from assemblage to assemblage, effectuating change. Both of these special components of passage rely on physiological perception and yet they simultaneously play a semiotic role, hence their ability to bridge, for example, biological, aesthetic, and social assemblages. Since components of passage are defined as concrete machines endowed with materiality, faciality and refrains can simultaneously engage form, substance, and matter (Hjelmslev's terms; *MR* 154–162/*RM* 364–376). Components of passage are crucial to the functioning of psychic and social assemblages because they are "functional articulations . . . which cause other coordinates of existence to emerge suddenly, allowing for a way out" (*CY* 10/*AH* 102). As articulations, they make connections, like joints. They can transform an existential state, or even bring new entities into existence. With their ability to find "a way out," they are important in schizoanalytic therapy as well as in projects of liberation, two situations where blockages often interfere with the ability of assemblages to function productively and creatively.

With his concrete machines, Guattari definitively parts ways with Thom's theory of change as topological catastrophe. As discussed earlier in this chapter, Thom relies on purely abstract mathematical *logoi* to confer existential consistency on systems. Guattari doubted the ability of Thom's mathematical *logoi* to traverse and create across all domains, as if such crossing could occur without engaging the physical and chemical. As concrete machines, Guattari's components of passage—faciality and the refrain—offer a solution to Thom's problem of excessive abstraction. However, even though faciality and the refrain are by definition concrete, they do not "belong" to space and time "in general," says Guattari; rather, "they effectuate specific spaces and times" (*IM* 141–142). Through faciality and refrains,

“possible worlds come into contact with real worlds, and proliferate” (*IM*152). Examples of such components of passage at work are found in Guattari’s discussions of animal ethology, capitalist triangulation, and Proust’s subjective universe, all of which will be addressed in the remaining sections of this chapter.

Behavior as assemblage

For Guattari, a behavior is a kind of assemblage, and in animal ethology he finds numerous examples of behavioral assemblages in action (*IM* 125–126). These assemblages include courtship rituals, hierarchical positioning, collective territorial defense, and individual flight (*IM* 137). Recasting ethology in his own terms, Guattari makes the point that there are many ways to build assemblages, by combining various components in different configurations. Assemblages always operate in conjunction with other assemblages, sometimes connecting together to form rhizomes. In the end, Guattari’s turn to ethology is political, insofar as he finds in animal societies actually existing alternatives to the sorts of assemblages favored by capitalism. At the same time, he seeks a framework of social analysis with the suppleness and complexity to counter the reductionist ideal which he finds throughout the social sciences, not only in linguistics and structuralist psychoanalysis but also in ethology itself.

According to Guattari, humans and animals differ not because animals dwell mostly in the imaginary and humans mostly in the symbolic (as Lacan would have it), but because of “the different assemblages of their components of semiotization” (*IM* 123). Animals and humans arrange their components and assemblages a bit differently. Lacan relies on the structural logic of his Real-Symbolic-Imaginary triad to support his denial of any biological involvement in social interaction. Guattari, however, seeks an analytical schema able to encompass biological elements like genes and endocrinal signaling in humans and animals alike, even though he too objects to the reduction of behavior to innate biological instincts. He favors examples showing that animals learn, semiotize, and improvise, and that humans engage in the repetitive, ritualized behaviors that Lacan associates with animals (*IM* 121). It is in fact not unusual for ethologists to include a chapter analyzing human sociality using their methods (Tinbergen 1955: 205–210; Eibl-Eibesfeldt 1970: 398–464). In studying animal and human behaviors side by side, Guattari is interested in the constant interchange among heredity, learning, experimentation, and improvisation (*IM* 153).

Departing from Lacan, whose engagement with ethology was discussed earlier in this chapter, Guattari refuses to isolate biological components from semiotic components in analyzing social interactions; what's more, he emphasizes the mutual dependency among biological, psychological, and social assemblages (*IM* 146, 150).

Even while borrowing numerous concepts and examples from ethology, Guattari criticizes its reliance on the theory of instincts and on behaviorism not on the grounds of biologism, but on the grounds of these theories' reductionism. He denounces the "ethological misunderstanding" and "behaviorist bias" which explain complex behaviors in terms of a simple inhibition-release binary (*IM* 117, 119). Worse, in his view, ethology makes inhibition-release into a transcendental formation (*IM* 125). For example, pioneering ethologist Niko Tinbergen transcendentalizes inhibition-release by positing an "Innate Releasing Mechanism," or IRM. Guattari likewise objects to hierarchical models of behaviors, also exemplified by Tinbergen who in a study of stickleback fish places fighting at the top, then descends to building to mating to offspring care, all arranged neatly on a branching tree diagram (*IM* 117; Tinbergen 1955: 104). In a generalizing statement combining hierarchization with the inhibition-release binary, Tinbergen claims that reactions to stimuli which set off releases "are organized in a hierarchical system, like the staff organization of an army or of other human organizations." He further claims that "there is a hierarchical system of IRMs and of motor centres" (Tinbergen 1955: 103). Guattari finds that not only is Tinbergen anthropocentric, but that he also looks to the animal world in search of an orderly socius (*IM* 137). Guattari further characterizes ethology by its reliance on binaries which, in his view, blind ethologists to creativity and transformation.

Guattari, in contrast, tends to look not for structures or specific mechanisms but instead seeks instances of complexity, freedom, and creativity. As a corrective to structuralism, reductionism, and hierarchies, Guattari substitutes his rhizomatic concepts of components, assemblages, and fields. He locates complex behaviors such as courtship, rivalries, or sex on the same rhizome of innateness, imprinting, learning, and individual initiative. Moreover, he refuses to classify desire, rivalry, or sex as separate drives (*IM* 128). Citing examples from studies of birds, insects, primates, etc., Guattari emphasizes socially learned behavior and innovation, downplaying the question of the instinctive or innate, even though he will not otherwise shy away from the biological or even biochemical components of social assemblages. On the contrary, semiotic components of passage like the refrain allow him to theorize interactions among the biological, the

cognitive, and the social. Components of passage dismantle binaries, Guattari claims (*IM* 118).

His refrain is a repeated semiotic element which functions as a component of passage among behavioral and other assemblages. The refrain can be verbal, melodic, or gestural, and is made familiar through repetition; it ritualizes and normalizes basic temporal rhythms. In animal societies, refrains such as bird songs or preening displays operate as components within mating assemblages. Human flirting and welcoming behaviors serve similar social functions (*IM* 133). The refrain can also mark territories, as for instance in traditional human societies, where a refrain can affirm a group's identity, territory, and internal cohesion (*IM* 109–110). In this context the refrain can help differentiate one group from another, just as different bird species sing different songs. Finally, a refrain can serve as a sort of safety net for dealing with sudden deterritorializations. This is the case at the present historical moment, when capitalism's hyper-deterritorialization forces humans to invent diagrammatic operators like faciality and refrains in order to deal with the gangrenous deterritorialization of their milieu, but this sort of evolutionary "machinic flight" can likewise be detected among animals, particularly in regard to their social territory assemblages (*IM* 122–123). Rhythm keeper, territorial marker, species differentiator, deterritorialization guardian—these are the functions of the refrain, which is neither sign, nor signal, nor symbol, but rather a means for negotiating assemblages (*IM* 135). Like catalysts or enzymes, refrains may orient an interaction or behavioral assemblage without participating in it directly (*IM* 118). As catalyzers, enzymes, and crystallizers, components of passage perform feats of biological-behavioral engineering, bringing about transformations—or "phase transitions"—in social systems (*IM* 119).

Other semiotic components from Guattari's genealogy likewise figure in behavioral assemblages, in addition to the components of passage. The absence of language among animals means that they have no semiology per se, but they do use semiotics. A stem of grass, for example, may become deterritorialized from its nest-building function in order to take on a symbolizing function during a courtship ritual (*IM* 139–141).²⁰ A birdsong which originally demarcated a territory may take on other functions when the birds become more sociable, such that a semiotic autonomization takes place. Abstract machinisms transform one kind of component into another; a grass stem which was once an index of nest-building in one courtship ritual make take on a different function in another, detaching it from the nest-building assemblage so that it can become deterritorialized into a symbol of future domestic bliss during another courtship ritual. This is not to

say that there are no hormones or instincts involved; rather, there is a “system of co-relations among the genetically coded components and the components of imprinting, learning, and individual initiative” (*IM* 145). What “passes” from one assemblage to another are “highly differentiated forms, deterritorialized keys opening and closing a territory or a species onto a particular machinic politics” (*IM* 153). This allows Guattari to derive political lessons from animal ethology.

There are at least three types of behavioral assemblage among baboons, delineated according to their having to do with hierarchical relations, collective territorial defense, or individual flight (*IM* 125–127). These regulate both domestic and external politics. Guattari notes that the first two, assemblages of hierarchy and of defense, are modes of collective semiotization, while the third, that of flight, is an individuated assemblage which functions as the reverse of the collective assemblages. He also points out examples of mixed assemblages, as when a male baboon exhibits and gyrates his brightly colored erect penis to mark the group's territory as off-limits to neighbors of the same species; this behavior combines territorial defense with sexual components which, it could be said, have in this usage become deterritorialized from their original reproductive function, bringing in a fourth assemblage, that of mating. In another mixture of component and assemblage types, “faciality-corporeality” comes into play in differentiating predators from the animal's own species, and can in the case of baboons set off the behavioral assemblage of individual flight. The menacing penis display (of the first example) and the predator/own species distinction (of the second) function here as components of passage, the exhibited sexual organ forming a refrain, and the predator distinction operating through faciality (recall that faciality enables judgments of belonging-not-belonging based on a silhouette or gestalt image. This will be discussed further below).²¹ The gyrating penis (refrain) and silhouette (proto-faciality) here are thus able to connect disparate assemblages: biological assemblage (mating) meets social assemblages (hierarchies, territorial defense) meets individual survival assemblage (flight).

We saw that Spinoza is an ethologist. Proust's narrator is also an ethologist, for example studying the bird-like twittering of the flock of young girls at the beach (*IM* 322). The *Recherche* is a scientific study of “hyper-deterritorialized mental objects,” and more successful, thinks Guattari, than other attempts to account for the reality of perception, including those of neurology, physiopathology, or phenomenology (*IM* 239). Throughout Proust's prodigious literary work, as among the ethologists' birds and primates, components of passage operate among various assemblages, territorializing

and deterritorializing along the way. As will be demonstrated in much more detail near the end of this chapter, Vinteuil's recurring musical phrase which Guattari characterizes as a "refrain," a semiotic component of passage, functions like a miniature spaceship that shakes up Swann's "molecular universe" (*IM* 329). This is the semiotics of a world, the production of a way of life through the arrangement and rearrangement of components (*IM* 136–137). The strong reaction of Swann to Vinteuil's musical phrase manifests the physicality of perception, for Guattari is convinced that for Proust, the "music effect" is produced not in the imaginary but in reality (*IM* 241). The innate, the imprinted, the learned, and the improvised are also at work in the most refined Parisian high society, discovers Proust in his scientific study of human subjectivity.

Resonating black holes

A behavioral rhizome may meet different fates, take off in different directions. One of its assemblages may become stratified, or may become a component of another assemblage. If an assemblage becomes hyperstratified, it may form a black hole, which may in turn generate a super-deterritorialized line of flight. Any particular component may itself bud into another assemblage (*IM* 148). These transformations of one component into another, or of an assemblage into a component of another rhizome, etc., depend on many moving parts, such as deterritorializing abstract machines, components of passage, and diagrammatic particle-signs. Unfortunately, social power formations—whether territorial, despotic, or capitalist—can impede this movement, thereby fixating assemblages and their components into formalized structures and strata which suit their repressive purposes. Libratory and creative projects need to foster transformations, budding assemblages, and lines of flight. This play of capture and liberation can be illustrated with the series of triangular drawings in the appendix of *L'Inconscient machinique*. These triangles provide an alternative rendering of the "regimes of signs" in *A Thousand Plateaus*.

In Guattari's version, capitalism not only privileges language over other modes of expression, but it also lays the semiological triangle over the Oedipal triangle, so that they work in concert to capture the machinic unconscious by transforming it into a structured unconscious. The resulting structuring stratification of the unconscious thwarts its complexities, cosmic scope, and future potentialities. Guattari does not claim that Freud, Saussure, Lacan, and their followers invented the semiotic and Oedipal

triangles, but he does argue that psychoanalysis reinforces these dominant capitalist models, as do schools, universities, and the State. As distasteful as he finds them, he realizes that the triangles cannot simply be tossed out and quickly replaced, and this because not only are they actually out there in the world, stratifying and capturing in the service of late global capitalism, but also because according to Guattari we all need models in order to construct our existential worlds. New models are possible, according to schizoanalysis, but first one must find ways to escape the old ones, and replace them with better models. This series of drawings, then, can be read as a schizoanalytic metamodeling of capitalism's triangular apparatuses of capture, the aim being to map strategies for getting out from the middle of them. As explained in my Introduction to this book, schizoanalytic metamodeling is precisely this search for and arrangement of a new combination of models which will be better suited to unleashing the creative potentialities of the machinic unconscious.

Guattari's triangle series was, I think, inspired in counterpoint to two structuralist predecessors: first, the semiotic triangle of C. K. Ogden and I. A. Richards, as explicated by André Martinet in his dictionary of linguistics; and second, a triangle centered over *jouissance* in Lacan's 1972–73 seminar on feminine sexuality. I will begin with the semiotic triangle, and return to Lacan's *jouissance* triangle later in this section. Linguists like Martinet, Ogden, and Richards conceive of meaning as a triangular relationship. Their more or less interchangeable terms can be combined as follows onto the outer points of a single linguistic triangle: thought/reference/meaning/signified (top), symbol/name/signifier (bottom left), and referent/thing (bottom right). These linguists draw the triangle's bottom as a dotted line, to show that there is no direct relation between symbol/name/signifier and referent/thing, but only an "imputed" relation. The only causal relations involved in meaning production occur along the triangle's sides, between thought/reference/meaning at the top and the name/symbol or the referent/thing (Ogden and Richards 1946: 11).²²

The genesis of this basic semiotic triangle can be found in Guattari's genealogy of components. It does not emerge until the formation of the semiological components of language. As we saw earlier, when components of passage like faciality and the refrain are deterritorialized, their semiotic materials can be bipolarized into human language by pulling them apart into a chain with Expression at one end and Content at the other (*IM* 213–214). Guattari explains that as the components of passage are stretched in opposite directions, the semiotic chain can be triangulated. Expression (labeled "the signifier") and Content (labeled "matter") form the bottom of a triangle, with a summit corresponding to "the soul"

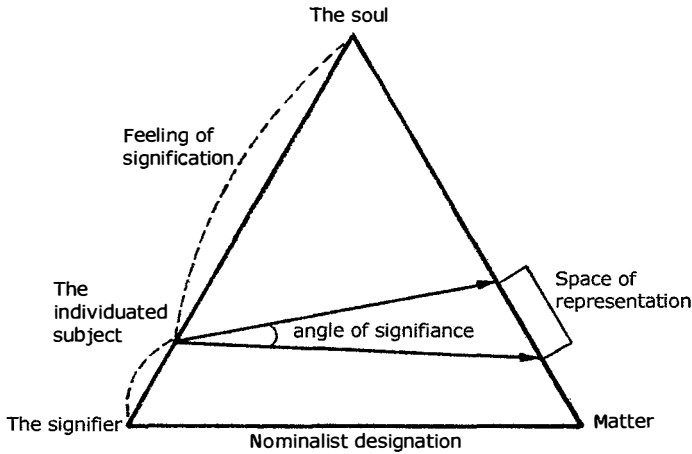


FIGURE 2.1 Opening of the angle of signifiacance. Source: Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

(Figure 2.1). I presume that Guattari's "soul" corresponds to thought/reference/meaning/signified atop the linguists' semiotic triangle (described above). This connection between soul and thought can be derived from Peirce, who holds that "the idea does not belong to the soul; it is the soul that belongs to the idea" (Peirce 1960: 1.216). Expression and Content correlate fairly directly with the semiotic triangle's symbol/name and referent/thing, respectively. Guattari's innovation is to locate the individuated subject along the side of the triangle between the signifier and the soul (Figure 2.1). The formation of the semiological triangle individuates the subject and opens up the space of representation (Figure 2.1). From the point where the subject forms, there opens up an angle of "signifiacance"—Benveniste's "signifying capacity" (Massumi in *ATP* xviii). This angle creates another triangle within the larger one. According to Guattari's analysis, the width of the angle of signifiacance, or signifying capacity, determines the length of the "space of representation" on the opposite leg of the triangle, between matter/content and the soul/thought. Meanwhile, back on the left leg of the triangle, between the subject (located at the point of the signifiacance angle) and the soul, there lies the subject's "feeling of signification," which can be measured as the distance between the subject and the soul. Guattari borrows the phrase "feeling of signification" from Thom's physical account of meaning, which is based on the notion of resonance (*IM* 217).

Resonance is a recurring term in Guattari, and therefore I once again fill in his cryptic account, this time first turning to Thom for help. In his search

for a scientifically objective theory of meaning, Thom proposes “the mechanical idea of *resonance*” as “a model of objective character having a geometric and dynamic nature” (Thom 1983: 170). He describes the encounter between an utterance and the brain as that between two dynamical systems, the utterance “a motor field codified as a verb” and the brain “a cerebral dynamic,” with an attractor corresponding to the verb. He compares the meaning-producing interaction between verb and brain to the tendency of two tuning forks brought close together to begin to vibrate at the same rate.²³ “We think we can see here the origin of coding in the phenomena of transmission” (Thom 1983: 171). He cites the example of imperatives, “the shortest messages of ordinary conversation which bears an autonomous meaning.” When a command is given, there is an almost “automatic obedience response” which occurs “at least virtually, because the start of the execution can always be repressed.” He understands this dynamic as a system (the brain) responding to a stimulus (the command) which excites it. Understanding will result in a diminution of excitation in the cerebral system, bringing it back to a state of stability.²⁴ The “feeling of signification” results from this play of stimulus, excitement, and return to stability.

The notion of resonance takes on a more sinister character when Guattari uses it to conceptualize the way capitalism superimposes the semiotic triangle onto the Oedipal triangle. This is accomplished by capitalism’s favorite component of passage, faciality, which acts as a “center” or “node” of resonance. Guattari calls capitalist faciality a “universal resonator” because of its ability to unify modes of subjectivation and the paradigms of power formations. It thus brings together very different domains, homogenizing them and thereby warding off the formation of rhizomes (*IM* 80). Under capitalism, semiotics and the Oedipal complex meld into a single system, because they are made to resonate together like the two tuning forks in the above-cited example. “The series resonate. Oedipus is the sound box, the resonance hub” (*AOP* 183/263, tm). Resonance as communication between two systems is an idea that Deleuze borrows from Gilbert Simondon, who defines internal resonance as “the most primitive mode of communication between realities of different orders. It includes a double process of amplification and condensation.”²⁵ Throughout *Logic of Sense*, Deleuze cites pairs of “series” which, he claims, are brought into communication by resonance (Deleuze 1990: 226–229, 239–242, 261). As Thom explains, “all interaction rests, in the last analysis, upon a phenomenon of resonance” (Thom 1983: 171).

Guattari's resonating triangles multiply their constraints through redundancy, a second device borrowed from science. Redundancy is a quantitative concept that Guattari appropriates from information theory, which defines it as a measure of the efficiency with which a message transmits information. Information is quantified by measuring the frequency with which one element appears in relation to another.²⁶ Human speech, for example, includes many elements which enhance communication by restricting which word or phoneme can follow or appear in conjunction with another. In English or French, for example, a noun must follow a definite article, while a direct object must accompany a transitive verb. The resulting degree of predictability can be seen in the way that a familiar expression begins to convey meaning or information from the first words of the phrase. However, an utterance with a high degree of redundancy is not the most efficient way of conveying information because the message repeats various bits of information, and this repetition is undesirable in domains such as telecommunications or computing, which is where information theory originated. Digitizing information using a binary code reduces the amount of information to a minimum, enabling a highly efficient transmission of messages by electrical impulse. This also means that computer code is cryptic and a-grammatical, because it leaves out most of the redundancy which is essential to human languages.

Redundancy always plays a role when humans are the ultimate receptor (Moles 1966: 42). In a conversation, the familiar patterns provided by redundancy insure that a message will be understood in spite of "noise" such as a garbled or unfamiliar word, a peculiarity of pronunciation, or an airplane flying overhead. It allows an interlocutor to construct meaning on the basis of context despite noise. "Redundancy furnishes a guarantee against errors in transmission, since it permits the receptor to reconstruct the message even if some of its elements are lacking on the basis of his a priori knowledge of the structure of the language" (Moles 54–55). This also means that even as it insures comprehension, redundancy imposes restrictions by limiting choice. "The fact that the redundancy of English is 50 per cent means that half of what we write in English is determined by the structure of the language and half is freely chosen" (Moles 45). Guattari interprets redundancy's structural determination as a political constraint imposed by the dominant social order in any given society, because social conventions and expectations play such a large role in the functioning of redundancy in human language. The concept of redundancy thus helps Guattari theorize the repressive capacity of language and justifies his

equating semiology with subjugation (see also "Postulates of Linguistics" in *ATP* 75–110/95–139).

Faciality and the refrain both function as redundancies, according to Guattari, because they operate in concert with language, which (as information theory has discovered) is already full of redundancy (*IM* 77, 115). Language always emanates from a face, as already noted. For every refrain there is a face. Every signifying redundancy goes with a face, a tone of voice (*IM* 111). In Guattari's lexicon, these social redundancies allow "repressive machines" (such as schools, the military, the mass-media, psychoanalysis) to operate through language and other semiotic systems, reinforcing their messages. Faciality and the refrain can be understood as special mechanisms of constraint imposed by context and expectation, prone to inefficiency not only for the sake of transmitting message entities, but for Guattari, also and especially for capturing desire and other potentially creative energies. Liberation consists in operating outside of the "dominant redundancies" which regulate semiotization, subjectivation, and consciousness (*IM* 163).

Faciality is more closely interrelated with language than the refrain, because it does not in fact achieve its full force without the domination of signifying subjectification over all other substances of expression, a condition which Guattari associates with capitalism. At its inception as a concept prior to the publication of *A Thousand Plateaus*, faciality can be read as Guattari's answer to Lacan's mirror stage (discussed earlier), although the two theories differ significantly.²⁷ To begin with, Guattari is interested in the recognition of another face, and not a reflected image of the self. Second, Lacan's mirror stage introduces identification and the Imaginary order, whereas Guattari never fully adopted the concept of the Lacanian imaginary, and has little or no use for identification.²⁸ Third, faciality serves a social function by its role in organizing assemblages, which vary according to the reigning socio-political regime. At the same time, in addition to these three differences between faciality and the mirror stage, there are two significant similarities: both theories are explained (at least initially) through the physiology of perception, especially the notion of the gestalt, and both reflect a wariness of instinct and behaviorism. Earlier I discussed Lacan's distancing from physiology as he grew more structuralist. In contrast, faciality makes manifest Guattari's insistence on the constant interaction among physiological and semiotic components.

Faciality's grounding in physiological perception is evident in Guattari's passing reference to the effects of human micro-facial movements, whose encoding, he notes, is probably hereditary (*IM* 133). More fundamentally, he cites the face's function as a gestalt image, as demonstrated in studies of

infant-caregiver interaction in experimental psychology (*IM76*). It is worth quoting directly from Guattari's source (*IM76* n. 3). In looking at a human face, explains René Spitz, "the three-month-old perceives not a human partner, not a person, not a libidinal object," but "a sign Gestalt which consists of a circumscribed part of the face"—the forehead-eyes-nose area (Spitz 1965: 88, 89; see also 91, 94). That the "sign-Gestalt" consists only in the "forehead, eyes, and nose" is proven experimentally by showing the infant a face with one eye hidden, or with the nose covered, or showing only the mouth and nose. Infants between three and six months smile only when they see the entire forehead-eyes-nose triangle. Other evidence shows that the face orients the infant toward the mother's breast, thus serving to organize the child's world spatially. Guattari claims that throughout adulthood the face continues to play a role in organizing the social world, but he takes great pains to emphasize that the face does not work the same way in all societies, that "[t]he gestalt-sign of faciality may or may not succeed in systematically reframing all perceptions and behaviors, establishing strategies for subjugating desire" (*IM76*). For example, this systematic reframing does not happen in primitive societies, because the head has not been "facialized," claim Guattari and Deleuze (*ATP 170/208–209*). Under capitalism, faciality succeeds in channeling perception and behavior: "It implants itself in the middle of the face like a third eye, an eye immanent to all signifying representation" (*IM76*). This redundant third eye assures the maintenance and alignment of capitalist representation's superimposed triangles.

The triangles present a detailed theory of the way redundancies enable what Guattari calls semiotization, subjectivation, and consciousness-ization. As we saw a moment ago, representation emerges with the birth of the individuating semiological triangle. Semiological redundancy allows the components of "subjectivation" and of "consciousness" to coalesce into three additional triangles which capture subjectivity in their centers (Figures 2.2, 2.3, 2.4). The components of subjectivation are implicated in seven "semiological redundancies" arranged in a triangle (Figure 2.2) whose angles correspond directly to the linguists' semiotic triangle (described above) and the "angle of signifi-ance" triangle (Figure 2.1). The semiological triangle of subjectivation (Figure 2.2) entraps "subjective redundancies" in the center, surrounding it with redundancies labeled with terms derived from semiotics: iconic and a-signifying redundancies, along with redundancies of representation, of morphemes of the referent, of designation, and of signification. Guattari claims that there is no hierarchy among these various redundancies, but that each particular assemblage accentuates one or another of

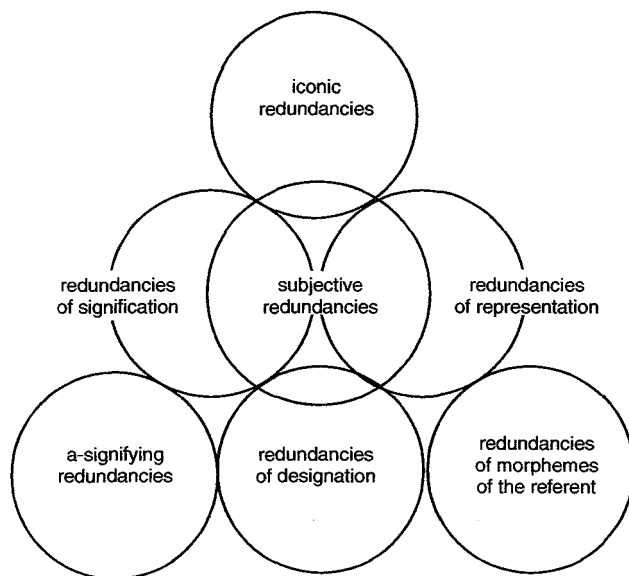


FIGURE 2.2 The seven semiological redundancies. *Source:* Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

them (*IM* 216). Interactions and resonances among these seven semiological redundancies “result in the definition of four types of semiological consistency” based on the reality of the referent (“raw Material”), the reality of representation and concepts (the “living Soul”), the reality of sign systems (the “signifying Word”), and the reality of individuated subjects (the “individual Subject”) (*IM* 215–216). In other words, these redundancies are responsible for bringing into existence the primary elements of the notorious signifying regime—the world of representation upheld by linguistics and structuralist psychoanalysis. This is therefore an ontological triangle. However, for Guattari, it does not exhaust the possibilities for arranging components and assemblages. He therefore continues drawing triangles.

In reaction to the redundancies of subjectivation, says Guattari, there appears the triangle of the redundancies of consciousness (Figure 2.3). Elsewhere he defines consciousness as the “body without organs of all points of deterritorialization, the body without organs of points of disempowerment [*impuissantation*]” (*RM* 331). He says, however, that there are many types of consciousness, for example the different sorts of consciousness associated with dreams, or that which induces guilt. He speculates that in the case of territorialized assemblages, such as those of traditional societies,

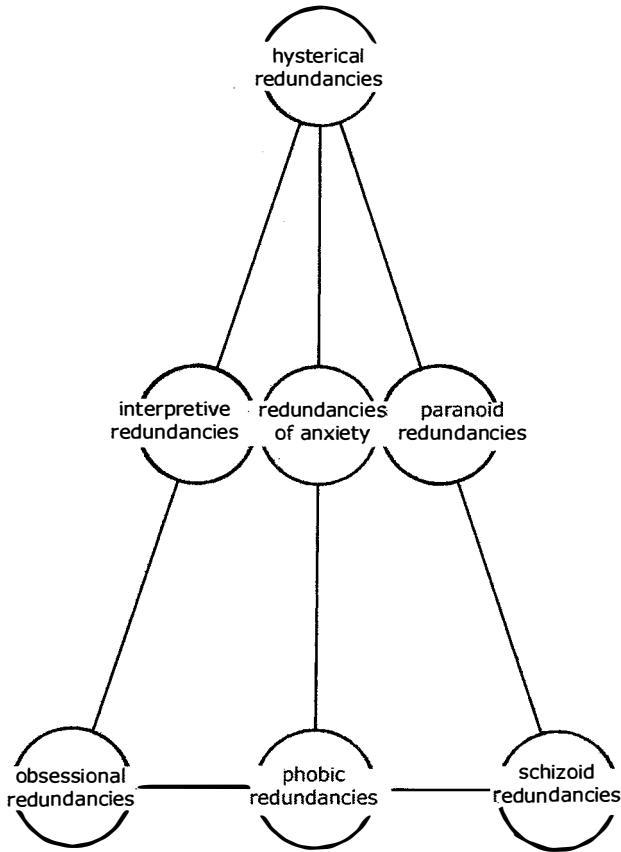


FIGURE 2.3 The seven consciousness-related reterritorializations of subjectivation, corresponding to the seven redundancies of the semiological triangle. *Source:* Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

“consciousness certainly remained separated from the self-other system,” and was “no doubt more intensive, less masochistic,” in keeping with the more collective subjectivity characteristic of such societies (*RM* 330). Modern consciousness, in contrast, imposes itself by “translating, reducing, classifying, formalizing, and hierarchizing the substances of expression of symbolic semiologies” (*RM* 331). Triangulated redundancy is the hallmark of modern consciousness. Guattari’s choice of labeling the consciousness redundancies with psychoanalytic diagnostic categories may reflect modern consciousness’s masochistic attenuation of its intensities (Figure 2.3). Redundancies of anxiety lie in the middle, in the same position as the subjective redundancies of the previous triangle. Surrounding the redundancies

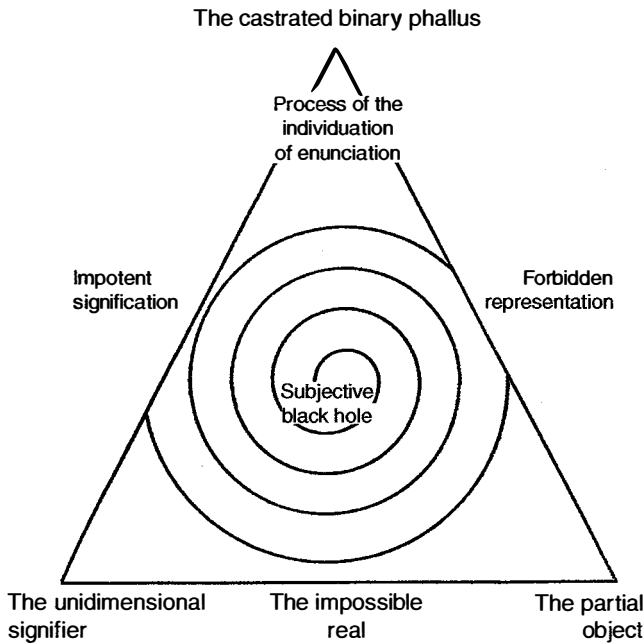


FIGURE 2.4 Abstract machinism of the involution of the semiological triangle.
Source: Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

of anxiety are hysterical, paranoid, schizoid, phobic, obsessive, and interpretive redundancies. “The components of consciousness turn nothingness [*le néant*] in on itself and in so doing they exacerbate the process of subjectivation, which likewise begins to turn in itself” (*IM* 219). I would speculate that “anxiety” describes the disquieting sensations, even existential upheaval, produced by this churning of nothingness and subjectivation. This self-devouring consciousness not only formalizes all modes of expression, it also centers them “over the *black hole* of signifying disempowerment” (*RM* 331). This centering is enabled by resonance, the same mechanism responsible for the “feeling of signification” which appears with the individuated subject and space of representation (Figure 2.1). Consciousness components set off resonance effects that result in the appearance of a black hole which fatally attracts subjectivity. “A facialized consciousness thus constitutes itself as the center of resonance of the black holes that may arise out of various semiotic components. This consciousness operates a semiological capitalization around an individuated subject of enunciation” (*IM* 76).

