1. Of the many forms of expression through which their thought moves, flowing and multiplying without privilege or hierarchy, Gilles Deleuze and Félix Guattari number "pop" among the most powerful (in the Spinozian sense, of that which affords the greatest potential for further connection and ramification). In what might at first seem a wildly inappropriate context—their analysis of Kafka's production of a "minor literature"—they define "pop" as:

An escape for language, for music, for writing. What we call pop—pop music, pop philosophy, pop writing—Wörterflucht [word flight]. To make use of the polylingualism of one's own language, to make a minor or intensive use of it, to oppose the oppressed quality of this language to its oppressive quality, to find points of nonculture or underdevelopment, linguistic Third World zones by which a language can escape, an animal enters into things, an assemblage comes into play. (Kafka 1986, 26-27)

"Pop," then, is for Deleuze and Guattari a form of multiplicity, a rhizome; indeed, in A Thousand Plateaus they insist that "RHIZOMATICS = POP ANALYSIS" (A Thousand Plateaus 24).¹ The rhizome, of course, is their well-known image of a decentered system of points that can connect in any order and without hierarchy, a term drawn from botany that names a network of stems, like the strawberry plant, that grows horizontally and discontinuously by sending out runners. Pop can be conceived as a rhizome because it develops by fits and starts, in a messy, practical, improvisational way rather than in a refined, programmatic, theoretical way. The logic of the rhizome is opposed to that of the tree, which is a hierarchical structure centered around a fixed root, a structure that grows continuously and vertically (A
Thousand Plateaus, chapter 1). If pop is a rhizome, then it may be helpful to think of the Germanic tradition of formal composition from Bach to Schoenberg, along with the classical musicology that studies that tradition, as an example of the linear tree system: a continuous sequence in which each successive composer extends the rigorous line of harmonic development established by the previous composers further in the same direction.

2. Although a detailed comparative examination of the two models would certainly be rewarding, it is beyond the scope of this essay. We have chosen specifically to limit our discussion to the pop realm or regime, defined as follows: the regime of music production that is tied neither to the European composer/concert tradition and its strict division of labor, nor to any of the various historical traditions of indigenous music making around the world, but rather to the bricolage of modern recording technology (electric/electronic instruments, studios, overdubbing, mixing, etc.) and its media of distribution. This definition of pop obviously has little to do with the neo-Romantic "popist/rockist" genre distinction that dominates many popular music studies, and even less to do with market demographics; it’s intended to be a productivist model that can in principle unite disparate phenomena like dub, musique concrète, dance remixes, electronica, and stadium rock along a coherent conceptual axis without necessarily claiming that it can account for all the differences among these phenomena. Because of the productivist nature of our model, we will be dealing exclusively with recordings; recordings are the unequivocally privileged form of production, distribution, and consumption of this musical rhizome. We are not particularly interested in whether the recordings in question sell ten or ten million copies; pop in this sense is not essentially a quantitative term but rather a qualitative one, just as it is not a marker of generic distinction, but rather a productive potential of all music. This is what Deleuze and Guattari’s claim concerning "pop music, pop philosophy, pop writing" demands.

3. Their functional and differential theory of pop intersects with more traditional critical definitions of the term at several points, but it also escapes from tradition in a number of significant ways, and provides contemporary musicians with new points of departure for musical composition.2 Indeed, we propose that any valid theory of contemporary music must be similarly double: descriptive of existing musics, and enabling of future musics. Deleuze and Guattari’s theory meets this criterion. We will first lay out the
descriptive elements of their general theory of music, which must be assembled from a number of published sources since Deleuze and Guattari never dedicated a text exclusively to the exposition of their ideas on music. A second descriptive section will also attempt to identify the specific pop music artifacts and experiences from which Deleuze and Guattari drew the key elements of their pop rhizome. This will serve as a transition to the final section of our argument, which will examine a number of electronic pop recordings explicitly dedicated to Deleuze and Guattari in order to determine the ways in which their theory has enabled innovative new forms of music to arise.

4. How are we to think of the explosive potentiality of "pop," this "minor" or "intensive" use of music in Deleuze and Guattari's work? In *A Thousand Plateaus*, Deleuze and Guattari take as the starting point of their analysis of music the concept of the "refrain" or *ritournelle* (literally "little return"), which they define as a rhythmic pattern that serves to mark a point of stability in a field of chaos, like the tune a child hums in the dark to comfort him- or herself. Refrains can be of many types, with many uses and motifs: not only the refrains of pop music, but also nursery rhymes and lullabies, the folks songs and Lieder of a people, national anthems, sacred or liturgical hymns, the drinking songs of friends, or even the songs of birds. What is common to all such refrains, however, is that they are linked to the spatio-temporal delineation and organization of a territory. Deleuze and Guattari begin with this notion of the refrain, not because it lies at the origin of music, but rather because it lies at its middle, and thereby gives them the means of assessing both the reterritorializing and deterritorializing potential of music.

5. Music can be said to reterritorialize on the refrain when it moves in the direction of what Deleuze and Guattari call a "punctual system," which is like a house erected on the territory of the refrain. This music-architecture parallel (architecture as "frozen music," and music as "moving architecture") has often been used to characterize the representation of music in the classical Western tradition, from Goethe and Schelling to Varèse and Xenakis. Each sound becomes a "note," a point whose position is determined within a system of coordinates having two basic axes: the horizontal axis of the melody, in which the points form horizontal lines which are superimposed vertically on the bass line, thereby entering into polyphonic relations of counterpoint with each other; and the vertical axis of harmony, which moves along the horizontals
but is not dependent on them, in which the notes form a harmonic chord that runs from high to low and links up with the following chords. Between these two axes, diagonals of modulation or transposition can be drawn that establish localizable connections between points of different levels or moments, thereby instituting various frequencies and resonances. From this point of view, canonical genres like the sonata, with its three movements, each of which has specified sections (theme, exposition, development, coda, etc.), can be seen as "enframing" forms, like a house whose internal architectonic structure encloses various rooms and passageways. The music unfolds in a "pulsed" or metric time, which is marked by the inscription of a certain number of beats in the determinate time of a measure (tempo), and constitutes a striated space-time. Audiences, when listening to such a piece of music, are expected to focus on its "plan of organization," that is, on the relational network of points and lines, whose unfolding they try to follow during the course of the piece in order to infer or reconstitute the structure of the whole.

6. However, music is deterritorializing when it moves in a different direction, that is, when it no longer gives primacy to formal relations and structures, but to the sonorous material itself. The musician no longer demands that the note function in relation to the harmonic or melodic axis, but rather considers the sound in its singularity, as a pure force. It is as if the structure of the house, in an act of deframing, opened out onto the sonorous forces of the Cosmos, following a deterritorializing "line of flight" that makes possible an almost limitless plane of composition. Even within a punctual system, this takes place whenever the diagonal is liberated as an autonomous dimension of space and time, when a pure "block of sound" is created that escapes the coordinates of the melodic horizontal and the harmonic vertical and forms a "transversal" that passes between the coordinates. Modern Western music, as Deleuze and Guattari suggest in What is Philosophy?, can in fact be read as the progressive conquering of such a sonorous plane of composition: the abandonment of the strict sonata form in favor of more open "compositional studies" on the piano (Chopin, Schumann, Liszt); the liberation of variations of speed between sound particles (Wagner's recurrent "leitmotifs"); the opening up of local, territorial refrains to the great refrain, the powerful song of the Earth (Mahler, Berg, Bartók); the focus on timbre (Stravinsky, Boulez); the proliferation of percussive effects or "densities" (Varèse); the placing-in-variation of the voice (Stockhausen,
Berio); the redefinition of sound in terms of noise and silence (Cage); the movement toward a non-chromatic use of sound in an infinite continuum, in which the sound itself becomes an autonomous motif that ceaselessly transforms itself, diminishing and augmenting, adding or subtracting, varying its speed and slowness (electronic music, synthesizers) (What is Philosophy? 189-191, 195).

