# **Music and Holey Space**

by Ronald Bogue

#### **Abstract**

Toward the end of the Nomadology plateau of *A Thousand Plateaus*, Deleuze and Guattari differentiate an ambulant holey space (espace troué) from the smooth space of the nomadic war machine and the striated space of the sedentary State apparatus. Although Deleuze and Guattari only discuss the concept briefly, holey space provides a useful means of framing their remarks on music in general. Music's holey space is a quasi-territory determined by processes of following sonic movement-matter. Its instruments differ from nomadic weapons and sedentary tools, being characterized by directions of injection, ejection and parajection; the vector of lines of the universe and extemporality; the model of free play; the trait of expression of incantation; and the tonality of affects-percepts. A paradigmatic instance of musical holey space is John Luther Adams' Inuksuit as performed on the U.S.-Mexico border in 2018.

Holey space, *espace troué*, is a curious concept. It first appears toward the end of *A Thousand Plateaus*' "Treatise on Nomadology – The War Machine" as a kind of mutant offshoot of the plateau's dominant opposition of the smooth space of the nomadic war machine and the striated space of the State apparatus. It arises in response to the question, "How do the nomads invent or find their weapons?» (Deleuze & Guattari 1987: 403). Deleuze and Guattari's answer to this question is that the weapons of the nomads are created by "metallurgists," construed broadly as the collectivity of prospectors, miners, smiths and artisans involved in the production of metal weapons. The metallurgist/artisan, they conclude, is neither nomadic nor sedentary. Rather, "The artisan is *the itinerant*, *the ambulant*" (Deleuze & Guattari 1987: 409), and the space of the artisan is neither smooth nor striated, but holey.

Only a few pages after its introduction, however, the concept of holey space largely disappears, its last formulation in the plateau appearing in the combinatory chart that identifies holey space as the substance of content correlative to the substance of expression of the nomad war machine (Deleuze & Guattari 1987: 416). Passing references to holey space are made in the Smooth and Striated plateau (Deleuze & Guattari 1987: 480-1, 487, 500), but they are ancillary to the plateau's central argument. In their works written after *A Thousand Plateaus*, neither Deleuze nor Guattari mentions holey space again.

Despite the marginal status of holey space in Deleuze and Guattari's works, I see great promise in this concept as a means of understanding the arts, especially music. Deleuze and Guattari assert that «metallurgy has an essential relation with music» in that both

exhibit a «continuous development of form» and a «continuous variation of matter» (Deleuze & Guattari 1987: 411), but there are many other aspects of music that can be regarded as having an essential relation with metallurgy's holey space. What I offer here, then, is less an explication than a speculative extension of Deleuze and Guattari's brief remarks on holey space as a viable framework for approaching music.

Early in the Nomadology plateau, Deleuze and Guattari treat the nomadic, the itinerant and the ambulant as synonyms, as when they characterize minor nomad sciences as «itinerant, ambulant sciences» (Deleuze & Guattari 1987: 372) whose fundamental procedure is not «reproducing» but «following.» The nomad, itinerant, ambulant sciences follow «the 'singularities' of a matter, » «a field of celerity, » «a vortical flow, » «a continuous variation of variables» (Deleuze & Guattari 1987: 372). But when Deleuze and Guattari introduce the concept of the «machinic phylum» (Deleuze & Guattari 1987: 395) they gradually move into a discussion of metallurgy and eventually an exposition of the notion of holey space, which they differentiate from smooth and striated space. The machinic phylum, at its limit, is «ideally continuous: the flow of matter-movement, the flow of matter in continuous variation, conveying singularities and traits of expression. This operative and expressive flow is as much artificial as natural: it is like the unity of human beings and Nature» (Deleuze & Guattari 1987: 406). Whereas earlier in the Plateau nomad science was said to proceed by following, now it is the artisan who follows, and does so because the machinic phylum's «matter-flow can only be followed» (Deleuze & Guattari 1987: 409). Deleuze and Guattari say that «We will therefore define the artisan as one who is determined in such a way as to follow a flow of matter, a machinic phylum. The artisan is the itinerant, the ambulant» (Deleuze & Guattari 1987: 409). A craftsman working with wood follows the singularities of «the variable undulations and torsions of the fibers» and the wood's traits of expression that are «more or less porous, more or less elastic and resistant» (Deleuze & Guattari 1987: 408). But the paradigmatic artisans are metallurgists, who follow the matter-flow of metal, shape it and reshape in various ways. Such metallurgists are neither nomadic nor sedentary. «There are no nomadic or sedentary smiths. Smiths are ambulant, itinerant» (Deleuze & Guattari 1987: 413).