The subjective black hole itself is drawn by Guattari as a spiral in the center of yet another triangle, this one topped with “the binary castrated

phallus" (Figure 2.4). Guattari labels this triangle "the abstract machinism of the involution of the semiological triangle," which implies that the black hole has pulled toward itself the subjective redundancies and redundancies of anxiety at the center of the previous two triangles (Figures 2.2 and 2.3). This black hole triangle reminds me of Lacan's jouissance triangle, which I mentioned earlier (Lacan 1999: 90; see also Žižek 1989: 184). Although Guattari does not reference this illustration of Lacan's Real-Symbolic-Imaginary triad, the resemblance to his own is so striking that I think it appropriate to compare the two. The point of Lacan's drawing is to differentiate the "true" (the triangle's left side) from the "real" (its right side), and in so doing to demonstrate the relationship among these two terms and jouissance (in a little circle in the triangle's center). For example, when a witness is asked to tell "the whole truth about what he knows," what is really being asked is "that jouissance be avowed, precisely insofar as it may be unavowable" (Lacan 1999: 91, 92). Lacan places the Imaginary at the top angle, the Symbolic on the lower left, and the Real on the lower right. The sides are vectors that lead from the Imaginary to the Symbolic, from the Symbolic to the Real, and from the Real back to the Imaginary (note that the Symbolic leads to the Real, and not the other way around). Lacan's triangle can be plausibly read as isomorphic with Ogden and Richards's semiotic triangle: the Imaginary lines up with thought/reference, the Symbolic with symbol/signifier, and the Real with the referent. The left vector (I to S) is labeled both as the path of the "true" and of the mathemes for the signifier of a lack in the Other, S (\mathcal{A}); the right vector (R to I) as "reality" and as the symbolic phallus, Φ ; the bottom vector (S to R) as "semblance" and the *objet petit "a"*. In the center, the circle around the J for jouissance is surrounded by a squiggly open-ended elliptical figure opening onto the angle marked "Real." What interests me most about Lacan's triangle is not his claims regarding truth, but rather his placing of jouissance within a circle surrounded by a squiggle pointing toward the Real. I sense an affinity between Lacan's jouissance and Guattari's black hole and find it telling that these terms are placed at the centers of triangles. Lacan's appears in his seminar on feminine sexuality, in which jouissance figures prominently. "What is jouissance? Here it amounts to no more than a negative instance. Jouissance is what serves no purpose." He provocatively adds that "The superego is the imperative of jouissance—Enjoy!" (Lacan 1999: 3). It is then a negative agency or formation (*instance* in French), but it is also the superego's command. Can it be a mere coincidence that Guattari places in the same position a black hole which attracts energy? Doesn't Lacan's jouissance harbor the same capacity to disempower a subjectivity that comes too near?

Guattari's black hole triangle shows the moment of subjectivity's involution into the central void (Figure 2.4). As already mentioned, the triangle's peak is labeled "the castrated binary phallus" and also "the process of the individuation of enunciation." The triangle's bottom, just opposite castration, is "the impossible real," flanked on either end by "the unidimensional signifier" (lower left angle) and "the partial object" (lower right angle). I concede that compared with Lacan's triangle, Guattari reverses the positions of the real and of the partial object, or *objet a*, but this may be because Guattari does not share Lacan's definition of the real as impossible. For Guattari, the referent is real, as is the partial object—recall that the partial object corresponds to Guattari and Deleuze's desiring machine. The triangle's left side is labeled "impotent signification" and the right side "forbidden representation." Guattari's choice of wording in the labels indicates the dismal state of affairs mapped by this drawing: castration, forbidden, impossible, impotent.

Guattari proposes a way out of the constraints imposed by capitalist consciousness: a diagrammatic consciousness (*RM* 329–331). Diagrammatic components can empty the triangle, allowing the semiological substances trapped in the black hole to follow vectors of deterritorialization (Figure 2.5). Schizoanalysis evaluates each ritual, habit, or behavior on the basis of its capacity for acting diagrammatically, for transforming an assemblage (*IM* 247). This means that approaching a black hole, which was produced by resonance and redundancy, can lead to two very different outcomes, one destructive, the other creative:

This black hole-effect is produced by the node of resonance that emerges with the constitution of a point of re-centering between semiological redundancies. It tends to attract, empty of their contents, and isolate from their substratum redundancies of all sorts. It constitutes a point of *semiological disempowerment*, as well as a point of *machinic superpower*, since from it are emitted the diagrammatic particle-signs. (*IM* 218)

The idea that a black hole can engender creative energy is based on physicists' startling discovery that a black hole can emit positively charged particles. Similarly, Guattari's subjective black holes can serve either as a point of "semiological disempowerment" or as a point of "machinic superpower." This means that either subjectivity remains mired in the middle where reterritorializing regimes like capitalism keep it captive, or deterritorialization can allow diagrammatic assemblages to release liberating particle-signs from the very center of subjective disempowerment (*IM* 219–220). If the

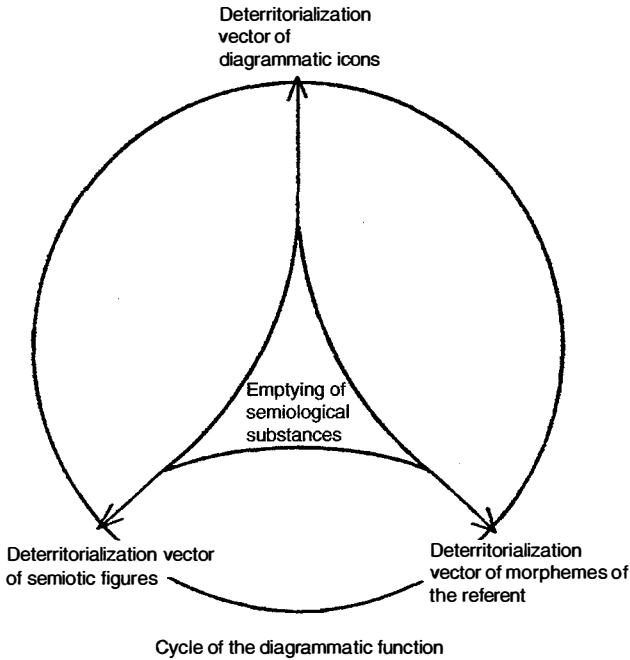


FIGURE 2.5 Centrifugal emptying of the semiological triangle. *Source:* Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

latter, then the black hole releases diagrammatic particle-signs, engendering *diagrammatic* components.

The diagrammatic function escapes redundancy, and so it is, in turn, the component that enables escape from the “strata” and thus allows for the unleashing of creativity. Guattari distinguishes between the machinic redundancies of actually existing entities (which includes the components of natural “encoding” such as genetics or hormonal signals) and the redundancies of signification (which include both semiotic and semiological redundancies). As a correlate, he adds redundancies of consciousness. In terms of the semiotic genesis outlined above, “iconic” and “indexical” components precede redundancy, while “diagrammatic” components operate beyond redundancy. Beyond the “system of redundancy” of “dominant significations,” it is always possible to transform the corresponding “semiotic assemblage,” insists Guattari (*IM* 182).

Black holes exemplify the diagrammatic function for Guattari, because astrophysicists discovered them through mathematical and scientific formulas, and only later observed them. The term “black hole” was coined

in 1967. In a 1972 article Guattari borrowed the notion of radiating black holes to suggest that a subjective black hole might not only capture particles, but also emit them (*RM* 331). Though observational astrophysicists believed they had found a black hole in 1974, its actual existence was not acknowledged by Stephen Hawking until 1990, and still without certainty (Thorne 1994: 314–315). Black holes thus remain theoretical entities at the time of the publication of *L'Inconscient machinique* in 1979. Recall that in his early essay “D’un signe à l’autre,” he was already talking about elementary particles which existed theoretically before their physical discovery. Similarly, according to his semiotic schemas, black holes are produced by a-signifying diagrammatic components (math, scientific theorems) which are able to establish a direct relationship between sign and matter that bypasses representation. Guattari’s particle-sign in a sense expresses the relationship between mathematics and physics. Black holes and the psyche share a common origin in the interplay of semiotic production and semiotic collapse—literally, not metaphorically. Guattari’s most salient and best-developed examples of the effects of the black hole on subjectivity are to be found in his brilliant reading of Proust (*IM* 239–336; briefly summarized in *ATP* 186–187/227–228). Guattari follows instances of faciality and refrains throughout the work: Swann’s habit of associating the faces of those around him with faces in famous paintings, Vinteuil’s little musical phrase which becomes the love theme for Swann and Odette, the deconstruction of Albertine’s face as the Narrator kisses her, the transformation of Vinteuil’s little phrase in a posthumously performed masterpiece arranged by his daughter. The main point of the reading is that Swann and the Narrator navigate their black holes differently, the former captured, the latter liberated (*IM* 239).

Swann’s all-consuming black hole forms around the infamous little phrase from Vinteuil’s sonata, a musical refrain that he and Odette share during their early courtship:

Reduced to an obsessive cliché, a mooring point for a newly forming black hole, which is to say a point of engulfment for everything that contributes to the meaning of life as well as to the most ordinary meanings, [Vinteuil’s little phrase] turns out to be the swan song of Swann’s passion for Odette, and also helps to loosen certain of its neurotic aspects without however transforming itself into a diagrammatic component of passage which would initiate a radical renewal of his existence. (*IM* 249)

The little phrase, as refrain, does “loosen” Swann’s neuroses, but it cannot manage to morph into a diagrammatic component. Swann thus remains

ever mired in a faciality and a refrain obsessively attached to Odette. The centering of faciality and the refrain over Odette creates a core of resonance which further intensifies the black hole's force of capture.

The Narrator's emancipatory black hole hovers over the pond at Montjouvain, which happens to be the home of Vinteuil the composer, who is also father to a lesbian daughter whom the Narrator as a child saw making love with her girlfriend, and whom the jealous adult Narrator suspects is having an affair with Albertine. However, unlike the case of the obsessively jealous Swann who never finishes the grand art historical study he is working on, this black hole plays a positive role for the equally jealous Narrator, enabling him to write. As Guattari explains:

The perverse Montjouvain pond is the focal point of *La Recherche's* black hole of passion. But let it be understood that at this point it is no longer a question of a passive black hole related to a powerless hate, as was that of Miss Vinteuil for her father or perhaps the secret hate of the Narrator as child for his parents, nor is it an empty, inhibited black hole as was that of Swann's love. The Montjouvain pond is a living thing, inhabited by representations and characters, matters of expression carrying quanta of possibility emitting particle-signs capable of interacting with the most varied semiotic components. (*IM* 299)

We see here that black holes may be either passive, empty and inhibited; or instead richly inhabited. The Narrator is constructed such that the black hole he encounters emits particles of creativity that catalyze the creation of a work of art, the novel in progress. Even though it functions as a black hole, the Montjouvain pond is not seen by Guattari to be a void or abyss, but rather to be a source of creative energy. Guattari reminds his readers in a footnote that "In astrophysics a black hole is just the opposite of energetic hollow; the point of gravitational engulfment constituted by the black hole results instead from a hyper-concentration of energy" (*IM* 299 n. 53). The Narrator manages to tap into the immense energy concentrated in the black hole, reassembling the emitted particles into a creative work.

This outcome remained impossible for Swann, who is said to have wasted his genuine talent for art criticism on advising aristocratic women on their art purchases. Swann and the Narrator can thus be compared as assemblages which navigate black holes in different ways, with different outcomes:

In the Swann assemblage, Odette's faciality served as a screen to the black hole; in the "Narrator assemblage," when Albertine is snatched up by the diabolical field of Montjouvain, her facial features proliferate, her

character is reduced, and in counterpart, the black hole itself is profoundly reworked. It is no longer centered over a "face." Faciality participates with its intrinsic machinism. The face and black hole are replaced by a literary machine which propels characters, faces and affects into the living rhizome of the work in progress, whose vocation is precisely to neutralize and the abolish all black hole effects. (*IM* 299–300)

Unlike Swann, the Narrator is able to overcome his jealousy by turning it into a catalyst for creation. The Montjouvain pond calls forth the traumatic childhood scene of lesbian lovemaking observed by the young narrator through the Vinteuil window. The pond also triggers the adult Narrator's fantasy scene of Albertine making love with Miss Vinteuil or her girlfriend. But rather than engulfing the Narrator, the pond instead becomes a source of creative material. Creation begins when the black hole is replaced by a literary machine which emits its own particle-signs. If a black hole can emit particles, if a galaxy can become an assemblage of production, then, as Guattari sees it, the literary machine is a particle accelerator capable of producing and actualizing new energized particles which had previously only been theorized.

* * *

Suppose an Assemblage of Enunciation undergoes just the right degree of deterritorialization and succeeds in escaping a black hole. The assemblage which emerges from the black hole will likely not be the same as it was when it initially entered the triangle. It will at the very least be completely reconfigured, and it is even more likely that in the process of navigating the black hole the assemblage will have split up, its components joining new assemblages. Or the assemblage may connect to others, or acquire new components. Nonetheless, what happens after the black hole, even and especially when the black hole has injected new energy into whatever comes out? What are the newly released particle-signs and liberated components and retooled assemblages supposed to do? And how? How can they create, produce, and maintain new entities without imposing solid strata and structures to hold them together? Political issues arise as well: how can the new assemblages avoid falling into a social regime even worse than capitalism? How can a better subjectivity be produced and sustained? These questions can be grouped under the heading of existential consistency, evaluated on the basis of what Guattari calls an "ethico-aesthetic paradigm." This will be the topic of the following chapter.

Chapter 3

An energetics of existence: creative quadrants

What is the best way to carry out psychotherapy, political analysis, and social action? Maps, says Guattari. Militant cartography. Schizoanalytic metamodeling, in other words. Although the terms “schizoanalytic cartography” and “metamodeling” only enter his vocabulary during the final dozen years of his life, in this book I am arguing that these notions describe what he had been doing all along. To briefly recapitulate from my Introduction, schizoanalytic cartography, or metamodeling, is a set of strategies for analyzing, creating, producing, recreating, and reproducing the unconscious, subjectivity, and what he calls assemblages of enunciation (Guattari and Johnston 2000: 13; see also *CS*, *CM*). The phrase “ethico-aesthetic paradigm” describes what, in different registers and different contexts, Guattari calls schizoanalysis, schizoanalytic cartography, and metamodeling. In this chapter, I will examine an apparent paradox which runs throughout Guattari’s final books: although he borrows many concepts and schemas from science and mathematics, he insists that his mapping and metamodeling are ethico-aesthetic and not scientific. Guattari defines his ethico-aesthetic paradigm against the scientific paradigm which he thinks that too many social scientists—Freud and Lacan among them—have overprivileged. It is not a question of dismissing science, but rather, as I have argued in Chapter 2, a critique of scientism, understood by Guattari as the search for scientific legitimation through the use of reductive models and general laws, at the expense of singularity and complexity. “Ethic” emphasizes the decisions and choices involved in any act of modeling or mapping. “Aesthetic” emphasizes creative productivity and extra-rational subjectivity.

The concern with the unconscious during the 1970s increasingly gives way to matters of subjectivity during the 1980s. Asked in 1992 about the centrality of subjectivity to his recent work, Guattari responds that for him it is a matter of “reestablishing a certain practice of the production of

subjectivity, of the production of the unconscious” (Guattari and Johnston 2000: 13). In Chapter 2 we saw that Guattari’s unconscious extends both below and beyond the bounds of the individual to encompass the molecular, the collective, and the cosmic. During the 1980s he likewise extends subjectivity to the point that sometimes he seems to use “unconscious” and “subjectivity” interchangeably. If Guattari emphasizes subjectivity more and more in his last works, this is because he recognizes it as fundamental to politics, production, and existence itself. He indeed adds the effacement of subjectivity to the list of sins he attributes to structuralism. His campaign against structuralist reductionism comes to include the restoration of subjectivity to its rightful place in intellectual inquiry. He complains that

[a] systematic rejection of subjectivity in the name of a mythical scientific objectivity continues to reign in the University. In the heyday of structuralism the subject was methodically excluded from its own multiple and heterogeneous materials of expression. It is time to re-examine machinic productions of images, signs, artificial intelligence, etc., as new materials of subjectivity. (*CM* 133/184, tm)

Guattari is critiquing Lacan’s withered, disempowered split subject imprisoned by the capricious and despotic signifier, but he is certainly not calling for a return to the Cartesian subject which structuralism rightly revisited. This subjectivity, which is charted and produced by schizoanalytic metamodeling, is both infra- and supra-individual, and is not confined to humans, but also found among animals, machines, and even biological life itself.

This call for a renewed attention to subjectivity is not incompatible with Deleuze’s thinking, but neither does it completely coincide with his primary interests. Guattari compares their compatible but distinct intellectual pursuits in response to an interviewer who asks how he reconciles philosophy and psychoanalysis, given that his work straddles both domains. He responds that

as Gilles Deleuze conceives it, the philosophical concept is something in motion, something auto-producing, even of its own meaning, and of more than its meaning, of its existence. In this sense, the philosophical concept is close to this production of subjectivity of which I speak, although of course the philosophical concept has its own absolutely specific field, which is neither that of science nor that of the social. (Guattari and Spire 2002: 12)

“Autopoiesis,” borrowed from Francisco Varela and Humberto Maturana, is the term that Guattari liberally adapts to describe the self-affirming, self-organizing, self-reproducing aspects of existence—of the existence of living beings, but also of machines in the broad, cybernetic sense (CS 93; CM 39–40, 93–94/61–62, 130–131). Subjectivity and the philosophical concept are both autopoietic entities, according to Guattari.

The existential process of the production of subjectivity is the metamodeling project that occupies Guattari throughout the final years of his life, as demonstrated in the more than 75 drawings in his most difficult book, *Cartographies schizoanalytiques* (1989). As I demonstrated in Chapter 2, during the 1970s he used a series of triangular drawings to expose the political ramifications of structuralist reductionism. His drawings of the 1980s are quadrangular, and serve to map the complexities of existence. This third and final major metamodeling project is based on four categories of his own invention: the economy of Flows (sometimes translated “fluxes”), machinic Phyla, existential Territories, and incorporeal Universes of reference. *Flows* (F) include matter and physical signals; these are subject to the coordinates of energetic quanta, space, and time. The abstract machinic *Phyla* (Φ) (which will be discussed further in Chapter 4) comprise evolution; Guattari’s deterritorializing abstract machines; and blueprints, plans, diagrams, rules, and regulation (in the cybernetic sense of control mechanisms). Existential *Territories* (T) include subjective identity, the sense of self, and “existential apprehension.” The incorporeal *Universes* of reference (U) are made up of values, nondiscursive references, and virtual possibility; these “escape the energetic, legal, evolutionary, and existential coordinates of the three preceding domains” (CS 74). Labeling them F, Φ , T, and U, he arranges these categories into quadrants, matrices, layered planes, or cycles, as for example in Figures 3.1–3.5 which are featured in this chapter.¹

Mapmaking is integral to schizoanalysis because its maps bring their territories into existence, as in the famous Borges short story (CS 52 n. 1). The mapping in *Cartographies* always involves Guattari’s “four ontological functors,” F, T, Φ , U (CM 60/82). A functor is a kind of mathematical function used to map relations between objects in different categories. I have found no clear explanation by Guattari of his use of the term “functor,” but the context of the “cartographies” of schizoanalysis indicates that his quadrants both produce and map, and that not only does the entire graph map, but that it is made up of mapping entities (the four functors). This would imply that the four terms “map” in three senses. First, the functors F, Φ , T, and U help the schizoanalyst establish connections between categories—to map

		Actual Expression Ontic Modeling Given Libido Effect	Virtual Content Pathic Metamodeling Giving Unconscious Affect
		discursive exo-reference	nondiscursive endo-reference
		DISCURSIVITY REFERENCE	
Possible Infinite Irreversible Far-from-equilibrium	DETERRITORIALIZATION consistency exo-consistency	Φ PHYLAs Machinic, processual Actual possible Irreversibility RHIZOMES Formal causality	U UNIVERSES Incorporeal Virtual possible Singularization CONSTELLATIONS Final causality
Real Finite Reversible Near equilibrium	DETERRITORIALIZATION consistency endo-consistency	F FLOWS Economic, energetic-spatial-temporal Material and/or semiotic (libido, capital, signifier, labor, etc.) Actual real Necessitation COMPLEXIONS Material causality	T TERRITORIES Existential Virtual-real Heterogenesis CUT-OUTS Efficient causality

FIGURE 3.1 The four ontological functors.

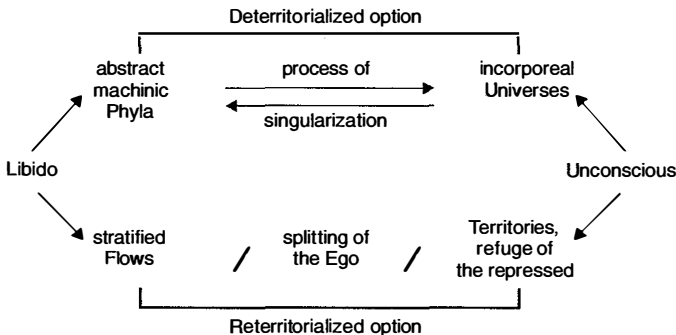
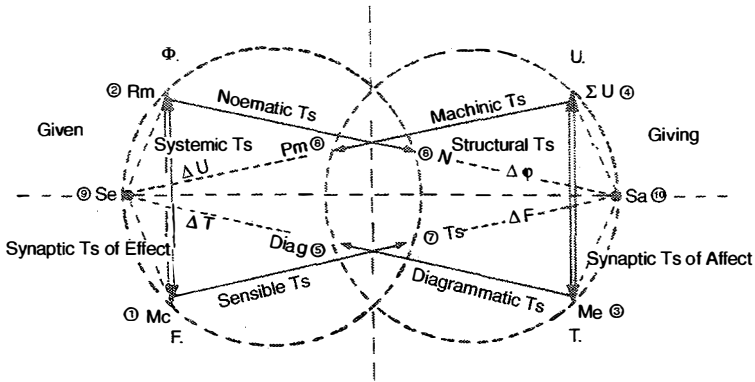


FIGURE 3.2 Libido-unconscious options. Source: Félix Guattari, *Cartographies schizo-analytiques*, © Éditions Galilée, 1989.



- | | | |
|------------------------------------|---------------------------------------|-----------------------------|
| 1 Mc : Matter of content |] Entities of intrinsic Reference |] Codes and Systems |
| 2 Rm : Machinic rhizomes | | |
| 3 Me : Existential matrix |] Semiotic entities |] Ordination and Structures |
| 4 ΣU : Constellations of Universes | | |
| 5 Diag : Diagrams |] entities of pragmatic manifestation |] Expression |
| 6 Pm : Machinic propositions | | |
| 7 Ts : Sensible territories |] Content |] Content |
| 8 N : Noemata | | |
| 9 Se : Synapse of effect | | |
| 10 Sa : Synapse of affect | | |

FIGURE 3.3 Map of entities and tensors. Source: Félix Guattari, *Cartographies schizoanalytiques*, © Éditions Galilée, 1989.

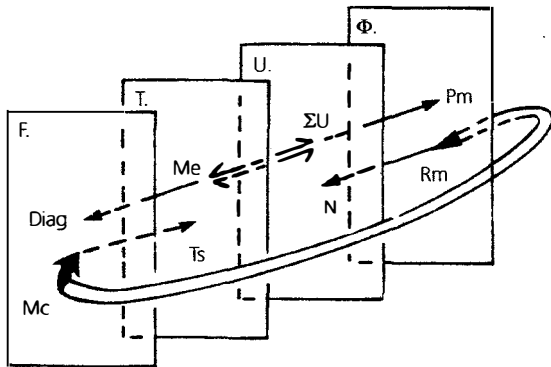
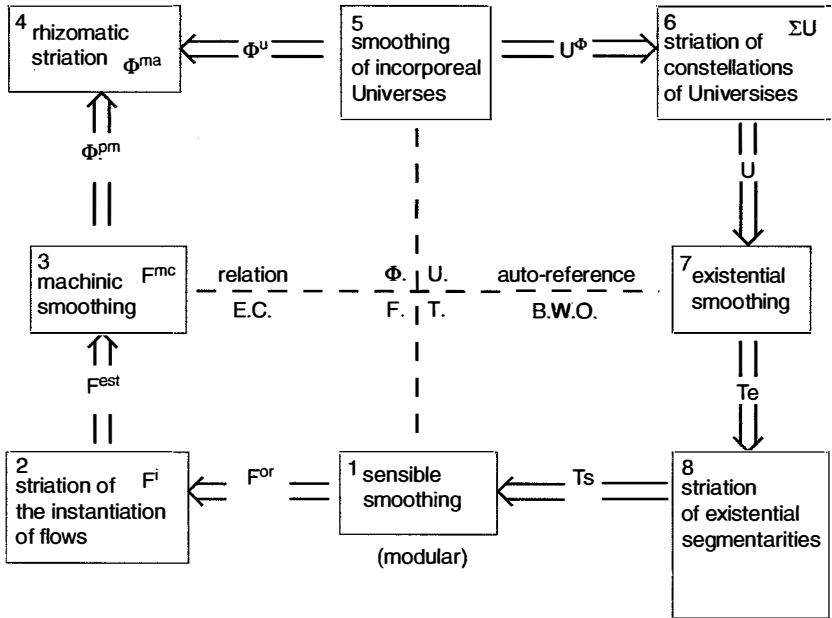


FIGURE 3.4 Layering of the four levels of intensive quantifications. Source: Félix Guattari, *Cartographies schizoanalytiques*, © Éditions Galilée, 1989.

one thing onto another, as in mapping roads onto a territory, or mapping coordinates onto an area. Second, the four terms at the same time designate the “domains” of the very territory that is being mapped: Guattari also calls his functors “domains,” and presents them as the four domains of the plane of consistency, which will be discussed further in the final section of



F^i : instantiated Flows
 F^{est} : energetic-spatial-temporal Flows
 F^{or} : Flows of relative ordination
 F^{mc} : Concrete machines
 Φ^{pm} : Phyla of machinic propositions
 Φ^{ma} : Rhizome of abstract machines
 U^v : virtual Universes
 ΣU : constellations of Universes
 Te : existential Territories
 Ts : sensible Territories

FIGURE 3.5 Cycle of assemblages of enunciation. *Source:* Félix Guattari, *Cartographies schizoanalytiques*, Éditions Galilée, 1989.

this chapter (CS 82–86). This leads to a third sense of “mapping” or “cartography,” the implication that the map and the territory have become indistinguishable. Subjectivity entails an existential territory, but it is at the same time a map of this territory and of its production.

The drawings in *Cartographies schizoanalytiques* provide the conceptual framework for *Chaosmosis* and *The Three Ecologies*. It is through these drawings that in this chapter I attempt to understand why Guattari comes to foreground the production of subjectivity in theorizing his analytic practice and his militant politics. These three final books should be read as a triptych, and yet in reading them together, a disconnect soon becomes discernible. Most of *Cartographies* is devoted to the above-mentioned four-part schema. However, the book’s introduction and a group of articles appended at the end present analyses and critiques of capitalism, literature, theatre, architecture, and a dream. These articles, as well as *Chaosmosis* and *The*

Three Ecologies, do evoke the four cartographic categories from time to time, but without “applying” them in any direct way. The correlation between the analysis and the maps appears tenuous at best. This is symptomatic of Guattari’s diagrammatic thought in general, but especially in his later work: his drawings do not match up directly with the analyses of specific instances of psychic phenomena, cultural works, or sociopolitical situations. Why draw so many maps that lead nowhere, so to speak, given that he does not directly apply them in his practical works of therapeutic, cultural, or political analysis? This analysis-theory mismatch is deliberate: schizoanalytic metamodeling can be defined as a willingness to forgo maps and models during any analysis of a concrete, actually existing psychic, aesthetic, or social object.

Families and other systems

Cartographies includes dozens of drawings meant to map and model, and yet in that text Guattari stakes out the position that models and maps are, at best, provisional, and that they can only directly apply to ideal limit cases. This is because all actually existing formations are contingent, singular, and mixed, whether the formation be psychic, social, political, or even physical-chemical or biological. This position is articulated in contradistinction against the generalizing schemas of structuralism, information theory, and systems theory. However, as discussed in the previous chapter, much of Guattari’s work of the 1970s should be understood in the context of the notion of system, which he both borrows and critiques. Although critical of systems theory as a discipline, Guattari does not by any means reject the idea of system as long as it is understood that systems are open, mutant, and heterogeneous. In his words, “unstable, precarious, transitory chemical formulas” are preferable to “homogeneous axiomatics” (CY 41/AH 156). Deleuze articulates this very position when he agrees with a remark by interviewer Robert Maggiori, who complains about a prevalent tendency to read *A Thousand Plateaus* as “the ultimate anti-system.” Maggiori instead sees the book as presenting “a ‘reality’ that’s not actually so dissimilar from the reality current scientific theories are describing.” Deleuze confirms Maggiori’s assessment that *A Thousand Plateaus* indeed embraces systems, replying that:

All the groundwork for a theory of so-called open systems is in place in current science and logic, systems based on interactions, rejecting only linear forms of causality, and transforming the notion of time . . . What

I and Guattari call a rhizome is precisely one example of an open system . . . A system's a set of concepts. And it's an open system when the concepts relate to circumstances rather than essences. (Deleuze 1995: 31)

Guattari and Deleuze are not against systems; they are instead for open systems understood to be singular, contingent, and subject to sudden change. Their objection is to the closing of a system, to cutting it off from its milieu. They are wary of the equilibrium-loving systems of classical thermodynamics, but are drawn to the far-from-equilibrium systems compatible with molecular biology, chaos theory, and quantum mechanics. Guattari engages even more directly with systems theory during the 1980s as he studies the work of physicist and chemist Ilya Prigogine, whom he meets through psychotherapist Mony Elkaïm and philosopher of science Isabelle Stengers. In 1979 Prigogine and Stengers published a popular book which explains to a nonspecialized audience the implications of Prigogine's work with far-from-equilibrium systems. With Stengers as coauthor, the book is very well-informed philosophically, drawing especially on Aristotle, Bergson, Hegel, Kant, Koyré, Leibniz, and Whitehead. The book was predestined to coincide with Guattari's theoretical interests, given that Stengers had long been a reader and admirer of his and Deleuze's work. She went on to teach their work in her own philosophy seminars during the 1980s in Brussels, and with Eric Alliez in Paris.²

It is primarily by way of the clinic that Guattari engages with Prigogine's work on open systems. A few years after becoming a full member of the Lacanian school in 1969, Guattari expanded his professional therapeutic activities to a third clinical space, beyond the couch and institution that I described in Chapter 1. He became involved with family therapy, as practiced by the Moroccan-born Belgium-based analyst Elkaïm. The family therapy approach is neither Freudian nor Lacanian, but is instead based on the systems theory of Ludwig von Bertalanffy, Gregory Bateson, and other researchers associated with the Mental Research Institute in Palo Alto, California. Guattari met Elkaïm in New York in 1972, and was immediately drawn to his work in the south Bronx with minority militant groups and at the mental health clinic which he directed there, serving poor, often immigrant neighborhoods. Guattari and Elkaïm found that they shared a commitment to situating psychotherapeutic treatment within larger sociopolitical contexts, and so they collaborated on clinical matters for a short time in the Bronx, and continued professional relations when Elkaïm returned to Europe in 1974–75, settling in Brussels and founding an international network for alternative psychiatry which included Franco

Basaglia and David Cooper (Elkaïm 1977). Guattari maintained a close personal relationship with Elkaïm despite sustained criticism of the theoretical assumptions underlying the practice of family therapy. This friendship sustained alongside impassioned theoretical debate is reminiscent of Guattari's friendship with La Borde founder Jean Oury. Guattari found Oury overly loyal to Lacanism, just as he found Elkaïm too attached to general systems theory. Although Guattari remains critical, he nonetheless stays very involved in family therapy, which he avows has become more powerful than psychoanalysis by the late 1980s (Guattari and Spire 2002: 10–11).

As described by the theorists of the Palo Alto Mental Research Institute, family therapy is predicated on the premise that a member's symptom serves the purpose of maintaining homeostasis—a state of stable equilibrium, especially in a living system—within the family as a whole. According to this view, the individual who presents as mentally ill is in fact sustaining the status quo within the family, who needs this individual's symptom in order to keep functioning as it does. "From studies of families containing a schizophrenic member there can be little doubt that the existence of the patient is essential for the stability of the family system and that the system will react quickly and effectively to any internal or external attempts to change its organization" (Watzlawick et al. 1967: 31). Removing the individual's symptom, then, entails changing the family system. This is explained by the concept of "family homeostasis," which was originally proposed by Don D. Jackson. "Observing that families of psychiatric patients often demonstrated drastic repercussions (depression, psychosomatic attacks, and the like) when the patient improved," Jackson "postulated that these behaviors and perhaps therefore the patient's illness as well were 'homeostatic mechanisms,' operating to bring the disturbed system back into its delicate balance" (Watzlawick et al. 1967: 134). These theories were developed under the mentoring of Bateson and based on the "general systems theory" of Bertalanffy.

Elkaïm developed his own version of family therapy, but he conceived of the family system in relation to other systems. He was therefore sympathetic to the critique of closed systems, and he shared Guattari's interest in far-from-equilibrium theory as described by fellow-Belgian Prigogine. Elkaïm describes his own shift toward open systems in a 1981 article. He acknowledges that "The model of the systemic approach that we commonly use in family therapy is mainly an homeostatic model," but goes on to identify a problem: this model applies mainly to "cases of processes occurring at thermodynamic equilibrium or at stationary states close to equilibrium.

In those instances, stability is maintained no matter what external or internal perturbations are exerted on the system." The homeostatic model quickly becomes less useful when perturbations push the family system beyond a near-equilibrium state. Says Elkaïm,

our practice shows that a modification limited to one part of the family system extends quickly to the whole system . . . we started to give attention to organizational forms likely to appear away from thermodynamic equilibrium and particularly to the work done in this field by the team of Ilya Prigogine. (Elkaïm 1981: 291)

Elkaïm thus departs from the established practices of family therapy by redefining the family as an "open" system, which is to say a system constantly perturbed by other systems, such as the neighborhood, institutions, society, economics, and politics. He borrows terminology directly from systems theory, such as "feedback loops," "bifurcation," "amplification," and the system's "state"; these are terms that Guattari himself uses.

However, Elkaïm continued to think of the family as a system, and to rely on Bateson's theory of the double bind. Here is his description of his own model, from his 1990 book *If You Love Me, Don't Love Me*.