7. From this point of view, music can be said to be made up of mobile or "floating" blocks of sound that enter into composition with each other on the smooth space-time of a cosmic plane, outside of points, coordinates, and localized connections, in a "non-pulsed" time (non-tempo) made up of nothing but modifications of speed and differences in dynamic. There is no longer a predetermined "plan of organization" to be recovered or inferred, but only a "plane of consistency" on which these blocks of sound or "percepts" enter into various connections, convergences, and divergences. In Deleuze and Guattari's terms, these blocks form a rhizome. Under these conditions, it is the "color" of the sound—its timbre, intensity, duration, density—that assumes increased importance, insofar as it constitutes an exploration of the deterritorializing potential of the "sonorous phylum" itself. We shall see below how a number of contemporary musicians have taken this "deterritorializing" aspect of music in new directions.

8. These two formally different conceptions of music are not opposed to each other, even in the Western tradition, but rather they are complementary; they mark out a single field of interaction in which the deterritorializing force of sound continually cuts loose the contents of a punctual system, which in turn continually re-appropriates the blocks of sound into new systems of coordinates (e.g., serial music in relation to free atonality). This is precisely why Deleuze and Guattari define music in terms of the labor of the refrain: "Does [the refrain] remain territorial and territorializing," they ask, "or is it carried away in a moving block that draws a transversal across all coordinates—with all the intermediaries between the two? ... In each case we must simultaneously consider factors of territoriality, deterritorialization, and reterritorialization." And they pose the problem of pop music in exactly the same terms:

music is precisely the adventure of the refrain: the way music lapses back into a refrain (in our head, in the pseudo probe-heads of TV and radio, the music of a great musician used as a signature tune, a ditty); the way it lays hold of the refrain, makes it more and more sober,
reduced to a few notes, then takes it down a creative line [of flight] that is so much richer, no origin or end of which is in sight... (*A Thousand Plateaus* 302, 303).

As a concrete example of the deterritorializing potential of the refrain, Deleuze and Guattari cite the analyses of LeRoi Jones (Amiri Baraka) who shows in *Blues People* how black slaves in America, in the conditions of forced labor, took their old African work songs, which were originally territorial refrains, and made use of them in a "deterritorialized" manner, in the process producing an "intensive" and plaintive use of the English language by blending it with their own African languages; these songs were in turn "reterritorialized" by whites in minstrel shows, and the use of "blackface" (Al Jolson); and then taken back by blacks in another movement of deterritorialization and translated into a whole series of new musical forms (blues, hootchie-koochie, etc.) (cited in *A Thousand Plateaus* 137-138).

9. Clearly, their claims for pop as an inventive and intensive usage of the heterogeneous elements of different sonorous territories are a far cry from the pessimistic account of popular or mass culture articulated by T.W. Adorno in his writings on popular music (primarily commercial jazz) and the culture industry. For Adorno, mass culture in general and popular music in particular represent not merely the commodification of art, but, more insidiously, the systematic enforcement of the false universality of commodity relations and profit that rationalizes all difference, what he called the "non-identical," out of social life. Even if at one time a genuine people's culture did express itself directly in the form of folk tales and musics, Adorno considers that by the late twentieth century the "culture industry" had taken control of this art and turned it into a means of administration (Horkheimer and Adorno 120-167). Popular music in particular, Adorno claims, enacts through its repetitive verse/refrain form and superficial fashion shifts the debasement and conformity that capital imposes on its subjects: "The subject which expresses itself [through jazz] expresses precisely this: I am nothing, I am filth, no matter what they do to me it serves me right" ("Perennial Fashion," 132; see also *Introduction to the Sociology of Music*, chap. 2). Such a culturally debased and subjectively debasing form of expression could not possibly assist an individual performer or listener in "deterioralizing" the determinations of capital, but this is precisely what Deleuze and Guattari implicitly claim.
10. In this, Deleuze and Guattari's work resembles the criticism articulated by the consumption theorists of popular music, particularly Simon Frith's studies of youth culture and, in a different vein, Dick Hebdige's analyses of punk as subculture. For these analysts, the commodity form of mass-produced popular music (as opposed to spontaneous folk forms) cannot fully determine the uses to which those commodities are put by consumers any more than commodity relations can completely reduce the singularity of avant-garde modern artworks, celebrated by Adorno for their formal resistance to the false universality of profit. Inspired instead by Mikhail Bakhtin's vaguely subversive model of dialogism and Walter Benjamin's (perhaps overly) optimistic analysis of mechanically reproducible works of art, consumption theorists (and their fellow-travelers like cultural historian Michel de Certeau) focus on the inventive ways that consumers find to de-contextualize and remotivate commodities and signs, often against the grain of capitalist ideology and market logic (see Bakhtin, Benjamin, and de Certeau). Deleuze and Guattari would make a similar argument in terms of the way these deterritorialized components can be reterritorialized, inserted into assemblages of desire that act as "war machines" against the market. Indeed, in *Anti-Oedipus* they follow Marx in insisting that consumption is itself a circuit within a more broadly conceived model of production, and they recognize that every economy must produce consumption at the same time that it produces products, and produces the network of distribution or communication that disseminates those products (*Anti-Oedipus* 68-106; Marx 83-100). As (part of) such an economy itself, music must produce listeners as well as sounds.

11. Yet Deleuze and Guattari differ significantly from these consumption theorists in their refusal to posit the consumer's subjectivity, constructivist though it may be, as foundational in a phenomenological sense. If for consumption theory the individual subject, constituted by and within capital, subsequently constitutes or assembles an unforeseen or uncontrolled expression of its desires and dissatisfactions through its manipulation and remotivation of the commodities provided for it by the market, for Deleuze and Guattari the innovative expression precedes and constitutes the subject rather than issuing from that subject as an after-effect. That is, the subject that is expressed via the assemblages of desire is not prior or transcendent in relation to its expressions but immanent within and alongside them. It is in the middle of everything and open to discontinuous variation, like a
refrain. The subject of/in pop music is not a source or origin but a surface effect, a wave of difference resonating across disparate regimes of signs; as participants in the production and consumption of pop music, we become pop ourselves.

12. Though they do not limit their conception of pop to the traditionally defined market sector of mass-produced pop music, Deleuze and Guattari do emphasize that their thought often passes or resonates by way of what any Anglophone reader would immediately recognize as pop music. From their work in the Seventies onward, Deleuze and Guattari demonstrate a familiarity with many of the most respected and influential pop/rock songwriters and performers of the Sixties, Seventies and Eighties that goes well beyond the superficial humor and "street credibility" that such allusions provide. Ultimately, their references to pop music provide them and their readers with stabilizing refrains, points of connection and passage for rhizomatic thought, that are often as complex and functional as their more common readings of canonical European philosophers and artists. The first significant connection to pop music arises in the first chapter of Deleuze's 1977 collaboration with Claire Parnet, Dialogues. In the only section of the book explicitly signed by Deleuze alone (the remainder of the chapters are unsigned, leaving the particular contributions of the individual collaborators impossible to define, as they are in Capitalism and Schizophrenia), he cites a poem by Bob Dylan in an attempt to exemplify his conception of conversation (and by extension teaching) as becoming, as double capture or a parallel evolution. The most relevant portion of Deleuze's citation is the following:

[...] not t' worry about the new rules for they ain't been made yet an' t' shout my singin' mind knowin' that it is me an' my kind that will make those rules... if the people of tomorrow really need the rules of today rally 'round all you prosecutin' attorneys the world is but a courtroom yes but I know the defendants better 'n you and while you're busy prosecutin' we're busy whistlin' cleanin' up the courthouse sweepin' sweepin' listenin' listenin' winkin' t' one another
Deleuze cites these lines from the Seghers edition of Dylan's *Writings and Drawings*, but modifies the published French translation, which suggests that he has taken some pains to study them in the original idiomatic English (Deleuze/Parnet 1977, 14n1); otherwise he offers no specific commentary on them. It is no hyperbole for him then to insist upon How proud and wonderful—also modest—is this Bob Dylan poem. It says it all. As a teacher I should like to be able to give a course as Dylan organizes a song, as astonishing producer rather than author. And that it should begin as he does, suddenly, with his clown's mask, with a technique of contriving, and yet improvising each detail. The opposite of a plagiarist, but also the opposite of a master or model. A very lengthy preparation, yet no method, nor rules, nor recipes. (Deleuze/Parnet 1987, 8)

Song, like philosophy and teaching, requires a long apprenticeship, as Deleuze has always insisted, though one that implies no master or privileged subject who might dictate the prefabricated or dialectical terms of the contract. Relations are produced by improvisation, which is to say by the encounter with the unforeseeable or "imprévisible" in each situation. As free jazz innovator Ornette Coleman writes, "none of these forms existed before their relation to each other" (Coleman) yet they constitute as sophisticated and sensitive a network of connections as any constructed according to the prefabricated, hierarchical logic of notational composition. Pop music too is music without an original, privileged form or instance, music that exists entirely in its disseminated actualizations, as Benjamin argued of film.