What sets metallurgists apart from other artisans is that metal and metallurgy raise «to consciousness something that is only hidden or buried» (Deleuze & Guattari 1987: 410) in other matters and operations. In other crafts, the selection of matter and its subsequent shaping are separate stages in an irreversible order, which invites us to think of them in terms of the hylomorphic, or matter-form, model. In metallurgy, by contrast, the operations that modify the metal precede and follow the creation of forms. In forging, quenching «takes place after the form has been fixed,» and «steel that is melted and molded later undergoes a series of successive decarbonations» (Deleuze & Guattari 1987: 410-11). And finally, whatever the form metal takes, it can always be melted into an ingot. Metallurgy may seem the most hylemorphic of arts, «yet the succession of forms tends to be replaced by the form of continuous development, and the variability of matters tends to be replaced

by the matter of a continuous variation» (Deleuze & Guattari 1987: 411). Here, Deleuze and Guattari find an essential relation between metallurgy and music, for there is a tendency within both arts «to bring into its own, beyond separate forms, a continuous development of form, and beyond variable matters, a continuous variation of matter.» There is «a widened chromaticism» that «sustains both music and metallurgy» (Deleuze & Guattari 1987: 411), what Deleuze and Guattari elsewhere term a «generalized chromaticism» (Deleuze and Guattari 1987: 95). And that widened chromaticism in the case of metal and metallurgy brings to light «a life proper to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinarily hidden or covered, rendered unrecognizable, dissociated by the hylemorphic model» (Deleuze & Guattari 1987: 411). What metallurgy ultimately reveals is a «panmetalism,» according to which «metal is coextensive to the whole of matter [...] Even the waters, the grasses and varieties of wood, the animals are populated by salts or mineral elements. Not everything is metal, but metal is everywhere» (Deleuze & Guattari 1987: 411). «The machinic phylum is metallurgical,» and what it makes manifest is «Nonorganic Life» (Deleuze & Guattari 1987: 411).

The space of ambulant metallurgy is neither smooth nor striated but holey. Obviously, metallurgy requires mining, the digging of holes to extract ore. Yet digging holes is not merely a preliminary stage before the metallurgist sets to work, but instead a figure of the artisan's action of following a matter-flow. A holey space is produced, and it is inseparable from its production, a space always in the making. In a 25 March 1980 seminar, Deleuze says that «the space of holes» is a matter of «making holes, making holes in space.» «To make holes,» he continues, «is to find something that exists in the holes. Holes are not lack, not absence.» Holey space is «a space such that the discovery of what is in the holes is made possible.» The hole is a kind of «receptacle,» and what is in the receptacle is «le gîte,» a word that means «mineral deposit,» but also «shelter,» «home» (Deleuze 1980). Hence, to make the holes of a holey space is to inhabit the site of discovery of what is in the holes.

In his 1980 seminar, Deleuze speculates that there may be many spaces—four, five, ten—and laments that he has only invented three. But these three, he insists, are distinct—smooth space, striated space and holey space. He thus identifies «three basic possibilities»: to be «a nomad, a sedentary, or a metallurgist» (Deleuze 1980). Of the three, the metallurgist strikes me as the figure closest to the artist. In each art, the artist discerns a matter-flow, follows the matter-flow in a progressive experimentation on its singularities and traits of expression, as if mining the vein of a metal deposit, and shapes what is discovered in the hole the artist inhabits. In music, it is a sonic matter-flow, but one that is part of a machinic phylum that includes instruments, people and the surrounding world, since, in Deleuze and Guattari's words, «This operative and expressive flow is as much artificial as natural: it is like the unity of human beings and Nature» (Deleuze & Guattari 1987: 406).