The model uses the notion of reciprocal double binds; two persons, part of the same system, ask for something that they are not prepared to accept as possible. As an example, let us look at the husband in a couple. Suppose he wants his wife to love him but at the same time he fears that love is always followed by abandonment. On the verbal level he will say, "Love me," but on the nonverbal level he will be saying, "Don't love me." Then whatever the wife does to satisfy one of the demands will be unsatisfactory because it addresses only one level of the double bind. But for such a pattern to continue or get worse, it has to have a function not only for the individual but also for the couple system . . . One person's behavior will continue or get worse only if it confirms the partner's world view and plays a role in the larger systemic context. (Elkaïm 1990: xx-xxi)

Family therapy as practiced by Elkaïm presumes that the family system can be successfully treated if the therapist identifies the double bind that is blocking it. Such a simple model is reductionist by Guattari's standards. Guattari does not object to thinking of families in terms of systems, but very much opposes going into an analysis armed with such a fixed, simple model

as homeostasis or the double bind. He finds that family therapy's professionalization further contributes to its reductionist tendencies. Albeit without mentioning Elkaïm by name, Guattari criticizes "certain post-systemic tendencies in family therapy" for deploying their techniques on a "truly industrial scale," with their colloquia, journals, centers, and formalized training. "All existing theoretical bodies of this type share the shortcoming of being closed to the possibility of creative proliferation" (*TE* 55/51–52). Family therapy and systems theory comes to play the role of polemical counter-position against which he defines schizoanalysis. Lacanian structuralism and linguistics are no longer the only targets of his critique of reductionism.

Guattari's remarks about Elkaïm thus alternate between admiration and admonition. He admires family therapy because it opens up onto the family, but he regrets that it remains so tied to what he sees as reductionist Anglo-Saxon systematism. In *Chaosmosis* he praises the movement around Elkaïm for "attempting to free itself from the grip of systemic theories," stating that its "inventiveness of treatment distances us from scientific paradigms and brings us closer to an ethico-aesthetic paradigm." He likes the way that these family therapists "get involved and put their own fantasm into operation," producing subjectivity "in the most artificial way possible," with a theatrical playfulness which develops "singularities" (*CM* 7–8/20–21). Here he positions Elkaïm as an ally in the promotion of the ethico-aesthetic paradigm, because his therapeutic techniques produce subjectivity by accepting the free reign of singularities.

The theoretical difference between Elkaïm and Guattari can be described in terms of models and maps. At what point does one cease adding detail, and is there such a thing as too much detail? This issue is addressed explicitly during a 1980 roundtable discussion involving Elkaïm, Guattari, Stengers, and Prigogine. Elkaïm states that the therapist must "remain open to singularities not necessarily included in his explicative map," even while he wonders "what is to be done in order to have a minimum framework" (Elkaïm 1981: 292). This call for "a minimum framework" highlights a serious drawback to the obsessively complex diagrams of Guattari's *Cartographies*. Can a model aspire to too much complexity? Elkaïm concedes that he feels limited by the reductionist model of family therapy, but he at the same time acknowledges the pertinence of advice from colleagues who warn that: "If you multiply the parameters, you risk paralysis. If you make a map as complex as the territory, there is no more map, you're lost in the middle of the territory." How, then, can one isolate singular variables while remaining suspicious of general theories? (Elkaïm 1990: 187). In reply, Stengers

addresses the problem of generalized reductionist theories by comparing insect ethology to the human social sciences. She observes that the termite specialist, for example, will be very happy if she manages to reduce a complex problem to a few interactions, explaining a wide variety of collective behaviors with just a few equations. However, the specialist in human societies would be wrong to strive for this same ideal, thinks Stengers, because even the ethologist's successful equations constitute only a limit case, and cannot be extrapolated to all termite behaviors (Stengers in Elkaïm 1990: 189–190).

“Basically, we are confronted with a problem of choice of models concerning the unconscious,” responds Guattari, wholeheartedly agreeing with Stengers that social scientists must resist the temptation to reduce complex social situations to simple interactional models (Guattari in Elkaïm 1990: 190–191). It is not merely a matter of choosing between simpler or more complex models. The great difficulty, according to Guattari, is to circumscribe the system or formation to be studied, which he finds especially problematic in psychotherapy. What belongs to the unconscious? What are its constituent parts? Human interactions involve so many levels of complexity that it is not at all evident how to delimit the units or elements of the system or systems in which they are caught up. “Interactions is a word on everybody's lips these days,” notes Guattari. “But interactions of what with what? Interactions between what types of sets [*ensembles*]? For example, the existence of individual interactions within a family seems to be self-evident. But we do not ask ourselves whether we are really dealing with individuals” (Guattari in Elkaïm 1990: 182/Guattari in Prigogine et al. 1993: 105–106, tm). He asks if, for example, speech or symptoms primarily involve individuals. “The concept of individual unity strikes me as misleading,” he affirms. Speech and symptoms may instead primarily involve, on the one hand, infra-individual elements (functions which are organic, physiological, perceptual, oneiric, etc.), or supra-individual elements (the father's profession, socioeconomic assemblages, etc.), adds Guattari. He finds a similar skepticism toward individual unity in Prigogine's account of contemporary science, which he paraphrases: “Particle physics . . . has had to break away from a physics of trajectories of well-defined *objects* to accede to a physics of interactions between *processes* whose unitary character is far less plainly visible” (Guattari in Elkaïm 1990: 181–182, my emphasis). Guattari is suggesting that theorists of the unconscious do likewise, breaking away from objects (individual subjects, the ego, the castration complex, etc.) in order to accede to an analysis of processes.³ “Process,” a term borrowed from Whitehead by way of Prigogine and Stengers, becomes a keyword in Guattari's vocabulary of the 1980s (AH 293; see Chapter 4).

Laying out a model, and even deciding exactly what to model, in the end amounts to much more than a scientific, clinical, or philosophical conundrum: modeling is a problem of ethics. Stengers argues that defining the parameters of a system and selecting its elements involves ethical choices.

When we make a theory concerning the way a system will react to this or that modification, we make a choice. In fact, we make a decision concerning the systemic nature of the fragment of reality we are dealing with. In so doing, of course, we take a risk: it may happen that the definition we decide to give to the system will merely endorse a situation determined by various social, cultural, and political pressures and that, instead of understanding it, we blindly freeze into a coherent system something that had other virtualities. (Stengers in Elkaïm 1990: 186)

Modeling selects a “fragment of reality” endowed with “virtualities” which may not always be obvious. The model itself may merely reinforce the status quo, foreclosing alternate possibilities. The problem that Guattari is attempting to solve with his notion of metamodeling is precisely the danger that a model might stifle “other virtualities” by “blindly” freezing a piece of reality “into a coherent system.” Stengers continues by observing that the choice inherent in modeling “implies responsibilities, therapeutic or political. We have to know whether we are confirming the problem as it is given or whether we are trying to open it up a little more, to give it a few additional degrees of freedom. What is often frozen is not only such and such a situation, but the definition of the problem that presents itself to the therapist” (Stengers in Elkaïm 1990: 186).

Guattari’s strategy for remaining open to virtualities is to make his own diagrams ever more complex, which is what draws him to far-from-equilibrium dynamics. Prigogine and his team developed their theories while studying chemical systems, which behave very differently than mechanical systems. As Prigogine and Stengers write, “The models considered by classical physics seem to us to occur only in limiting situations such as we can create artificially by putting matter into a box and then waiting till it reaches equilibrium” (Prigogine and Stengers 1984: 9). Bertalanffy himself notes this evolution of scientific models from those based on simple closed mechanical systems to those of the complex open systems of chemistry and biology. “Living organisms are essentially open systems, i.e., systems exchanging matter with their environment. Conventional physics and physical chemistry deal with closed systems, and only in recent years has theory been expanded to include irreversible processes, open systems, and states of disequilibrium” (Bertalanffy 1968: 32). It is not that Bertalanffy does not

recognize, understand, or appreciate the complex open systems theorized by Prigogine; on the contrary. The problem for Guattari is that Bertalanffy searches for general laws applicable to all systems by comparing complex systems from different domains, extrapolating common principles at the expense of what Guattari calls the singular. Here is one of Bertalanffy's own examples of his quest for generality:

There are correspondences in the principles that govern the behavior of entities that are, intrinsically, widely different. To take a simple example, an exponential law of growth applies to certain bacterial cells, to populations of bacteria, of animals or humans, and to the progress of scientific research measured by the number of publications in genetics or science in general. The entities in question, such as bacteria, animals, men, books, etc., are completely different, and so are the causal mechanisms involved. Nevertheless, the mathematical law is the same . . . This correspondence is due to the fact that the entities concerned can be considered, in certain respects, as "systems," i.e., complexes of elements standing in interaction. (Bertalanffy 1968: 33)

This is a deliberately reductionist move: four disparate collective entities are compared on the basis of one variable—growth in this instance—which is shown to have the same "causal mechanisms" for each case. But what about the specificities of each of these disparate domains ("bacteria, animals, humans, books, etc.")? If one brings to an analysis a model that only considers one variable (such as growth) and presumes a general causal mechanism, then it is likely that anything falling outside this model will be overlooked. Singularities will be discarded in favor of general laws.

The open systems approach precludes such a search for general laws, because "when we move from equilibrium to far-from-equilibrium conditions, we move away from the repetitive and the universal to the specific and the unique." Far-from-equilibrium there simply are no universal laws.

In contrast with close-to-equilibrium situations, the behavior of a far-from-equilibrium system becomes highly specific. There is no longer any universally valid law from which the overall behavior of the system can be deduced. Each system is a separate case; each set of chemical reactions must be investigated and may well produce a qualitatively different behavior. (Prigogine and Stengers 1984: 13, 144–145)

This observation about open far-from-equilibrium systems can be read as a manifesto for schizoanalytic metamodeling, which systematically places

into doubt all general laws because it presumes each case to be separate and highly specific. Guattari assumes that the universe operates mostly far-from-equilibrium, and that therefore singularities matter more than generalities.

Return to Freud

In 1983 Guattari presented his $F \Phi T U$ schema at a Cérisy colloquium co-organized by Stengers in honor of Prigogine. Elkaim gave one of the responses to Guattari's paper. The purpose of the conference was to bring together thinkers who were using Prigogine's ideas, not only in physical chemistry, but also in sociology, economics, biology, and philosophy; all were drawn to the question of complexity. Entitled "Energetic Semiotics," Guattari's heavily illustrated paper opens with a discussion of Freud, who serves at once as his role-model and his anti-model. This presentation is published both in the conference proceedings, and as chapter two of *Cartographies* (Brans et al. 1988: 83–100; CS 67–92; partially translated in MB 312–315, 392–398). Guattari introduces his economic Flows, machinic Phyla, incorporeal Universes, and existential Territories with the aid of eight complicated drawings, two of which I include here (Figures 3.3, 3.4). Stengers has commented that Guattari missed an important opportunity by focusing on the diagrams in his talk, which none of the scientists present could follow despite the numerous references to science and scientific concepts (Dosse 2007: 609). This remark applies more generally to *Cartographies*, whose obscurities leave its readers with numerous unaddressed questions regarding the dozens of drawings, which are accompanied only by dense technical prose that often does little more than walk the reader through the mechanics of the illustrations. Too often Guattari merely glosses the drawings' labels, with little other explanation and few examples. This makes most of the book frustrating to read, and calls for more than explication on my part, which is why I devote considerable space in this chapter to the motivations behind Guattari's frenetic production of diagrams. In order to better understand what Guattari was trying to accomplish, I will first consider the Freudian context in which he situates not only this talk, but *Cartographies* in general.

Guattari makes what might be called a "return to Freud" by way of energetics, again parting ways with Lacan's own much-vaunted "return to Freud." Lacan's position vis-à-vis Freud's energy model was similar to his attitude toward Freud's biologism, which I discussed in the previous chapter. In order to more fully appreciate this new-found esteem for Freud, in what

follows I supplement Guattari's C erisy paper with related remarks he makes elsewhere. Guattari praises Freud's brilliant discovery of the complexities of the unconscious, and in so doing sums up Freud's career as a struggle between general theory and the analysis of singular situations. He finds that Freud produced two very different kinds of work: on the one hand, he created rigorous theories grounded in the science of his times, and on the other hand he provided "a new reading of subjective effects" which consists in the ongoing "work of capturing, collecting, and classifying the singularities of the unconscious" (*MB* 300). Exemplary of this new way of reading would be Freud's books on dreams, daily life, and jokes, as well as the individual case studies of patients like Dora or the Wolf-Man. Guattari considers these case-by-case readings much more significant than the formal theoretical elaborations. Nonetheless, he marvels at an apparent paradox: Freud's "explosion of new interpretations of hysterical discourse, dreams, slips of the tongue, jokes" whose "adventurousness" is rivaled only by Dadaism and Surrealism, manages to coexist with his mechanistic presuppositions inspired by Fechner, Helmholtz, and Br ucke. Freud initially made creative use of borrowed scientific models, suggests Guattari, who speculates that these models gave Freud the confidence to let his creative imagination run free. Guattari recasts Freud using his own vocabulary, characterizing the latter's "primary processes" as the discovery "of unconscious processes of semiotic singularization," which amounts to a "deterritorialization of the psyche."

He contrasts Freud's insight into singularizing processes against the rigid quantifying framework of Freud's 1895 "Project for a Scientific Psychology" (sometimes referred to as the *Entwurf*) with its "abstract quantities" and "economy of nervous forces," as Guattari puts it (*CS* 42). The scientific aspirations of the project are clearly laid out in Freud's introduction to the text:

The intention is to furnish a psychology that shall be a natural science: that is, to represent psychical processes as quantitatively determinate states of specifiable material particles, thus making those processes perspicuous and free from contradiction. Two principal ideas are involved: (1) What distinguishes activity from rest is to be regarded as *Q*, subject to the general laws of motion. (2) The neurones are to be taken as the material particles. (Freud 1966: 295)

This neurobiological project's basis in thermodynamic energetics and early systems theory is already detectible the words "quantitatively determinate

states,” “activity,” and “laws of motion.” Throughout his text, Freud emphasizes the project’s speculative, theoretical character. He proceeds by defining three “systems” of what he calls “neurones,” using the term which science had only recently proposed as “the ultimate unit of the nervous system” (Freud 1966: 296 n. 2). Freud assigns each neuronal system a letter, and he includes many drawings with vector lines and curves connecting the systems, in regard to which he plots quantities. His purpose is to show the interrelations between the organism and its environment. Freud soon distances himself from this project of neurobiology, although it can be argued that much of his later work departs from it, especially the energetics evident, for example, in his theories of the id and of the death drive.

In short, Freud’s theoretical work sought a quantitative model of the unconscious, but for Guattari, such a model can never hope to capture the unconscious’s singularities the way Freud’s qualitative individual case analyses do. Given this shortcoming attributed to Freud’s quantitative theory, Guattari finds it especially fitting that the above-cited “Project for a Scientific Psychology” languished in a desk drawer for many decades (*MB* 300–301). However, although this text was only published posthumously in 1950, Freud never destroyed it, and, as Guattari reminds us, he never fully renounced its “neuronal models” (*CS* 43). This assessment of Freud’s scientifically grounded psychic theory is curious, because Guattari does not necessarily dismiss theory as such, or even assess the specific flaws of Freud’s various theories. What he appreciates is Freud’s willingness to set the formal theory aside in order to focus on the singular features of each particular dream, parapraxis, or symptom he analyzes. He is granting theory a very odd status in the practice of analysis: he does not object to theorizing, but he does disapprove of remaining overly attached to the theory produced. In his comments on the paradox of general theory coexisting with singularizing analysis, he reveals a great deal about a paradox which becomes especially palpable in his own work of the 1980s. This way of characterizing Freud’s writings reflects Guattari’s own ambivalence toward theorizing: he draws elaborate schemas such as the semiotic matrix (Chapter 1), the semiological triangles (Chapter 2), and the quadrants featured in this chapter, and yet, as I noted earlier, his analyses of patients, art, or politics only loosely reference his diagrams. He seems to be alluding to his own tendency to produce mad-looking and arguably superfluous drawings when, during his discussion of Freud, he briefly explains his own attitude toward theorizing:

I believe that theoretical elaborations in the field of psychoanalysis are ways of mapping the formations of the unconscious or the situations that

render them present, from which one cannot make a schematic outline or a general theory. *We must always be ready to store our own cartographies in a drawer and invent new cartographies in the situation where we find ourselves.* Basically, isn't that precisely what Freud did during the creative period that gave rise to psychoanalysis? (*MB* 301; my emphasis)

"New cartographies" are here opposed to preexisting schematic outlines or general theories. As he writes elsewhere, schizoanalytic cartography is "an essentially precarious undertaking, a continual creation without the benefit of any pre-established theoretical edifice" (*CM* 71/101–102, tm). Guattari's relationship to science, which was already discussed in the previous chapter, is closely bound up in this ambivalence to theory, epitomized by his admiration for Freud's having safely filed away his theoretical models.

A mapping or a model should only be used once according to Guattari, because to reuse it would be to transform it into a general theoretical schematic. "Either a model is useful for something (as a precise description), or it must be set aside" (*MB* 185). In his view, the problem with general theoretical schemas (i.e., the reuse of maps and models) is that although they may help an analyst find what they are designed to locate, they can and usually do blind the analyst to that which lies beyond the model or predrawn map. Although it can be stored and need not be destroyed, an old map should be pulled out of the drawer only if the particular, singular situation at hand warrants it, but the old map will certainly need to be modified, and it is always preferable to make a new map instead. Guattari's "return to Freud" is therefore to be understood not so much as a return to the latter's scientific borrowings from energetics, but rather to his willingness to analyze afresh each and every encounter with the unconscious and its manifestations. To phrase matters in Guattarian terms, Freud invented new cartographies with great regularity. To cite but the most famous example, he never clearly rejects his first topography (Preconscious-Consciousness-Unconscious) when he proposes the second topography (Ego-Id-Superego). Many other theoretical notions come and go in his writing as well. It could be said that Guattari reads Lacan's return to Freud as a transformation of the latter's speculative analyses into general theories, albeit while replacing the latter's neurobiology with the science of linguistics. Lacan retains the scientism, and generalizes Freud's discoveries so as to reduce them to laws. Guattari's return to Freud is instead a return to Freud the daring mapmaker, the cartographer of singularities who was willing to cast aside theories in a spirit of discovery.

If Guattari is indeed following his own advice by storing his own maps in a drawer, then these remarks made in regard to Freud help explain why he draws an entirely new set of schemas in *Cartographies*, but without any indication that these should replace the drawings in *L'Inconscient machinique*, or any of his other work, solo or jointly authored. Furthermore, most of the drawings even in the later book go into the drawer as well for the writing of *Chaosmosis* and *Three Ecologies*. This practice of drawing schemas then immediately setting them aside provides another good description of meta-modeling, but it also raises a vexing question: why does Guattari draw so many disposable schemas? There are several plausible reasons: the constant replacement of models helps Guattari keep systems open; reductionism is combatted by adding layer upon layer of complexity with each new diagram; the relentless reworking of models helps insure that metamodeling never turns into a general model.

Guattari's wariness of general models does not mean that he forsakes organization. On the contrary, he recognizes organization even in chaos, which is exactly what he charts with the disposable models of *Cartographies*. Guattari objects to the tendency to pit a "raw world of desire against a universe of social order, a universe of reason, judgment, ego, and so on" (*MB* 315). Desire is organized, but according to its own irrational logic. This, he insists, was Freud's great discovery: "The world of dreams, the world of madness, the semiotics of childhood, and the semiotics of so-called primitive societies have absolutely nothing that is undifferentiated. On the contrary those worlds involve highly elaborate operations of assemblage, syntax, and modes of semiotization" (*MB* 316). Despite the absence of laws generally valid for such an inherently unstable entity, the unconscious is not without organization or system. This is why it makes sense that Freud turned to thermodynamics, the first science of complexity. He famously featured energetics in his 1920 *Beyond the Pleasure Principle*, which models the repetition automatism of posttraumatic stress on organisms seeking a return to equilibrium, even though this entails their death. Guattari's objection to Freud's science is not energetics itself, but rather his extension of thermodynamic concepts beyond the reaches of their validity, outside of the "very specific technoscientific assemblages of enunciation" to which they were meant to apply. Guattari points out that thermodynamics was never intended as a theory of incorporeal objects or processes particular to organic and psychic life (*MB* 396/ *CS*73). Guattari does, however, recognize the importance of energetics, as evidenced in the title of the text he gave at the 1983 Prigogine conference: "Semiotic Energetics." Guattari asks: "Is it

possible to imagine the reconstitution of a model of the Unconscious that . . . would fully recognize energetics (in the plural)—including physical, biological, sexual, social, or economic energetics?" (*MB* 395–396/ *CS* 73). In order to make energetics useful for his purposes, Guattari transforms it in two ways: he updates Freud's science with the help of Prigogine and his contemporaries, and he shifts from an attitude of scientism to his own "ethico-aesthetic paradigm."

Let me begin with a simple summary of the science, based on the popularizing history of science books published in French during the 1960s and 1970s, of which Guattari was an avid reader. Thermodynamics is a theory of systems, and was a first response to problems of complexity (Prigogine and Stengers 1984: 129). As originally formulated in 1850, the second law of thermodynamics tells us that "*within an energetically isolated enclosure all difference of temperature must tend to even out spontaneously . . .* Now within an insulated and enclosed space at uniform temperature, where no difference of potential remains, no (macroscopic) phenomenon can occur. The system is *inert*." This tendency to move toward equilibrium is measured by the notion of entropy (Monod 1971: 197). This state of inertia to which an isolated closed system tends already poses a problem for a therapist or a social activist like Guattari, since inertia—maximum entropy—makes any systemic change impossible. "In this sense we say that the second law [of thermodynamics] specifies the inevitable *degradation* of energy within an isolated system, such as the universe. 'Entropy' is the thermodynamic quantity which measures the extent to which a system's energy is thus degraded" (Monod 1971: 197). Where there is no energy, there is inertia, which is to say disorder. An increase in entropy, understood as the degradation of a system's energy, corresponds to disorder. Conversely, negative entropy, or negentropy, designates an increase in order, and thus measures order. When you melt a crystal like ice, "you thereby destroy the neat and permanent arrangement of the atoms or molecules and turn the crystal lattice into a continually changing random distribution" (Schrödinger 1967: 68–73).

The evolution within science from the first theories of thermodynamics to later versions of systems theory is paralleled by the rise of cybernetics and information theory. It has been said that everything that, in the nineteenth century, was matter, substance, or social has by the late-twentieth century become system (Morin 1982, 1990: 238). By the second half of the twentieth century, the idea of the system pervades the hard sciences and social sciences alike, and plays an especially important role in cybernetics and engineering. It informs Deleuze's critique of individuation, which is

borrowed from Gilbert Simondon, and is pervasive in psychology. “Behavioral psychology considers the individual as a *system* connected to the world whose evolution is determined by his *environment*, which acts on him through the messages that he receives from the inert world or from other individuals” (Moles 1966: 1). Whereas early thermodynamics could only study closed, isolated systems, the new science of cybernetics makes it possible to understand complex systems defined as open to their environment, because exchanges of information between system and environment can now be taken into account. Such exchanges involve not just energy transfer, but also information transfer, or communication (Watzlawick et al. 1967: 28–30). Information is here understood in terms of entropy and negentropy. “The order of a system . . . is equal to the quantity of information required for the *description* of that system. Whence the idea . . . of a certain equivalence between ‘information’ and ‘negentropy.’” It follows that “one of the fundamental statements of information theory, namely that the transmission of a message is necessarily accompanied by a certain dissipation of the information it contains” can thus be regarded as “the theoretical equivalent of the second law of thermodynamics” (Monod 1971: 198–199).

Thermodynamics was originally conceived as an explanation of the workings of heat engines. The shortcomings of this theory became evident when scientists began to examine biological systems. The difference between physical and biological systems can be defined in terms of chaos and complexity, explains Nobel prize-winning physicist Erwin Schrödinger in *What is Life?* The laws of physics are “based on the statistical tendency of matter to go over into disorder,” or in other words, “the natural tendency of things to approach the chaotic state.” However, “living matter evades the decay to equilibrium.” Organisms feed on negative entropy in order to avoid reaching a state of maximum entropy, which for an organism equals death (Schrödinger 1967: 68–73). The modern concept of chaos developed with what has been called the “the organismic revolution,” after which the world could be perceived in terms of organization (Bertalanffy 1968: 186–188). Deleuze and Guattari’s critique of organs and organism in *Capitalism and Schizophrenia* must be understood in the context of this development within scientific thought.

The 19th and first half of the 20th century conceived of the *world as chaos*. Chaos was the oft-quoted blind play of atoms which, in mechanistic and positivistic philosophy, appeared to represent ultimate reality, with life as an accidental product of physical processes, and mind as an epiphenomenon. It was chaos when, in the current theory of evolution, the living

world appeared a product of chance, the outcome of random mutations and survival in the mill of natural selection. In the same sense, human personality, in the theories of behaviorism as well as of psychoanalysis, was considered a chance product of nature and nurture, of a mixture of genes and an accidental sequence of events from early childhood to maturity.

Now, says Bertalanffy, the trend is toward "*the world as organization*," a trend "marked by the emergence of a bundle of new disciplines such as cybernetics, information theory, general system theory, theories of games, of decisions, of queuing and others" (Bertalanffy 1968: 187–188). Recall from Chapter 1 the games of chance loved by Lacan and Guattari, which involved calculating patterns and probabilities based on coin tosses. Note that *Order Out of Chaos* is the title of Prigogine and Stenger's 1979 book. Unlike Lacan, who renounced biology and energetics in favor of the signifier, Guattari chooses life. Lacan finds order in the unconscious by choosing structure. Guattari chooses biology and energetics, convinced that life itself is a matter of creating order from chaos.

For Guattari, to choose structure is to opt for entropy, which leads to disorder, and eventually death. This is the high price of reductionism. He notes that Freud's energetic model is less reductionist than that of his followers, but that even so Freud's "theories provided a reinforcement for highly reductionist conceptions and practices."⁴ Too many social scientists sought scientific legitimacy by positing an energetic base, a tendency that Guattari calls "the disease of entropism" (*MB 314/CS 67*). Such paradigms bring on the

"entropic Superego," the main effect of which was to make those afflicted with it incapable of perceiving a movement, a transformation, an alteration, or anything that could be experienced, without linking it to a common economy of energy, based on the two sacrosanct principles of thermodynamics. (*MB 313/CS 68, tm*)

Guattari maintains that entropy disease persists well into the twentieth century, even among social scientists who seem to have abandoned thermodynamics. With the clever labels of entropy disease and the entropic Superego, he is suggesting that structuralists and systems theorists alike replicate Freud's scientism, while neglecting to take into account the wide range of unexpected singularities which he uncovered in the unconscious. The systemetizers only manage to replace Freud's outdated thermodynamic models with their own overly reductive models. Structuralism and systematization,

claims Guattari, merely replace the nineteenth-century science of energy with two other “energy monotheisms”: the cult of information and the cult of the signifier. “In its terminal phase—I am referring to structuralisms and systemisms—the disease of entropism can appear to evolve toward a remission” when the thermodynamic energetic base is replaced with “information” in the case of systems theory, or with “the signifier” in the case of Lacanian structuralism. The result is still reductionism, argues Guattari, since formalism has simply been transferred from an economy of energy to an economy of information or an economy of signifiers. “The focal point of the reductionism merely shifts toward a matter even more radically purged of its last specific traits for the benefit of an energetic *hyle* assimilated to a flow of binary alternatives” (*MB* 314/*CS* 69). Entropy disease stubbornly persists.

Guattari regrets that Freud’s later theories are more reductionist than his earlier formulations, and that he gradually pulls away from energy metaphors. Lacan goes much further by liquidating the idea of libidinal energy in favor of the signifying chain (*MB* 394/*CS* 71–72).⁵ Guattari, in contrast, maintains that signifying structure does not transcend the libido, which is why he advocates a return to the earlier Freud who had “the stroke of genius, not to say the stroke of madness . . . to invent a semiotic energetics” (*CS* 36; *MB* 392/*CS* 67). “Semiotic Energetics,” it should be recalled, is the title of the paper Guattari gave at the 1983 Prigogine conference. “What was important to Freud was to establish passageways between sexual libido”—energetics—“and effects of meaning”—semiotics (*MB* 394/*CS* 71). The effects of this energy joined with meaning are both physical and psychic, because (in Guattari’s terminology) the “intensive entities” and “quanta of energy” involved here “can only be ‘detected’ through the complex Assemblages that semiotize them” (*CS* 73–75). For Guattari, semiotization not only reveals libidinal phenomena, but it also participates with the libido in the creation and sustenance of existence itself. As he explains elsewhere, semiotization does much more than articulate the relations among figures of expression, mental entities, and objects; linguists are shortsighted in limiting the function of semiotics to representation and denotation. According to Guattari, semiotization is above all existentialization. This existential function of semiotization makes use of “intensive indices” and other “diagrammatic operators” which act as “crystals of singularization” and “points of bifurcation outside of dominant coordinates” (*CS* 51–52). This is one of the primary points that Guattari is trying to make with his quadrangular drawings, and why he introduces them under the guise of Freud’s energetics and semiotics.

The eight drawings that accompany the “Semiotic Energetics” essay are meant to map various aspects of Guattari’s “model of the Unconscious” (CS 81). All are based on the basic four-quadrant “graph” that maps “the configurations of subjectivity, desire, drive energy, discursive modes, and consciousness,” offering “a redefinition of the Unconscious based on the transformations of four basic entities: Flows, machinic Phyla, existential Territories, and incorporeal Universes” (CS 239, 40). Guattari proposes this schizoanalytic model of the unconscious because he is dissatisfied with Freud’s “conception of an Unconscious founded on an economy of drive quantities [*quantités pulsionnelles*] and a dynamics of conflictual representations.” Guattari objects to both to the emphasis on quantification and the recourse to representation. He instead proposes his quadrants as “a transformational modeling such that, under certain conditions, the following can engender each other: Territories of the Ego, Universes of alterity, Complexions of Material Flow, desiring machines, semiotic Assemblages, iconic Assemblages, intellectual Assemblages” (CS 73–74). This self-engendering makes the model not only ontological, but also autopoietic, which is to say self-reproducing.⁶ Guattari’s model is still an energetics, but it does not seek to quantify energy within a closed economy, as does Freud with his thermodynamics. The quadrant model instead presumes that “life, the mind, desire, and truth” tend to exist in “far-from-equilibrium” conditions. This cartography thus maps “Assemblages subject to radical transformations, to schizzes” (CS 75).

Chapter 1 of *Cartographies* provides a relatively straightforward drawing which maps the Unconscious onto the four-functor grid (Figure 3.2). Labeled “Libido-Unconscious options,” this drawing indicates that there is a micro-political choice to be made between the “deterritorialized option” (top of the graph) or the “reterritorialized option” (bottom of the graph). The vertical axis of the plane is that of deterritorialization-reterritorialization. Territorialization and reterritorialization increase as one descends the axis, which is why the more territorialized domains of Flows and Territories are located at the bottom of the graph, and the more deterritorialized Phyla and Universes at the top. One can deterritorialize, which is the option favored by schizoanalysis, or one can reterritorialize, which is the option favored by the psychoanalytic establishment (CS 43–45). Guattari does not deny the presence in the unconscious of “libidinal stratification” and “repetitive structures” which “mimic the homeostasis of physical systems of equilibrium.” This sort of homeostasis in fact characterizes neurotic syndromes (CS 76). The problem is that Freud, claims Guattari, in the end

betrays his initial impulses and confines the unconscious to the bottom half of the graph. Freud's model stratifies the libido in the domain of Flows by defining it as an "economy of drive quantities," limiting it to the somatic portion of the psychic drives (lower left quadrant of Figure 3.2; CS 44). Flows are economic, and subject to energetic-spatial-temporal coordinates, and so by conceptualizing the libido in terms of quantifiable energy, Freud makes the libido "a static energy concurrent with the stratified psychic entities," which leads toward entropy, which is to say death (see Figure 3.1; CS 44). Having thus harnessed the energy of the libido, Freud goes on to constitute the unconscious as a refuge territorializing repressed psychic material. This unconscious is "kept on a leash by the censor" of the Conscious-Preconscious and the Ego-Superego systems of the two topologies (CS 44–45). This limits the unconscious to its "conflictual representations" which take place within the Territories (lower right quadrant of Figure 3.2). The drawing further shows that Freudian psychoanalysis cannot offer any kind of traversal or transversality between the libido and the unconscious, because it can only generate the libido and the unconscious by way of a "splitting of the Ego" located between the stratified libido-Flows and the repression refuge of the Territories.

Schizoanalysis, in contrast, opens up new possibilities for the libido and the unconscious by choosing the deterritorialized option, according to Guattari. Locating the libido in the Phyla, it allows for a process-related energy which pushes dynamic relations into the far-from-equilibrium conditions necessary for transformation and creation (top left quadrant of Figure 3.2). This is the domain of the actual possible, discursive yet deterritorialized (Figure 3.1). Schizoanalysis likewise rescues the unconscious from the Territories, elevating it to the equally deterritorialized incorporeal Universes of reference. This constitutes the unconscious as "the set [*ensemble*] of lines of alterity, virtual possibilities, and unheard-of becomings" (CS 44). The relation between the libido and the unconscious can then become one of processes of singularization, predicated on two-way exchanges between the two sides of the graph (Figure 3.2). Freud's unconscious did not have to wind up at the bottom of the graph, but its fate is assured by his followers, says Guattari. Subsequent generations of Freudians in the end made all of the psyche's singularities into generic functions (CS 45). Thus conceptually armed, Guattari can carry out his analytic projects without having to rely on the usual array of standard psychoanalytic entities like subjectivity, consciousness, signifiante, the somatic, instinct, behavior, or lack—these are "transcendental entities impermeable to concrete situations."

Schizoanalysis applies to concrete situations, which is why it disdains categories with universalizing, reifying pretensions (CS 36, 41).

One or several planes?