13. In 1981, Deleuze invoked the American New Wave band Talking Heads (and their collaborator Brian Eno) in his study of Irish painter Francis Bacon. In order to help explicate what he perceived to be the system of becomings embodied in Bacon's paintings, Deleuze offered a quotation from Talking Heads' song "Crosseyed and Painless" from the album *Remain in Light*:

> There is indeed a change of form, but the change of form is a deformation, that is, a creation of original relations which are substituted for the form: the meat that flows, the umbrella that seizes, the mouth that is made jagged. As the song says, "I'm changing my shape, I feel like an accident." (Deleuze 1981, 101)
Change of form, deformation, is here defined not as deviation from or distortion of a normative or recognizable form, but as the "creation of original relations," spontaneous transversal reformation, immanent invention or creativity. Becoming is the externality and exteriorization of relations, the accident that destructures the essential form and decenters the substantial subject. The warped bodies in flight from their own identities expressed in Bacon's paintings find themselves captured, momentarily, in the aparallel images of "Crosseyed and Painless": "Lost my shape—Trying to act casual! /Can't stop—I might end up in the hospital/I'm changing my shape—I feel like an accident..." 9

Clearly, for Deleuze, pop music can serve as well as painting or literature as an intensifier of becoming.

14. If we have so far established that pop music is potentially an important element in the assemblages of expression according to Deleuze and Guattari, we have not established the sources or causes of this sudden, apparently unphilosophical interest. We might expect that Guattari, as the more directly engaged and militant of the two at the outset of their friendship, was the conduit that brought pop music into the collaboration through his contacts with members of the French student movements before and after May '68. This expectation would not be entirely accurate, however plausible it may seem (though Guattari certainly did bring to the collaboration a sensibility that made connections with pop more conceptually productive); in fact, it was apparently Deleuze who had the first direct contact with the regime of pop music through the intermediary of his student and friend Richard Pinhas.

15. From the point of view of the American reception of French theory, Pinhas' career constitutes a veritable rehearsal of the coming era. He studied history at the University of Paris X—Nanterre for a year starting in late 1968, then switched to sociology and ethnology, in which he received a master's degree under the tutelage of Jean Baudrillard. In 1969 he began to study philosophy under Jean-François Lyotard; ultimately he received a doctorate in that field in 1974, and taught briefly at the University of Paris I—Sorbonne. He met Deleuze in 1970, at Lyotard's dissertation defense, and followed Deleuze's courses from that moment until Deleuze's retirement from the University of Paris VIII—Vincennes/St. Denis in 1987. Along the way, Pinhas became friends with Serge Leclaire, head of the Vincennes department of psychoanalysis who was later forced out by the Lacanian "coup" of 1975, and through Leclaire's
influence became a member of Lacan's *École freudienne de Paris* (from which Pinhas resigned in 1976).\(^\text{10}\) Pinhas is also the author of several published and unpublished texts on music and philosophy that figure strongly in Deleuze's writings on music and aesthetics in general; for example, much of Deleuze's discussion of analogical and digital language in chapter 13 of *Francis Bacon* is drawn from Pinhas' unpublished manuscript *Synthèse analogique, synthèse digitale* (Francis Bacon, 75-76), while the discussion of the refrain in plateau 11 of *A Thousand Plateaus* makes use of Pinhas' article "Input, Output" from 1977 (A Thousand Plateaus 551n53).

16. But the influence of Pinhas' philosophical writing on Deleuze (and Guattari) would concern us little were it not for Pinhas' primary activity as a rock musician. In the early Seventies Pinhas formed a progressive rock band called Schizo, which released two singles before metamorphosing into Heldon, one of the most original and influential French bands of the era. Heldon might best be described as a sort of Gallic King Crimson: a band that based its musical productions not only on the permutational structures of blues and pop but also on the improvisational openness of jazz and the timbral experiments of electronic music synthesis. Pinhas was to Heldon what Robert Fripp has been to King Crimson: a restless experimenter driven not by the demands of the music market, but by a desire to create new sounds and new structures that is, from Deleuze and Guattari's point of view, the fundamental drive of all philosophy. Like Bacon, Boulez, or Jean-Luc Godard, Pinhas is an example of an artist who creates an art-philosophy, a set of percepts, out of the materials of his/her art rather than one who attempts to imitate or represent established philosophical concepts in aesthetic terms.

17. In fact, Deleuze himself participated in such an act of musical philosophy when he joined Pinhas and his fellow musicians in a Schizo recording session in 1972. At a studio sixty kilometers from Paris, the musicians laid down a bolero-like backing track over which Deleuze recited a passage from the final aphorism, "638: The Wanderer," in the first volume of Nietzsche's *Human, All Too Human* (Nietzsche 203-04).\(^\text{11}\) This track, "Le voyageur," was one of the two Schizo singles released in 1973, and was shortly thereafter incorporated into Heldon's first full-length album, *Electronique Guerrilla* (Heldon 1973). This album, which was re-released on compact disc by Cuneiform Records (U.S.) in 1993, sold quite well upon its initial release in France and allowed Pinhas and Heldon to
commit themselves to music full-time. They built a private recording studio and subsequently released six more albums between 1974 and 1979. As of 2001 Pinhas has also released nine solo albums, several of which (Rhizosphere [1977], L'Ethique [1981], on which Deleuze also appears, Cyborg Sally [with John Livengood, 1994] and De l'un et du multiple [1996]) show clear Deleuzean influences. Deleuze and Pinhas remained close friends until Deleuze's death in November 1995. Thereafter Pinhas established the Deleuze Web, an Internet archive containing transcriptions of Deleuze's seminar sessions, and joined the editorial board of Chimères, the journal founded by Deleuze and Guattari in 1987. He has recently toured Europe and the U.S. with his current project, Schizotrope, which consists of live and tape-looped electronic music accompanying readings of unpublished texts from Deleuze's seminars.

18. Our focus on Deleuze's relations with the world of pop music does not imply that Guattari did not forge his own links to that world, but that he did so in less simple and continuous ways. Though references to pop music are rare at best in his writings, Guattari was involved for most of his public life with militant mass movements in France and abroad, movements that were themselves constituted in part by the circulation of pop protest music through the international student communities. Among the left-wing groupuscules, French student life before May '68 may have been poverty-stricken, but it was not without a soundtrack cribbed from British, American, and local rock bands. Likewise, and more relevantly, elements of the Italian leftist Movement of '77 with which Guattari was directly associated coalesced around unlicensed "pirate" radio stations like Radio Alice in Bologna. A contemporary report sets the scene:

Radio Alice's broadcasts are an amalgam of music (rock, jazz, some classics, many folk and political protest songs), news (reports on left-wing and working-class struggles in Italy and abroad, reports on the local student movement, readings from newspapers published by groups of the "extra-parliamentary" left, up-to-the-minute accounts of activities organized by feminists, homosexuals, and radical civil-rights activists), and comments on a wide variety of topics by anyone who cares to telephone or drop in to the station's headquarters. These consist of two dilapidated rooms located on the top floor of an apartment building in a rather run-down residential section of Bologna. (Cowan, 67)
This "Free Radio" movement, one of the components of the Movement of '77 (others included the "Metropolitan Indians" who registered their dissatisfaction with the politics of austerity and the Historic Compromise between the Italian Communist Party and the reigning Christian Democrats by adopting "primitive" fashions and lifestyles), used pop music as one of the elements of its subversive assemblage. Guattari wrote a laudatory preface to a book documenting the stormy career of Radio Alice in which he characterized the station as "Alice. A radio line of flight. Assemblage of theory—life—praxis—group—sex—solitude—machine—affection—caressing" (Guattari 380). That is, for Guattari, Radio Alice was a kind of cultural metonym, a spontaneously generated territory assembled out of dissident subjective and affective points, freed from the margins of society, and articulated in the context of a broad political movement. The special issue of *Semiotext(e)* that is dedicated to Italy and Autonomia contains a summary manifesto by the organizers of Radio Alice, Collective A/Traverso, which includes a photograph of Guattari working with station staff in September 1977, just prior to the day it was shut down on charges of obscenity. The manifesto concludes with an imperative that alludes directly to Deleuze and Guattari's theory of desire: "Let's not talk about desires anymore, let's desire: we are desiring machines, machines of war" ("Radio Alice-Free Radio," 133-34).