Deleuze and Guattari provide few details about metallurgists and holey space. This space, they say, is underground (sous-sol), «passing through both the striated land [terre] of sedentary space and the nomadic ground (sol) of smooth space without stopping at either one» (Deleuze & Guattari 1987: 414). Metallurgists «are in themselves double, a hybrid, an alloy, a twin formation [...] not 'impure' but 'mixed'» (Deleuze & Guattari 1987: 415). And the hybrid metallurgist, «a weapon- and toolmaker, communicates with the sedentaries and with the nomads at the same time. Holey space itself communicates with smooth space and striated space [...] it is always connected to nomad space, whereas it conjugates with sedentary space» (Deleuze & Guattari 1987: 415). The hybridity of metallurgists seems to invite a conception of them as a mere mixture of the nomadic and sedentary, but they are «in themselves double.» As Deleuze says in his 1980 seminar, metallurgists have two heads, one facing the nomads, the other facing sedentaries, but neither head being nomadic or sedentary. To repeat: «There are no nomadic or sedentary smiths» (Deleuze & Guattari 1987: 413). Likewise, though holey space communicates with smooth and striated space, it is not a simple blending of the smooth and striated.

How, then, may we specify the nature of holey space as it is manifested in music? First, it must be seen as a quasi-territory. A territory is produced via refrains, each refrain having the three aspects of a point of stability, a circle of property, and an opening to the outside, these elements being «three aspects of a single thing» (Deleuze & Guattari 1987: 312). In that the refrain includes an opening to the outside, inherent in the refrain is a tendency toward its own deterritorialization. Nonetheless, the refrain's basic function is to enclose and contain. The refrain is «a means of preventing music, warding it off, or forgoing it,» yet «music exists because the refrain also exists.» This is because «music is a creative, active operation that consists in deterritorializing the refrain» (Deleuze & Guattari 1987: 300). Music's deterritorialization of the refrain, however, is not without its own organization, its own regulation, coding and auto-referentiality.

Animal and child refrains seem to be territorial: therefore they are not 'music.' But when music lays hold of the refrain and deterritorializes it, and deterritorializes the voice, when it lays hold of the refrain and sends it racing off in a rhythmic sound block, when the refrain 'becomes' Schumann or Debussy, it is through a system of melodic and harmonic coordinates by means of which music reterritorializes upon itself *qua* music. (Deleuze & Guattari 1987: 303)

As an instance of such deterritorialization of the refrain and its subsequent reterritorialization upon itself, consider Olivier Messiaen's use of birdsong (which clearly serves as the primary model for Deleuze and Guattari's approach to music). In the *Catalogue d'oiseaux* (1956-1958), for example, Messiaen organizes each piece for solo piano around a specific bird's song (Piece one: «Chocard des Alpes» [Alpine chough], Piece two: «Loriot d'Europe» [Eurasian golden oriole], and so on). Messiaen develops a musical rendering of a given song by preserving its fundamental inner relations, but to make it suitable for a

piano composition, he must enlarge its micro-intervals to conform to a chromatic musical scale, elongate its temporal duration to a measure readily audible to human ears, and invent harmonic clusters that serve as timbral equivalents of the bird's voice. The resulting musical phrase is a mutative transformation of the bird's territorial refrain, one that has been extracted from the territory and rendered «other.» This transformed motif is then combined with other musical elements to create a new sonic territory, the territory of whatever composition is in question. (Messiaen precedes each piece of the *Catalogue d'oiseaux* with a prose paragraph situating the featured bird in a specific ecosystemic landscape.)