How can the four-functor schema escape the reductionism that Guattari finds in other models, not only in triangular models but also in four-part models like that of Lacan's four discourses? If this quadrangular model does indeed succeed in its ambitions to map the complexities of existence, this is because the Flows, Territories, Universes, and Phyla are, Guattari tells us in the 1983 essay on energetic semiotics, "the four domains of the Plane of Consistency," which he also calls a "plane of immanence" (CS 82). The same phrases, "plane of consistency" and "plane of immanence," are used interchangeably throughout the joint work he coauthored with Deleuze. In Guattari's solo work this plane appears as early as 1972, and by 1979 he has added two axes on which he plots coordinates of consistency (as we will see in Chapter 4). In 1983 he redraws the plane, but this time he labels the quadrants F, Φ , T, and U (which do not line up with the 1979 axes). In the writing done with Deleuze, the plane of consistency/immanence appears throughout *A Thousand Plateaus*, and receives extended discussion in *What Is Philosophy?* Only Guattari's solo versions ever divide the plane into quadrants. Much more of a departure on Guattari's part, though, is what is included on the plane, and the number of planes. In *What Is Philosophy?*, the "plane of immanence" (or "consistency") includes only philosophical concepts. Writing together, Deleuze and Guattari carefully distinguish philosophy from science, claiming that "The object of science is not concepts but rather functions that are presented as propositions in discursive systems." Since science works with functions rather than concepts, and since "science is discursive," it belongs to a "plane of reference," and not to the plane of immanence (WIP 117).

The function in science determines a state of affairs, thing, or body that actualizes the virtual on a plane of reference and in a system of coordinates; the concept in philosophy expresses an event that gives consistency to the virtual on a plane of immanence and in an ordered form. (WIP 133)

To science and philosophy they add art, which lays out yet a third plane, "the aesthetic plane of composition" (WIP 194/183). That makes three

planes: philosophy's plane of immanence or consistency, science's plane of reference, and art's plane of composition. "What defines thought in its three great forms—art, science, and philosophy—is always confronting chaos, laying out a plane, throwing a plane over chaos." Art, science, and philosophy "are distinguished by the nature of the plane and by what occupies it" (*WIP* 197–198/186–187).

Guattari does occasionally evoke three planes when speaking or writing alone, but throughout *Cartographies* there is only one plane, and it is the basis for all of the 75 plus drawings, on which Guattari always places "four ontological functors" in the same position in relation to the plane's axes. I have compiled my own matrix that combines the elements of various drawings (Figure 3.1; based on *CS* 41, 83, 86, 94, 97, 143, 210–213, 224, 234; *CM* 60/88, tm). As indicated in the drawings, Guattari's plane in *Cartographies* includes elements which *What Is Philosophy?* places on separate planes: the discursive, reference, consistency, the actual, the virtual, propositions (Figures 3.1, 3.5).⁷ My hypothesis is that *Cartographies* puts art, science, and philosophy on the same plane because this book's ontology relies on interactions among the actual and discursive aspects of science, as well as the nondiscursive, virtual character of art and philosophy. This is why the Flows, Territories, Phyla, and Universes function here as "four ontological functors" (*CM* 60/82). In mapping the unconscious and subjectivity, the four functors are mapping existence itself. "Being crystallises through an infinity of enunciative assemblages associating actualised, discursive components (material and indicative Flows, machinic Phyla) with non-discursive, virtual components (incorporeal Universes and existential Territories)," writes Guattari (*CM* 58–59/86, tm).

Guattari's apparent inconsistencies in dealing with planes—one or three? concepts only or propositions and discourse also?—could be read in more than one way. Is this sloppy or eclectic thinking on Guattari's part, or is this an example of remapping, of making new maps for each singular situation—in other words, is this metamodeling? I will argue for the latter response. The number of planes differs despite the many shared ideas and views in *Cartographies* and *What Is Philosophy?* because these two books are organized around very different questions. As indicated by Guattari's comments that I quoted earlier in this chapter, the joint book asks about the nature of philosophy, while the solo work asks how subjectivity is produced in the contemporary world. As a result, these two books also differ in regard to professional orientation, semiotics, subjectivity, and technology. As concerns professional orientation, Deleuze with Guattari writing together define and delimit the objects and operations of philosophy, science,

and art, domains which interest them both; Guattari in his solo book is writing from the perspective of a psychotherapist, cultural critic, and political militant, and so is forging tools for these domains. Guattari includes “reference” on his plane of consistency because he is so invested in semiotics and linguistics, while Deleuze is not (see my Introduction). Guattari becomes ever more concerned with subjectivity toward the end of his career, which is not the case with Deleuze. Finally, Guattari pays much more attention to new technologies than does Deleuze. These themes are woven throughout the following discussion of Guattari’s single ontological plane.

Guattari’s critique of scientism can be expressed in terms of the plane of consistency. He faults Freud for wanting to quantify libidinal energy in the name of science, but not because energy is not measurable—it is. Rather, Guattari is convinced that just as quantum physics cannot measure waves and particles at the same time, so analysis cannot easily capture quality and quantity simultaneously (CS 141; GR 158–159/CS 251–253). “How, in the end, can one hold together qualities in relation to quantities?” (Guattari and Johnston 2000: 22). Quantity belongs to scientific method and the discursive, economic, rule-driven side of the Phyla and the Flows on the left side of the graph. Qualities are the concern of philosophy, aesthetics, and subjectivity, which are located on the side of Territories and Universes on the right of the graph. A series of paired terms divide along Guattari’s vertical axis: libido/unconscious, science/philosophy, rational logic/pathic apprehension, effect/affect. However, existence and the productive processes necessary to sustain existence depend on traversals and interactions among all four quadrants. Figures 3.2, 3.3, 3.4, and 3.5 all show tensors and vectors (indicated as directional lines) crisscrossing the four domains, indicating constant interaction.⁸ In any endeavor, the unconscious on the right side of the graph is inseparable from the rationality on the left.

All scientific approaches, all forms of logical-mathematic rationality, are based on the same web of schemas—of perception, affects, imaginary activities, and representation—as are also found in daily life, dreams, madness, or creation. The only changes are in the assemblages and the intensity of the components brought into play. Likewise, these same Universes—concrete, oniric, pathological, or aesthetic—engage, according to specific modalities, problematic traits and highly differentiated machinic Propositions which are found stuffed under the banality of their ordinary manifestations. Thus, in my view, the *cartographies of unconscious subjectivity* should become the indispensable counterparts to *systems*

of rationality at work in science, politics, and other areas of knowledge and human activity. (CS 51, my emphasis)

Note that here “unconscious subjectivity” and “systems of rationality” are “indispensable counterparts” to each other and not binary opposites. Both sides belong to the “same web of schemas.” Science and dreams are made up of the same components and differ only in the way they are assembled and in their variations of intensity. The point here is not just that science desires and dreams, but also that the Universe of dreams makes use of machinic propositions from the Phyla.

Guattari at the same time maintains distinctions among art, science, and philosophy, even though he locates them on the same plane. Here he distinguishes philosophy from science on the basis of that which they tend to model:

It seems self-evident that there is a *discursive Given*. Philosophy is built around metamodelings of the non-discursive *Giving*, while, on the side of sciences, the question of the degrees of deterritorialization of the Given remains marked by a lack of elucidation of the Assemblages of enunciation of the giving and of the logics of non-discursive intensities. (CS 94)

Science concerns itself with givens; philosophy with the giving, with questions of how the given came into being, as well as how it persists in its being. “Continuous discursivity Φ marks the infinite multiplicity of a state of facts or a state of things which, in addition, is only given to be in Assemblages ‘made contingent’ (territorialized)” (CS 94). As shown in Figures 3.1 and 3.3, Guattari places the given on the left side of his plane, corresponding to the Phyla and the Flows; this is also the discursive side. The giving is located on the right side, the nondiscursive side, corresponding to the Universes and the Territories, the side of the logic of the body without organs (CS 95).

It is from the aesthetic and subjective side of the ontological graph that singularity is affirmed. This side is neglected by those in the grip of what Guattari calls scientism. The struggle against scientism is part of his ethics. “The question of ethics begins with this very rupture with the scientific paradigm.” Ethics, for Guattari, implies that something singular happens, for example during psychotherapy. An “existential singularity” is produced, indicating that one is no longer in “a world of linear causality.” Ethics begins

here, as does aesthetics, because “this same concern with singularity is found in aesthetic creation” (Guattari and Spire 2002: 13–14). This is why Guattari advocates replacing the scientific paradigm (which he ascribes to both Freud and Lacan) with the ethico-aesthetic paradigm (which he ascribes to his own schizoanalysis).

“Aesthetic” here designates creativity in any domain of production. Guattari’s aesthetic paradigm applies not just to art, but is also to be found at work in science, the economy, and the ecology (Guattari and Senaldi 2000: 32). He explains why he so values the aesthetic, writing that “The aesthetic power of feeling, although equal in principle with the other powers of thinking philosophically, knowing scientifically, acting politically, seems on the verge of occupying a privileged position within the collective Assemblages of enunciation of our era” (*CM* 101/141). Favoring the aesthetic does not entail abandoning reason for beauty. His aesthetic paradigm does obey a logic, but it is a logic of creative composition and complex processes. He explains that all domains face constraints, art included. “Science, technology, philosophy, art and human affairs confront respectively the constraints and resistances of specific materials which they loosen and articulate within given limits” (*CM* 100/140). It all depends on the “specific materials” being worked; for Guattari, “materials” include Flows of energy along with Flows of matter. In order to better appreciate the “paradigm” aspect of the aesthetic paradigm, it may help to remember that Guattari was especially fond of music and poetry, two artistic domains whose most creative breakthrough works can be very much subject to formal or material constraints, such as physical capabilities of musical instruments, the resonance frequencies of sound itself, or the formal qualities of verbal meter and rhyme. Whether one is writing a poem, building a skyscraper, or recording rock and roll, “[t]his processual aesthetic paradigm works with (and is worked by) scientific and ethical paradigms. It is installed transversally to technoscience because technoscience’s machinic Phyla are in essence creative, and because this creativity tends to connect with the creativity of the artistic process” (*CM* 107/149, tm). Despite their transversal relations, for Guattari the scientific and aesthetic paradigms do remain distinctive. He privileges aesthetic paradigms over scientific paradigms above all because the latter fail to take into account subjectivity and affect.

For their part, the paradigms of techno-science place the emphasis on an objectal world of relations and functions, systematically bracketing out subjective affects, such that the finite, the delimited and coordinatable, always take precedence over the infinite and its virtual references.

With art, on the contrary, the finitude of the sensible material becomes a support for the production of affects and percepts which tend to become more and more eccentred with respect to preformed structures and coordinates. (*CM* 100–101/140)

Paradoxically, Guattari's mathematical terminology and diagrams are integral to his aesthetic paradigm. This should be taken as another reminder that the phrase "ethico-aesthetic paradigm" does indeed contain the word "paradigm." As Guattari says several times, even chaos is not entirely aleatory or undifferentiated (see for example *CS* 76, 81; *MB* 316). Guattari's drawings become far more mathematical toward the end of *Cartographies*, incorporating concepts like infinity, Brownian motion, the Baker's transformation, fractals, and phase space. The very division of the plane into quadrants with two axes follows the example of mathematics. Although he claims that his plane of consistency is not subject to mathematical logic, he does acknowledge "topological constraints" (some of which he imposes himself), the most significant of which is that there is no possibility of a direct connection between the Flows and the Universes, or between the Territories and the Phyla. This means that traversals—or transversals—indicated by the tensors and vectors drawn across the graphs, folds, matrices, or cycles must either occur vertically or horizontally, or as a shallow diagonal which does not cross the central horizontal axis (see especially Figure 3.3 on this point). A vector is a line with a direction, usually indicated by an arrow. Tensors are a related entity, but they can be multi-dimensional, and can be used with an array or a mathematical matrix. I have included several versions of Guattari's quadrants to show his format variations: as matrix (Figure 3.1), as quadrants of a two-axis graph (Figures 3.3, 3.5), as layered or folded topographical space (Figure 3.4), or as a cycle (Figures 3.2, 3.3, 3.5). Some of the figures combine two formats, such as graph with cycle in Figures 3.3 and 3.5.

This two-axis plane of consistency is an ontological model meant to map self-reproducing, self-managing existential processes. I would add that at the same time, the model continuously engenders itself, as if it were an auto-reproductive or autopoietic drawing: each set of terms added leads Guattari to make another drawing, another iteration of the quadrants. It is this auto-generative capacity that attracts Guattari to four-part models.

Two-term axiomatics (of the Being-Nothingness sort) can only lead to a 'disempowered' representation and an inaccessible 'grund' [ground], whereas three-term dialectics lead to pyramidal, arborescent determinisms.

It is only with $3 + n$ entities that there can be established: a) a trans-entity generativity and proliferation (matricial) without any entity taking essential priority over another . . . b) a principle of auto-affirmation, auto-retroaction; a foundation which is 'auto-transcendent' (Jean-Pierre Dupuy) or auto-poietic (Francisco Varela). (CS 93)

Elsewhere he adds that "The fourth term stands for an n th term: it is the opening onto multiplicity. What distinguishes metamodeling from modeling is the way it uses terms to develop possible openings onto the virtual and onto creative processuality" (CM 30–31/51–52, tm). This constant multiplication of terms which characterizes metamodeling is one of Guattari's main strategies for combating scientism. It is not at all obvious why this level of detail is necessary for the practical purposes for which Guattari originally developed the four-part model, but the constant regeneration of the model does make it very difficult to "apply" it as a standardized analytical grid.

Guattari uses his divided plane of consistency to account for much more than philosophical concepts, and for more than psychic entities. As evidence of the scope of his ambitions and the range of his concerns, I list here examples (some of which he mentions only in passing) that he gives in discussing various aspects of his quadrants. I've arranged the examples into categories to make the list more readable: sociopolitical entities (the Versailles court, Capitalism, the Christian and Muslim worlds); the mental phenomena of daily life (dreams, car driving, hallucinations, the ego, Sartre's nausea, the effects of TV-watching on subjectivity); psychotherapy (the La Borde kitchen, a grieving singer who loses her voice, Freud's fort-da game); science and technology (NASA's moon program, ATM machines, a hammer, the particle-accelerator, steam engines, thermonuclear weapons, airplanes); nature and the cosmos (organic systems, the Big Bang, species individuation); art and culture (musical compositions, totemic icons, photography, literature, architecture).

Guattari spends a great deal of effort modeling the interactions between the evolution of technology and the production of actual machines, which he draws as arrowed lines connecting the Flows to the Phyla (Figure 3.5; CS 93–160). However, he is always quick to point out that machines cannot attain existential consistency without the active involvement of Universes and Territories. In the final schema of the main text of *Cartographies*, Guattari maps his four ontological functors onto Aristotle's four causes (CS 235; see also 211, 216–217). He does not define them, but Heidegger does in his well-known essay on technology, which Guattari does reference (CM 47–48/72–73):

(1) the *causa materialis*, the material, the matter out of which, for example, a silver chalice is made; (2) the *causa formalis*, the form, the shape into which the material enters; (3) the *causa finalis*, the end, for example, the sacrificial rite in relation to which the chalice required is determined as to its form and matter; (4) the *causa efficiens*, which brings about the effect that is the finished, actual chalice, in this instance, the silversmith. (Heidegger 1977: 289–290)

The four causes line up with Guattari's functors as follows (Figure 3.1): *causa materialis* describes the Flows (F) of matter, libido, capital, signification, labor; *causa formalis*, the abstract machinic Phylum (Φ); *causa finalis*, the referential Universes (U); and *causa efficiens*, existential Territories, which includes selfhood (T).⁹ Guattari critiques Heidegger's ontological account of technology by demonstrating its incapacity to account for the fate of the Concorde supersonic jet, a technological success that was an absolute failure commercially. In other words, the Concorde never reached its full existential potential. Guattari explains that the "ontological consistency" of the Concorde airplane depends not only on material Flows and the machinic Phyla of technology, but also on a number of Universes: diagrammatic (plans, theories, feasibility studies), technological (transposition into material terms), industrial (production capabilities), collective imaginary (sufficient desire to bring the project to fruition), political and economic (release of funds, etc.). These Universes comprise many more elements than the simple purpose of flying, or the classical *causa finalis*. The Concorde was never very successful because its economic Universe lacked consistency, in terms of Guattari's model (CM 47–48/72–74). A Universe is a constellation of values, of nondiscursive references, of virtual possibility, not real and not actualized, and yet necessary to any process of actualization and realization. Crystals of singularization and bifurcation points may serve as the point of emergence of new "mutant universes of reference" (CS 51–52). Guattari calls these variously "incorporeal Universes," "Universes of reference," or "Universes of enunciation." They are constituted by "something that is repeated, that is affirmed, that is neither localized nor finite nor discursive, but which is singular, or better, irreversibly singularizing" (CS 196).

The Concorde example demonstrates that

the ontological status of concrete machines [such as jets] implicates not only the entry of abstract machinic functions but also of existential operators enabling their incorporation into incorporeal Universes and

existential Territories which confer on them an auto-consistency, a character of necessity, which in fact requires a complete and inversed looping of the cycle of Assemblages. (CS 127)

“The Cycle of Assemblages” is the title of chapter 3 of *Cartographies*, which includes a diagram entitled “The cycle of assemblages of enunciation” (Figure 3.5). This drawing is almost identical to another entitled “Smoothing and striation of the Assemblages of enunciation” (CS 148). These cycles are essential not only to the production of subjectivity, but also to the production of trains, rockets to the moon, and simpler machines like a lock and key (CS 123). Why “enunciation?” For Guattari, existence and enunciation are “similar expressions” (CS 177). In Figure 3.5, the “relation E.C.” is the relationship between Expression and Content, which Guattari locates between the material Flows and the machinic Phyla. Another airplane project is used to exemplify the role of the collective Assemblage of enunciation in the ontological cycle:

When Leonardo da Vinci dreams of flying machines, he draws them, he makes plans, but that's it. The representation stewing in his head does not manage to bite into his era's technical-scientific state of affairs. But since then, things have gained consistency, and have become charged with *collective enunciation*. An immense capital of knowledge has been accumulated at the heart of institutions and facilities, these days with the efficacious help of computers, and by way of the chains of researchers; of inventors; of Phyla of algorithms and of diagrams which proliferate in technological programs; of books; of teachings; of know-how. Today, the innumerable consequences of the “flying machine” content make a real forest with their “family trees of implication.” By successive steps, its diagrammation has taken off from its initial dream world, then from the world of slightly mad inventors, in order to finally become incarnated into the mainsprings of modern society. (CS 176–177, my emphasis)

“Collective enunciation” here refers to the generations of pooled knowledge and sociopolitical desire necessary to concretize—to existentialize—a technology. It differs from the Phyla in that it incorporates subjectivity. This same process could just as easily apply to a technology of the self, or to a social technology. Collective assemblages of enunciation are thus the necessary correlate to the plane of consistency.

I mentioned that Guattari's drawings of the plane grow ever more elaborate and technical. Figure 3.5 (which, by the way, is not the most complicated)

shows a process of alternating smoothing and striation. In *Cartographies* Guattari takes the idea of smoothing from several sources. He frequently cites René Thom's "retroactive smoothing of time," which refers to a "deed" having "an influence on its antecedents" in the genesis of organs; this is the problem of "finality" in biology, the way biology smoothes out developmental accidents as organs develop during maturation (Thom 1983: 185–186; cited in *IM* 8–9; *CS* 161; *CM* 51/77).¹⁰ Cybernetics and information theory makes use of a mathematical operation of smoothing, a type of statistical approximation, in communication engineering (Wiener 1949). There is also the mechanical smoothing that removes asperities from a material surface, as for example in tooling a lock and key set (*CS* 125; *CM* 43–44/66–68). Lock and key technology combines concrete, contingent, singular form (endo-reference, existential consistency of the Flows) with a continuum of possible forms (exo-reference, materiality of the process of the Phyla) (*CS* 125; see Figure 3.1). In other words, the Phyla supply the plans and diagrams, which must be realized in the matter and energy of the Flows. Continuing with the lock and key example, striation in the Phyla (top left quadrant of Figure 3.5) differentiates the possible lock-key forms, while striation in the Flows shapes the material (bottom left quadrant). The two striations meet in the middle for a smoothing that assures the functioning of an actual, concrete lock and key set. In terms of Figure 3.5, smoothing refers to all transformations between neighboring quadrants, which create a new trans-quadrant homogeneity from a heterogeneity of register (*CS* 104, 127). Striation refers to all heterogeneity developed within the same quadrant; a heterogeneity circumscribed within the same register results from the homogeneity of a quadrant (*CS* 103–104, 127).

The full cycle of assemblages is not complete until the Universes and Territories also become involved, incorporating both machinic proto-subjectivity and human experience. This subjective dimension of the production of machines (which for Guattari includes living machines; see Chapter 4) can be read as Guattari's take on the philosophical approach of Whitehead, whose ideas also inform *What Is Philosophy?* (Alliez 2004: 54–60). As explained by Prigogine and Stengers, the purpose of Whitehead's "cosmology"

was to define the conceptual field within which the problem of human experience and physical processes would be dealt with consistently . . . What had to be done was to formulate the principles necessary to characterize all forms of existence, from that of stones to that of man . . . While each scientific theory selects and abstracts from the world's complexity a peculiar set of relations, philosophy cannot favor any particular region of

human experience. Through conceptual experimentation it must construct a consistency that can accommodate all dimensions of experience, whether they belong to physics, physiology, psychology, biology, ethics, etc. (Prigogine and Stengers 1984: 94–95)

The “tensors” of Figure 3.3 and the “cycle” of Figure 3.5 express the need for philosophy to “construct a consistency” amenable to all experience, including the experience of the domains typically assigned to science. Guattari quotes the following sentences from Merleau-Ponty regarding the relationship between experience and science:

All my knowledge of the world, even my scientific knowledge, is gained from my own particular point of view, or from some experience of the world without which the symbols of science would be meaningless. The whole universe of science is built upon the world as directly experienced, and if we want to subject science itself to rigorous scrutiny and arrive at a precise assessment of its meaning and scope, we must begin by reawakening the basic experience of the world of which science is the second-order expression. (Merleau-Ponty 1989: viii; quoted in *CS* 50)

This dimension of experience belongs to the right side of Guattari’s graph, to the Universes and Territories. It is nondiscursive, affective, and to be distinguished from scientific knowing. Guattari’s preferred adjectives for this level of experience are chaomic and pathic. Pathic knowledge is knowledge as existential transference, as nondiscursive transitivity. It is not to be confused with knowledge tied to the discursive realm of representation, which lies within energetic-spatial-temporal coordinates (*CM* 61/89–90, 79/112). This is not to say that Guattari dismisses scientific, discursive knowledge. On the contrary, he insists that discursivity is inevitable, that it is part of our apprehension of the world. He explains that discursivity has to do with us being thrust into energetic-spatio-temporal Flows, which are part of life. Capitalist discursivity is a cancer, he concedes, but not discursivity as such (Guattari and Johnston 2000: 26–27).

Examples of chaomic and pathic apprehension can be especially salient in mental pathology. Psychosis can be described as a chaomic stasis, in which “a sense of being-in-itself is established before any discursive scheme, uniquely positioned across an intensive continuum whose distinctive traits are not perceptible by an apparatus of representation but by a pathic, existential absorption, a pre-ego, pre-identificatory agglomeration” (*CM*

79/112). Such a state is not limited to pathological conditions, but it is often most palpable there. Guattari explains to an interviewer the idea developed in *Chaosmosis*:

the (mental) apprehension of the world, the fact of being in the world (dasein), is essentially a chaosmic apprehension. One is abolished in the world, the world starts to be for itself, 'I am in the world because I am the world,' I absorb and I dissolve all discursivity while affirming this discursivity. But in general this time of fusion, of absorption, goes completely unrecognized, or is even fought. (Guattari et al. 2000: 10–11)

Guattari is arguing for the recognition and acceptance of this chaosmic experience of pathic apprehension, a notion which he bases on several sources.

"The apprehension of the world" is, for Guattari, the equivalent of the constitution of an Existential Territory (Guattari et al. 2000: 11). Pathic and chaosmic apprehension grasps the nondiscursive complexity of the world in a way that conscious and rational thought cannot. Guattari takes the verb "grasp," which he leaves in English, from Whitehead: "Each new phase in the concrescence means the retreat of mere propositional unity for the growing *grasp* of real unity of feeling" (Whitehead et al. 1978; cited in English in *CS* 82 n. 1). Proposition is here opposed to "feeling." It is a matter of the relative, limited, delimited speeds of communication versus the infinite speed of existential apprehension (Guattari and Johnston 2000: 22). This is why for Guattari "Existential consistency has . . . to do with the pathic categories that Viktor von Weizsäcker opposes to ontic categories." The pathic is characterized as wishing, being able to, being obligated to. Guattari finds here the beginnings of a theory of "existential appropriation" (*CS* 143). Weizsäcker himself contrasts the "ontic," or being, against the "pathic," or in French "*le subir*"—the suffered, the endured, the undergone. He defines the pathic as "the aspect of biological existence in which this existence is not given as a 'being' [*étant*] but solicits a decision without the form of 'wish,' 'capability,' 'description.'" For him, the pathic introduces a subject into biology, because this category ties perception to movement. For example, a simple organism senses a danger, and moves out of harm's way. This apprehension takes place at a very basic biological level, and is inseparable from the movement which ensues. The pathic comprises both the perception and the flight, rather than separating out cognition-reaction. "It's the dualism of perception and movement that implies the

introduction of a subject in biology," for Weizsaecker, for whom the pathic characteristic also engenders the indeterminism proper to life (Weizsaecker 1958: 217–219, 221–222, 229).

This biological level of the pathic is essential to the phenomenology of the psychoses, according to Arthur Tatossian. The pathic has to do with the most originary state of living, of life, of the lived, and this is true of simple organisms as well as those whose psychosis impairs their apprehension of discursive knowledge. The pathic is nearly inaccessible to conceptual consciousness. It is immediate, intuitive, preconceptual apprehension of phenomena. It is the felt rather than the perceived. It is implied in all movement, understood not as objective displacement in space, but at movement of the Self, auto-movement, that which is a vital communication with the world. Activity/passivity, self/other—these distinctions do not apply here. We are at the level of subjectivity whose functioning is unrelated to the ego (Tatossian 1979: 169, 186, 117, 102). This is why Guattari places ontic operators in the center of the left side of the graph, and pathic operators in the center of the right side (CS 143). This is also what distinguishes Guattari's existential Territories from Heidegger's Aristotelian *causa efficiens*, or the silversmith in the example of the chalice. Self-propelled movement, found in the most minimal life forms, implies choices and decisions, which necessitates a sort of subjectivity. Furthermore, the participation of the pathic dimension in ontology, as suggested by the quadrants, implies a subjective dimension to existence itself, while the cycle of assemblages shows that existence is self-organizing, self-generating, and self-modeling.

Stated otherwise, the subjective dimension of processuality is best understood as pathic because processuality is machinic, and its subjectivity therefore lies in the "machine," Guattari's broad definition of which will be discussed in the following chapter, in relation to the political and historical implications of the machinic phylum. I have said very little about Guattari's political commitments in this chapter, in the interest of focusing on the complexities of the third metamodeling project. I do think that there are political implications in Guattari's version of the plane of consistency, and I will at least touch on these in the following chapter's discussion of the machinic phylum, as well as in the discussion of ecosophy in the Afterword.

Chapter 4

History as machinic phylum: sociopolitical schemas

Schizophrenics hallucinate universal history, an observation of Guattari's which is repeated in *Anti-Oedipus* (PT 155; AO 85–89/101–107). His conceptualization of history is far more complicated than that expressed by this colorful image of raving racist paranoia, and yet the figure captures his overall approach to historiography: the schizophrenic thinks in grandiose terms and yet his relationship to races, continents, and empires is libidinal, intensive, desiring, and existential. World history cannot be separated from the most irrational petty desires. In short, Guattari's is a universal history which unfolds at the molecular level. It is not universal in the philosophical sense, or in the sense of the Newtonian-style laws of nature, but universal in the sense of the planetary and the cosmic. Although the topic of history appears frequently in Guattari's writing, it is only explicitly theorized in bits and pieces, and is never quite organized into the sort of conceptual framework that he gives his machinic semiotics. Or perhaps I should state matters differently: the machinic semiotics is a theory of history, although this is not always made obvious. It is important to keep in mind that for all his insistence on the intensive, the chaosmotic, the micro, and the molecular, along with his critique of the structural and the molar, Guattari is always also thinking on the scale of "the cosmos, history, and the socius" (*IM* 141–142).

This chapter will describe Guattari's approach to history by way of the machine as a materialist historicism that is no longer dialectical, but which remains true to the Marxist project of a universal history as critique of capitalism. Asked if he is a Marxist, Guattari replies that he belongs to no religion, but that "I go on using ideas and ways of making ideas work, drawn from any kind of theory, particularly from Marx. Marx was an extraordinary genius who interpreted history, economics, and the production of subjectivity in a way that was entirely new" (*MB* 198). In another interview, Deleuze

phrases this somewhat differently, saying that he feels that he and Guattari remain Marxists of a sort: "I think Félix Guattari and I have remained Marxists, in our two different ways, perhaps, but both of us. You see, we think any political philosophy must turn on the analysis of capitalism and the ways it has developed" (Deleuze, *Negotiations*, 171). I must agree with Deleuze's assessment on this matter. That analysis of capitalism necessarily entails studying "the ways it has developed" is an assumption that permeates all of Guattari's oeuvre. This can be seen by following two recurring themes: revolution and universal history. I am defining universal history here quite simply as the delimiting and describing of grand historical eras. In its Marxist versions, this implies a history conceived in terms of discontinuity, breaks, and ruptures, such that universal history and revolution go hand in hand.

To historicize is, for Guattari, to make a political and ethical choice. He insists that historical explanations are always to be chosen over mythical accounts. This, for example, is a fault that he finds with Freud's recourse to mythic origins to explain the individual psyche, group formations, and even civilization. The choice of myth, he suggests, leads Freud down a winding dead-end path in "an infinite quest" for an "impossible truth" (*GR* 64–65/*PT* 55–56). Many societies likewise turn to "ahistorical systems of religious and political legitimacy." There is of course a problematic use of history, such as the self-legitimizing history reconstructed by many nationalisms of the most repressive sort, a supposedly "objective History with a big H, guaranteed pure science" (*AH*73). Guattari argues that societies should instead turn to history because a society that chooses history is acting as a "subject-group" capable of speaking for itself, enunciating its desires, and assuming responsibility for its situation. Choosing history over myth means accepting "the precarious and transient nature" of one's group's "existence," and thus lucidly assuming "the situational and historical contingencies" that confront one's group. This is the path to change, because facing history means refusing "to mystically reestablish and justify the existing order" (*GR* 65/*PT* 56). Real historical analysis is thus a highly political undertaking, presupposing a commitment to revolutionary transformation, at least as Guattari formulates matters.

As a lifelong militant, Guattari's preoccupations with mutation, transformation, and revolution never stray far from his own political engagements. Although he was active in the French Communist Party until the mid-1960s, he always also belonged to various smaller militant groups which were marginal (and sometimes oppositional) to the large leftwing parties, and so he was well-versed in the organizational problems and strategies of both bureaucratic and autonomous groups (Dosse 2007: 37–50). His preference

for the smaller groups certainly contributed to his theory of molecular revolution. The events of May 1968, in which he was actively involved from the planning stage, would become a constant reference in his writing, but his most theoretical discussions of revolution tend to reference Lenin. He in fact proposes several theories of what he calls the Leninist cut or break (*coupure*), proposing various accounts of the genesis of the Russian revolution, including its rapid descent into Stalinist totalitarianism. What remains constant throughout the varying formulations of the Leninist cut is the evocation of desire, subjectivity, semiotics, and machines.¹ By following Guattari in his successive returns to the Russian revolution problem, I will be able not only to trace the evolution of his theories of history, but also to illustrate the theoretical trajectory that I have been trying to sketch out in this book: from a Lacanian theory of the signifier, followed by the power-signs of his Hjelmslev-Peirce semiotics, finally culminating in the rhizomatic ontology of his engagement with systems theory and far-from-equilibrium dynamics. In so doing, I am suggesting both that Guattari's own theoretical evolution motivates each revisiting of the Lenin dilemma, and also that the gnawing problem of revolutionary causality drives many of the most important transformations in his own thought process. My task will involve tracing the legacy of the machine-structure distinction which Guattari first proposed in the late 1960s, to show how and why it culminates in the theory of "machinic heterogenesis" which serves Guattari as an ontology of a universal history precariously balanced between existential consistency and revolutionary change. My discussion will include readings of two drawings, one devoted to a version of universal history (Figure 4.1), and the other to the theme of revolution (Figure 4.2).