19. The Movement of '77 also produced its own directly musical regime of expression, in affiliated pop singers like Eugenio Finardi (who had a hit with his tribute to the fledgling free radio movement, "La Radio," in 1976—see Finardi) and Claudio Lolli who articulated some of the partial perspectives and desires of the new militants. The earlier Autonomist militants had been involved primarily with jazz and avant-garde musicians, exemplified in Autonomist novelist/poet Nanni Balestrini's collaboration with composer Luigi Nono on the electronic tape piece "Contrappunto dialettico alla mente [Dialectical Counterpoint in the Mind]" (1967-68) and Nono's own "La Fabbrica illuminata" ["The Illuminated Factory"] (1964) and "Non consumiamo Marx" ["We Do Not Consume Marx"] (1969). Though these connections between aesthetic avant-gardists and political radicals persisted, the involvement of pop musicians substantially broadened the reach of the social movements, much as similar contacts between pop musicians and student radicals in the United States precipitated the counter-culture of the Sixties through the proliferation, hybridization, and feedback of mass expression. And like the American counter-culture, the Italian mass
movements were hobbled by disagreement within their ranks and constrained by in comprehension, ignorance, and hostility from without. In short, both movements were in the middle, like refrains, and their musics (among other elements) also acted as refrains that both deterritorialized the enforced social relations of capital, and provided hooks for the reterritorialization of alternate futures. Certainly this connective quality, which made of the movements what Deleuze calls in French "intercesseurs," contributed not only to their protean vitality but also to their ultimate dissolution in the face of the rigidities of State control (Pourparlers, 165ff).

20. Following Deleuze's suicide in November 1995, two record labels released memorial CDs in his honor. The first, Folds and Rhizomes for Gilles Deleuze (hereafter abbreviated FR), had been prepared by the Belgian label Sub Rosa prior to his death but did not reach stores until afterward. In the liner notes to that disc, label founder Guy Marc Hinant writes:

"L'Anti-Oedipe was written by the two of us, and since each of us was several, we were already quite a crowd." It is on the basis of this sentence, the first in Mille Plateaux, that we conceived of Sub Rosa. From the beginning, we wanted to be more than a label; a machine perhaps, composed of rhizomes, of peaks and troughs, of tranquility and doubt... Obviously, this is not an official tribute to this great figure, one of the foremost of our time. It is only the fraternal salute of a few young people who admire him deeply, and who, better still, were one day helped in their lives and in their creations by his writings.

The disc contains tracks by five bands or artists, four of which also contributed tracks to the second memorial project, a two-disc, 27-track set entitled In Memoriam Gilles Deleuze (hereafter IM), from the Mille Plateaux label in Frankfurt, Germany. Founder Achim Szepanski describes the work of the artists on his label as "Becoming, so that the music goes beyond itself; this is the search for the forces of the minoritarian that the label Mille Plateaux is part of. In a letter Gilles Deleuze welcomed the existence of such a label" (IM, 5, trans. modified).

21. Both of these labels are independents, unaffiliated with the large multinational music corporations that dominate the international recording market. They are also "alternative" labels, in the sense that the music they circulate is not designed to compete directly with the "mainstream" music of multinational labels. In addition to the Deleuze tribute discs, Sub Rosa has also released recordings of sound experiments by William S. Burroughs, Antonin Artaud, Bill
Laswell, and Richard Pinhas, among others, while Mille Plateaux specializes in dense techno dance/trance mixes and electronica. What they have in common is a focus on musicians who have been profoundly affected by the most recent computer revolution in music—the one that broke the monopoly of large, limited-access mainframe machines (and their bureaucratic administrators) over sound synthesis. The proliferation of personal computers through the Eighties and Nineties spawned an entire generation of musicians (and listeners) for whom sound is practically a tactile substance, digitally reproducible, malleable and storable, and consequently for whom traditional musical forms and notation have become increasingly irrelevant. Their music is pop, not in the Adornian sense of commodity music produced by corporate professionals and intended to impose a false universality upon consumers, but in a sense much closer to the old meaning of "popular": an amateur, bricolage music arising from people's everyday activities. In this regard at least, the contemporary cultural situation is similar to those that gave rise to the blues, or to the American counterculture of the Sixties and the Italian one of the Seventies. Today, everyday activities for many people depend upon advanced digital technology, and the music that arises from, or mixes with, those activities constitutes an index of political potentialities that have yet to coalesce.

What use were Deleuze and Guattari's concepts to these musicians who were seeking new categories and forms for musical creation and social intervention? We turn now to discerning the ways in which certain musicians have detached concepts from, or grafted elements onto, Deleuze and Guattari's philosophical rhizome for use in their own creative activities. To do so, we must make a little machinic assemblage, a refrain or temporary musical territory, of our own: we must select a few tracks, passing over others in silence, and re-sequence them in order to make the breaks fall, not between the two memorial discs, but between our particular line of enquiry and other virtual lines. Our choice of line should be construed neither as an essentially privileged account of these recordings nor as a devaluation of other approaches to them, but simply as one stem of a rhizome. We do what we can with them, and leave it to other listeners to do otherwise.

For our enquiry, the clearest line goes back to Deleuze and Guattari's basic concepts, but we view it from the less systematic, more pragmatic and selective perspective of these musicians. Music
is made of percepts, intensive sensory complexes which "are no longer perceptions; they are independent of a state of those who experience them... Sensations, percepts, and affects are beings whose validity lies in themselves and exceeds anything lived" (What is Philosophy, 164, trans. modified). But before the elements of music can be percepts, they must become perceptible. This becoming-perceptible complements or complicates the becoming-imperceptible of movement which Bergson described:

If movement is imperceptible by nature, it is always so in relation to a given threshold of perception, which is by nature relative and thus plays the role of a mediation on the plane that effects the distribution of thresholds and percepts and makes forms perceivable to perceiving subjects. It is the plane of organization and development, the plane of transcendence, that renders perceptible without itself being perceived, without being capable of being perceived. (A Thousand Plateaus 281)

This threshold of perception must be crossed for music to arise, and the work of the musician is directed toward making perceptible what is as yet imperceptible.

24. The crossing of the threshold is the object of two tracks on IM, Jim O'Rourke's "As In" (disc 2, track 1) and DJ Spooky's "Invisual Ocean" (disc 2, track 8). O'Rourke's track takes almost three minutes to fade slowly into perceptibility, and as it does it gradually assembles a smooth continuum of modulated sound (to which we will return in a moment). This track assembles itself as a perceptible continuum, however, only through the accumulation and superposition of myriad instantaneous "little perceptions." It is like the murmuring of Leibniz's ocean:

we say that the little perceptions are themselves distinct and obscure (not clear): distinct because they grasp differential relations and singularities; obscure because they are not yet 'distinguished,' not yet differenciated. These singularities then condense to determine a threshold of consciousness in relation to our bodies, a threshold of differenciation on the basis of which the little perceptions are actualised, but actualised in an apperception which in turn is only clear and confused; clear because it is distinguished or differenciated, and confused because it is clear. (Difference and Repetition, 213)

As the little perceptions accumulate, their differences become audibly distinct from one another (to the perceiving subject), and in so doing they define a large-scale perception of the ocean. The perception of the ocean is clear because the little perceptions from which it is assembled are audibly distinct, but because the little
perceptions are not fully individualized, this clear perception remains dynamically confused. DJ Spooky's track assembles such an audible ocean, which remains "Invisul" (invisible or infra-visual, imperceptible to vision?), out of non-maritime sound elements in precisely this way. This ocean forms part of the larger sonorous and social territory that defines all his work: "I wanted to create music that would reflect the extreme density of the urban landscape and the way its geometric regularity contours and configures perception … The sounds of the ultra futuristic streetsoul of the urban jungle shimmering at the edge of perception" (DJ Spooky 7-8).21