Hence music, as deterritorialization of the refrain, is fundamentally geomusic, that is, an engagement with the patterning processes of the world (with no differentiation between natural and artificial, organic and inorganic, or human and nonhuman systems). Deleuze and Guattari identify modern music as music of the «age of the cosmic» (Deleuze & Guattari 1987: 342), but all music ultimately is cosmic, and every musician a «cosmic artisan» (Deleuze & Guattari 1987: 345). Music's holey space is the site of the deterritorialized cosmic refrain's reterritorialization on itself, a quasi-territory, or provisional, shifting territory, which has a certain autonomy and yet retains its connections with the outside. Music's holey space is «le gîte,» the mineral deposit ready for excavation, but also the shelter, the home of extraction. It is what Deleuze and Guattari call the house in What Is Philosophy? The house, or «territory-house system» (Deleuze & Guattari 1994: 183), is «defined by the 'frame,' by an interlocking of differently oriented frames» (Deleuze & Guattari 1994: 186), each frame of the paradigmatic cubic house delimiting a section of the world. But the house has windows and doors, which allow a communication between the inside and the outside. The house «filters and selects» (Deleuze and Guattari 1994: 182) cosmic forces, for which reason, although the house frames and delimits, there is always a passage «from House to universe» (Deleuze and Guattari 1994: 185).

In an effort to further differentiate smooth, striated and holey space and to develop the connection between holey space and music, I turn to Deleuze and Guattari's contrast of weapons and tools, which they use to distinguish the smooth space of the nomadic war machine from the striated space of the State apparatus. What I offer is a speculative extension of this opposition, one that adds a third class of implements to Deleuze and Guattari's analysis – that of instruments, specifically musical instruments.

Instruments are neither weapons nor tools. Like weapons and tools, instruments are relays in the transfer of human energy to the external world. The immediate function of instruments is to excite a sonic medium – specifically, to propagate atmospheric vibrations, resonances and reverberations that are audible to the human ear. Here, a broad distinction may be made between instruments and tools, on the one hand, in that instruments do not serve as prostheses extending human perception for the observation or manipulation of the external world (SONAR or ultrasound, for example), and between instru-

ments and weapons, on the other, in that instruments are not designed to wound, incapacitate or kill humans. Rather, their object is to provide a medium for the development of experimental, metamorphic analogs of refrains, which deterritorialize those refrains and make possible a reterritorialization of these analogs on themselves. Ultimately, what instruments do is extract a sonic «being of sensation» that is able to «stand on its own» (Deleuze & Guattari 1994: 164), while at the same time resonating with the cosmos.

One may specify further the nature of instruments by considering their connection to the site of their operation. Instruments have an intimate relation to the ambient space of their performance, to such an extent that determining the constituents of a given instrument is problematic. A flute played in an open field has a different sound than when played in a practice studio, a subway station or a concert hall. The surfaces of an auditorium, one might say, themselves constitute a musical instrument, but one might just as well identify those surfaces as components of the flute being played within its walls. This relation between the instrument and its ambient space is especially evident in the cathedral pipe organ, where the building itself functions as the instrument's resonating chamber. The relation between instrument and space becomes even more complicated with the advent of recorded music and the digitization of sound. The recording studio provides a highly controlled space for the registration of sounds generated by instruments; and once recorded, the studio's sound board, filters, effects, and so on serve as another instrument shaping those sounds. When reproduced through amplified speakers or headphones, the sounds occur in additional spaces, a given sound-event being, one might say, either the production of a sequence of instruments - guitar, studio, headphones, for example - or the production of a single meta-instrument.

But most importantly, instruments, like weapons and tools, must be defined «by the constituent assemblages they presuppose and enter into» (Deleuze & Guattari 1987: 398). Deleuze and Guattari characterize the differential traits of the assemblages presupposed by weapons and tools «from at least five points of view: the direction (*sens*) (projection-introception), the vector (speed-gravity), the model (free action-work), the expression (jewelry-signs), and the passional or desiring tonality (affect-feeling)» (Deleuze & Guattari 1987: 402). These five binary oppositions preclude any neat addition of a third term to each opposition, but an exploratory meditation on each opposition may help characterize instruments in contradistinction to weapons and tools.