I will be making the case that the notion of machinic phylum quickly becomes central to Guattari's conception of history. This orientation has forced me to make choices, even though there are a number of other avenues worth exploring in much more depth than I am able to here. There is of course in *Anti-Oedipus* and *A Thousand Plateaus* a palpable philosophy of history which overlaps that in Guattari's solo writing. Jay Lampert, in an excellent book, has lucidly analyzed the philosophy of history in the joint writing, but from the perspective of Deleuze's solo writing (Lampert 2006). I instead, as has been my practice throughout this book, follow lines of argumentation in Guattari's solo work, and I have kept to a minimum references to the joint work in order to streamline my presentation. In addition to a more detailed comparison to the joint work, it would also be well worth exploring several other aspects of Guattari's approach to history: his disagreements with Althusser and with Heidegger; the way his idea of the

PRIMITIVE SOCIETIES	URSTAATIC AND CAPITALIST SOCIETIES	AUDIO-VISUAL SOCIETIES
territorialized infinitive	anti-production against the deterritorialization process	deterritorializing Infinitivation
transduction	production	retransduction
transduction	transcription and retranscription (translatability; signifier-signified-subject)	retransduction
transcursive programming	discursive programming	artificial axiomatic programming
repeating difference = initiation society	deferring difference; flow economy	deferring repetition to infinity: modernism, artificialism, de-realization, etc.
relative code surplus value		generalized code surplus value
collective territorialized subjects of enunciation (polyvocality)	dualism: subject of the (contractual) statement subject of the (contractualized) enunciation	collective subjects of enunciation, artificial transcurcion

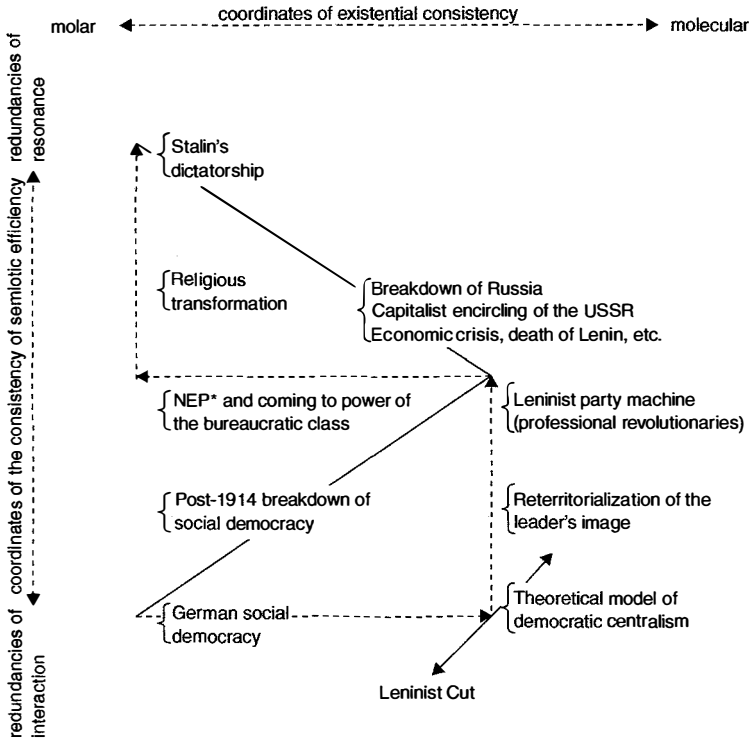
FIGURE 4.1 Primitive – Urstaat/Capitalist – Audio-Visual. *Source:* Félix Guattari, *Anti-Oedipus Papers*, © Semiotext(e), 2007.

Leninist cut diverges from the cuts and flows that characterize the machines in *Anti-Oedipus*; the relationship between his views of revolutionary history and clinical history in psychotherapy; his admiration for the historiography of Fernand Braudel; his position in relation to Wilhelm Reich; and the philosophy of temporality, especially Deleuze's Bergson. These topics will have to be developed elsewhere.

Many of the Guattarian terms used in this chapter have already been defined elsewhere in this book; to avoid excessive cross-referencing, I refer readers to the index.

Lacan's revolutionary moment

Already in 1965, several years before meeting Deleuze, Guattari is talking about grand civilization "machines"—Egyptian, Mesopotamian, Chinese, Greek, Roman, Christian, etc. (*MR* 180–181/*PT* 178–179). He remarks that each of these machines produced a new civilization through the invention



(There is a conjunction of the reterritorializations of the two components: paranoid vector.)

*NEP = Lenin's "New Economy Policy"

FIGURE 4.2 Rhizome of the Leninist Cut and the engendering of Stalinism. *Source:* Félix Guattari, *L'Inconscient machinique*, © Éditions Recherches, 1979.

of writing, technological innovation, and the introduction of a division of labor. In each case, he says, “a military machine sets off a continuous process of innovations, matrix of the eventual machinization and militarization of labour in capitalist societies” (*MR 180/PT 179*, tm). He adds that behind each of these civilizational mutations lies a loss of control by “structured signifying chains,” such that an “incoherent, absurd” and “short-term semiotics” awaits “the reconstruction of a plane of reference ‘structured like a language’” (*MR 180/PT 178*, tm). He is suggesting that the new civilization materializes upon replacement of the old signifying chains and plane of reference. This brief sweep of the world’s great civilizations showcases the two elements typically featured in Guattari’s historical analyses: mutation

and semiotics. His 1965 approach to semiotics will change drastically after he meets Deleuze and moves away from Lacan, but recognizing Guattari's Lacanian foundations is helpful in understanding some of his later theoretical moves. His early Lacanism is evident in phrases like "signifying chains" and "like a language." Armed with this Lacanian semiotics of civilizational rise and decline, Guattari grapples with the problem of how to account for a historical mutation in a given society. In Chapter 1, I argued that Guattari teased the theory of desiring machines out of a Lacan seminar. Similarly, he teases a theory of revolutionary history out of Lacan. In both cases, he highlights machinic, anti-structuralist moments in Lacanian thought.

Thinking about history in its grandest dimensions is a salient feature of historical materialism, which may explain why the essay I have been citing includes the great civilization machines, even though its main topic is revolution. Entitled "History and Signifying Determination," the essay makes the case that the signifier is at least as determinant of history as economics or class consciousness, because the desiring economy is inseparable from the materialist political economy (*MR* 175–184/*PT* 173–182). Although Guattari's above-cited evocation of "machines" setting off "a continuous process of innovations" prefigures his theory of the machinic phylum 20 years later, in this particular essay the Lacanian signifier plays the role of revolutionary machine. This 1965 essay in turn provides the theoretical basis for a 1971 essay entitled "The Leninist Cut" ("cut," *coupure*, is translated as "breakthrough" in *MR*; *MR* 184–195/*PT* 183–194).

Guattari declares that in reconsidering Lenin and the Russian revolution, "[t]he real question is in what fashion we should best look back at such moments in history, to what point it is necessary to analyse all the circumstances that affected them" (*MR* 185/*PT* 184, tm). In answering this self-posed question, Guattari outlines his own theory of history in relation to historical materialism. He begins by conceding that "One might think it preferable to remain at a certain level of generality," but this for him is a mistake that he ascribes to a certain Marxism. In the following passage he defines his own preference for complexity in terms of transversality, but had he been writing later than 1971, he might have spoken of rhizomes or the heterogenesis of machinic phyla.

Or one could consider a more complex approach that would cross the traditional boundaries and try to work out the links connecting the different determinisms—economic, demographic, sociological, the unconscious, etc. One would then no longer have to choose one signifying

plane over another—either the human factor or the economic, for instance—but could follow in detail *the winding trail of the signifier*, its crossroads, dead ends, ramifications, repetitions, backward turns. Such a study, in which the work of the historian and the economist would be continually tied in with the production of psychoanalytic biographies, linguistic studies and so forth, would be a kind of crucible from which might emerge a new race of militant analysts who would help Marxism at last to recover from the fatal disease of generality that now paralyses it. (MR 186/PT 185, tm, my emphasis)

There are two notable ideas advanced here. First, this “new race of militant analysts” describes what Guattari was trying to produce with his research coalitions FGERI and CERFI, for whom his proposed strategy of multidisciplinary analysis would not replace Marxism, but rather would transform it by replacing its generalities with complex accounts assembled by a multiplicity of researchers. Second, the new breed of analysts will follow the “trail of the signifier,” an approach made necessary because Guattari is here redefining “the human factor” and “the economic” factor as two (among many) “signifying planes.” The signifier itself is able to cut across these planes, forging paths which link “the work of the historian and the economist,” “the production of psychoanalytic biographies,” and “linguistic studies.” The signifier connects both the different disciplinary studies as well as the different determinisms (economic, demographic, sociological, the unconscious, etc.) which are to be studied. The study of history thus becomes the collective study of signifying determination, but only because the signifier leads the way through all of the other determinations.

Following this trail himself, Guattari is led to ask “what complex network of signifiers” put the Bolsheviks in a situation which enabled them to bring about the revolution of October 1917 (MR 186/PT 185)? By posing the question in this way, Guattari posits that the “network of signifiers” is the revolution’s very condition of possibility. He locates “the fundamental Leninist cut,” a “signifying cut,” in 1903 at the end of a party congress.

The split, according to Trotsky, came out of a clear blue sky . . . The trouble arose over the definition of membership, with a disagreement over the meaning of *two words* in one paragraph of the statutes, and the argument shifted to the number of members of the *Iskra* editorial board . . . It was problems of this sort that shattered the precarious equilibrium that had somehow been maintained hitherto. (MR 188–189/PT 187–188, tm)

This set off a “chain of events,” including personal splits involving Martov, Lenin, Plekhanov, and Trotsky. Guattari often makes the point that such mundane organizational questions involving statutes and managerial details matter just as much as a well-reasoned, theoretically sound political agenda. He writes that after these minor disputes in 1903, “a new signifying system came into being, a new axiomatic of the revolutionary movement, on which our thinking is still largely dependent today” (*MR 189/PT 188*). He goes on to explain the party split in linguistic terms, which I quote at length because the published English translation does not capture the technicalities of the linguistics of enunciation from which Guattari borrows:

What happened at that Congress was repeated *ad infinitum* elsewhere. Statements were hardened into dogma, and cut off from their situations of enunciation. As dominant statements, their function then became that of seeking to control all ruptures in enunciation . . . I am convinced that phoneticists, phonologists and semanticists would be able to trace back to this event the crystallization of certain linguistic traits, of certain ways—always the same—in which stereotyped formulae are still hammered out by militants today, whatever language they are taken from. A new variant of the universal militant language—a “specialized language” indeed!—was born out of this rather absurd theatre. (*MR 189/PT 188–189, tm*)

He adds that he is not claiming that a direct trajectory leads from this 1903 cut straight through Stalinism to Maoism. “I am simply saying that the fundamental signifiers, the key cuts, entered history with this event” (*MR 190/PT 189, tm*).

Guattari likewise redefines the subject of history in terms of its relationship to language. There is a subject of history, he avows, but it is not the usual “subject of enunciation [*sujet de l'énonciation*]” but rather the “subject of statements [*sujet des énoncés*]” (*MR 175/PT 173, tm*). In the French linguistics of this time “enunciation” usually designates the situation of speaking, while “statement” (or “utterance”) refers to individual sentences independent of context (Ducrot and Todorov 1979: 323; Evans 1996: 55). Guattari declares that it is erroneous to seek a subject “of the enunciation of discourses and actions related to history.” The subject of history is instead the subject of statements, in the sense of being subject to statements as they are received. The subject of history is “the subject that is constituted by, and remains the prisoner of, repetitive structures, signifying chains wound back around themselves.” (Note the negative tone of “repetition” here—*Difference and Repetition* has not yet been published). Understood as entangled

in signifying chains, the “working class” as “alienated subject” becomes “the class of the words of the class.” “Class” becomes “the class of the statements that, in a given field of historical enunciation, produces significations for terms such as ‘class,’ ‘class struggle.’” In Lacanian fashion, there is presumed to be a slippage between the signifier and the signified, so that signification remains in flux. For each “current of thought” there is “a metonymic initiatory code that determines signification” (*MR 175/PT 173–174*, tm). The subject of history, as subject of the statement, is thus caught up in a web of repetitive structure, signifying chains, and determining codes. It follows that emancipation must begin with the signifier. A few years later Guattari will declare the signifier to be an enemy, but here he makes the signifier a hero.

It likewise follows from this line of reasoning that the effects of the Russian revolution are manifested in signification. It’s not that the statements themselves had changed; after 1917 the words were the same; it was the meanings that were different.

That’s what revolution is—true history. Something has happened. Anyone who came to Russia in 1916 and returned in 1918 would see that the people were not where they had been. That could be read in the signified. Journalists would write, for instance, that ‘one no longer sees anyone at the race courses’, or ‘the Winter Palace looks quite different’. But that was not the important thing: what had totally changed was the meaning of all the significations—something that happened with the signifier. (*MR 179/PT 178*, tm)

But what exactly did happen with the signifier? What brought about the changes inscribed in the signified, and what does it have to do with revolution? Guattari attributes the transformation to Lenin’s signifying cut. Guattari appropriates the notion of “cut” from Lacan, for whom it is a “function of discourse.” The word “*coupure*” is found throughout Lacan, who uses it in several senses. At its most basic, the cut corresponds to the bar separating the signifier from the signified (written S/s in Lacan’s algebra): “we analysts must bring everything back to the cut qua function in discourse, the most significant being the cut that constitutes a bar between the signifier and the signified.” The “signifying chain” hereby makes a cut that “verifies the structure of the subject as a discontinuity in the real” (*E 678*). The project of liberating the subject of the statement from the entangling structures, chains, and codes is, argues Guattari, the function of the cut that separates the signifier from the signified.

The “signifying cut” is for the still-Lacanian Guattari a liberating rupture because he equates traditional history with the signified, which he in turn equates with structure and repetition (of the kind that Deleuze will later call repetition of the same). “The signified is always the same thing—repetition, death, tedium.” This empty repetitive structuralist history is the sort that asks “name the kings of France,” and which for Guattari amounts to an anti-history (*MR 179/PT 178*). “True” history, in contrast, interrupts this repetition, bringing about something unexpected. The mutations, ruptures, and revolutions that produce true history belong to the signifier, claims Guattari. “Only by being incessantly cut across at the level of the signifier can [the signified] be radically remoulded.” The empty yet powerful Lacanian signifier is “a nonsensical, ahistorical raw material constitutive of historical significations: pure effect of cut or resonance, contingent accident that can only be seen with hindsight to have been the first term in a series” (*MR 176/PT 174*). History corresponds to “a possible cut in a given order, a rupture, a revolution, a cry for radical reorientation” (*MR 179, 178/PT 178, 176*). The mutating “signifying cut” is a “machinic cut” (*MR 181–182/PT 180–181, tm*).² This is what the Bolsheviks were able to do, thanks to a “complex network of signifiers.”

Guattari credits Lacan with the distinction he is making between repetitive structuralist history and the true history which proceeds by revolutionary signifying cuts. In a fleeting remark, Lacan compares the history of historians to what he calls “development”—the psychological evolution of a patient. Analysis, Lacan declares, depends on producing a history that breaks with development. Guattari quotes this passage:

It suffices to say in passing that in psychoanalysis, history constitutes a different dimension than development—and it is an aberration to try to reduce it to the latter. History unfolds only in going against the rhythm of development—a point from which history as a science should perhaps learn a lesson, if it expects to escape the ever-present clutches of a providential conception of its course. (*E 743, cited in MR 175–176/PT 174*)

Lacan’s “development” corresponds to Guattari’s structural, traditional, repetitive history, while Lacan’s “history” designates what Guattari calls true history, history-as-rupture. Stated otherwise, revolutionary history is the signifying cut, while history-as-development is the signified (*MR 179/PT 178, 177*). The subject of development—in other words, of psychological evolution—is neither the subject of analysis nor the subject of history, adds Lacan (just after the passage quoted by Guattari):

Conveyed by a signifier in its relation to another signifier, the subject must be . . . rigorously distinguished . . . from any psychological evolution subsumable under the subject of understanding. In minimal terms, this is the function I grant language in theory. It seems to me compatible with historical materialism, the latter having left this point unaddressed. Perhaps the theory of object *a* will also find its place therein. (*E* 743)

The subject cannot be subsumed under psychological evolution based on understanding because “understanding” posits a knowing subject, the transparent subject of consciousness that psychoanalysis rejects. Historical materialism, implies Lacan, likewise rejects the knowing subject. However, and this is where Guattari is (and will remain) in complete agreement with Lacan, historical materialism does not pay adequate attention to desire, to that special partial object, the object “*a*” that by 1969 Guattari will be calling a “desiring machine” (*MR* 115–116/*PT* 244–245). For Lacan, the signifier always determines the place of the subject, always in relation to the object “*a*.”

Since Guattari’s subject of history is a desiring subject, and since for him structuralism is antithetical to desire, he declares Lacan to be anti-structuralist based on the latter’s theory of the object “*a*.” Guattari posits that structural, developmental, anti-history results when the “structuralist temptation” closes the circle between the subject and the signifier, cutting them off from all reality, so that “the real and history have become subject to an eternal symbolic order from which they are totally isolated and which essentially nullifies them” (*MR* 176/*PT* 175). Surprisingly given his position only a few years later, in 1965 Guattari dissociates Lacan from this “eternal symbolic order,” instead casting him as a champion of desire who restores the subject and the signifier to history:

Lacan, on the other hand, has always stressed the profound dissymmetry characterizing the subject in relation to the signifier. Just as you neutralize a Moebius strip by cutting it lengthwise, so the subject cannot be separated from the signifier without being reified. The subject and the signifier are not distinctly opposites. The subject depends on its relationship with residuality, upon the *object petit ‘a’*, to secure its status . . . It is thus prevented from yielding completely to its deadly yearning to be abolished in a pure and ideal structure. (*MR* 177/*PT* 175–176, tm)

The Moebius strip is a topographical figure which can be formed from a long strip of paper which is twisted before its ends are joined, so that if you trace along its length with a pencil without lifting it, you will eventually

reach your starting point. The band has no inner or outer edge, and for Lacan it demonstrates that paired terms such as signifier-signified are not discrete opposites but in fact continuous. During his seminars Lacan demonstrates the signifying cut topographically by literally taking scissors to a paper Moebius strip.³ In the sentences I've just cited Guattari is suggesting that the subject survives as a subject thanks to its *objet petit "a,"* the object-cause of desire, whereas structure leads to the death of the subject.

Since the signified (or history-as-development) can only be transformed by a cut in the signifier, then "the revolutionary cut, as rupture with history-as-development, is the supreme moment of the existence of the signifier" (*MR 178/PT 176*, tm). Guattari must modify Lacanian linguistics to make this argument plausible, and he does so by declaring that there are two uses of the signifier, one which he considers structuralist, the other which could be described as machinic. One can make the signifier "a kind of universal category, like space or time: it is then the cleverness of a new idealism." This universalization of the signifier, he complains, "actually betrays the linguistic discovery of the signifier, which is inseparably linked with the sign in its relation to meaning [*sens*] and to social reality." He associates Lacan with what he identifies as the second use of the signifier, the signifier as link to "meaning and social reality," declaring that it is better to hold "with Lacan that the signifier is a screen through which the effects of the unconscious do not pass," but which allows the indexing of irruptions of the unconscious in forms such as dreams, transference, acting out, or slips of the tongue (*MR 176/PT 178*, tm). Guattari has in effect invented a new semiotic element here, equivalent to that which he will soon be calling an "index," borrowing from Peirce. It is only by (temporarily, as it turns out) recasting the signifier as an index of unconscious "irruptions" that Guattari is able to turn the Lacanian signifier into a revolutionary force, making Lacan a champion of revolutionary history.

What Guattari will always retain from his Lacanian period is an emphasis on subjectivity. "The history [Lacan] talks about doesn't even bother to be dialectical, it is history considered at the level of subjectivity, in the cut of enunciation [*la coupure de l'énonciation*]" (*MR 176/PT 174*, tm). Guattari would not phrase it this way, but it could be said that for him, as well as for Lacan, semiotics is subordinate to but inseparable from the question of subjectivity. This is how Guattari describes the history created by Lenin and the Bolsheviks. He hypothesizes that they managed to interrupt "historical causality" at the subjective level by making a Lacanian cut of enunciation. With his April theses Lenin convinced the party and the masses that "they must hurl themselves into the breach" left by the weakness of the

bourgeoisie, moving forward “with their heads down, and by a kind of collective voluntarism, force history to record indelibly this proletarian revolutionary cut—despite the weakness of the Russian proletariat” (*MR* 184–185/*PT* 184, tm). The actions of October will only retroactively be declared “revolution,” and recorded “indelibly” as such by history. The Bolsheviks made history by preventing “the natural evolution of things,” upsetting the normally expected course of events, a trajectory leading toward an anodyne center-right coalition culminating in the retaking of power by the usual parties (*MR* 184/*PT* 183). Like the Lacanian patient whose words, as indices of unconscious desire, must interrupt the trajectory of her symptomatic psychological development in order to advance the analysis, so the Bolsheviks went “against the rhythm of development” (to borrow Lacan’s phrasing) by diverting the evolutionary path along which the Russian politics had been developing. The Russian revolution was a rupture with history-as-development, an intervention that changed the meaning of everything.

Described this way, the Leninist cut is a signifying rupture in history that operates at the subjective level. The Russian revolution quickly degenerated into Stalinist totalitarian bureaucracy because subjectivity and desire were soon forgotten. Even though Guattari maintains that historical materialism remains “the only viable method,” he laments that “dialectical determinism” fails to take into account the subjective factors that make revolutionary rupture possible (*PT* 184/*RM* 183). This is why militants must learn their lessons from the Leninist break, and why Guattari theorizes it more than once. Alluding to contemporary militant politics, Guattari writes that

Though it refuses to recognize the fact, the revolutionary movement is working out its action on the plane of subjectivity and the signifier, setting about causing other signifying cuts, a subjective transmutation . . . Those who continue to put forward their pronouncements without reference to this new unconscious syntax will be turning away from the subjective revolutionary cut that is coming, reifying the logic of history (a logic of nonsense), and falling despite themselves into structuralism. (*RM* 182–183/*PT* 181, tm)

It is evident from this statement that the critique of structuralism is, for Guattari, no mere therapeutic or semiotic debate. It is a matter of political history on the grandest of scales.

Guattari always advises militants to take into account the revolutionary power of subjectivity and desire, including the more pedestrian aspects

of political persuasion by appealing to desire. Abstract theory simply fails to capture the public imagination, and as Guattari insists, imaginary investments are just as crucial as symbolic reasoning. Bureaucratic programs will fail due to lack of popular appeal. "Desire, subjectivity, at this level of collective crystallization, is something that necessarily remains very close to the masses and can only be related extremely indirectly to fundamental historical goals still programmatic and abstract at the time of being formulated" (*MR 195/PT 194*). Speaking of the modern USSR, Guattari says that the Soviet bureaucrats have reached a "fundamental impasse" with their abstract programs like "five-year plans that interest no one, about which the masses do not give a damn, and which everyone is sick of" (*MR 181/PT 179–180*, tm). He explains that the masses do not experience social contradictions as if they were theoretical problems; rather, they locate contradictions in an imaginary order that defies rational bureaucratic logic (*MR 209/PT 232*). Militant groups must rely on the contingency of their statements, on potentially revolutionary signifying cuts that may only be produced unconsciously, because such "creative ruptures" may "engender subjective effects" which cut across "the whole of the historical sequence under consideration." He concedes that his observations "will no doubt be criticized for nudging historical causality toward 'pettiness', and in a sense this is quite true." Still, he holds firm that the revolution hinges not only on the usual determinisms, but also on the pettiest desires.

To what extent are the mass of people prepared to sacrifice themselves for things that 'really matter', to shoulder their fundamental historical tasks? Under what conditions would they consider uniting as one to form a vast war machine like the one that swept all before it in 1917? Surely the first condition (without which the death instinct would take over collectively) should be an assertion that the 'pettiness' that is for them the salt of life, the source of their desire, would not be forgotten in the process? (*MR 194–195/PT 194*, tm)

This level of desire, which may remain unconscious, is the level at which psychoanalysis becomes relevant to militant politics. At face value, this statement about the petty desires of the masses may be read as an elitist dismissal of the less educated proletariat, but Guattari recognizes this same level of pettiness in all desire, including that of his fellow Parisian intellectual militants. His point is that revolution will not be complete without a transformation at the level of subjectivity, no matter how favorable economic or

social or other conditions may seem. This desire factor is precisely why revolution must be molecular.

Militant iconoclasm

The materialist semiotics that Guattari develops during the 1970s strips the Lacanian signifier of its earlier status as revolutionary hero. The materialization of the sign which takes place in the pages of *The Anti-Oedipus Papers* leads him to reformulate his account of Lenin's intervention in the Russian revolution. His approach remains semiotic, but it favors other matters of expression. His reformulation involves the new concepts of deterritorialization and diagrammatization, which he developed with Deleuze, and which come from anthropology and the semiotics of Peirce, respectively, allowing Guattari to advance beyond his Lacanian, Freudian, Marxist, and Sartrean vocabulary, but without fully renouncing any of these sources of theoretical ideas.⁴ Lenin's actions are still understood as a cut, but this break is attributed to semiotic components other than the signifier. This new version of the revolutionary cut is presented in an entry in the *Papers* entitled "Icons and Class Struggle," dated June 1971, the same month and year as the publication of "The Leninist Cut" (AOP 188–195/269–278). From the writing of the one text to the next, Guattari gives up on the idea that the signifier could liberate. This forces him to leave Lacan for Hjelmslev and Peirce, taking Marx and Lenin with him.

Juxtaposing Peirce's typology of the sign alongside a newspaper article in which a Monsignor declares that the icon is the manifestation of a presence, Guattari concludes that Marx and Lenin are iconoclasts (AOP 188–195/269–278). His understanding of iconoclasm here is based on an early version of the schema that I explicated at the end of Chapter 1 (Figure 1.1). In "Icons and Class Struggle" he only loosely references Peirce, but he already makes it clear that his main concern is the relationship between a semiotic element and reality. He lays out the following distinctions, which I have extrapolated out of his still fuzzy formulations. An *image* works on the basis of identification and representation. Images are forbidden by the iconoclasts precisely because God cannot be represented. *Signs* and *symbols* manifest not identity but rather difference, their basis being the cut between the signifier and the signified. It is important to note that Guattari is not abandoning the Lacanian theory of the signifying cut, but is merely placing it within the context of non-signifying semiotic

elements that work differently, outside of signification, and which did not interest Lacan. *Icons*, in the strong sense of the venerated pictures of the saints, prove themselves to be much more powerful than images or signs precisely because, as the Monsignor says, they do embody a presence. Icons can thus be understood as “a *continuous* passage from the signifier to the signified. Passage in the nature of things. Real passage” (AOP 188/269–270).

As an example of this kind of “real passage,” Guattari discusses at length two ethological studies of wasps which pollinate orchids even though the flowers offer them no nectar. The male wasp is sexually attracted to the flower’s calyx, which secretes an odor similar to that of the female wasp’s. The male wasp inserts its genitals into the orchid’s calyx, simulating sexual penetration, then transports to the next flower the gluey pollen stuck to its member. Recall that Freud defines perversion as a sexual act which cannot lead to reproduction. In this case, the wasp is not reproducing itself, and so as Guattari says, these perverted wasps in effect pollinate the orchids “for nothing, just for fun!” The ethologists characterize this as a case of “parallel evolution,” since the orchid’s parts have evolved genetically in order to attract the insect. Guattari rephrases the ethologists’ conclusion in semiotic terms, referring to genetic encoding when he writes that “wasps and flowers are coded correlatively” (AOP 179–180/257–259). The flower’s imitation of the female wasp is no mere image, but rather is an icon, because the insect’s image “is not a symbolic representation, but a real inscription in the orchid’s machinic code.” He calls this “perversion among orchids” an “example of code surplus value,” playing on the Marxist notion of capitalist surplus value (AOP 188/270; 179–180/257–259). Guattari will later make a distinction between a-signifying “diagrams” and a-semiotic “natural encoding” like that which attracts the wasp to the orchid, but for now he is merely making the case that some semiotic elements merely represent (image), while others intervene directly in the real (diagrammatized icon).

It follows, reasons Guattari, that for the iconoclasts, only the holy Eucharist can stand in for the Lord because it consists in a deterritorialized partial object—“a diagrammatization of the icon” (AOP 189/271, tm).⁵ According to the theological doctrine of transubstantiation, consecration during the Eucharist actually transforms the communion wafer into a piece of Christ’s body, a part-object transmitted to the believer. The wafer thus functions very differently than the holy pictorial image, even the Byzantine icons believed to manifest a presence. As an embodying object, the Eucharistic wafer is a semiotic element directly connected to the real, without passing through representation, resemblance, or signification. The Eucharist thus deploys a diagrammatized icon which achieves the highest degree of

connection to the real referent, since it is in fact a part-object of it. The religious iconoclasts thereby force a choice between the deterritorialized, diagrammatized icon (the Eucharist) and the “richly territorialized image” (the holy painting).

Lenin forced a comparable iconoclastic choice on his party, contends Guattari, who argues that Lenin “diagrammatized the class struggle,” offering the masses an icon, so that “the working class had to give up its images and its idiosyncrasies” (*AOP* 189/271, tm). Lenin imposed the Eucharist as a deterritorialized part-object, in effect forbidding images merely representing the class struggle. In other words, he forced a direct semiotic connection to the real (semiotics of the icon), forbidding an imaginary identification completely cut off from its real referent (semiotics of the image). “Everything had to be on the side of the Leninist Eucharist. You’re on one side of the other, ‘centrism’ is not an option.” Marx too was an iconoclast, having “diagrammatized the history of capitalism” by showing how capitalism uses “diagrammatization” in its “struggle against the masses’ desiring polyvocality.” With the help of semiotic politics, the capitalist ruling class “gained the upper hand on production relations” (*AOP* 190/271–272). However, suggests Guattari, the iconoclasts’ polarized class struggle offers only the two choices, image or icon. “On both sides, the politics of desire is betrayed. On one side, deterritorialization lacks desiring machine assemblages,” in the sense that the deterritorialized icon can only result in the “vertigo of the abolition of history in revolution.” On the other side, “re-territorialization” (or “re-iconization,” the reappropriation of the richly territorialized image) “alienates, oedipalizes and archaizes” desiring machine assemblages (*AOP* 190/272). Liberation cannot succeed through detached semiotic figures; the bottom line is always desire, and the capacity of any semiotics to operate in conjunction with desire—which is to say with reality, the real.

There is a third semiotic option, in addition to the Eucharist and the image: the powerful sign-point. Guattari’s analysis implies that Lenin’s revolution eventually failed because it did not produce sign-points, which are only made possible by “collective agents of enunciation,” and which alone among the semiotic components listed here can attain full, unmediated access to the real. The real is the domain of desire, which always remains detached from the signifier. Here Guattari introduces the “plane of consistency,” the conceptual space of machinic logic where signs meet matter.

The only reterritorialization compatible with the revolutionary project is the one that occurs on the subjective surface of consistency “self-managed”

through the singular exercise of desiring machines . . . *I.e.* something that can artificially stick full bodies back together again . . .

With collective agents of enunciation, a plane of consistency is deployed . . . Sign-points are brought into play. These signs conjoin the singular and the universal, the icon and the symbol, the image and the diagram . . . This is a real operation in which things' intrinsic qualities are brought into play. (AOP 190–191/272–273)

The plane of consistency is the site upon which crucial connections are made, but without any pretence of homogenizing, synthesizing, or hierarchizing. The conjoining here of the real and the semiotic makes historical change possible. The concept of the plane of consistency will eventually enable Guattari to develop a theory of history based on the machinic phylum, which will be discussed further later in this chapter.

Meanwhile, with these revisions to his analysis of Lenin's role in the Russian revolution, Guattari has relegated the signifier to a small segment of the semiotic spectrum. The signifier is no longer a revolutionary agent. Revolution is now aligned with those semiotic entities capable of establishing varying degrees of direct contact with the real: the icon, the diagram, the sign-point. The working class is no longer defined as the subject of the statement, as it was in "The Leninist Cut," but is now conceived as "the class of deterritorialization." Workers are now "the unconscious collective agents of practical synthesis." Stated otherwise, "The worker is the power sign of capitalism" (AOP 192/274). The signifier has been redefined as the semiotic substance of capitalism, because capitalism is only concerned with "the *translatability* of mercantile things," with the "things' capacity to be represented in detached signifying grids. *I.e.* to have recourse to *disempowered signs*." This echoes Marx's explanation of commodity fetishism, whereby goods refer to goods, eliding the role of human labor embodied in those goods. Guattari compares the commodity form's semiotic sleight-of-hand to "Saussure's impotent sign" which refers only to other signs, eliding the referent, the real referent where history resides. Capitalism, a regime based on representation, relies on the semiotics of equivalence and translatability. This is why, for Guattari, signification precludes revolution, and the reason why he no longer locates revolution in the signifier-signified-subject splitting, but in an a-signifying semiotic cut within the real.

Universal history tends to lurk around the edges of discussions of revolution in Guattari's writing, and this is true of "Icons and Class Struggle," the short text that I have been discussing. Alongside his presentation of Marx

and Lenin as iconoclasts, he maps the “politics of the total sign, the power sign, that is in touch with the real” onto a grand sweep of the past from pre-history to the present. He sees the sign’s deterritorialization as a “historical process,” which he finds in the difference between the territorialization which for him characterizes the tribal economies of Neolithic towns, and the deterritorialization that he ascribes to the Urstaat, whose semiotic machines and division of labor place it in an “alliance with structure” (AOP 191/274). In this case, deterritorialization plays into the hands of the dominant power, detaching the sign from its connection with the real. As Guattari puts it, the “disempowered signs” of the Urstaat have lost all “transductivity” and “transcursivity,” two terms which belong to his jargon at this moment, and which he uses to describe the semiotic politics of so-called primitive societies.

Guattari’s discussions of primitive societies are always related to his critique of capitalism, as are his frequent returns to Lenin and the Russian revolution. Deterritorialization, the process which for him is at work both in capitalism and in revolution, is always defined against territoriality, the hallmark of primitive social organization, and so in order to understand capitalism, Guattari consults ethnography. The inclusion of “primitives” and “savages” among Guattari and Deleuze’s social typology has been criticized, but I read their presence in their universal history schemas as yet another example of a noncapitalist form of sociopolitical organization.⁶ Guattari was keenly interested in the ethnographic fieldwork being done in the 1950s and 1960s, with the very last of the societies which had not yet been fully absorbed into modernity. He was friends with some of Claude Lévi-Strauss’s students, including Lucien Sebag and Pierre Clastres, and consulted several ethnographers during the writing of *Anti-Oedipus*.⁷ He and Deleuze both were heavily influenced by Clastres’s idea that primitive tribal societies deliberately ward off the formation of a state, and are thus not unorganized or less “developed,” but rather differently organized and differently developed (Clastres 1987; ATP 357–359/441–446). *The Anti-Oedipus Papers* allow us to observe Guattari carefully reading cultural anthropology and ethnography as critiques of capitalism, looking for alternative ways to organize subjectivity, desire, social relations, and political life. The same motivations are apparent in his reading of history: he is constantly searching for ways to foster greater subjective freedom and creative enrichment for the present and future.