25. Once the threshold of perceptibility has been crossed, the assemblage of sound begins to actualize its space-time, its imperceptible plane of organization. Such a plane actualizes itself in terms of its breaks and cuts, or rather its resistance to them. A smooth, sonorously continuous space-time unfolds, as in O'Rourke's "As In": glissandi, continuous lines or gradients of sound that modulate from tone to tone without discontinuous jumps across the sonorous spectrum. The tracks by the German group Oval, "You Are * Here 0.9 B" (disc 2, track 2 of IM) and "SD II Audio Template" (track 3 of FR), also embody this smooth construction, at least temporarily. The Oval tracks also intentionally dramatize the process by which smooth space-time becomes striated and vice-versa. "Oval is a very strict and limited approach," claims principal musician Markus Popp, "in order to make some new distinctions clear—and, in a way, to go beyond the music concept, the music metaphors underlying the concepts used in the digital instruments involved" (quoted in Weidenbaum). In "SD II Audio Template," the continuously modulating tones are abruptly interrupted by punctual percussive events that sound like scratches on the surface of an LP. These interruptions obviously allude to the dialectic of tone and noise, consonance and dissonance that has defined modern music from Schoenberg to Cage, but they also have a more novel function. Despite their metric irregularity, these events introduce something like a rhythm or striation into the smooth plane. As Deleuze and Guattari point out, "Meter, whether regular or not, assumes a coded form whose unit of measure may vary…whereas rhythm is the Unequal or the Incommensurable"; this unequal element is the imperceptible "difference that is rhythmic, not the repetition" of perceptible meter (A Thousand Plateaus 313-14). These irregular striations are digitally "looped" to form a repeating metric phrase that constitutes the striated space-time of the Oval
track. Thus metric irregularity at short intervals becomes rhythmic regularity at longer intervals or higher levels of scale.

26. Conversely, the striations can also reconstruct a smooth space/time through acceleration and accumulation; in "SD II Audio Template" this happens when the metric striations occur at shorter and shorter intervals until they begin to overlap, either in actuality or simply in the perception of the listener. As they do so, their differenciated or striated features begin to merge, to return to a smooth continuity or indistinguishability at a higher frequency. The track passes through a circular progression, from smooth sonorous continuity to striation and then back to smoothness via increasing striation. As a result of these exemplary transformations, this track by Oval can stand, as its title implies, as an "audio template" or abstract map because it reveals that all audio assemblages are in fact what Deleuze and Guattari call multiplicities: "A multiplicity has neither subject nor object, only determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing in nature." Thus when the tempo of striation, the number of one of the track's sonorous dimensions, increases, not only the speed of the piece but also its sound quality changes. "When Glenn Gould speeds up the performance of a piece, he is not just displaying virtuosity, he is transforming the musical points into lines, he is making the whole piece proliferate" (A Thousand Plateaus 8). Just as acceleration changes the nature of the piece, so does deceleration. Obviously, deceleration of a sound lowers its pitch and thus alters its tone quality, but it also alters all its other relationships and reveals qualitatively new features in them; if you slow down a passage of pizzicato strings, for example, you will find the continuous hum of a motor. To a certain extent, the Blue Byte track "Can't Be Still" (disc 1, track 12 of IM) and the Bleed track "Pâtent" (disc 2, track 5 of IM) also embody this principle of audio multiplicity via acceleration and deceleration.

27. Another way that smoothness emerges from striation—in fact, the most common method employed on the Deleuze memorial discs—is via the superposition of a number of distinct metric patterns of striation. These superposed patterns intersect at a variety of singular inflection points, creating indirect harmonies and virtual melodies. Deleuze and Guattari describe it this way:

Certain modern musicians oppose the transcendent plan(e) of organization, which is said to have dominated all of Western classical music, to the immanent sound plane, which is always given along with
that to which it gives rise, brings the imperceptible to perception and carries only differential speeds and slownesses in a kind of molecular lapping. (*A Thousand Plateaus* 267)

In this molecular (over)lapping the perceiving subject "hears" virtual sounds that have not actually been played and "counts" virtual beats that have not actually been measured. The amplified ensemble music of Philip Glass is the most well known example of this method of superposition; the track "The Grid" from his soundtrack for the film *Koyaanisqatsi* is representative. On the Deleuze memorial discs, the tracks contributed by Mouse on Mars, "Subnubus" (track 1 on *FR*) and "1001" (disc 2, track 3 on *IM*), provide examples of generative superposition in techno music.  

28. Within the mutating smooth/striated space-time of the musical multiplicity, other concepts drawn from Deleuze and Guattari's work also become productive. In his piece "Unidirections/Continuum" (disc 1, track 6 of *IM*), Christophe Charles makes use of the techniques of *musique concrète* pioneered by Pierre Schaeffer to construct a decentered sonorous rhizome according to principles of connection and heterogeneity. *Musique concrète* assembles not only pure sounds produced by wave generators but also everyday sounds not normally considered to be musical: the creaking of a hinge, a sigh. This heterogeneity follows from the musician's recognition that all sonorous materials are available for use on this plane of development. The musician makes music by assembling "semiotic chains":

> Semiotic chains of every nature are connected to very diverse modes of coding (biological, political, economic, etc.) that bring into play not only different regimes of signs but also states of things of differing status... A rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences, and social struggles. A semiotic chain is like a tuber agglomerating very diverse acts, not only linguistic, but also perceptive, mimetic, gestural, and cognitive... (*A Thousand Plateaus* 7)

Charles' semiotic chains range from the unearthly mechanical purity of oscillator and wave generator tones to the entropic crackle of broadcast static and recording surface noise. Between the extremes, we hear pitched and unpitched percussion, sirens, the delicate movement of water and sounds of flight in field recordings; the heterogeneity of connected elements leads the listener across vast distances of sonorous intensity.
29. The final element of these memorials to which we must turn seems at first to be more intimate but is actually just as distancing as static: the voice. Up to this point we have focused on elements of Deleuze and Guattari’s philosophy of music that have no clear correlatives in popular music criticism, but with the voice we move onto critical terrain that is currently dominated by methods and categories drawn from psychoanalysis, an interpretive strategy on which Deleuze and Guattari declared war in *Anti-Oedipus*. Our purpose here is not to rehearse that all-out assault, nor to intervene concretely in the ongoing musicological debates over the voice, but merely to identify the general limits of a psychoanalytic representational approach to pop music as a way of highlighting the originality of Deleuze and Guattari’s productivist perspective.

30. In psychoanalysis and the criticism derived from it, the voice functions like the gaze to address and thus subjectify individuals, to interpellate them as the subjects of a symbolic order whose structure their psyches reflect imperfectly. Thus the recorded voice forms an "acoustic mirror" in which the subject (mis)recognizes him/herself, and the activity of listening to that voice becomes an unavoidably narcissistic enterprise. Deleuze and Guattari accept the validity of this model as far as it goes, but they propose a more broadly based alternative that also opens up new territories and structures for music. The narcissistic model of listening, they claim, is a fundamentally retrospective and representational one that cannot account for the production of novelty or innovation in music. Everything new gets cut down to fit the Procrustean bed of universal Oedipal triangulation ("papa-mama-me") and the endless deferral of desire conceived as lack; every action is separated from its practical efficacy to become a pure dramatic signifier of the interminable desire for desire. The psychoanalytic unconscious is a Victorian theater of familial narcissism, a model of dialectical negativity that is incapable of escaping its own constitutive impasses, so Deleuze and Guattari propose instead a productivist unconscious that exceeds the representational model on all sides. This affirmative model enables the prospective temporality of subjective improvisation as well as the negative abyss of psychoanalysis’ repetition compulsion.