Deleuze and Guattari first oppose weapons and tools in terms of the direction of their usage. Weapons «have a privileged relation with projection. Anything that throws or is thrown is fundamentally a weapon, and propulsion is its essential moment.» The tool, by contrast, «is much more introceptive, introjective: it prepares matter from a distance, in order to bring it to a state of equilibrium or to appropriate it for a form of interiority» (Deleuze & Guattari 1987: 395). The weapon's action is centrifugal, the tool's centripetal. What about the instrument's direction? Here, Deleuze and Guattari's description of Klee's gray point may serve as a guide.

The gray point starts out as nonlocalizabe, nondimensional chaos, the force of chaos, a tangled bundle of aberrant lines. Then the point 'jumps over itself' and radiates a dimensional space with horizontal layers, vertical cross sections, unwritten customary lines, a whole terrestrial interior force (this force also appears, at a more relaxed pace, in the atmosphere and in water). The gray point (black hole) has thus jumped from one state to another, and no longer represents chaos but the abode or home. Finally, the point launches out of itself, impelled by wandering centrifugal forces that fan out to the sphere of the cosmos. (Deleuze & Guattari 1987: 312)

The instrument, we may say, has three directions distinct from those of projection and introjection: first, *injection*, an exploratory penetration of a given sonic matter-flow; then *ejection*, a creative leap out of itself, a black hole that establishes the «gîte» as abode or home; and finally, *parajection*, an expansive resonance across the holey space of the sound-event and beyond. Although the instrument's directions may be described in terms of three successive moments, they, like the three elements of the refrain, are simultaneous. The instrument's injection is always focused on a specific sonic matter; its ejection marks that matter's conversion into a musical material and hence the instrument's deterritorialization of that specificity; and its parajection characterizes its general dissemination, its omni-directional diffusion over its ambient space.

Deleuze and Guattari then contrast weapons and tools in terms of their respective vectors of speed and gravity. The weapon «invents speed, or the discovery of speed invents the weapon» (Deleuze & Guattari 1987: 395), whereas the tool engages the force of gravity. Implicit is a qualitative difference between two kinds of movement, Celeritas and Gravitas, the one being «a vortical motion, occupying a smooth space,» the other «a laminar movement that striates space, that goes from one point to another, [that] is weighty» (Deleuze & Guattari 1987: 371). To determine the vector of the instrument, it is useful to consider Deleuze and Guattari's paradigmatic instance of the occupation of a holey space - the example of Indian metallurgist tribes described by Elie Faure: «There at the shore of the sea, at the base of a mountain, they encountered a great wall of granite. Then they all entered the granite; in its shadows they lived, loved, worked, died, were born, and, three or four centuries afterward, they came out again, leagues away, having traversed the mountain» (Deleuze & Guattari 1987: 413). The vector of this space is one of hollowing and following, a perpetual adjustment and readjustment of direction attendant on each act of excavation. Its vector follows what Deleuze calls a «line of the universe» in Cinema 1. It is the vector of «a skeleton-space [espace-ossature], with missing intermediaries, heterogeneous elements which jump from one to the other, or which interconnect directly [...] a vectorial space, a vector-space, with temporal distances.» Skeleton-space «is like a knotted rope, twisting itself at each take, at each action, at each event» (Deleuze 1986: 168). This vector traces «a line of the universe, across the holes [des trous]» (Deleuze 1986: 168). The vector of holey space is such a line of the universe, a succession of holes that are like knots in a rope. The vector «moves by degrees [de proche en proche],» step

by step, adjustment by adjustment, «in a determined but unlimited direction, since the direction varies with each fragment, a vector being attached to each one» (Deleuze 1986: 193). We may further specify that this vector is a vector of «extemporality,» in the sense of both a temporal evacuation, or ex-temporalization, and a continuous extemporaneous improvisation. Like the Vinteuil Sonata in Proust, to which Deleuze repeatedly refers in *Proust and Signs*, the holey space of the musical instrument marks a perpetual «beginning of the World in general, a beginning of the universe, an absolute, radical beginning» (Deleuze 2000: 44). The instrument opens a temporal hole within which the musical sound-event may establish its own time, with its own absolute, radical beginning. And within that opening, the event unfolds through extemporaneous improvisation, a continually recalibrating responsiveness to the shifting contingencies of the sonic medium.<sup>1</sup>