The comparative nature of Guattari’s engagement with ethnography is made evident by one of his drawings, a matrix whose columns divide human societies into three types: Primitive, Urstaatic and Capitalist, and

Audio-Visual (Figure 4.1). The written passages related to this matrix make it clear that Guattari's point of departure was the primitive column. In introducing the various ideas and terms included in the matrix, he specifically cites anthropologists Robert Jaulin, André Leroi-Gourhan, Clastres, and Lévi-Strauss (Figure 4.1; *AOP* 48, 58–61/65, 77–81). This table is conceptually unfinished, as evidenced by its unnecessarily obtuse vocabulary, by the repetition of terms, and by the blank square near the bottom of the middle column. I include it because it affords an excellent glimpse into Guattari's diagrammatic thought, which here manifests itself as a cross-generation of ideas inspired by the matrix form. A matrix like this one lines up row headings and column headings, requiring that the resulting blank squares be filled in by matching up a column heading with a row category. As already mentioned, the three columns correspond to society types (Primitive, Urstaatic and Capitalist, Audio-Visual). Although he does not label his rows here, one can infer that they correspond to an unusual array of categories for social analysis: types of production, of inscription, of programming, of differentiation, of subjectivity, of enunciation. This tabular format not only serves as a comparison-generator, but it also conveys a certain perspective on history, because it suggests a synchronic relationship among the columns and squares. Already the content of this matrix raises temporality questions, since some of Guattari's sources for the qualities he ascribes to primitive societies come from recent anthropological fieldwork. I therefore read the matrix as at once a synchronic study of comparative politics, and a diachronic presentation of different moments in history. The synchronic reading is important because Guattari's drawing is not intended to suggest a linear progression of historical stages, which is why he draws a matrix, and not a timeline. Furthermore, this matrix generates ideal types, a typology, and not a set of pigeonholes for actually existing societies. The primitives, barbarians, precapitalists, and mediatized masses described herein are ideal limit-types, and should not be confused with their living counterparts, past, present, or future. It is in this sense that I understand Deleuze and Guattari's claim that in *A Thousand Plateaus* they are not even doing history (*ATP* 121/152).

This iteration of Guattari's universal-history-as-comparative-politics includes "audio-visual societies," which he does not particularly explicate at this time, but which prefigures his later discussions of the mass-media effects on subjectivity and his call for a post-media era, will be taken up later in this chapter. Located between primitive and audio-visual societies, he lumps together the Urstaat with capitalism. This is symptomatic of the unfinished quality of this particular schema. That the despotic states of

the so-called barbarians appear together with early capitalism may indicate that he has not yet assimilated Deleuze's insights into nomadism, which calls for a contrast between the sedentary State and the invading barbarians. Although this table will not be reproduced in the joint writing, the basic schema persists and with Deleuze's contributions will be finished: the middle column of the table is fleshed out in the text of *Anti-Oedipus*, and made even more detailed in the pages of *A Thousand Plateaus*. Guattari's initial drawing badly needs not only the addition of Deleuze's thinking on nomads and barbarians, but also his talent for naming concepts, which is not Guattari's strong suit.

For me, the conceptual crux of the unpolished matrix lies in Guattari's toying with the two above-mentioned terms, transduction and transcurion, variants of which appear in several squares. These will not become key terms in Guattari's vocabulary, but in the *Anti-Oedipus Papers* he uses them to think through the distinction between territorializing and deterritorializing societies, and so they can be read as notions which bridge the way between the signifying cut theory of revolution and his more mature theory of socio-historical change as a bifurcation in the machinic phylum. These two strange terms allow Guattari to forge a path from Lacan's algebra of signifiers to Deleuze's Spinozist plane of immanence. It is noteworthy that Guattari plays with these terms not only in conjunction with his readings in anthropology, but also in relation to Hjelmslev, Peirce, Marx, Spinoza, Leibniz, and especially Deleuze (*Difference and Repetition, Logic of Sense, Expressionism in Philosophy*). These thinkers are cited throughout the entries which include transduction and transcurion. However, his clearest explanation of transduction references the Bambara people of Mali, who were a subject of ethnographic study.

The Bambara doesn't imitate, metaphorize, index. Its dance, its mask, are a full sign, a total sign that is simultaneously representation and production, *i.e.*, transduction. It doesn't watch representation impotently. It is itself, collectively, the scene, the spectacle, the spectator, the dog, etc. It is transformed through expression . . . This is a sign in touch with reality. (AOP258/366)⁸

Guattari here defines transduction as a sign that is both representation and production, and which therefore has the semiotic quality that he values most, the ability to intervene in the real. It is a-signifying. The term transduction is found in both cybernetics and microbiology; in cybernetics it refers to the conversion of energy or of a message into another form, while

in microbiology it designates the transfer of genetic material. Guattari mentions a "DNA-RNA plane of transduction" in a discussion of the power sign (*AOP* 248/354). In the same text, which is devoted to the power sign, he says that "I picked up this use of the term 'power' in Marx" (*AOP* 246/351). He then quotes several sentences from Marx's second thesis on Feuerbach, such as "In practice man must demonstrate the truth, that is to say, the reality and power, the materiality, of his thought," and "Language is practical consciousness" (*AOP* 246–247/351–352). It is a question of language directly intervening in the real (as implied by "materiality" and "practical"). Gilbert Simondon, Deleuze's favorite philosopher of science, uses the term "transduction" to designate the nonidentity of being with itself (Hansen 2001), but this strikes me as somewhat removed from Guattari's more semiotic usage of transduction to designate a mode of encoding capable of producing real effects.

"Transcursion" is a neologism that Guattari uses in conjunction with transduction. He defines "transcursive programming" as one of several ways of programming desiring machines, and suggests it as a way to end the dichotomization found in the "discursive programming" he associates with Freud's Victorian vision of sexuality. For Guattari, to program a desiring machine discursively, as does Freud, results in mutilated desire, a desire "broken, bi-univocalized, bipolarized, divided into love and hate, sexual drive and asexual drive, mother and father, and then, *au finish*, the superior principles of 'malitude' (Eros) and 'femalitude' (Thanatos)." A transcursive programming would instead promote Deleuzian qualities such as "pure difference," "Aïôn," and "the desire event"; as well as "polyvocality" and a nonlinear inscription like that of "an organic chemistry chain." A sufficiently mature machine would be able to connect to various genetic sequences, so that desire would no longer have to be attached to the sexual organs or to the parents (*AOP* 118–119/171–173). Guattari titles the pages I've just quoted "Of Sexuality as the Resultant of Bi-Univocality Machines on Desire (or of Productive Machines on Transductive Machines)." This title, a mini-essay in itself, suggests that "sexuality" (understood as a socializing, normalizing channeling of desire) results from the effects of discursively programmed machines. Repressive, binarizing discursive programming characterizes the title's "productive machines," while liberating, nonlinear, polyvocal transcursive programming produces "transductive machines." This would make the transductive machine neither sexual nor asexual, and able to exchange genetic material "perversely," in the manner of the wasps and orchids described above. Transcursive programming is the desiring counterpart to the transductive semiotics that Guattari also ascribes to primitive societies.

Transduction and transcurSION bring to Figure 4.1 a wide range of disciplinary influences including biology, cybernetics, computer programming, semiotics, the philosophy of time. The term transduction appears in two squares, corresponding to economics and semiotics. The primitive “transductive economy,” or simply “transduction,” is aligned against the urstaatic/capitalist “productive economy” or “production.” On the semiotic level (fourth row of the matrix), Guattari characterizes primitive semiotics as transduction, and Urstaatic/capitalist semiotics as transcription involving the signifier. Audiovisual society is characterized by an economy and a semiotics described as “retransduction,” which Guattari suggests is a result of deterritorialization and diagrammatic processes. “Transcursive programming” is found in primitive societies, “discursive programming” in Urstaatic/capitalist societies, and “artificial-axiomatic programming” in audio-visual societies. The transcursive has to do with markings made directly on the earth or on the body, as opposed to the discursive texts that characterize the State’s writing-based transcription processes. Guattari offers only a few examples of transcurSION and transduction including primitive sacrifice as giving food to the earth or ancestors, the champagne bottle broken over the hull of a new ship before its maiden launch, dreams. “Transcursive writing writes *onto* the real in the same way that primitive magic wrote onto the ground and the earth” (*AOP* 68–69/91–92).

My purpose in discussing Guattari’s embryonic matrix has been to demonstrate his thought process as he strives to make connections between signs, reality, and history. Therefore, rather than risking the tedium of explicating the rest of the squares in Figure 4.1, I will conclude this section of the chapter by observing that his historicized semiotics so permeates his thinking that he even maps it onto the 1973 matrix entitled “the place of the signifier in the institution” as presented in Chapter 1 (Figure 1.1). This seemingly synchronic semiotic typology of institutional semiotics should therefore be understood as superimposed on a diachronic matrix such as Figure 4.1. In his essay on the institution, Guattari tells us that “symbolic semiologies” correspond to “archaic” or primitive societies; “semiologies of signification” go hand in hand with the writing machines of “great despotic empires.” “A-signifying semiotics” maps onto the “audio-visual societies,” assuming that these correspond to what is later called the “post-signifying regimes” such as late capitalism (*GR* 149–151/*RM* 280–281). He does not say so, but I think that it follows from his reasoning that “natural encoding” would have to be understood not as outside of history, but as belonging to physical-chemical or biological phyla. A similar mapping of semiotic categories to the eras of universal history reappears in *A Thousand Plateaus* as “regimes of signs.”

Guattari's theories of revolution and universal history suffer from several shortcomings at this point in his writing career, despite the correctives he has added with diagrammatization, iconization, transduction, and transcurivity. First, he lacks a way of bringing together his various semiotic categories into a drawing less suggestive of stages or phases than the matrix (Figure 4.1). Second, he needs a more explicit explanation of how a society coheres into a recognizable and sustainable entity. Finally, he needs a way to theorize transformations between his society types by a process other than militant revolution. For example, he has no means of theorizing his observation that the "demand for social transformation" which appeared in French feudal society did "not necessarily" imply starting up "a revolution," although it does express "a desire for something else, a passion for a shake-up perceptible through a thousand symptoms" (*PT* 42). As I will argue in the following section, his furtive borrowings from systems theory will during the 1970s allow him to shore up these gaps.

Graphing the revolution

The idea of society as a system in fragile equilibrium is in fact already present in embryonic form in the ethnography-inspired analysis of *The Anti-Oedipus Papers*. Guattari explains that a tribal society cannot suddenly become a fascist state on a mere whim of its chief because the chief is caught up, as it were, in a self-regulating system. "It's not, for example, that Clastres' Indian chief does not want to become a Fascist," but the "equilibrium" of the primitive "machine" is configured "such that he can't take things too far or for too long" (*AOP* 68/91).⁹ The delicate balance of primitive society can only be maintained by guarding against any grab for fascist power, which would upset the equilibrium of the machine, either annihilating it, revolutionizing it, or causing it to mutate into another kind of machine altogether. This cybernetic view of the machine will soon move much closer to the forefront of Guattari's theory of revolution and comparative political history, all of which is included in his concept of molecular revolution.

"I remain convinced that molecular transformations are the true fabric of long-term historical transformations," Guattari tells an interviewer in 1980. Molecular revolution, he explains, can take place on various levels, such as the body, family, neighborhood, information, movement, and (à la Paul Virilio) speed. "We do not have the same relations to reading, writing, images, space, sex, the body, the night, the sun, pain, as we had only ten years ago. Profound irreversible mutations are underway in all these areas"

(CY 47/AH 162–163, tm). Other examples of molecular mutation would include not only the transformations brought about by the technology of birth control pills, but also the “eruption of what one could call ‘the Khomeini effect’” in Iran. “Carter’s advisors are tearing their hair out trying to grasp the possible causes of such a phenomenon, which never have [*sic*] the systemic or structural character of ideologies” (SS 225–227). Guattari is setting up a contrast between his machinic theory of social (re)production, and the Althusserian theory of ideology, which he considers too structuralist. With the dimension of the molecular, Guattari seeks to account for causes not readily discernible within molar categories like ideology, religious fanaticism, or paranoia. He argues that historical causality must be sought in the heterogeneous array of factors at work on multiple fronts.

Machines, for Guattari, hold the key to understanding the heterogeneous causality which drives history.

Reference to ideology masks the connections between different “machines” at work in the social process. It might have to do with machines of a scientific nature, an aesthetic, institutional nature, but also technical machines, logical machines that intertwine their effects in order to trigger off an event, something historically important, as well as a microscopic, almost imperceptible decision-making process. Reference to ideology does not account for such events . . . It is always due to the interaction of very heterogeneous factors stemming from different logics, or from a multivalent logic, that results in the coexistence of systems—I prefer to say machines—plugged into the real. (SS 227)

It is quite easy to read “machine” here metaphorically, but while this figurative reading would not be wrong, it would miss the rich cybernetic conceptualization of the machine that doubles as a theory of history in Guattari’s most significant books—*Révolution moléculaire*, *L’Inconscient machinique*, *Cartographies schizoanalytiques*, and *Chaosmosis*. In the passage just cited, systems theory, thermodynamics, and cybernetics are evoked by the terms “process,” “event,” “systems,” and (for Guattari) “the real.” Notice that he equates machines with systems, which allows him to combine cybernetic references with systems theory (this will be discussed further in the next section of this chapter). This is the technical side of his phrase “molecular revolution,” and the aspect of revolution that I am examining throughout this chapter.

Early on, Guattari recognizes the machine’s relevance to materialist history. He cites Marx’s call for “a critical history of technology” which

would be modeled after Darwin's evolutionary history of plants and animals. Marx regrets that "there is no such accomplishment" for human-made machines, noting that

Darwin drew attention to the history of *natural technology*, i.e., to the formation of plant and animal organs, considered to be the *means of production* of animals' lives. But the history of social man's productive organs, the material basis for all social organizations, is surely worthy of similar research? (*AOP*81/108; citing Marx 1977: 493 n. 4)

Guattari answers this call to provide an evolutionary account of the machine with his notion of "machinic phylum," which for him applies not only to the history of technology, but to all of universal history.

To understand history one must expand the notion of the machine, contends Guattari. Machines are not just technical, but also diagrammatic, "which is to say, inhabited by diagrams, plans, equations, etc." (*GR* 126/*PIP* 57–58). Defining machine in the broadest conceptual terms, he includes in his history all types of machines: semiotic, theoretical, abstract, economic, political, technical, chemical, biological, etc. There are also writing machines and war machines throughout his writing (solo and with Deleuze). Contrasting his view against Heidegger's, Guattari posits that technology is only one kind of machinic phylum, that there are also "the phyla of the sciences, mathematics . . . poetry, the socius, desiring machines, etc." (Guattari and Johnston 2000: 28). History consists in the interactions among machines from any number of phyla.

[I]f one really wants to describe how historical mutations operate, it seems to me necessary to forge expanded concepts of the machine that account for what it is in all its aspects. There are its visible synchronic dimensions, but also diachronic virtual dimensions: a machine is something that situates itself at the limit of a series of anterior machines and which re-launches the evolutionary phylum for machines to come. The machine is thus a material and semiotic assemblage which has the virtue of traversing, not only time and space, but also extremely diverse levels of existence concerning as much the brain as biology, sentiments, collective investments. (*GR* 126/*PIP* 58, tm)

In defining the machine as at once material and semiotic, Guattari draws on the cybernetic notion of signalling, or information exchange, in describing control systems it studies. The reference to an "evolutionary phylum"

emphasizes the diachronic dimension of the concept of the machine. “The various kinds of machine—technical, living, abstract, aesthetic—are positioned in relation to space and time. In which case they constitute phyla, like living species in evolution” (*MB* 468). Although Guattari emphasizes evolutionary phyla, by grounding his theory in the machine he necessarily also includes the machine’s “visible synchronic dimensions,” which is to say all that enables it to operate, the requisite equilibrium among the components, its functioning, which assures the machine’s continued existence as a machine. Endowed with productive and reproductive capacity, Guattari’s broadly defined machines not only maintain their own existence, but also engender themselves as well as a host of other entities. The machinic phyla include “all of the processes of selection, elimination and generation of machines by machines, which never cease producing new, artistic as well as scientific and technical possibilities” (*CY* 18/*AH* 112). This is the ontological aspect of the machinic phylum, which transforms the world as it produces and reproduces. Consequently, “Machines do more than revolutionize the world, they completely recreate it” (*CY* 19/*AH* 113).

The synchronic axis of machinism is essential not only to Guattari’s historical analysis, but also to his clinical schizoanalysis. Recall that for him the unconscious itself is machinic (*IM*). Earlier in this chapter I cited Lacan’s juxtaposition of the clinical history of patients with the history of historians, and his suggestion, adopted by Guattari, that true history is that which interrupts development. Like Lacan, Guattari rejects any notion of “stages” in accounting for psychological development, and also like Lacan, even in his later work he continues to think about both clinical and universal history in terms of developmental trajectories interrupted by the ruptures that create “true history.” Schizoanalysis can be defined as the search for interrupting ruptures in the form of subjective mutations with the potential to set off large-scale sociopolitical transformation. Guattari therefore advises activists interested in his molecular approach to “be alert to everything that blocks the processes of transformation in the subjective field” (*MB*190). This is what he seeks to accomplish by cartography: identifying the blockages by exploring the subjective field with the aid of schizoanalytic maps. A schizoanalytic cartography doesn’t look for the recurrence of psychic complexes or universal “mathemes,” as does traditional psychoanalysis, but instead

explores and experiments with an unconscious in action. It does not concern itself exclusively with locating diachronic outcomes—symptoms, neuroses, sublimations, etc.—but, beyond manifest states of equilibrium or subjective catastrophes, it works at bringing to light the least obvious

situational potentialities, along the synchronic axes currently traversing (or likely to traverse) the assemblages under consideration. (*IM* 190)

Guattari replaces the notion of developmental stages with the idea of abstract machines. He finds that instead of a succession of stages, there is “a circulation of abstract machines,” some of which thrive, others of which “stagnate, disappear, reappear.” Asked about the history of the La Borde clinic where he worked all his adult life, instead of periodizing he cites five “abstract machines” which over the years had been in simultaneous operation there: one machine promotes communication throughout the clinic; another is a constantly updated chart or “grid” which assures the rotation of duties; a third decentralizes management in favor of smaller self-managing units; a fourth involves the entire staff in administering psychotherapy; and a final machine sees to power relations between patients and caregivers. He concludes that “a historical periodization” into phases “would not necessarily correspond to the libidinal dynamics of the system” (Guattari et al. 1977). The same is true of history on a grander scale, according to Guattari, who describes the multiplicity of coexisting abstract machinisms at work in history in terms of the synchrony and diachrony indispensable to the machinic phylum:

There is no abstract machine spanning history, as the “subject” of history. Machinic multiplicities simultaneously traverse synchronic and diachronic planes, the strata of different “provisionally dominant” realities. It cannot be said of the general movement of the machinic multiplicities’ line of deterritorialization that it manifests a universal, homogeneous tendency because in addition, at all levels, it is interrupted by reterritorializations grafted onto new microscopic buds of deterritorialization. The cartography of abstract machinisms makes history by unmaking dominant realities and significations; this constitutes the umbilical cord, the point of emergence and creationism of the machinic phylum. (*IM* 180)

For Guattari, there are only abstract machinisms, in the plural (*AOP* 222/319; *IM* 166–176). Just as so-called stages can occur all at once, insists Guattari, so multiple abstract machinisms can and do coexist (*IM* 189). Although some abstract machines may be inactive at times, they may still be available as potential. These coexisting abstract machines further suggest that history does not always proceed by abrupt, radical revolution. “I’m all for ruptures,” admits Guattari, “but real ruptures are rather rare” (Guattari et al. 1977).

The simultaneously synchronic and diachronic nature of the machine can be more easily grasped with the concept of “plane of consistency.”¹⁰ On this plane of consistency unfold the events as well as the continuities of the processes which produce history. “We find . . . the plane of consistency both as the impossible goal of the history of science and the preliminary to the ‘start’ of history” (MR 121/RM 316). Earlier I suggested that Guattari’s matrix of society types (Figure 4.1) must be read both synchronically as a comparative analysis and diachronically as social systems on the verge of mutating into something else, a reading which is facilitated by exchanging the matrix format for the plane on which the phyla are deployed. “Phylum” expresses the machine’s diachronic lineage. “Plane of consistency” expresses the synchronic functionality necessary to the machine’s existence. On the one hand, “the plane of consistency is thus what enables all the various strata of the socius, of technology and so on to be cut across, invested, disinvested and transferred,” while on the other hand the notion of the “phylum” reminds us that history relies on never-ending evolutionary mutation, nonlinear and yet continuous (MR 128/RM 325). This continuum is not temporal, but has to do with the conjunctions which occur on the plane:

The plane of consistency indicates that the machinic phylum is a *continuum*. The unity of any process, the unity of history, resides not in the fact of a shared time encompassing and traversing everything, but in the fact of that continuum in the machinic phylum, which itself results from the conjunction of all processes of deterritorialization. (MR 120/RM 314–315).

A number of theoretical propositions are packed into these two sentences, and might be extracted as follows. History is a process. All deterritorializations come together on the plane of consistency. The plane, not time, provides history with its unity. True history is continuous processual change. Later in the same essay, Guattari adds that although essential to history, the plane of consistency lies outside of time and space. It is pure intensity of deterritorialization, and includes point-signs which are more deterritorialized than “the craziest tachyons” (RM 327). What further distinguishes the continuous machinic phyla from linear development is not only the multiplicity of the phyla but also the way they are assembled. “These phyla do not start from a single point of origin: they are arranged in a rhizome” (MB 468).

“The Rhizome of the Leninist Cut and the Engendering of Stalinism” (Figure 4.2) maps the Russian revolution onto a plane of consistency drawn in the manner of a geometric plane, although Guattari insists that on his

conceptual surface mathematical laws do not apply, because his is a space of machinic logic.¹¹ Lenin produces a cut on the plane of consistency, as depicted in Figure 4.2. "Consistency," for Guattari, designates the minimum coherence which holds a social (or psychic) formation together, assuring its existence as a formation. For example, a political program or regime needs a certain degree of consistency in order to exist as such. The same is true of subjectivity or an assemblage. He prefers the idea of consistency to that of "substance" (*AOP* 267/379). The notion of "machinic consistency," he says, affirms "the coherence and irreversibility characteristic of the deterritorialized machinic mutations at work on the *machinic phylum*" (*MR* 97/*RM* 262, tm). I will return to the diachronic notion of irreversibility in a moment, but will for now dwell on the synchronic notion of coherence, which is related to consistency.

Guattari defines three types of consistency: molar, molecular, and abstract. These are the "existential coordinates" that describe the state of an assemblage's being (*IM* 45). He places molar and molecular consistency at either end of his plane's horizontal axis (Figure 4.2). In order to describe the consistency of an assemblage of enunciation, he also provides the "coordinates of semiotic efficiency," plotted between "redundancies of resonance" and "redundancies of machinic interaction," which he places at either end of the vertical axis on his graph (*IM* 45–50). As I explained in a previous chapter, in linguistics and information theory, redundancy measures the efficiency of message exchange by calculating the quantity of information which could be discarded to facilitate mechanical or digital transmission, but which in human speech is essential to communication because redundancy counteracts interference, or "noise." Guattari's "redundancies of resonance" correspond to the end of the spectrum where human language is located, but for him the price to pay for the convenience of high redundancy is that it brings with it the constraints of expectations and norms imposed by dominant culture. At the other end of the vertical axis, "redundancies of interaction," or machinic redundancies, correspond to an assemblage's (or its components') degree of engagement with the real. Machinic redundancies are capable of "producing [an] effect in reality." Conversely, redundancies of resonance are signifying redundancies and thus are by definition "deprived of any access to reality" (*MB* 469/*AH* 294).

Guattari plots the Leninist cut onto the graphic plane according to its coordinates of consistency. He draws the cut as a short diagonal line located toward the molecular end of the existential axis, and the machinic redundancy end of the semiotic efficiency axis. According to a related matrix also

found in *L'Inconscient machinique*, the intersection of molecular consistency and machinic redundancy corresponds to “components of passage,” semiotic entities which for Guattari are capable of crossing between assemblages, effectuating real changes, setting off new behaviors (*IM* 49). This indicates that Lenin’s intervention made use of “strong resonance” (characteristic, for example, of imaginary, poetic or mystical effects), and of “strong interaction” (characteristic of assemblage-transforming components of passage like faciality or refrains) (*IM* 46–47). For Guattari, these are the language-effects and components capable of interacting directly with the real. Lenin produced a real effect because he made use of machinic semiotic efficiency, and because he operated on the molecular level of subjectivity and desire.

Diagonally opposite the Leninist cut lies Stalin’s dictatorship, plotted at coordinates corresponding to molar consistency and signifying redundancies of resonance. This is the zone of heavily crystallized, stratified redundancies, the realm of the signifier’s effects, and of pure formal translation (*IM* 46–47, 49). Stalinist bureaucracy champions the signifier. In contrast, the Leninist cut, a-signifying and diagrammatic, can only occur in the molecular, machinic zone of the consistency plane, the space where mapping becomes possible. Cartography is an a-signifying, diagrammatic activity, like mathematics or music. Guattari’s drawing graphically depicts the difference between Leninism and Stalinism in terms of two different grammatical politics: either one can “remain prisoner of the redundancy of signifying tracings” (Stalin), or one can “make a new map” with “new diagrammatic a-signifying coordinates” (Lenin) (*IM* 182–183). Revolution can only result from the second politics, claims Guattari, that of diagrammatism, of making maps. “This is what the Leninists did when they broke with the social democrats.” However, this Leninist transformation subsequently fell into “the field of redundancy of Stalinist bureaucratization.” For Guattari, this does not mean that the Leninists accomplished nothing, for “Nevertheless, the Leninists managed to pull a new matter of expression from the social field, a new map of the political unconscious, in relation to which all productions of statements . . . will have been forced to define themselves” (*IM* 183). Note that Guattari retains the idea that revolution transforms the meaning of statements, forcing them to “define themselves” according to a new map. Even though the once molecular, machinic Leninism eventually followed a trajectory leading to molar, signifying Stalinism, it did bring about an irreversible mutation. “One can no longer continue to write history in the same way after the Leninist invention” (*MB* 253).

In search of singularity

In yet another iteration of the Leninist cut, during his 1982 travels in Brazil Guattari recounts a more narrative version of the Leninist story. Here the revolutionary transformation is cast as re-conceptualization, rewriting, and reinterpretation:

When Lenin invented the Leninist war machine, he invented something relatively mutant . . . there's a rupture, a "Leninist cut," that is, something that appears in the way of considering militant action, theoretical writing, or the relation between social classes, nationalities, and so on. At the same time, the Leninist universe projects itself on the totality of what exists in the domain of the workers' movement, social democracy, trends in the field of peasant organizations, and things like that. Then one sees that the emergence of a historical novelty—and this is something also described by Sartre—rewrites and reinterprets the totality of potentials that already existed in stratified form. (*MB* 252)

Even though by now Guattari characterizes history as a machinic rupture or a cut across the continuum of an evolutionary phylum, he maintains that the effects are still perceptible in semiotic spheres of writing and interpreting, as well as on the subjective levels of conceptualization and of social relations. The "Leninist universe" he references corresponds to what he defines in *Cartographies schizoanalytiques* and *Chaosmosis* as a constellation of values and references which are integral to constructing a subjectivity capable of realizing the potentialities found in the machinic phyla ("U" for "universes of reference" is one of "four ontological functors," *CM* 60/88). It is a matter of liberating potentialities trapped in the strata.

Releasing already existent potentialities through rewriting and reinterpreting is crucial to bringing about social change. Even though a machinic cut like Leninism's can transform everything, since the machinic phylum remains a continuum, the cut cannot do away with what is already there, and can only intervene by negotiating the situation at hand. "Nothing is possible in the domain of creation that does not start from the phyla that are *déjà là*. It's then that a 'threshold' creativity takes place" (*MB* 252). One must begin with the history that has already occurred. What schizoanalytic maps seek out is the "threshold," the points of singularity where a new creative process can take off. The Leninists cross such a threshold. These points of singularity, which are also known as points of bifurcation, are explained by Ilya Prigogine and Isabelle Stengers in a book that was read

across the disciplines when it came out in French in 1979, and which Guattari read and admired. In it they trace theories of complexity from Newton to the rise of thermodynamics up through Prigogine's work with the irreversible processes of the far-from-equilibrium systems of chemistry and biology. They show the wide-ranging implications for the world at large of Prigogine and his team's groundbreaking work. "We know today that both the biosphere as a whole as well as its components, living or dead, exist in far-from-equilibrium conditions" (Prigogine and Stengers 1984: 175). In 1982 Guattari describes his understanding of revolution in terms that echo the concepts explicated by Prigogine and Stengers. He states that a revolution is "a *process* that produces history," "a repetition that changes something, a repetition that brings about the *irreversible*," "the production of a *singularity* in the very existence of things, thoughts, and sensibilities," "a process of existential *singularization*" (MB 258–259, my emphasis). In his final works, thinking in terms of machinic phyla, Guattari comes to associate what he once called "true history," history as revolutionary rupture, with irreversible processes of existential singularization. Still differentiating his thinking from that of Lacanian structuralism, Guattari writes that what counts is "systems of transformation," not structural topologies (CS 41). To untangle this web of thought, I will be reading Guattari's later writings with Prigogine and Stengers.

Guattari borrows cautiously and judiciously. He uses the term singularity much more broadly than do the sciences of complexity. For him, singular, singularity, and singularization convey at least two distinct senses: (1) in reference to an autonomy from dominant models, implicated in creativity and the line of flight; and (2) in reference to a rupture in the phylum or in the plane of consistency. The first definition of "singular" and its derivatives is very similar to Deleuze's use of the same terms, which is related to other Deleuzian ideas like haecity, event, and individuation.¹² The second meaning corresponds most closely to the scientific notion of point of singularity as explicated by Prigogine and Stengers, but in Guattari's writing (as well as in much of the joint writing) the two senses are not unrelated. During his travels in Brazil, Suely Rolnik asks Guattari to discuss his various ways of describing "the processes of rupture with the mode of production of capitalistic subjectivity," and she lists the following phrases: process of singularization, autonomization of subjectivity, minoritization, autonomy, marginality, molecular revolution. He responds that "I agree that there's an equivalence in these formulas," but he goes on to make distinctions within this lexicon of transformation. He states that molecular revolution and the function of autonomy correspond to "an ethico-analytico-political attitude,"

whereas “‘Autonomy’ refers more to new territories, new social refrains.” Minority is understood “more in the sense of a becoming,” while marginality “would be more sociological” (*MB* 171–172). At one point during his travels he defines “process of singularization” casually, as “simply being able to live or to survive in a particular place, at a particular time, and to be ourselves” (*MB* 94). However, in his direct response to Rolnik’s question, “process of singularization” proves to be the most technical of the terms, defined as “the more objective event of a singularity detaching itself from layers of resonance and causing the process to proliferate and broaden” (*MB* 172). This definition comes very close to that of points of singularity or bifurcation in thermodynamics.

The future state of a complex, open dynamic system is by nature unpredictable. Using a graph, scientists can only ever plot out possible trajectories. On the graph depicting possible futures, points of bifurcation or of singularity appear as special points marking thresholds which, if crossed, would result in a sudden loss of equilibrium, transforming the system into a different state. James Clerk Maxwell, a leading contributor to the theory of thermodynamics during the late nineteenth century, explains that

Every existence above a certain rank has its singular points . . . At these points, influences whose physical magnitude is too small to be taken account of by a finite being, may produce results of the greatest importance. All great results produced by human endeavor depend on taking advantage of these singular states when they occur. (Maxwell 1882: 443; cited in Prigogine and Stengers 1984: 73)

Although thermodynamics was primarily concerned with heat engines, Maxwell here indicates the relevance of the theory to “human endeavor,” and he also includes several examples of points of singularity from the domain of daily life: a frost-loosened rock balanced on a point of the mountainside that sets off an avalanche, a little spark that starts forest fire, a fighting word that leads to a brawl, a spore which causes potato blight.

In characterizing singularization as a process, Guattari explicitly links singularity to Prigogine and Stengers. He defines process as

a continuous sequence of events and operations that can lead to other sequences of events and operations. The process implies the idea of permanent breakdown of established equilibriums . . . Here the term comes close to what Ilya Prigogine and Isabelle Stengers call ‘dissipative processes’. (*MB* 478–469/*AH* 293)

The theory of bifurcation is just such a dissipative process (Prigogine and Stengers 1984: 14).¹³ Note that Guattari's definition of process includes both "continuous sequence" and "permanent breakdown," suggesting the same paradoxical description of history as that encapsulated by his vision of the phylum-as-continuum subject to revolutionary cuts like that of Leninism. "For better or for worse, crucial social transformations always seem to 'originate' in points of singularity, 'accidents' of history" (*IM* 122 n. 18). This is what makes history machinic. It should not be forgotten that thermodynamics, the immediate theoretical precursor to Prigogine's far-from-equilibrium systems, is the science of the modern industrial machine. "Rather than understanding history as basically being filled with machines, I think that, on the contrary, machines—all machines—function in the same way as real history insofar as they remain constantly open to traits of singularities and creative initiatives" (*IM* 200). Even linguists, insists Guattari, should take into account "contingent socio-historical characteristics and points of singularity" (*IM* 23). René Thom's catastrophe theory relies on the mathematical notion of singularities. Guattari cites examples of Thom-style catastrophes which took place at the dawn of capitalism: invasions, epidemics, the hundred years war, etc. (Thom 1983; *IM* 119).