31. The voice provides a good example of the interpretive consequences that this broader model entails. In much pop music, the voice is the fixed point of thematic reterritorialization around which the sounds temporarily deterritorialize (through distortion,
feedback, overdubbing, etc.). "[A]s long as the voice is song, its main role is to 'hold' sound, it functions as a constant circumscribed on a note and accompanied by the instrument" (A Thousand Plateaus 96). Since the listener’s attention to the voice as a carrier of discursive content or meaning usually effaces its impact as sound or intensity, the voice most often functions to delimit and preserve the pre-established territories of the piece, both harmonically and conceptually. The voice tells us what the song is about, and it does this while doubling or harmonizing with its accompanying instrumental melody, and reproducing the more or less regular meter. The voice, especially the "good" or "trained" voice in pop music, addresses the listener, demands (mis)recognition and interpellates her/him as a docile subject precisely because of the power it gains by this process of harmonic/thematic reduplication or reterritorialization. This can be true even (and especially) when the voice sings or speaks of escape, of lines of flight out of its territorial constraints; think for example of the vicious irony of "I'm Free" from the Who's Tommy ("I'm free/I’m free/And I’m waiting for you to follow me ... "), which reterritorializes the newly-claimed freedom of the "I" in its control of the second person, the "you"). So far, Deleuze and Guattari would agree with Adorno, Althusser, and the psychoanalytic tradition.

32. Such is not the case, however, with respect to Scanner's track "Without End" (disc 2, track 7 of IM). Here a hoarse voice whispers of events or hecceities, saying, "it is dawn eternally, time of prophecy," while the process of sound assembly creates an unexpected auditory space-time that does not double or reflect the sonic contour of that voice. The slow, diffuse metric pulse of human breathing provides a foundation for the piece, a foundation upon which are laid layers of indistinct vocal sounds, ungraspable fragments of speech and angular melodic cells that constitute an unstable soundscape. The listener does not (mis)recognize her/himself in the vocal/harmonic pattern here, but rather must wait for some pattern to emerge, only to see it subside again into the constantly mutating mix. A similar procedure of discontinuous assemblage, though often without the intelligible lead vocal that provides thematic continuity and territorialization here, underlies all of Scanner's work, including his piece on FR, "Control: Phantom Signals with Active Bandwidth" (track 4). Robin Rimbaud took the name "Scanner" from his primary enabling musical machine, the broadband scanner that intercepts the transmissions of radios, cellular telephones, and other broadcast machinery. His method
itself is formally subversive and deterritorializing, in that he is transforming a surveillance technology—originally devised to allow police to monitor broadcast communications and intervene in that medium—into a generator of aesthetic affects and percepts. But it is also a new territorialization, as he has said:

A good way of putting it with the scanner stuff is mapping the city... it's like mapping the movements of people during different periods of the day. It's fairly predictable [during the day]. Then in the evening, that's where the riot happens. That's when it gets really exciting because all hell gets let loose. The phone rates go down and people have the most surreal conversations. I've always been interested in the spaces in these conversations... It amazed me with these mobile phones, which are much more expensive than standard phones—you get these enormous gaps happening. They're the points that really interest me. What's happening in there. (cited in Toop, 35)

In deterritorializing the technology, he generates a new refrain and hence new spatio-temporal territory: a perceptual map of the city and the day. From his recordings of human voices snatched from these broadcast bands, Scanner often selects the least intelligible statements, those that are so unconventional and decontextualized that they carry no direct meaning even when they can be understood clearly; he also selects voices that have been so distorted in transmission that they cannot be understood at all. These voices, and even the static-filled gaps in conversations, are used as concrete sound, as in *musique concrète*. In other words, he uses the scanner as a source of raw sonorous material and not generally as a source of subjectively referential information, as the police do; the demand for stable reference and command that informs police use of surveillance technology is much closer to the territoriality of the traditional pop song form (and to psychoanalytic criticism of it) than to Scanner's audio maps.

33. Scanner deterritorializes the voice by centering it in the mix, but depriving it of its direct signifying capacity and its continuous harmonic intensification. In his piece "Control," we hear voices speaking, but often we cannot understand what they are saying. The voices become elements of the sound, values of timbre, without the privilege (and limitation) of discursive meaning. "Only when the voice is tied to timbre does it reveal a tessitura that renders it heterogeneous to itself and gives it a power of continuous variation: it is then no longer accompanied, but truly 'machined'" (*A Thousand Plateaus* 96). The voice always has timbre, of course, but not all timbre is equally perceptible; indeed, the mark of the
"trained" or "pure" singing voice is precisely its minimal noticeable timbre in comparison with the gruff, cracked or shrill vocal quality of blues or rock singers. By "machined" Deleuze and Guattari mean that the timbrally distinctive voice ceases to be tied to a stable harmonic structure or its attendant subjective form as limiting territories, and is instead opened up to a process of sonorous production that exceeds the expression of an individual psyche. The voice becomes an inhuman sound, a noise, and is no longer personal, subjective, or most importantly, subjectifying (interpellating). Like Adorno, psychoanalytic critics treat this inhuman vocality as a source of anxiety that must inevitably be repressed, only to return as an uncanny recorded double of the fractured self (Engh, 1994, 130-31). Deleuze and Guattari, on the other hand, find in this inhumanity, so unexpectedly close at hand, an affirmative and convenient step out of the straightjacket of normative subjectivity.

The uncanny point of indiscernibility between human voice and inhuman sound can be reached in a number of ways. For example, it is what post-serial composers like Milton Babbitt and Luciano Berio have sought in their vocal and electronic works through the transformation of traditionally trained voices. Babbitt's Philomel for soprano, recorded soprano and synthesized sound (1963) dramatizes the Greek myth of Philomel's metamorphosis into a nightingale by continuously manipulating the soprano's voice, sending it off down a line of flight toward one, then the other of the endpoints of its constant becoming: singing woman or synthesized bird. The sonic affirmation of flight from a constraining subjectivity counterbalances the mythic tragedy of Philomel's punishment. Berio's Thema: Omaggio a Joyce (1958) and Visage (1961), both electronic manipulations of soprano Cathy Berberian's voice on tape, occupy the same point of transition between voice as discursive meaning and voice as inhuman sound. Of Thema, which actualizes the virtual fuga per canonem in the "Sirens" chapter of James Joyce's Ulysses, Berio has written,

I was interested in developing new criteria of continuity between spoken language and music and in establishing continual metamorphoses of one into the other... [In Thema] it is no longer possible to make distinctions between word and sound, and between sound and noise; or between poetry and prose, and between poetry and music. We are thus forced to recognize the relative nature of these distinctions, and the expressive characters of their changing functions. (Berio 1998, 1)
Scanner's work uses different techniques and different vocal timbres, but it forces a similar recognition upon us as well, one that complements the political subversiveness of his chosen medium: there is a becoming-sound of the voice that can draw the subject into a parallel becoming-other of the self, one that is marked not by primal castration anxiety but by prospective affirmation.

35. Even so, the indiscernibility of voice and sound in Scanner's pieces often highlights, paradoxically, the subjectively expressive power of the voice even in the absence of intelligible meaning. The deterritorializing line of flight out of normative subjective structure may reterritorialize within something similar to the psychoanalytic paradigm. Even when we cannot understand the words or locate a melody in "Control" or "Without End," we can sometimes still extract some signifying value by grasping the mood or tone of the sounds.

36. This reterritorializing aspect has also been explored by post-serial composers, most significantly by György Ligeti in his pieces *Aventures* (1962) and *Nouvelles Aventures* (1962-65), for three singers and seven instrumentalists. In these pieces, Ligeti uses an invented language to demonstrate that "All the ritualized human emotions that are expressed colloquially, such as understanding and dissension, [etc ... ] can be expressed exactly in the a-semantic emotional artificial language." In singing this artificial language, the performers produce "the opposite of what we were used to at the performance of an opera ... : the stage and protagonists are evoked by the music—the music is not performed to accompany an opera, but an opera is performed within the music" (Ligeti 1985, 8-9). Here the accompaniment itself serves to interpellate the listening subject, even without direct address from the voice.

37. The *reductio ad absurdam* of this situation is surely the Residents' album *The Third Reich and Roll*, which consists of two LP-side-long "semi-phonetic interpretations of Top Forty hits from the Sixties" (Residents 1979). On this album the Residents, perhaps the most important conceptual art band in pop, perform hit singles like the Rascals' "Good Lovin'," Lesley Gore's "It's My Party" and the Mysterians' "96 Tears" as if they had only been heard over a poor quality AM radio; the melodies and arrangements are largely intact, but the words are reduced to "semi-phonetic" approximations at best, in acknowledgement of the historical and phenomenological
experience of many actual listeners who would have encountered much of the most influential pop music of the twentieth century via low-fidelity AM radio. The Residents' method also ironically acknowledges the fundamental irrelevance of stable discursive meaning to the world of pop, where pure sound intensity and affective projection should rule.