Deleuze and Guattari further characterize tools and weapons in terms of their respective models of work and free action. Work «meets resistances, operates upon the exterior, is consumed and spent in its effect, and must be renewed from one moment to the next,» whereas free action «has no resistance to overcome, operates only upon the mobile body itself, is not consumed in its effect, and continues from one moment to the next.» Linear displacement «constitutes the relative movement of the tool,» whereas «it is vortical occupation of a space that constitutes the absolute movement of the weapon» (Deleuze & Guattari 1987: 397). Clearly, the instrument's model is not work. Rather, it is a model allied to free action, one best specified as the model of free play. Music's holey space is a ludic space, in which one plays the instrument, one is played by the instrument, and other players and instruments play one another. It is a liminal space, a site set aside for experimentation and invention.<sup>2</sup> The instrument meets resistances, but only within the ludic interplay of sonic forces within its holey space. That interplay of forces itself has no resistance to overcome, but merely ebbs and flows in repeated excavations and explorations.

In the domain of *expression*, Deleuze and Guattari contrast tools and weapons in terms of signs and jewels. There is «an essential relation between tools and signs [...] because the work model that defines the tool belongs to the State apparatus» (Deleuze & Guattari 1987: 400), whereas the weapon «is in an essential relation with jewelry» (Deleuze & Guattari 1987: 401). The gems and gold plaques that ornament weapons «constitute traits of expression of pure speed, carried on objects that are themselves mobile and moving» (Deleuze & Guattari 1987: 401), and their relation to writing is secondary, the gems and gold plaques serving at best as surfaces for the inscription of «signatures, as marks of possession or fabrication» or «short war or love messages» (Deleuze & Guattari 1987: 402). The key to determining the traits of expression of the instrument is to be found in the voice. Music has a special relation to the body. One may speak of the hands as tools or

For a rich account of musical improvisation from a Deleuzian perspective, see Stover (2017).

The literature on play and liminality is vast. For useful accounts of the field see Spariosu (1989 and 2014).

weapons, but only to a limited extent, since for the most part tools and weapons are prosthetic extensions of the hand. The voice, by contrast, is most definitely an instrument indeed, it is the paradigmatic melodic instrument, for which reason harmonic analyses routinely speak of voices in both vocal and instrumental music. Deleuze and Guattari note that «music has linked the voice to instruments in various ways» (Deleuze & Guattari 1987: 96), and they argue that the voice may be tamed and restrained, in which case it is merely accompanied by the instrument, or it may be «machined,» in which case it becomes an instrument in its own right, «heterogeneous to itself» with «a power of continuous variation» (Deleuze & Guattari 1987: 96). The voice in music also has «always been a privileged axis of experimentation, playing simultaneously on language and sound» (Deleuze & Guattari 1987: 96). The machinic voice, the voice as instrument, can extract asignifying signs from language, «attaining that secret neuter language without constants and entirely in indirect discourse where the synthesizer and the instrument speak no less than the voice, and the voice plays no less than the instrument» (Deleuze & Guattari 1987: 96). If we extend these observations, we may say that the instrument's traits of expression are neither jewels nor signs but incantations – spells, charms, hexes, curses, invocations. The secret language of the magic formula tends toward an asignifying non-language of patterned sounds, and its power resides in its music, not its sense. What the incantation points toward is music's action at a distance, its siren song, its power to soothe King Saul or tame the savage beast. Paradigmatic of the instrument's incantatory power is the figure of Amphion, the mythic builder of Thebes, who raised the city's walls by playing his lyre, his music inducing the stones to follow him and leap into place. Here, the incantation has nothing to do with language, and its sonic effects operate via no psychological mechanism. This is a cosmic incantation that activates the nonorganic life permeating the earth's flora, fauna, waters and stones: «music is not the privilege of human beings: the universe, the cosmos, is made of refrains; the question in music is that of a power of deterritorialization permeating nature, animals, the elements, and deserts as much as human beings» (Deleuze & Guattari 1987: 309).