The unpredictable, contingent, accidental aspect of history means that it is impossible to accurately predict the results of militant strategies, as demonstrated by the study of near-bifurcation systems: "To restore both inertia and the possibility of unanticipated events—that is, restore the open character of history—we must accept its fundamental uncertainty" (Prigogine and Stengers 1984: 207). Guattari concedes that a revolution cannot be programmed, and must, like history, always be a surprise, always unpredictable, but, he adds, "That doesn't prevent one from working for revolution, as long as one understands 'working for revolution' as working for the unpredictable" (*MB* 259). History's unpredictability, accidents, and catastrophes amply demonstrate that the machinic phylum, although a continuum, is no "majestic trajectory," for even in a case such as the phylogeny and ontogeny of animal behavior, evolution is subject to "accidents" which can be "historical," claims Guattari based on his readings in ethology (*IM* 136). This idea of evolutionary accidents is borne out in the study of near-bifurcation systems, which according to Prigogine and Stengers "seem to 'hesitate' among various possible directions of evolution." In these moments of hesitation within a system,

[a] small fluctuation may start an entirely new evolution that will drastically change the whole behavior of the macroscopic system. The analogy

with social phenomena, even with history, is inescapable. Far from opposing 'chance' and 'necessity,' we now see both aspects as essential in the description of nonlinear systems far from equilibrium. (Prigogine and Stengers 1984: 14)

This is a good description of history as machinic phylum, a continuum subject to sudden ruptures and changes. The revolutionary moment seized by Lenin and the Bolsheviks is a point of bifurcation or a singularity. This is history as revolution, but Guattari is now theorizing it in a very different idiom than that of his Lacanian days.

I have already cited Guattari's contention that the Leninist break changed everything. This can now be explained as an instance of the "irreversibility" which for Prigogine and Stengers is the most salient characteristic of far-from-equilibrium systems such as those that compose all living entities. "Biological systems *have a past*," they observe, and this feature imposes a clear divide between the law-driven, reversible dynamics of closed systems and the unforeseeable, irreversible dynamics of open systems. The behavior of basic bifurcation systems depends on their history (Prigogine and Stengers 1984: 153, 161). Similarly, Guattari insists that the machinic phylum is not a law, but that it instead marks "the irreversibility of machinic mutations" (*RM* 327–328). The "phenomena of irreversibility . . . constitute the profile of history," says Guattari in response to a question about the war machines in *A Thousand Plateaus*. He adds that "there is no repetition of history," a "specificity" which he says he and Deleuze "marked . . . at the level of the machinic phyla." The phyla are "irreversible," as evidenced, for example, in "the fact that once a certain kind of writing is discovered, it is never lost." Despite its continuity, there are "abrupt breaks in machinic history," and this is what "punctuates history, giving it its character of irreversibility" (*MB* 250–251; see also 257).¹⁴ Such a view of history is compatible with contemporary understandings of biological evolution. Prigogine and Stengers point out that in watching embryological development on film one sees "jumps corresponding to radical reorganization followed by periods of more 'pacific' quantitative growth." They explain this in terms of dissipative processes: "We might speculate that the basic mechanism of evolution is based on the play between bifurcations as mechanisms of exploration and the selection of chemical interactions stabilizing a particular trajectory" (Prigogine and Stengers 1984: 171–172).

As a political militant, Guattari's vision of history includes the presumption that change is possible. Notions like points of singularity provide him with a way to theorize how molar-level transformations can be brought

about by molecular-level changes. Near a point of singularity, a small intervention can produce significant results: “the amplification of a microscopic fluctuation occurring at the ‘right moment’” can result “in favoring one reaction path over a number of other equally possible paths. Under certain circumstances, therefore, the role played by individual behavior can be decisive” (Prigogine and Stengers 1984: 176). The role of individual behavior in effectuating system-wide change is of paramount importance to small militant groups, such as those frequented by Guattari. Molecular revolution can be understood as the cultivation of near-bifurcation states where an individual or small group can make a difference. “A trajectory may become intrinsically indeterminate at certain singular points . . . An infinitesimal perturbation would be enough” to change it (Prigogine and Stengers 1984: 73). Militants should not despair in the face of dominant power, but should instead seek points of singularity at which even a modest intervention could bring about a transformation. It is a matter of recognizing the difference between “states of the system in which all individual initiative is doomed to insignificance,” and choosing to focus actions on “bifurcation regions in which an individual, an idea, or a new behavior can upset the global state” (Prigogine and Stengers 1984: 206).

Guattari defines molecular revolution as “the whole range of possibilities of specific practices of change in the way of life, with their creative potential.” This is “a condition for any social transformation. And there is nothing utopian or idealistic in this” (*MB* 261). History is made not only by established political parties, but also by “this kind of molecular wave” (*MB* 76). However, from the standpoint of militant politics, molecular revolution is “only one side of the story.” Struggle cannot be waged solely on the molecular level, warns Guattari, because “things like poverty exist,” and combating such societal-level problems necessitates interventions on the molar level of economics and social policy, and thus “in order to struggle against this situation, the affirmation of molecular movements is not enough.” Drawing examples from contemporary politics (he is writing in 1982), Guattari argues that given problems like a state’s excessive military expenditures or the effects of capitalist food markets on the third world, “a molecular movement can’t survive for long without establishing a politics in relation to existing forces, economic problems, the media, and so on” (*MB* 199–201). This is why molecular revolution “complements rather than opposes traditional notions of social revolution in today’s world” (*CY* 46/162). He adds that, “The question of political intervention on a social global level thus appears to me to have become inseparable from its connections at this molecular level” (*CY* 47/*AH* 163). Molecular revolution

remains necessary, however, because subjective factors can be addressed only at this level. Strategic relations and socioeconomic determinations still exist, but they cannot on their own explain “the principal current historical events of the planet.” Although “the approaches based on economic and social contradictions remain valid,” to understand phenomena like the rise of religion in Iran, Afghanistan, or Poland “it is necessary to consider the problematic of the economy of desire” (*MB* 197).

For Prigogine and Stengers, the possibility that individual behavior can prove decisive even in a large system means that “Self-organization processes in far-from-equilibrium conditions correspond to a delicate interplay between chance and necessity, between fluctuations and deterministic laws” (Prigogine and Stengers 1984: 176). This idea of self-organization confronted with determinism informs Guattari's thinking regarding autonomy. “What characterizes a process of singularization (which, at one time, I called the ‘experience of a subject group’) is that it is self-modeling.” This means that the process

captures the elements of the situation . . . constructs its own types of practical and theoretical references, without remaining dependent in relation to global power, whether in terms of economy, knowledge, technology, or segregations and prestige . . . Once groups acquire this freedom to live their processes, they acquire the ability to read their own situation.

This will make creativity possible, and enables the preservation of “this very important character of autonomy” (*MB* 62). The presence of self-organization within a system suggests the possibility that groups or collective assemblage of enunciation can, and even must, succeed in detaching themselves from dominant structures. In *Chaosmosis* Guattari will express this idea in terms of Humberto Maturana and Francisco Varela's auto-poiesis, which he extrapolates from their biological definition in order to designate more broadly the “processes of the realization of autonomy” (*CM* 7/19–20, 39/61–62).

However, Guattari questions the usual distinction between centralized authority and autonomy, citing highly structured political organizations such as that of the established left-wing parties or trade unions, and militant groups wishing to remain autonomous. He notes that there appears to be a choice to be made between centralized organization and autonomous spontaneism—that is, between on the one hand the organizational efficiency of centralism, and on the other hand the risk of disorder and

ineffectiveness which can result from autonomy and spontaneism, and especially from anarchism—but he finds that this organization/autonomy dichotomy does not hold up because “The dimension of organization is not on the same plane as the issue of autonomy” (*MB* 246). This does not for him imply advocating the coexistence of both forms of organization, the centralized and the autonomous, an arrangement whose shortcomings he sees in Leninism, which allowed for the both a strong Central Committee and “the mass organizations, where everyone does his own little job, everyone cultivates his garden.” The problem with this arrangement is that the Party winds up manipulating and controlling the autonomous groups because it sets the tasks. Guattari therefore redefines autonomy as existential singularization, which does not mean an absence of organization; he instead proposes a rhizome of autonomous singularized subjectivities as an alternative form of organization. “The function of autonomy . . . is what will make it possible to capture all impulses of desire and all intelligences . . . to place them in a huge rhizome that will traverse all social problematics” (*MB* 247). Self-organization for Guattari entails allowing subjective singularization to flourish. “We are not confronted with a subjectivity given as in-itself, but with processes of the realization of autonomy, or autopoiesis” (*CM* 7/19–20). In advocating a rhizomatic mode of organization which thrives on subjective singularity, “[i]t is entirely a question of a collective reclaiming of dynamics capable of destratifying moribund structures and reorganizing life and society according to other forms of equilibrium, other universes” (*AH* 54).

Writing about the 1980s, which he calls “the winter years” (*Les Années d’hiver*, *AH*), Guattari wonders why social revolution has not accompanied “the continuous technico-scientific revolutions.” He speculates that

Either these revolutions will be matched by mutations in social subjectivity capable of steering them ‘far from’ existing ‘equilibria’ toward emancipatory and creative paths, or . . . they will oscillate around a point of conservatism, of a state of stratification and stagnation, with ever more mutilating and paralyzing effects. Other systems of inscription and regulation of social flows are conceivable on this planet! All fields of aesthetic and scientific creation have been intruded by models which break from oppressive hierarchies (models which are non-arborescent, ‘rhizomatic,’ ‘transversalist’). Why not in the social domain? (*AH* 37).

Guattari’s message is that it is possible to change existing modes of subjectification, semiotization, and sociality, but that new models are needed

to effectuate such a change. Throughout contemporary politics of the late 1980s, Guattari sees a search for subjective singularization as a yearning to achieve autonomy from dominant structures. This for him has world historical implications. With the "global diffusion of the mass media," he argues in his 1992 *Chaosmosis*, subjective factors have come to the forefront of world politics, such that "contemporary history is increasingly dominated by rising demands for subjective singularity." In this demand he sees the grounds for a "collective existential mutation." Unfortunately, this mutation may just as easily be for the worse as for the better, since singularity is so often being sought not in liberatory movements but in conservative returns to tradition, such as the growth of nationalisms and fundamentalisms in Eastern Europe and the Middle East (*CM* 2-4/12-14). Subjectivity is to be understood to involve two levels, neither of which coincides with the individual; rather, there is a level below the individual and a level beyond. Subjectivity "inhabits infrapersonal processes (the molecular dimension)," and subjectivity also has a social dimension insofar as it "is essentially assembled in terms of concatenations of social, economic, and machinic relations" and is "open to all socio-anthropological determinations and economic determinations" (*MB* 93).

In order to understand such problems of subjectivity, Guattari proposes another universal history schema, a "triad" of capitalist "ages" that he claims "has no other aim than to clarify certain problems—for example, the current rise of neoconservative ideologies and other, even more pernicious archaisms" (*GR* 98/*CS* 14; see also *CY* 22-23/*AH* 117). The "age of European Christianity," the "age of capitalist abstraction or deterritorialization," and the "age of planetary computerization" make up this triadic schema, which is found in the introduction ("Liminaire") to his 1989 *Cartographies schizoanalytiques*, and although Guattari does not include a drawing here, based on his text one could easily construct a matrix similar to that of Figure 4.1 (*GR* 95-108/*CS* 9-26). In summarizing his typology below, I have indicated what would be column headings in bold and possible row headings in italics:

AGE OF EUROPEAN CHRISTIANITY. *Path/voice:* Power. *Semiotics:* Territorialized. *Consistency factors:* (1) Flexible monotheism; (2) Disciplinary grid established through a new religious machine; (3) Data banks of knowledge and technique (guilds, monasteries, etc.); (4) Flowering of machinism; (5) Machines of subjective integration like clocks, church music.

AGE OF CAPITALIST DETERRITORIALIZATION. *Path/voice:* Knowledge. *Semiotics:* Deterritorialized. *Consistency factors:* (1) Printed text;

(2) Steam machines and steel; (3) Manipulation of time (chronometry, monetary credit); (4) Biological revolution (such as Pasteur, biochemistry).

AGE OF PLANETARY COMPUTERIZATION. *Path/voice:* Self-reference. *Semiotics:* Processual. *Consistency factors:* (1) Media and telecommunications double speech, writing; (2) Custom-made, chemically produced materials (i.e. plastic); (3) Microprocessors alter temporality; (4) Biological engineering (reformulates ethological and imaginary references).

Note that all three of these “ages” belong to capitalism, unlike the triad in Figure 4.1 which includes primitive societies. The label “audio-visual” from the 1970 matrix has by 1989 become “computerization” (*informatisation* in French, which nicely encompasses “information”). The addition of the adjective “planetary” indicates Guattari’s attentiveness to globalization, both in the political-economic sense as rendered by his phrase “Integrated World Capitalism,” and in the ecological sense captured by his term “ecosophy” (to be discussed in the Afterword). Guattari warns that “It goes without saying that so perfunctory a model cannot even claim to begin to map concrete processes of subjectification” (*GR 98/CS 14*). The model does, however, indicate various possibilities, enabling critical comparison.

Each of these “ages” is to be understood as a “component” or “figure” of “capitalist subjectivity” (*GR 98, 102/CS 15, 20*). As I pointed out earlier in regard to the Leninist-Stalinist rhizome, an “age” can only cohere by achieving “existential consistency.” Understood in terms of an open dynamic system, consistency can be defined as the minimum stability needed to maintain a state of equilibrium or near equilibrium. For each of the three ages in this schema, Guattari identifies a heterogeneous array of “consistency factors,” which I have numbered in the outline above. Different kinds of features may dominate in different times and places, and so Guattari warns that it is misleading to go into historical analysis armed with a model such as economic determinism. Transformations only emerge as a result of multiple factors—technological, scientific, economic, political, etc.; real mutations overflow any one structure or feature (*IM 48 n. 7*). One type of factor may dominate in some eras, but not in others (*CM 1/11–12*). For example, Guattari claims that his age of European Christianity owes its consistency in part to “flexible monotheism” and a “disciplinary grid” established by the “religious machine.” However, religion is not mentioned among the “consistency factors” holding together the eras of capitalist deterritorialization or planetary computerization. Similarly, discoveries in the biological sciences become consistency factors in the latter two ages, but do not figure into the first.

Even as he identifies consistency factors for each era of his triad, he at the same time describes the three ages as “zones of historical fracture” (*GR 98/CS 15*). The schema, then, can be read as a mapping indicating bifurcation regions in the systems involved in producing capitalist subjectivity. I have already mentioned that the stated purpose of this triad is to try to understand contemporary mutations in subjectivity which lead to nationalism, traditionalism, and archaism. Guattari hypothesizes that returns to tradition arise in reaction to capitalism’s deterritorialization and consequent “destruction of social territories” which were based on “collective identities and systems of traditional values.” Although capitalism at the same time launches a “reterritorialization” which artificially recomposes individual and social frameworks, in our present moment the “machinisms” of communication and information technologies have deterritorialized human faculties like memory, perception, hearing, understanding, or imagination. Recent tendencies toward conservatism may result from a failure to come to terms with these mutations, suggests Guattari (*CS 54*). The “contemporary subjective cocktail” is characterized by “this mixture of archaic attachments to cultural traditions that nonetheless aspire to the technological and scientific modernity” (*CM 3–4/14–15*).

This is why Guattari calls for a “post-media revolution to come,” which would replace capitalism’s deterritorialization-reterritorialization mode of subjectivation with “alternative Assemblages of subjectivity production” (*CS 55*; see also *SS 106/AH 273*). He does pessimistically concede that “one is forced to admit that there are very few objective indications of a shift away from oppressive mass-mediatic modernity toward some kind of more liberating post-media era in which subjective assemblages of self-reference might come into their own” (*GR 98/CS 15*). However at the same time he hints at possibilities, advising that “new practices of subjectivation” would entail new “regimes of semiotization” which would have to be constructed (*CS 60*). The ushering in of this new post-media era could be hastened by the “reappropriation” of communication and information technologies. Such a reclaiming of technology would need to combat the alienating effects of existing mass-media technologies by making them more interactive, accessible, and enabling of creativity (*CS 60–61*). The media could contribute to subjective singularization if only it were decentralized and made accessible to autonomous groups, recalling the free radio movements about which Guattari was very enthusiastic during the 1970s.¹⁵ The problem then becomes one of bringing about “a revolution in intelligence, sensitivity and creativity” (*GR 103/CS 22*); subjective singularization, in other words.

From the October cut to molecular May

Just a few months after the events of May 1968 Guattari offered an assessment of what happened. Using the psychoanalytic framework characteristic of his writing at this time, he explains that from the preliminary militant actions at Nanterre in March, “a signifying chain was unfurled.” He adds that phenomenologically, something happened “that would have been unimaginable only the day before.” He hypothesizes that a “transitional phantasy” enabled “a radical cut, another possible state of things, an absolute difference, a newborn and as-yet uncertain revolutionary engagement” (*MR211/PT233–234*, tm). At the same time, he already talking in terms of singularity when he analyzes the relationship between the student militants and the workers at the Renault factory, stating that the “goal” of the student group’s “analytic activity” was “to insure that the group . . . did not become a substitute for the signifying problematic of the mass’s movement.” The group’s analytic activity would instead

cut the signifying chain to open it up to other possibilities. The activity of the militant group is not aiming to provide ready-made rational answers to the questions they think people should be asking, but on the contrary, to deepen the problematic, and to bring out the singularity of each step of the historical process.

The student movement was heard around the world, he says, only because it managed to preserve its “singular message” (*MR 215–216/PT 238*, tm).

By 1973, Guattari in retrospect revises his initial judgment. He concedes that May ’68 did not bring about a revolutionary “cut.” The “absence of a great war machine” meant that no real break was possible (*RM 33–34*). However, he does insist that May ’68 did result in “small leaks of desire, small ruptures.” Even though even these small ruptures were “recuperated within a few weeks,” he claims that May ’68 “had extremely profound consequences that are still being felt.” “[A] new vision, a new approach to militant problems has come to light.” For example, before 1968 developments like the movements for prisoner or homosexual rights were unthinkable. Unfortunately, despite “an intense movement of waves of molecular revolution on all levels,” after May 1968 “none of those modes of action was able to pass to another level of struggle” (*MB 232*). “The real break will not come about until” militants examine their own ways of doing things, the bureaucratism of their organizations, their personal domestic relations, their mental health issues. “The struggle must be waged in our own ranks, against

our own interior police" (*RM* 33–34). This sort of self-reflection motivates Guattari to dwell on issues like processes of singularization, autonomy, and self-modeling.

Echoing the above-cited remarks of Prigogine and Stengers regarding the interplay of necessity and chance in bifurcation systems, Guattari describes May '68 as more chance than necessity:

I always come back to the notion of drawing rare combinations from the deck. The dynamics of singularities always results from the small miracle of encounters that may trigger transformations that are no longer singular because they can upset the entire planet. Certain events, the lamest as well as the most extraordinary, statistically must occur. It's foolish to think that '68 came about because of the pressure of the masses—what a joke. It was an amazing chain reaction released by a very unlikely semiotic scaffolding. (*CY* 33–34/*AH* 92, tm)

He underlines that it was "a very exceptional coming together." However, despite his borrowings from systems theory, he adds that "no energetic or thermodynamic image can account for it" (*AH* 92). This disclaimer reminds us that he only borrows scientific paradigms cautiously, temporarily, to make very specific points. Elsewhere he compares social revolution to scientific revolution.

The perspective of a real social revolution seems to me as open as the fields of possibility for scientific and esthetic revolutions . . . I do not see why the organization of social relations in a way that permits everyone to live and to flourish would be more difficult to solve than questions of quantum physics or genetic manipulation. (*CY* 46/*AH* 161, tm)

Here, he is not suggesting the application of quantum or genetic theory to social problems, but is instead comparing their degree of complexity. At the same time, he is indicating that the problem lies in questions of organization.

Just as carefully, Guattari avoids defining a paradigm for revolution, or even a set of revolutionary procedures, but instead he returns constantly to organizational issues. He does not propose a new program to replace the "old programme" that, he is convinced, doesn't work: "setting up a vanguard for the purpose of effecting syntheses, of building up a party as an embryonic State apparatus, creaming off the educated working class,"

leaving behind the *Lumpenproletariat* (MR 230/RM 64). There is no “working class motor of history, carrier despite itself of dialectical calculations,” neither is there any “intrinsic spontaneism of the masses” (AH 8). Every militant engagement must confront the singularity of its own situation, the very singularity that precludes recipes for revolution. “It’s not a question of adopting a programmatic logic, but a ‘situational logic’” (MB 236). Just as there is for Guattari no eternal, universal Oedipus complex, so there is no universal revolutionary “forever rising again from its own ashes.” This is not how history works, he says. “A revolutionary in France after May 1968 is, from the point of view of desire, a totally different breed from his father in June 1936” (MR 254–255/RM 19). Guattari’s returns to Lenin are not meant to imply that there could ever be a return of Lenin.

Still, there are lessons to be learned, which is why it is worthwhile to analyze the revolutionary movements of the past. Although May ’68 should not be held up as a “model,” Guattari says, it is possible to learn some “lessons” from the 1960s and the confusion that followed it. “Future militant assemblages,” “future machines of struggle,” and “mutant militant machines” would do well to take up certain “conditions,” he suggests, because certain “givens related to method . . . can be extracted from forms of struggle and modes of organization” used during the 1960s (AH 65, 68). May 1968 found a logic other than that of the politburo (MB 178). It instead relied on transversality, rhizome, “collective analytic procedures,” “collective and/or individual processes of singularization,” “dissident subjectivity,” “subject groups,” “engaged subjectivities.” To avoid falling into the logic of the politburo, aspiring revolutionaries should avoid avant-garde parties, the modeling of collective desire, compartmentalization, authoritarian discipline, orders from on high, mandatory ideological references, “blind Boy Scoutism,” “militantism impregnated with the rancid odor of religion,” “subjectivity pre-fabricated by the media and by new-look capitalism,” militarism, terrorism, and dogmatism (AH 66–68). It is a matter of paying close attention to matters of organization. During a 1972 interview he clarifies his concerns regarding militant political organizations:

It’s always the same old trick: a big ideological debate in the general assembly, and the questions of organization are reserved for special committees. These look secondary, having been determined by political options. Whereas, in fact, the real problems are precisely the problems of organization, never made explicit or rationalized, but recast after the fact in ideological terms. The real divisions emerge in organization: a particular

way of treating desire and power, investments, group-Oedipuses, group-super-egos, phenomena of perversion. (Deleuze 2004: 264/RM 65–66; also MR 231)

This is why he calls for “new alliances” that will replace both the power-hungry conspiracies and the purist sectarianism of the 1960s. These new alliances must “assume their finitude and their singularity,” which is another way of saying that they must not rely on the old revolutionary formulas (AH 68).

Even during the conservative 1980s, Guattari remains committed to the ideals, projects, and lessons of May 1968. His machinic thinking shapes his militant hopes for the future. “‘Objective’ conditions . . . lead one to hope for real revolutions—both molar and molecular—to provide the means to construct a new social order,” he declares, acknowledging the loss of credibility of the phrase “objective conditions” (CY 45/AH 161). He explains that it is neither the good intentions nor the “good nature” of the proletariat that gives him this hope, but rather “machinic phyla.” “Whenever a desire to create or an inclination to really live springs up, wherever something is happening, be it in the sciences or the arts, one encounters a rejection of contemporary systems of organization as they are today stratified and hierarchized” (CY 46/AH 161, tm). This again is a call for rhizomatic auto-organization, so that the system can be opened up to singularities, making transformation possible, in the hopes that the change will be for the better rather than for the worse. If the latter, then the machinic phyla offers the possibility of yet another mutation, then another.

I will conclude this chapter with the question of the multiple versions of the Leninist cut, a repetition with variation that may have something to do with the rhizomatic nature of the machinic phyla. I have identified four theories of the Leninist cut that appear in Guattari's solo writing: signifying cut, iconoclastic Eucharist, a Rhizome plotted on a graph of consistency, and mutant historical novelty. Let me add to those the three accounts of the Russian revolution in *Capitalism and Schizophrenia*. Guattari and Deleuze bring up the Leninist “cut” (translated “break”) twice in *Anti-Oedipus*, theorizing it slightly differently each time. First, they define “the task of the revolutionary socialist movement” as the organization of “a bipolarity of classes.” Lenin and the Russian Revolution “forged a class consciousness” by imposing a cut which forced even the capitalist countries to recognize class bipolarity (AO 255–256/304–305, tm). In a second discussion, the “Leninist cut” is characterized as a “libidinal cut at a precise moment, a schiz whose sole cause is desire—which is to say the rupture with causality that forces a

rewriting of history on a level with the real, and produces this strangely polyvocal moment when everything is possible" (377–378/453–454, tm). In the first case, Leninism cuts between the proletariat and the bourgeoisie. In the second, an irruption of desire cuts across causality. In *A Thousand Plateaus*, Lenin is mentioned twice in the "Postulates of Linguistics" chapter (plateau 4), where it is a question of a "rupture," not a cut, and the result is described as an "incorporeal transformation." Slogans and statements do play a similar role here as in Guattari's solo versions of the Russian revolution, but it is interesting that the term "cut" is not used in this version (ATP83/105).

Although I have shown a progression in Guattari's thought by presenting in chronological order his solo versions of Leninism, I would not claim that each new version replaces its predecessor. I would instead account for the seven returns to the October revolution as a manifestation of Guattari's insistence on multiple causality, as well as on the retroactive nature of historical analysis. One could certainly attribute the piecemeal quality of Guattari's historiography to his shortcomings as a writer, to his tendency to publish collections of occasional pieces and even notes rather than finished, polished monographs. At the same time, there are sound theoretical reasons for not offering a grand, unified theory of revolution, and this has to do with the notion of singularity. Revolution can only result from interventions which manage to cross the thresholds of singularity. There can never be a formula or program for bringing about events which can only arise out of fluctuating, uncertain, unpredictable, far-from-equilibrium situations, which by nature are multiply determined. This is why Leninism calls for multiple analyses, and why revolution is itself a militant cartography mapping multiple machinic phyla.

Afterword: from cartography to ecology

In 1989, Guattari introduced the “three ecologies”—environmental, social, and mental. Together these make up what he calls “ecosophy,” which he describes as “an ethico-political articulation” (*TE* 28/12–13). This idea is presented in two publications: a short book entitled *The Three Ecologies* which reads like a manifesto, and the final chapter of *Chaosmosis* which is much more theoretical. This new term, ecosophy, affords me an opportunity to think about the relationship between theory and politics in Guattari’s writing. As suggested in Chapter 4, political concerns often motivate Guattari’s theories. In other instances, he advances explicitly political concepts which include within them a militant program—“molecular revolution” and “ecosophy” are examples of such manifesto-concepts. The term ecosophy replaces the term molecular revolution, for historical reasons. The replacement of the one term by the other demonstrates the idea that there can be no standardized paradigm of revolution, that every revolution must take into account the singularities of its particular situation. Molecular revolution corresponded to the 1970s and 1980s. Ecosophy announces a program for the 1990s and beyond.

Although he had not previously been using the term “ecology,” mental and social ecologies had been Guattari’s focus all along, from his earliest essays in *Psychanalyse et transversalité* and up through his final books. With the introduction of ecosophy these are arguably still his primary concerns. He criticizes the green movement in France for being too narrowly focused on environmental issue alone, without taking into account broader social and political problems. I am not questioning the sincerity of Guattari’s concern about the physical condition of the planet—he raises real alarms about clean water and air, and the food supply, indicating the possibility of environmental catastrophe linked to human demographic growth and a reluctance to manage resources. I am instead suggesting that there is for him an added sense to the term environment, and that is its planetary scale. As noted in Chapter 2, Guattari has always been a thinker of the cosmic, as

well as of the molecular. He has said that ecosophy operates on three scales, the environment corresponding to the macroscopic, mental ecology to the molecular, and socius to an intermediary scale (Guattari and Spire 2002: 47).

The planetary dimension of environmental threats makes it necessary to conceive of ecosophy in terms of globalization, or “Integrated World Capitalism” (IWC) as Guattari calls it. “Molecular revolution” does not address this vast scale, hence the need to replace the term with a much more encompassing concept, but one which can take into account the molecular dimension as well (*CM* 133/184). The three ecologies of ecosophy do just this.

The only true response to the ecological crisis is on a global scale, provided that it brings about an authentic political, social and cultural revolution, reshaping the objectives of the production of both material and immaterial assets. Therefore this revolution must not be exclusively concerned with visible relations of force on a grand scale, but will also take into account molecular domains of sensibility, intelligence, and desire. (*TE* 28/13–14).

This statement reflects Guattari’s general approach to social and political issues: solutions must always address a large-scale problem, but the transformation must take place on the smallest scales in order to be effective. This is a basic premise of the sciences of complexity from which Guattari so often borrowed in his metamodeling enterprises. Environment itself is an important notion in both open systems theory and ethology, which study the behavior of entities within a larger milieu, as they interact with each other and with their surroundings.

The multilevel approach of ecosophy mirrors IWC itself, which Guattari describes as a three-sphere object. “At present, IWC is all of a piece: productive-economic-subjective” (*TE* 48/42). As he explains in more detail,

IWC forms massive subjective aggregates from the most personal—one could even say infra-personal—existential givens, which it hooks up to ideas of race, nation, the professional workforce, competitive sports, a dominating masculinity, mass-media celebrity. Capitalistic subjectivity seeks to gain power by controlling and neutralizing the maximum number of existential refrains. (*TE* 50/44–45)

It is as if capitalism itself has begun hallucinating universal history, hooking up race and nations to infrapersonal, molecular desire, but its ravings are

a component of its deterritorializing-reterritorializing *modus operandi*. Existential refrains for Guattari can work for capitalism, but they can also bring about processual singularization (*IM* 109–117; *GR* 158–171/*CS* 235–250). This is why Guattari writes that “In the end, the ecosophic problematic is that of the production of human existence itself in new historical contexts” (*TE* 34/21–22, tm). The new context is IWC, and ecosophy is the new historically contingent paradigm developed for this particular historically specific problematic.

If molecular revolution was the political facet of the theory of the machinic unconscious, then ecosophy is the political facet of schizoanalytic cartography. Indeed, in *Chaosmosis* Guattari identifies “an ecosophic object with four dimensions,” which are none other than the Flows, Phyla, Universes, and Territories of the drawings in *Cartographies schizoanalytiques* (*CM* 124/172). He likewise suggests that “ecosophic” is a synonym for “schizoanalytic” (*CM* 127/176). As he argues in his final works, the technological sphere depends on the subjective sphere in order to bring any project to fruition, even the building of a simple machine (see Chapter 3). The subjective dimension of mental ecology will thus have to join with social ecology in order to face the challenges posed at the level of the environment.

So, wherever we turn, there is the same nagging paradox: on the one hand, the continuous development of new technoscientific means to potentially resolve the dominant ecological issues and reinstate socially useful activities on the surface of the planet, and, on the other hand, the inability of organized social forces and constituted subjective formations to take hold of these resources in order to make them work. (*TE* 31/17)

Without a change in values and in political desire—Guattari’s “Universes of reference”—technology will continue to work against the planet, rather than for it. Guattari does not blame technology for nature’s ills, but rather insists that technology can work for the betterment of existence, or to its detriment. The key lies in finding ways to use technology toward singularizing ends.

Schizoanalytic cartography therefore morphs into ecosophic cartography in order to provide the paradigmatic support for realizing the political vision embodied in ecosophy’s three ecologies. As I argued in Chapter 3, for Guattari mapping not only analyzes but above all produces. Describing such a cartography as schizoanalytic highlights the production of subjectivity; describing it as ecosophic indicates that such a mapping can likewise produce new geopolitical formations. “The primary purpose of ecosophic

cartography is thus not to signify and communicate but to produce assemblages of enunciation capable of capturing points of singularity of a situation” (*CM* 128/177). To capture a point of singularity is to adapt strategies to the situation at hand, to recognize and confront historical contingencies. Though ecosophic cartography is not illustrative, it is an aesthetic endeavor, but in Guattari’s sense of the “ethico-aesthetic paradigm” (see Chapter 3).

In mapping out the cartographic reference points of the three ecologies, it is important to dispense with pseudo-scientific paradigms. This is not simply due to the complexity of the entities under consideration but more fundamentally to the fact that the three ecologies are governed by a *different logic* . . . It is a logic of intensities, of auto-referential existential assemblages engaging in irreversible durations . . . Process, which I oppose here to system or to structure, strives to capture existence in the very act of its constitution, definition, and deterritorialization. This process of ‘fixing-into-being’ relates only to expressive subsets that have broken out of their totalising frame and have begun to work on their own account, overcoming their referential sets and manifesting themselves as their own existential indices, processual lines of flight. (*TE* 44/35–36)

The ecosophic map does not just draw an image of the territories involved, it also reproduces and transforms the territories, indicating deterritorializing lines of flight, and identifying potentially dangerous reterritorializations. This is Guattari’s final militant cause, and one which characteristically aims large but thinks small. Ecosophy, as the globalized incarnation of molecular revolution, targets all of existence, one molecule at a time, with the aid of ontological diagrams whose purpose is to map, which is to say revolutionize, the complex connections between the machinic unconscious, autopoietic subjectivity, and the cosmos.

Notes

Introduction

¹ The primary critical reference on Guattari's solo writings remains Genosko 2002. My intent is to complement this comprehensive overview with a more targeted study, by situating Guattari in relation to Deleuze and Lacan.