38. The imperative to deterritorialize the voice, to use it timbrally rather than harmonically or referentially, must include even the voice of the philosopher who articulates that imperative. There is a difference, however imperceptible it may be, between the randomly sampled voices used by Scanner, or the rigorously disciplined voices required for the performance of Babbitt's, Berio's, and Ligeti's pieces, and the singular voice of Deleuze himself. It is the difference between the deterritorialized voice and the deterritorializing voice, between hearing a voice become an inhuman sound and actually becoming an inhuman sound via that voice. Deleuze once said,

Some of us can be moved by certain voices in the cinema. Bogart's voice. What interests us is not Bogart as subject, but how does Bogart's voice function? What is the function of the voice in speaking him? ... It can't be said that this is an individualizing voice, even though it is that also ... I deterritorialize myself on Bogart ... It's a kind of metallic voice...a horizontal voice, it's a boring voice—it's a kind of thread which sends out a sort of very very very special sonorous particles. It's a metallic thread that unwinds, with a minimum of intonation; it's not at all the subjective voice. (Vincennes Seminar, 215)

Deleuze's own voice was also such a non-subjective "metallic voice" through which others deterritorialized themselves. At his death, his friends and colleagues uniformly evoked his familiar gruff voice, which Richard Pinhas described as "difficult but beautiful" (Heldon 1973), and two of the artists on the memorial discs make use of that deterritorializing voice in their compositions. Hazan + Shea, in "Rhizome: No Beginning No End" (track 5 on FR), sample Deleuze's voice from the Abécédaire de Gilles Deleuze television broadcasts. In the first section, "End," they use Deleuze's voice as pure timbre, setting its isolated phonemes against a synthesized ensemble of keyboards, strings and percussion; in the second section, "Beginning," the voice re-emerges as a signifying instrument as the sentences broken down into timbral elements in section one are cited in their entirety. Hence the inversion of sequence: (no) end before (no) beginning. Wehowsky/Wollscheid's "Happy
Deterritorializations" (disc 1, track 2 of IM) "reformulates ... an aural sound, once recorded by a French rock band accompanied by a reciting Gilles Deleuze [sampled from "Le voyageur" by Heldon on Heldon 1973]. Pieces of this archetypal sound are projected onto different contemporary sound matrices and merge with their sonic corpora" (Wollscheid in IM, 9). Wehowsky/Wollscheid enfold and unfold Deleuze's voice by sampling, resequencing and overdubbing his performance with Heldon to create a multiplied, polyphonic, deterritorializing/reterritorializing Deleuzean voice distanced from and in conversation with itself.

Richard Pinhas' latest recordings, released by Sub Rosa and Cuneiform, constitute a third memorial disc, though they are not billed as such, and they too are organized around Deleuze's words and voice. For this project Pinhas recruited the musicians (and science-fiction writers) Norman Spinrad and Maurice Dantec to form a unit called Schizotrope, subtitled "The Richard Pinhas & Maurice Dantec Schizospheric Experience—French Readings of Gilles Deleuze's Philosophy with Metatronic Music and Vocal Processors" (Schizotrope 1999 & 2000). Much of these discs reprise Pinhas' earlier collaborations with Deleuze: either Deleuze's words, read by Dantec, are set to music, or Deleuze's voice itself is set. They differ in the form the musical setting takes. On the initial Heldon recording of "Le voyageur," the music can be described as progressive rock, as bands like Heldon and King Crimson were inventing it in the early Seventies, music which we have described as "bolero-like" in structure and sound. Schizotrope's music, however, is quite different from that. Instead of repeating metric and harmonic forms in regularly striated space-time, the new music is smooth and ambient. Drawing on experiments from his previous solo album De l'Un et du Multiple (1996), Pinhas has created a contemporary style that owes equal amounts to the Nineties explosion of sampled, computer-generated techno music, and to the pioneering Seventies/Eighties "Frippertronics" work of King Crimson founder Robert Fripp. Eric Tamm defines Frippertronics as follows: it is

the technological setup whereby two reel-to-reel tape recorders were connected together and to...electric guitar; [and it is also] the musical style, that is, the potential for creatively shaping ever-fluctuating masses of sound in real time, ordinarily upon a tonal, pandiatomic, modal or multi-modal basis; and the various uses of Frippertronics—as music performed solo, or as one timbral/structural element within a more conventional song, or as a "thematic sound" used to unify a large
musical collage ... (Tamm 1990, 115)

By the Nineties, the technological setup had changed to include DAT recorders and digital signal control, but otherwise the description remains accurate (though, significantly, Fripp changed the name of the activity to the more territorial "soundscapes"). The interconnected recorders produce cyclic loops of varying durations that grant a periodicity to even the most irregular meters. At the same time, the "thematic sound" gradients of modulating tone and timbre establish smooth lines of sonorous continuity against which Deleuze's words and voice are set. Pinhas' work here is at once the most territorial of the pieces we have examined, in that Deleuze's concepts and the grain of his voice clearly function as continuous centering elements in the sound assemblage (see A Thousand Plateaus 96), and also perhaps the most conceptually radical in its extensive deployment of Deleuze's thought according to its own internal logic and rhythm. Instead of the repetitive interpellations of harmonic doubling, we find pure differences of sonorous intensity.

CODA: *ad libitum*

40. Our analysis of the contemporary productive potential of Deleuze and Guattari's musical philosophy cannot be as complete as our account of their borrowings from—and participation in—historical pop music was, in part because that potential is still in the process of being realized in diverse concrete forms, but also, more importantly, because its mass political threshold has yet to be crossed. At present there is no broad-based socio-political movement, comparable to the counter-cultures of the Sixties and Seventies, in which that potential can find smooth, open territory for large-scale experimentation and composition. So far it has found only small and temporary autonomous territories, hemmed in by the market or the state and sustained precariously by the local refrains of DJ Spooky, Richard Pinhas, and other musicians. But the market and the state are themselves nothing more than temporary territories, legitimated by advertising jingles and national anthems, and yet ominously prone to mutation whenever enough people call a different tune. Plato recognized this instability in the Republic when he warned that "the introduction of novel fashions in music is a thing to beware of as endangering the whole fabric of society, whose most important conventions are unsettled by any revolution in that quarter" (Plato 115). If for the moment such a revolution is effectively contained at the local level, its deterritorializing effects summarily reterritorialized in musical niche markets, the potential
for its intensification and spread remains, awaiting the bigger and better assemblage that we will have to construct in order fully to realize it.

41. For now, though, we have the brief audio assemblages dedicated to Deleuze. They are not models to be imitated, but rather distinct cases of realization for the conjoined potentials of sound and society. Guattari would call them molecular revolutions. We have scarcely begun to explore the richness of invention contained in these memorial discs and the related works of the musicians in question, but we hope that our analysis has at least sketched a provisional answer to our question: what use were Deleuze and Guattari’s concepts to these musicians? In brief, the musicians extracted concepts like tools from the Deleuze-Guattari toolbox and used them to intensify or amplify their own thinking and performing in sound. This is not a matter of simply applying or illustrating philosophical ideas in another medium, but of thinking in and with what we play, what we sing, and what we hear. Atom Heart captures this idea neatly in "Abstract Miniatures in memoriam Gilles Deleuze" (disc 1, track 7 of IM): as the track opens, a deadpan, synthesized voice says, "What I see is thinking. What I hear is thinking too."

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Endnotes

1. Two pages earlier, they offer an expanded version of this analytic chain that implicitly demonstrates the importance of pop to their conception of philosophy and critique: "RHIZOMATIC = SCHIZOANALYSIS = STRATOANALYSIS = PRAGMATICS = MICROPOLITICS" (22).

2. As this essay will make clear, we are not using the term "composition" in the restricted sense of a notated plan for subsequent performance, but in a broader sense that includes both improvisational production (as in jazz or raga) and concrete sound assembly (as in musique concrète, electronic and process music).