And as regards the fifth vantage for differentiating weapons and tools, that of «passional or desiring tonality,» the instrument is obviously the affiliate of the weapon and its affects rather than the tool and its feelings. The tool's «feeling [sentiment] implies an evaluation of matter and its resistances, a direction (sens, also 'meaning') to form and its developments, an economy of force and its displacements, an entire gravity,» whereas the affect of the weapon «is the active discharge of emotion,» and it is related «only to the moving body in itself, to speeds and compositions of speed among elements» (Deleuze & Guattari 1987: 400). Deleuze and Guattari say that «Weapons are affects and affects weapons» (Deleuze & Guattari 1987: 400), but how much more so are instruments affects and affects instruments? The equation of instruments and affects is no doubt less provocative than that of weapons and affects, but certainly less counter-intuitive. Perhaps here we

could borrow from *What Is Philosophy?* and add that instruments are not simply affects but affects and percepts, generators of the being of sensation.

In summary, the instruments of holey space are characterized by injection, ejection and parajection; the line of the universe and extemporality; free play; incantation; and affects-percepts. To an extent, this description of musical instruments stresses the separation of holey space from other spaces, in that it is a ludic space of extemporality set apart from its surroundings, a discrete site of excavation and experimentation. But music's holey space communicates with smooth and striated space, and that which music explores, its phylum of matter-flows, ultimately reveals «a life proper to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinarily hidden or covered» (Deleuze & Guattari 1987: 411). For these reasons, music's holey space must also be viewed from the ecosophic perspective of a general ecology. Toward that end, I would now like to turn to an example of musical holey space, John Luther Adams's 2009 composition *Inuksuit*. The piece may seem idiosyncratic and *sui generis*, but I believe it makes patent what is latent in every viable musical work.

Adams has spent most of his adult life as an environmental activist in Alaska, and as a composer his abiding concerns have been to create music in resonance with nature and to develop an ecology of music. His compositions include works for traditional ensembles -choirs, string quartets, orchestras, and so on - pieces interfacing acoustic and electronic instruments, and works made up entirely of synthesized sounds. He has described the trajectory of his musical experimentation up to 2009 as going from an initial engagement with birdsong; to a decade of musical landscapes, filled with sonorous colors; to works of what he calls «sonic geography,» which seek to capture the feel of a place and its sociocultural associations; to an engagement with primal natural forces; to an embrace of «synthetic noise as the *prima materia*» (Adams 2009: 3) of his compositions. After hearing one of his compositions played outside the concert hall in the Alaskan tundra in June 2008, Adams set out to create a piece designed for outdoor performance, one that would not be site-specific, but site-specified - that is, a piece that would have internal coherence yet would fundamentally change in the context of its performance. In Adams's words, the piece was «intended to expand our awareness of the never-ending music of the world in which we live, transforming seemingly empty space into more fully experienced place» (Adams 2013). In my terms, Adams sought to create a work in which the musicians convert a site into a holey space that engages the matter-flow of nonorganic life.

The result of this effort is *Inuksuit*, a piece for nine to ninety-nine percussionists (with optional piccolos). The composition takes its name from human-made stone landmarks erected by Inuits in Alaska, the word «inuksut» (plural «inuksuit») meaning literally, «that which acts in the capacity of a human.» The work premiered at the Banff Center in the Canadian Rockies the summer of 2009, with eighteen musicians playing it once in the outdoor amphitheater and a second time in a mountain site. Subsequently, it has been performed by fifty players in a meadow in South Carolina, by ninety-seven performers in a

Texas field, by ninety-nine musicians in Harlem's Morningside Park and by forty-five players at the Ojai Music Festival in Southern California, to name but a few of its performances.