In France, Guattari's contributions to the works co-written with Deleuze have often been ignored entirely, to the point that his name is sometimes elided. For a detailed account and bibliography of this neglect, see Antonioli 2005.

² Cover blurb of the University of Minnesota Press edition (Badiou 2000).

³ "Desiring anarchists" (or "anarcho-desirers" according to Badiou's translator), a pejorative label used by the Maoists during 1968 (Badiou 2000: 2).

⁴ Deleuze, for example, notes Michel Foucault's turn from discourse to cartography, with his concept of the panopticon (Bosteels 1998: 147).

⁵ In his discussion of this idea in the early 1960s, Guattari characterizes theoretical physics as "a gigantic signifying machine" capable of bringing new elementary particles into existence (*DS* 53). Later he redefines theoretical physics in terms of what he calls "a-signifying" semiotics. See Chapter 1.

Chapter 1 Lacan's couch, Guattari's institution

¹ The essay also appears in *MR* 73–81.

² As his friend and collaborator Jean-Claude Polack has observed, Guattari does not syncretistically "combine" theorists such as Marx and Freud, but instead "subverts" and "corrodes" their theories, "rubbing them against each other until they are nicely worn in" (Polack 2007: 130).

Stephen Zepke describes what Deleuze and Guattari do with Nietzsche, Spinoza, Bergson, Peirce, and Hjelmlev: "No creation without destruction, and Deleuze and Guattari are forever setting machines in motion which break with their previous determinates in order to create something new." I agree with this statement about the destructive phase of creation, but I am also asking what remains of a thinker—in this case Lacan—when Guattari (with or without Deleuze) goes on to create in the aftermath of the destruction. I propose that this destruction/creation process is related to what Guattari calls metamodeling, as described in the Introduction (Zepke 2005: 223).

- ³ Gary Genosko notes the importance of couch/institution distinction in Guattari's writing (Genosko 2002: 91–99).
- ⁴ The broadest overview is found in Dosse 2007.
- ⁵ Gary Genosko in Guattari 1996: 9; Oury and Depussé 2003: 198, 204. The La Borde clinic was founded by Oury in 1953, and has just over 100 beds for inpatients, with some outpatient services available as well. It is still located in a Loire Valley chateau in the village of Cour Cherverny, France.
- ⁶ From 1953 until his death in 1981, Lacan presented his teachings as public lectures, choosing a new theme each academic year. The lectures are grouped by year and theme into 27 “seminars.” Many of these have been published as individual volumes under the title *The Seminar of Jacques Lacan* (W.W. Norton), while others exist only in manuscript form, and as notes taken by seminar attendees.
- ⁷ The grid at La Borde was subject to a great deal of discussion and renegotiation, as problems continually cropped up. “This constant activity of calling things into question seems pointless and confusing . . . and yet it is through this activity alone that individual and collective assumptions of responsibility can be instituted, the only remedy to bureaucratic routine and passivity generated by traditional hierarchical systems” (CY 191).
- ⁸ This remark primarily targets the then-typical psychiatric hospital which the psychiatry reformers saw as organized like a prison, with patients dressed in uniform pajamas and isolated in their own rooms, discouraging circulation and social interaction.
- ⁹ On the conceptual framework of institutional psychotherapy, see Oury et al. 1985: 132–133. On pedagogy, see Vasquez and Oury 1967. The interview with Guattari from this book appears in English in GR 121–138. Guattari complains that the term “institutional analysis” has been hijacked and put to unintended uses (GR 122).
- ¹⁰ See for example Lacan 1991b: 208–212, 220–224. Like Guattari after him, Lacan's approach to the therapeutic relationship was pragmatic, since for him “the handling of transference and one's notion of it are one and the same, and however little this notion is elaborated in practice, it cannot but align itself with the partialities of the theory” (E 504).
- ¹¹ In both “Transference” and “Transversality,” Guattari references Belgian psychiatrist and psychoanalyst Jacques Schotte, whose essay on transference was published in the same journal issue as Guattari's. Schotte situates Freud's notion of transference within the context of the scientific thought of his time, and notes two threads of meaning which eventually meld into one. The second, larger meaning is that of the affective relation, especially between analyst and analysand. Guattari here draws primarily on its first, more literal meaning, that of transport, translocation, or displacement. The transfer of values was one meaning of the term during Freud's time. Freud finally settles on the term *Uebertragung* to describe the phenomena he was grappling with. Schotte notes a number of meanings and associations for the German *Uebertragung*: transport, transmission, transposition, gift, tradition, translation, metaphor, contract, pact, agreement (Schotte 1965).
- ¹² Guattari sees transference in the relationship between mother and fetus. “What is transmitted from the pregnant woman to her child? Quite a bit: nourishment

and antibodies, for example.” His argument here draws on the notion of message transmission in biological processes. He extends the biological to the social by insisting that “what is transmitted above all are the fundamental models of our industrial society” (GR66). In a later essay, he explains that a child in utero would be able to receive a “message” about “industrial society” via the body of a mother, as in the case of morning sickness made more severe by the mother’s stress in the face of power formations at the level of the socius. In other words, transference need not be verbal, and physical transmissions (of the mother’s stress affecting the fetus, for example) may carry social messages, such that “the message is carried not via linguistic chains, but via bodies, sounds, mimicry, posture and so on” (MR 164–166).

¹³ The concept of the performative in full speech is taken from Austin 1962; Lacan 1988: 107 n. 1.

¹⁴ This typology of groups is in fact developed over time in several different essays, which I will summarize in the following paragraphs at the risk of giving it a coherence that Guattari never quite supplied (PT 42–45; GR 61–68/PT 52–58; MR 14–17/PT 76–79; CY 191–193).

¹⁵ Note that Guattari is already using idea of territorialization, 5 years before he meets Deleuze.

¹⁶ The S.C.A.J. (The Sub-Commission for Daily Activities) included many of the most socially and verbally challenged patients at the clinic. Its meetings sometimes accomplished very little in terms of tasks, but they were attended by about half of the patients, and were very good at generating interaction and social contact (PT 35–38).

¹⁷ Oury and Depussé 2003: 172. In Lacanian terms, for psychotics the paternal structure has been foreclosed. Whereas neurotics can often be overly attuned to matters of authority and hierarchy (hence the efficacy of transference for Lacanian analysts), psychotics are not, since by Lacanian definition, they know no big Other. By the 1970s, Guattari has abandoned this theory of psychosis, referring to it disparagingly with the shorthand phrase “name of the father.”

¹⁸ The second group published the journal *Recherches* (CY 195).

¹⁹ Guattari sometimes expresses his somewhat grumpy annoyance with specific neurotic clients from his private practice. See for example AOP 110–111/162; 116–117/169–170; 151/213. To my knowledge, he does not speak of his psychotic patients in such terms.

²⁰ “I believed that the single trait [*trait unaire*] was not appropriate for a general semiology, but that the sign-point should be. But the single trait is the differentiating phallus that founds the notion of identity in the mirror—hollow identity [*identité en creux*], identity of lack, etc. Whereas the sign-point is the cancerous contamination of set theory” (AOP 34/47).

²¹ The lecture on *The Purloined Letter* has been published several times. For the first French version, see Lacan 1957. In English, see E 6–48; S2 191–205. See also the reproduction of the text along with many commentaries on it, including an essay by Jacques Derrida, in Muller and Richardson 1988. My assumption is that Guattari and Oury attended the original lectures in which Lacan spoke of the game then the Poe tale. They would have had notes from the lectures, then probably had a copy of the journal where the seminar was published in 1957.

- ²² “Repetition automatism” refers to recurring psychic phenomena such as the nightmares and flashbacks symptomatic of what today is called posttraumatic stress disorder. Freud had originally characterized dreams and other unconscious manifestations as partaking in a pursuit of pleasure and thus was surprised when shell-shocked combat veterans reported the uncontrollable repetition of their unpleasant battlefield experiences. In *Beyond the Pleasure Principle*, he developed the notion of the death drive to account for repetition automatism.
- ²³ The L-schema shows “the specular relationship with the other” as the ego in an imaginary relation to its mirror image. This relation is interposed with the relation between the Subject and the Other (*E* 40). “The schema shows that the dyadic relation between the ego and its projection *a a'* (indifferently its image and that of the other) constitutes an obstacle to the advent of the subject, S, in the locus of its signifying determination, A” (Jacques-Alain Miller in *E* 859).
- ²⁴ Guattari does not explicitly cite this lecture, but he does refer to Lacan’s *trait unaire*, and this chapter provides the most extended discussion of it that I have found (Lacan 1991b: 405–422). On the translation of the term into English, see Evans 1996: 81.
- ²⁵ Elementary particles are mentioned several more times in this essay (*DS* 43, 46–47, 55).
- ²⁶ “Félix had talked to me about what he was already calling ‘desiring machines’: he had a whole theoretical and practical conception of the unconscious as a machine, of the schizophrenic unconscious” (Deleuze 1995: 13–14).
- ²⁷ “Machine and Structure” was given as a paper at Lacan’s École Freudienne de Paris in 1969 (*PT* 240 n. 1). Deleuze and Guattari’s mutual friend Jean-Pierre Faye recounts that Lacan asked Guattari to write the paper for *Scilicet*. Faye eventually published the text in his own journal, *Change* (Faye 2000: 92, 97). Historian François Dosse tells a slightly different story, involving a first promise of the article to Roland Barthes for his journal *Communications*, followed by Lacan demanding the article for *Scilicet*, but then never publishing it (Dosse 2007: 268–269). In both Dosse’s and Faye’s versions, the text winds up being sent to Deleuze, and serving as a point of departure for their first conversations.
- ²⁸ One of Guattari’s research coalitions, as mentioned above.
- ²⁹ Lacan 1991a. For a contextualized overview of the development of these concepts over time, see Marini 1992: 62–70.
- ³⁰ The “interesting statements on the family” that Guattari references situate the rise of the nuclear family within a broad sociohistorical context, a framework which will become unusual in Lacan’s more familiar, more strictly “structuralist” work. For example, on the page which Guattari references, Lacan remarks that “the family unit’s power to captivate the individual has waxed as the family’s social power has waned.” He says of the Oedipus that

Experience has clearly shown that this triangle is merely the reduction, produced by an historical evolution, to the natural group of a formation in which the authority reserved for the father—the only remaining trait of its original structure—proves in effect to be ever more unstable, nay obsolete; the psychopathological impact of this situation must be related both to the tenuousness of the group relations that it provides the individual with and to the ever greater ambivalence of this structure. (*E* 108)

- ³¹ Guattari during a 1972 roundtable discussion in Deleuze 2004: 222, 224.
- ³² In this section of *AOP*, Guattari toys with incorporating Nietzsche's "will to power" into his theory of the sign, but his power-sign depends just as much on mathematics, physics, and Marxism. He will drop the term power-sign, but will retain a distinction between powerful and disempowered semiotic elements (*AOP* 224–253/329–360). Also in relation to power, Guattari discusses in some detail Deleuze's study of Spinoza, whose notion of "substance" he compares to Hjelmslev's (*AOP* 254–279/361–395).
- ³³ For example, an extensive reflection on Hjelmslev (*AOP* 201–223/291–320) is condensed by Deleuze into one long paragraph (*AO* 241–243), observes Stéphane Nadaud in the French version of *AOP*, p. 397 n. 1.
- ³⁴ Other linguistic texts which Guattari cites elsewhere also evoke this idea of a general semiology. Émile Benveniste attributes grand semiotic ambitions to Peirce, whom he characterizes as having spent a lifetime developing "an increasingly complex apparatus made up of definitions whose aim is to divide up into different orders of signs the totality of the real, the conceived, and the lived" (Benveniste 1969: 1). A. J. Greimas too called for a general semiotics, but he limits his scope to signifying human objects (Greimas 1987: 17–19).
- ³⁵ Most of the following is taken from the "Semiotic Scaffolding" section of the 1977 edition *La Révolution moléculaire* (*RM* 241–376, partially translated in *MR* 73–107, 120–134, 144–172, and *GR* 148–157). These categories also appear in chapter 7 of *L'Inconscient machinique*.
- ³⁶ The term "code" here is used quite differently than in the *Anti-Oedipus*, where it refers primarily to social and psychic processes which channel desire. By the late 1970s Guattari had explicitly widened the definition to include not only "semiotic systems" but also "social flows and material flows" (*MR* 288). The semiotic component of "natural encoding" designates the work of codes in material flows. Social codes would be classified among the signifying or symbolic semiologies, depending on whether the context is a traditional or modern society; computer codes would belong to the category of a-signifying diagrammatic components.
- ³⁷ *Symbolic semiologies* are in fact excluded from Lacan's Symbolic Order, which would correspond to Guattari's *signifying semiologies*. While Guattari does include the Real and the Symbolic in his model, he does not to my knowledge include the Imaginary. I suspect that this is because he has by now rejected Lacan's theory of psychosis, as well as his developmental model which culminates in the Signifier.
- ³⁸ The term "strata" appears in the title of a Hjelmslev essay frequently cited by Guattari, "La Stratification du langage" (Hjelmslev 1971).
- ³⁹ For a fascinating discussion of Deleuze and Guattari's general mistrust of language, see Lecercle 2002: 8–40.
- ⁴⁰ Matter of expression, matter of content, substance of expression, substance of content, form of expression, form of content. The categories are taken straight from Hjelmslev, but the drawing is Guattari's.
- ⁴¹ Hjelmslev never actually envisaged considering "matter" independently of signifying semiotics, admits Guattari (*MR* 99/*RM* 265).
- "Matter" is often translated into English as "purport," which is "a technical term in Hjelmslev's vocabulary meaning unformed matter" (*GR* 157 n. 1). In French,

it is rendered either by *matière* or by *sens*, which Guattari finds fortuitous, given his definition of the category.

- ⁴² For Hjelmlev, substance exists only in its formed state. Guattari transforms Hjelmlev's model into something completely new by claiming that the a-signifying and the a-semiotic entail bypassing substance, which Hjelmlev never considered possible, because he thought only in terms of language (*MR 99/RM 265*).
- ⁴³ Guattari and Deleuze both have demonized representation, together and separately. For the most thorough critique, see Deleuze 1990: 253–279.
- ⁴⁴ The biologist explains in his article that he and the linguist discussed the comparison of the genetic code to the linguistic code, without either one convincing the other of his position (Jacob 1974: 200). See also *IM 210* n. 6.
- ⁴⁵ *MR 99/RM 265*; *MR 133–134/RM 336–338*; *RM 341–344*. For a thorough critical account of the abstract machine in Guattari and Deleuze, see Zepke 2005.
- ⁴⁶ Peirce considered the diagram to be a kind of image or icon, which would place it in the realm of symbolic semiologies, whereas Guattari redefines the diagram as an articulation of form directly onto matter, making it an a-signifying semiotic (*MR 170/RM 310*).
- ⁴⁷ On Chomsky, Guattari tends to cite Ruwet 1973; original French published in 1967.
- ⁴⁸ Martinet 1964: 22–24; “La Double articulation du langage,” in Martinet 1968: 1–35; Martinet et al. 1969: 169–170.
- ⁴⁹ The 1968-era irruption of linguistics into the Paris publishing market included important texts by Noam Chomsky, J. L. Austin, Oswald Ducrot, Tzvetan Todorov, A. J. Greimas, Roman Jakobson, André Martinet, Christian Metz, Nicolas Ruwet, John R. Searle, Julia Kristeva, Jacques Derrida, and Roland Barthes.

Chapter 2 The cosmic psyche

- ¹ Lacan makes this statement more than once. For example,

If psycho-analysis is to be constituted as the science of the unconscious, one must set out from the notion that the unconscious is structured like a language. From this I have deduced a topology intended to account for the constitution of the subject. (Lacan 1998: 203)

Joel Dor calls this “the most fundamental hypothesis in all of Lacan’s theoretical work,” and subtitles his introduction to Lacan “The Unconscious Structured Like Language” (Dor 1998: 3).

- ² Personal conversation with Nadaud.
- ³ Ansell-Pearson 1999: 41, 159. Ansell-Pearson notes the modernization of Deleuze’s view of evolution between his early work on Bergson and his later work with Guattari, but he fails to take into account the latter’s extensive readings of biology and ethology. Pearson shows in detail the effect of this paradigm shift on Deleuze’s Bergsonism. It seems likely to me that Guattari played a role in this shift.

- ⁴ Further emphasizing the biological basis of the experience of the fragmented body, but this time with an adult example, Lacan evokes the hysteric's "fantasmatic anatomy, which is manifested in schizoid and spasmodic symptoms," and which makes the dreams and visions of a fragmented body "tangible even at the organic level" (*E* 78).
- ⁵ *S2* 122–123; see also *S1* 137–138, Lacan 1993: 93–94, Tinbergen 1955.
- ⁶ Guattari does not claim that animals use language, although he does in a footnote cite a study which raises the possibility of their learning language (*IM* 248 n. 9).
- ⁷ Deleuze 1995: 144. On Deleuze's univocity, see Smith 2001.
- ⁸ Deleuze 1988: 126. On Deleuze and Uexküll, see Leclercq 2005; Gatens 1996. Deleuze made the link between Spinoza and ethology in his 1970 book, which may indicate that Guattari and he were reading ethology at the same time, given Guattari's references to wasps and orchids in *The Anti-Oedipus Papers*. Deleuze defines ethology as "a composition of fast and slow speeds, of capacities for affecting and being affected on this plane of immanence" (Deleuze 1988: 126).
- ⁹ *E* 235–236. This paper was given in 1953 and published in 1956, then again in 1966 in the *Écrits* (*E* 197–268, 865). Guattari likely knew the earlier versions, and certainly carefully read the latter version, as evidenced by references to the *Écrits* throughout. *The Anti-Oedipus Papers*.
- ¹⁰ For a more complete account of the abstract machine, which includes its philosophical dimensions, see Stephen Zepke's elegant book on the topic (Zepke 2005).
- ¹¹ Abstract machines are "neither transcendental Platonic idea, nor Aristotelian form adjacent to an amorphous matter" (*IM* 8).
- ¹² Fellow mathematician Ivan Ekeland explains that although Thom relies on mathematical formulas, his theory is considered qualitative and not quantitative. Qualitative methods "are the only methods which enable us to approach physical reality." Quantitative methods can be used only when a system is isolated from outside influence. Although definite predictions cannot be made for unstable systems, a qualitative approach can help show patterns that the system will follow in the long run (Ekeland 1988: 69–75).
- ¹³ Lacan met Chomsky at MIT in 1975. "According to one account, Lacan was horrified by Chomsky's approach to the study of language. 'If that is science', he commented after his conversation with the great American linguist, 'then I prefer to be a poet!'" (Evans 2005: 53).
- ¹⁴ Ducrot and Todorov 1979: 40, cited in *GR* 147 n. 1/*IM* 41 n. 29. See also *MR* 102 n. 14/*RM* 269 n. 1. *A Thousand Plateaus* mentions "Chomsky's abstract machine" but does not provide these details or the reference to Ducrot.
- ¹⁵ I am not certain why Guattari uses "abstract machinism" here rather than his usual "abstract machine," or if this wording variation is even significant, given that such terminological variations are in fact common in his writing. One guess is that he is talking about a machinic function here, rather than a particular instance of a specific machine. Nadaud in *AOP* 23/30.
- ¹⁶ The phrase "morpheme of the referent" appears in Figures 2.2 and 2.5. The referent, as indicated later in this chapter, is the actual thing to which a sign refers to. "Morpheme" usually refers to the minimum meaning-bearing element of a word, but here Guattari diverts the term to content, the thing.

- ¹⁷ Lacan considered the *conception* of consciousness to be historically variable, and he found the modern “religious conception of consciousness” to be erroneous:

Implicitly, modern man thinks that everything which has happened in the universe since its origin came about so as to converge on the thing which thinks, creation of life, unique, precious being, pinnacle of creation, which is himself, with this privileged vantage-point called consciousness.

He declares that this modern notion of consciousness is a deluded anthropomorphism, the idiocy of scientific atheism, “making consciousness the high-point of all phenomena,” such that consciousness replaces the Supreme Being as the ultimate explanation. (S2 47, 48)

However, for Lacan consciousness itself does not seem to be historically variable. In his 1954–1955 seminar, Lacan presents a materialist consciousness; the lecture dated December 8 is in fact entitled “A materialist definition of the phenomenon of consciousness” (S2 40–52). He says that consciousness occurs each time “there’s a surface such that it can produce . . . *an image*. That is a materialist definition” (S2 49). Consciousness is material because it “is linked to something entirely contingent . . . the existence of our eyes or of our ears” (S2 48). This physical phenomenon of perceiving engenders the tension between the ego and the immediacy of sensation (S2 50). Later during the seminar year the account of consciousness seems to take a more structuralist turn, but it is still grounded in perception:

Consciousness in man is by essence a polar tension between an *ego* alienated from the subject and a perception which fundamentally escapes it, a pure *percipi*. The subject would be strictly identical to this perception if there weren’t this *ego* which, if one may put it like this, makes it emerge from out of its very perception in a relationship of tension. (S2 177)

- ¹⁸ Jacob 1973: 266; original French 1970. Cited by Guattari in *MR* 83–84/*RM* 243; *RM* 302–303.

Writing in the late 1960s, Abraham Moles likewise associates many of Guattari’s interests with the leading ideas of the time: “The concepts of information, code, redundancy, complexity, the dialectic banal-original, foreseeability, and background noise must take their places beside the quantum theory, the principles of relativity and uncertainty, and the opposition between the microscopic and macroscopic universe” (Moles 1966: 2). Book cited by Guattari in *MR* 94–95/*RM* 258–259.

- ¹⁹ “The face identifies a ‘person’ in a very Manichean way: it’s either the person whose keystone is this face-voice, or it’s nonsense; it’s either the complete and unconditional acceptance of the ego and its dominant personological coordinates, or the ‘end of the world,’ the abolition of the *socius*” (*IM* 76–77).
- ²⁰ In *A Thousand Plateaus*, the grass stem-turned-semiotic component is characterized as a “component of passage” (*ATP* 324–325/399–400). This telescopes the schema of *L’Inconscient machinique*, where the stem would not function as a component of passage until it becomes a refrain. A subtle simplification of the

semiotic genealogy thus takes place between the original solo version and the joint version.

- ²¹ Although Guattari does compare the function of the animal silhouette in certain assemblages to human faciality, he takes care to note that animal faces and human faces are not equivalent “matters of expression.” To take an extreme case, the bird face is not innervated, and therefore not expressive like the human face with his many nerve endings. The human face is therefore more “deterritorialized” insofar as it partakes in semiotics thanks to its “morphological detachment” from physical functions, such as mouths that smile, and are not just for eating or breathing (*IM* 133).
- ²² Ogden and Richards 1946: 10–11; Martinet et al. 1969: 340–341. Guattari cites the Ogden and Richards triangle in *IM* 211 n. 8.
- ²³ “Consider two identical tuning-forks D and D’, and suppose that D is vibrating. If we bring D close to D’, then D’ starts to vibrate by resonance with D . . . Fundamentally, that is the schema typical of all resonance . . . In general the composite system [made up of the two forks] thus obtained becomes unstable, for . . . there will be a degeneration towards a common, more stable regime, the regime of *resonance*. Each of the systems . . . loses its individuality and there will only be a mixed system which, in practice, is indecomposable” (Thom 1983: 170).
- ²⁴ It is worth citing Thom at greater length, as an example of the technicality of the material incorporated into Guattari’s metamodeling.

If we consider the totality of our cerebral activities as a dynamical system . . . we are led to suppose that to each motor field codified as a verb there corresponds a true mode, an attractor A of the cerebral dynamic. Upon hearing the order the cerebral dynamic suffers a specific stimulus *s*, which sends it into an unstable state of excitation. This state then evolves towards stability through its capture by the attractor A, whose excitation generates the motor execution of the order by coupling to the motor neurones . . . ‘To understand’ is in some way to render oneself *immune* to the stimulus formed by the perception of the message, it is to adopt the right attitude in relation to the situation that has been revealed. When, under the effect of a message, the mental dynamic does not present an attractor which captures it in a secure fashion, then the message has little meaning . . . Thus we are led to postulate that ‘meaning’ expresses the possibility of a system under the influence of external perturbations adopting corrector regimes which nullify the effect of the perturbations. (Thom 1983: 172–173)

- ²⁵ Simondon 1995: 31 n. 11; see also Deleuze 1994: 246; Sauvagnargues 2005.
- ²⁶ Guattari uses the term redundancy throughout *IM*, but he first develops the notion in a short chapter of *RM* dated 1974, “Intensive Redundancies and Expressive Redundancies” (*MR* 130–134/*RM* 332–338). For a definition of the term as appropriated by linguistics, see “Redundancy” in Martinet et al. 1969: 330–335; cited in *ATP* 530 n. 30.
- ²⁷ Guattari refers to Lacan’s mirror stage essay at the beginning of his chapter on faciality (*IM* 76 n.3).
- ²⁸ Guattari proposes “a perspective on identity which has no meaning unless identities explode” (*GR* 216).

Chapter 3 An energetics of existence

- ¹ Guattari's new functors do not replace the components, assemblages, or abstract machines which I discussed in Chapter 2, all of which remain important terms in his lexicon. Indeed, components can be classified according to these four new categories: there are the actualized components of the Flows and Phyla, as well as the virtual components of the Universes and Territories (*CM* 58–59/86).
- ² Dosse 2007: 608–609. Alliez cites Stengers several times in his invaluable commentary on *What is Philosophy?* (Alliez 2004: xxix).
- ³ Social analysis likewise involves problems of delimiting and defining its objects. Here, Guattari proposes that “cartographies” replace the standard sociological objects like race, sex, age, nationality, etc. This will likewise enable a more complex understanding of class.

Take the notion of class, or the class struggle. It implies that there are perfectly delimited sociological objects: bourgeoisie, proletariat, aristocracy [. . .] But these entities become hazy in the many interzones, the intersections of the petite bourgeoisie, the aristocratic bourgeoisie, the aristocracy of the proletariat, the lumpenproletariat, the non-guaranteed elite [. . .] The result: an indeterminacy that prevents the social field from being mapped out in a clear and distinct way, and which undermines militant practice. Now the notion of assemblage can be useful here, because it shows that social entities are not made up of bipolar oppositions. Complex assemblages place parameters like race, sex, age, nationality, etc., into relief. Interactive crossings imply other kinds of logic than that of two by two class oppositions. Importing this notion of assemblage to the social field isn't just a gratuitous theoretical subtlety. But it might help to configure the situation, to come up with cartographies capable of identifying and eluding certain simplistic conceptions concerning class struggle. (*CY* 42–43/*AH* 158)

- ⁴ Guattari includes Marx here, interpreting his insistence on flows of work as an energetic base. He does note, however, that “the Marxists never really attempted to quantify capital in the economic sphere” (*MB* 314/*CS* 69 n. 1).
- ⁵ Guattari traces in detail Lacan's liquidation of the libido, which takes place from 1936 through the 1970s in the pages of the *Écrits* and in the seminars (*MB* 492 n. 19–25/*CS* 72, n. 1–6).
- ⁶ Many commentators have noted Guattari's borrowing of the term “autopoiesis” from Hubert Maturana and Francisco Varela, for whom it designates the auto-reproduction and auto-management characteristic of biological machines. Guattari explains that he extends the term to include not only “the auto-reproductive capacity of a structure or ecosystem,” but also “social machines, economic machines and even the incorporeal machines of language, theory and aesthetic creation” (*CM* 93/130).
- ⁷ Guattari separates the plane of immanence/consistency from the plane of reference in the glossary he prepared for *Molecular Revolution*, the 1984 collection of his essays in English.

The flows, the territories, the machines, the universes of desire, whatever their differences of nature they are related to the same plane of consistency

(or plane of immanence), which must not be confused with a level of reference. In effect, these different ways of existence of systems of intensity do not spring from transcendental idealities but from real processes of generation and transformation. (*MR* 290/*AH* 292–293, tm)

In a 1992 interview Guattari names the planes of aesthetic construction, philosophical immanence, and scientific functionality (Guattari and Senaldi 2000: 34). He does the same, with slightly different wording, in *CM* 55/83, which was also published in 1992.

⁸ This imbrication of the four domains of the plane can also be mapped onto Hjelmslev's semiotic categories. Guattari notes that Hjelmslev doubles Saussure's notion of substance by dividing it into matter and substance. Guattari with his quadrants in turn doubles Hjelmslev's notion of form by dividing it into incorporeal Universes and abstract machinic Phyla. Therefore, if Hjelmslev's "substance is the manifestation of *form in matter*," then Guattari's "existential *Territories* are the manifestation of incorporeal *Universes* and of machinic *Phyla* in the energetic-signaletic *Flows*" (*CS* 84 n. 1). In other words, semiotic energetics implies that the flows are both energetic and "signaletic"—which is to say flows of signals, which are semiotic function.

⁹ In a very different context, Guattari makes a direct reference to the causes in *Three Ecologies*. In the course of questioning the old Marxist model of an economic base producing an ideological superstructure, he counters by explaining the genesis of Integrated World Capitalism (his term for economic globalization) with a scholastic ontology: "At present, IWC is all of a piece: productive-economic-subjective. And, to return to the old scholastic categories, one might say that it follows at the same time from material, formal, efficient and final causes" (*TE* 48/42).

¹⁰ These two terms are also used in *A Thousand Plateaus*, where they help differentiate between the ways of the nomads as compared with the ways of the State. There is a reference to Thom's smoothing in *ATP* 481/601.

Chapter 4 History as machinic phylum

¹ For a fascinating discussion of twentieth-century militant subjectivity using the theories of Guattari and Deleuze see Thoburn 2008.

² This usage of the term "cut" differs markedly from that in *Anti-Oedipus*, where the cut (*coupure*, translated "break" in the English version) has to do with the cutting of flows, as in an electrical breaker (*AO* 375–378/450–454). This cybernetic redefinition of the cut occurs during the joint writing with Deleuze, who encourages Guattari to develop his ideas about desiring machines. As a result, Guattari will conclude that the Lacanian signifier is structural, not machinic.

³ See for example the lecture of June 16, 1965 from Lacan's Seminar 12 (Lacan n.d.). The passage on history that Guattari cites is from the first lecture of Seminar 13, given December 1, 1965.

- ⁴ “Our term ‘deterritorialization’ was based on a concept of territory borrowed from American anthropology” (*CY* 39/*AH* 154).
- ⁵ Guattari uses both “diagrammize” and “diagrammatize” in this passage, a variation that editor Stéphane Nadaud preserves. For the sake of clarity in my own presentation, I have used only the latter spelling.
- ⁶ The most extensive attack on their use of ethnography is surely that of Christopher Miller, whose accusations I find ill-informed and unfair, as Eugene W. Holland argues in a review of his book *Nationalists and Nomads* (chapter 2 in Miller 1998; Holland 2003).
- ⁷ “It is evident going through the ‘Guattari Archives’ that for Chapter 3 of *Anti-Oedipus*, ‘Savages, Barbarians, Civilized Men,’ . . . Guattari asked for help from the anthropologists Michel Cartry, Andras Zempléni and Alfred Adler” (editor Stéphane Nadaud in *AOP* 17/20; see also *AOP* in French 116).
- ⁸ Guattari does not cite a source here, but the Bambara were among the ethnic groups studied by Marcel Griaule and Germaine Dieterlen, both of whom are cited in *A Thousand Plateaus*, although for other work.
- ⁹ According to the French version of *AOP*, the reference here is to Clastres 1998. “Special institutions are thus necessary to enable a chief to become a man of State, but diffuse, collective mechanisms are just as necessary to prevent a chief from becoming one. Mechanisms for warding off, preventive mechanisms, are a part of chieftainship and keep an apparatus distinct from the social body from crystallizing. Clastres describes the situation of the chief, who has no instituted weapon other than his prestige, no other means of persuasion, no other rule than his sense of the group’s desires” (*ATP* 357/441–442).
- ¹⁰ Deleuze and Guattari often equate “plane of consistency” and “plane of immanence,” but Guattari’s usage here is very different than that in Deleuze’s solo writing, or in the joint writing. For more on this point, see Chapter 4.
- ¹¹ Guattari compares his rhizome to Chomsky’s tree-like diagrams (*IM* 187). I have left out of my account Guattari’s appropriation of Chomsky’s terms “generative” and “transformational,” which would be an interesting topic of study for those interested in the details of the linguistic debates of the 1970s (see for example *IM* 53–58, 70–73, 182–196).
- ¹² Tom Conley traces the Deleuzian understanding of “singularity” to its use in cartography during the early modern period. “Discovery and encounter prompted cosmographers to register new, often conflicting, and sometimes unthinkable things.” These singularities correspond to “new shapes of alterity and difference coming from distant spaces.” Deleuze uses the term differently in different contexts, “but it is always related to perceptions, subjectivity, affectivity and creation” (Conley 2005). Robert O’Toole combines this meaning with the mathematical “point of singularity” in an interesting article which combines Deleuze’s solo work with the Deleuze-Guattari joint writing.
- ¹³ Stengers has written a great deal about Alfred North Whitehead, who would certainly have influenced any mention of process in this context. This is a point worth exploring in more detail, but I will leave that for another occasion.
- ¹⁴ The notion of the machinic phylum appears briefly in the war machine chapter of *A Thousand Plateaus* (“plateau 13”). They write, “We may speak of a machinic

phylum, or technological lineage, wherever we find a constellation of singularities, prolongable by certain operations, which converge, and make the operations converge, upon one or several assignable traits of expression" (*ATP* 406/505–506).

- ¹⁵ See for example "Popular Free Radio" (*SS* 73–78/Guattari 1977, 1980: 367–374) and "Millions and Millions of Potential Alices" (*MR* 236–241/*RM* 377–384). By 1982 he realized that the media industry was the ultimate beneficiary of the movement's efforts to wrest the radio frequencies away from state control (*MB* 145–170).

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