3. Deleuze and Guattari draw this "dimensional" terminology from Pierre Boulez, who proposes it in Boulez on Music Today, pp.116-121.

4. This rhizomatic reading of the development of modern Western music also demonstrates that the history of European concert music is not necessarily trapped within a linear, tree model of development, as it may have appeared from our mention of the Germanic tradition in the introduction above. That history too may be treated as a rhizome, on the condition that critics give up the restrictive presuppositions and exclusions of traditional musicology.

5. For a discussion of a specific musical example involving these issues, see "Boulez, Proust and Time." For Boulez's acknowledgement of the value of Deleuze and Guattari's forays into musical philosophy, see Boulez/Menger 1990, p.9, and the Chamber Orchestra of Europe program notes.

6. In its emphasis on the dialectic of aesthetic form and subjectivity, and in its relentless negativity, Adorno's theory of mass culture draws upon and consequently resembles psychoanalytic criticism, as many scholars (for example Barbara Engh in Dunn and Jones, 126-130) have noted. We will return to the issue of Deleuze and Guattari's critique of psychoanalysis below.

7. The earliest direct reference to a pop musician, if not pop music, in their works appears in their third collaboration, Rhizome (later incorporated into A Thousand Plateaus as its introduction). By way of contrasting the hierarchical, exclusive structure of the "arborescent" or tree model of thought to the immanent, acentric rhizome, they cite "the American singer Patti Smith [who] sings the bible of the American dentist: Don't go for the root, follow the canal." (Rhizome p.57, and A Thousand Plateaus p.19). We have not been able to locate the source for their Smith citation; the line does not appear in any of the songs included on her two albums released prior to the appearance of Rhizome, Horses (1975) and Radio Ethiopia (1976), and may actually be drawn from her published or unpublished poetry.

8. Italicized lyrics cited in English in Deleuze's French text. Further citations from the song refer to this recording.

9. Beyond this aparallelism of distortion, the song also shares with Deleuze's account of Bacon an emphasis on fact, but fact conceived in an unconventional sense. "Fact" in these contexts does not describe the relation of a representation to its material referent or the status of a piece of information independent of the theory that explains it. The fact for Deleuze and Talking Heads is instead a kind of singularity prior to representation, a point or
monad isolated from generality and identity. Deleuze draws his usage and analysis of fact from Bacon's interviews with David Sylvester, *The Brutality of Fact* (Sylvester). "The relation of the Figure to its isolating place defines a 'fact,'" Deleuze claims. "Isolation is thus the simplest means, necessary though not sufficient, to break with representation, to disrupt narration, to escape illustration, to liberate the Figure: to stick to the fact" (Francis Bacon, 9-10). Talking Heads assert a similarly paradoxical conception of the fact as that instance which provides no information and indeed cuts open the supposedly unified subject:

I'm ready to leave—I push the fact in front of me  
Facts lost—Facts are never what they seem to be  
Nothing there!—No information left of any kind  
Lifting my head—Looking for danger signs  
There was a line/There was a formula  
Sharp as a knife/Facts cut a hole in us  
There was a line/There was a formula  
Sharp as a knife/Facts cut a hole in us  

...  
The island of doubt—It's like the taste of medicine  
Working by hindsight—Got the message from the oxygen  
Making a list—Find the cost of opportunity  
Doing it right—Facts are useless in emergencies  

...  
Facts are simple and facts are straight  
Facts are lazy and facts are late  
Facts all come with points of view  
Facts don't do what I want them to  
Facts just twist the truth around  
Facts are living turned inside out  
Facts are getting the best of them  
Facts are nothing on the face of things  
Facts don't stain the furniture  
Facts go out and slam the door  
Facts are written all over your face  
Facts continue to change their shape

The paradoxical idea that "Facts are simple and facts are straight" while at the same time "Facts continue to change their shape" reveals their generative nature, their implicit virtuality. Like Leibniz's monads, "Facts all come with points of view." "Facts are nothing on the face of things," that is they are not objects to be seen in specific cases of expression because, on the contrary, "Facts are living turned inside out," sedentary interior life drawn outside itself, exteriorized, along a line of escape: "Facts go out and slam the door." And it is precisely in the form of such facts that pop music can provide components to expressions that exceed the commodity form in all directions.

10. Information on Pinhas' background is drawn, with permission, from his private e-mail correspondence with Timothy S. Murphy.


12. We would like to thank composer/musician Stefano Scodanibbio for this information on the Movement of '77 and much of what follows.

13. In this regard it is instructive to compare the documents and analyses of the American counter-cultural music experience and its antagonists, contained in Denisoff & Peterson, with the (much more diffuse) texts on the Italian movements and their music contained in
Cowan, Alice é Diavolo and "Radio Alice-Free Radio," and in the special issue of Guattari’s journal *recherches* dedicated to the "Untorelli" or "plague-carriers," as the Italian movements were labeled by the Italian Communist Party.

14. Martin Joughin translates this term as "Mediators," which has rather too Hegelian a ring to it for our ears (Negotiations, 121ff).

15. A year later Sub Rosa released a second CD of tributes to Deleuze. *Double Articulation* consists of revisions of the tracks from *Folds and Rhizomes*: the artists involved swapped tapes and remixed each other’s work. In order to keep our discussion of the musicians as focused as possible, we have chosen to examine the original mixes rather than the remixes.

16. For a Deleuze/Guattarian sociological analysis of the techno music scene with which these labels are associated, see Fitzgerald 1998.

17. On this significant transition, see Born, 183-193, 207-210.

18. For example DJ Spooky, whom we will discuss below, writes, "Based on the notion that all sonic material can be manipulated with the same ease that computers now generate composite images, the DJ combines the musical expression of other musicians with their [sic] own and in the process creates a seamless flow of music" (DJ Spooky, "Flow My Blood the DJ Said," included as liner notes to his debut album *Songs of a Dead Dreamer* [1996], p.8).

19. On the technologization of everyday activity, see Hardt and Negri, 7-11.

20. See Leibnitz 1981, p.54: "To hear this noise as we do, we must hear the parts which make up this whole, that is the noise of each wave, although each of these little noises makes itself known only when combined confusedly with all the others, and would not be noticed if the wave which made it were by itself."

21. DJ Spooky *That Subliminal Kid* (the name refers to a character in the final chapter of William S. Burroughs' *Nova Express*, "Pay Color" [129ff]) is, after Richard Pinhas, the musician whose work is most consistently and closely bound up with Deleuze and Guattari’s philosophy. Unlike Pinhas, who comes out of the Seventies progressive rock/ambient music scene, DJ Spooky is associated with the Nineties hip hop and "illbient" scene. See "Flow My Blood the DJ Said," pp. 7 and 14.

22. Something similar happens in the hyperkinetic form of punk rock known as "grindcore": simple chords and rhythmic patterns are played so fast that they begin to form higher-level gradients of sonorous density and diffusion in which the original chord patterns are rendered imperceptible. The early work of Napalm Death, for example the album *From Enslavement to Obliteration*, is perhaps the most significant manifestation of this form of smoothness emerging from extremely rigid striation.

23. On this technique of overlapping or superposition in general, and Glass' music in particular, see Richard Pinhas' discussion with Deleuze in "Vincennes Seminar Session," pp. 209-214.

24. Charles has collaborated with Oval on a CD entitled *Dok*, in which the German musicians use Charles’ field recordings as material for electronic processing.

26. This is a key element in Adorno’s argument in "The Curves of the Needle"; see especially p.54. For the most influential exposition of this model of the voice, see Silverman.

27. See for example "Twenty-seventh Series of Orality" in The Logic of Sense, especially pp.193-195.

28. See Deleuze and Guattari 1977, chapter 2. Although they do not explicitly take Adorno as one of their targets in this critique, his model of pop music is clearly implicated in it; see the Adorno texts cited above.


30. Chris Cutler, who was close to the Residents and studied their techniques, describes the production of The Third Reich and Roll as follows: it was "made by running the songs to be copied on one track and then playing along with them, adding part by part and finally erasing the original—then cutting and montaging the whole into a long single work. A tribute to/vicious parody of pop" (Cutler 84).

31. For examples of Fripp’s work, see his albums Let the Power Fall (1981) and the trilogy 1995 Soundscapes Live.
Works Cited


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