There is no master score for *Inuksuit*, but there is an «Event Map» charting the interaction of the three groups into which the performers are divided.<sup>3</sup> Each performer selects a loose sheet from the composition's folio, which, says Adams, «contains a collection of musical materials and possibilities for musicians to use in creating a unique realization of the work» (Adams 2013). Musicians gather at a central point at the work's beginning, and then gradually move to form three concentric circles, along which larger percussion instruments are already stationed. Group One sets the pace of the performance and signals transitions from section to section (five sections per group). During the performance, audience members are encouraged to circulate throughout the space. The piece opens with the sound of members of Group One breathing through megaphones and ends with triangles, sizzle cymbals, orchestra bells and piccolos in concluding sections titled «Wind» and «Birdsong.» In between are sections featuring Conch shell trumpets, whirling tubes, sirens, tom-toms, snares, kettle drums, bass drums, cymbals, gongs, chimes and so on. The entire performance is to last between seventy-five and ninety minutes.

Adams says that "each performance of *Inuksuit* is different, determined by the size of the ensemble, the specific instruments chosen, and by the topology and vegetation of the site." He continues that the work "invites exploration and discovery of the relationship between the music and the site, as well as the musicians' interactions with both" (Adams 2013). Each performance transforms a site into a holey space of attentive listening and responsive playing, a zone of experimental "following" of a sonic matter-flow, in which instruments "paraject" across the performance space in the improvisatory free play of asignyfing signs and affect-percepts, the players interacting with one another and with the surrounding topography and its life forms.

Each site of *Inuksuit*'s performance engages a different ensemble of ecological relations, environmental, social and mental. Early performance sites of *Inuksuit* were uninhabited by humans and performances had small audiences, but subsequent performances, such as the Harlem event, have taken place in urban environments with large audiences, such that the chatter and laughter of adults and shouts of playing children formed a significant part of the composition, as did the ambient sounds of traffic, aircraft and so on. To my mind, however, the most interesting performance to date took place on the U.S.-Mexico border, January 27, 2018, with seventy musicians performing in the half-acre binational «Friendship Park» near the border cities of San Diego and Tijuana, half on the American side of the park, half on the Mexican side.

Friendship Park/El Parque de la Amistad is a half-circle area whose focal point is a monument on the beach of the Pacific Ocean erected in 1849 to mark the origin point of the boundary negotiated by the United States and Mexico in the treaty of Guadalupe-Hidalgo, which brought an end to the U.S.-Mexico War. The monument served as a popular

The Event Map of *Inuksuit* is reproduced in Herzogenrath (2017: 100).

meeting place for U.S. and Mexican citizens for over a hundred years. In 1971, the park was officially inaugurated by then-First Lady Pat Nixon as a symbol of binational friendship and designated a national monument. Until 1994, only a simple barbed wire fence separated the two halves of the park, and people were free to meet and pass messages, food, and other items across the border. As part of Operation Gatekeeper in 1994, a more substantial fence was erected in the park. In 2009, the U.S. Department of Homeland Security closed the park and erected a second parallel fence of 20-foot steel bars, with barbed wire, sensors and surveillance cameras. In 2012, the Surf Fence project extended the fence 300 feet into the Pacific Ocean. In response to intense public pressure, the Department of Homeland Security reopened the park in 2012. At present, access to the U.S. side of the park is limited to Saturdays and Sundays from 10:00 am to 2:00 pm, and the exchange of any items through the barrier is punished as a customs violation. There are no restrictions on access to the Mexican portion of the park.

Clearly, Friendship Park is replete with social, cultural and political significance, its history exemplifying the increasingly hostile attitudes of the U.S. government toward Mexico. And its choice as the locus of a performance of *Inuksuit* represents a timely intervention in a contentious situation. There is no need to elaborate on the political ramifications of this performance, which so obviously challenges the racist and xenophobic policies of the Trump administration. The choice of the site also dramatizes an ecosophic dilemma of environmental, social and mental ecologies. The work's holey space engages the extremes of smooth and striated space in the Pacific Ocean and the looming border wall, especially in the absurd prospect of a futile fence extending into the ocean. Particularly significant is that the players and audience on either side of the border have a limited ability to hear one another. A reporter attending the performance on the U.S. side commented, «it was frustrating to be unable to explore the sounds from the Mexico side, let alone those inside the two fences. What I couldn't experience—because of the border—became an important aspect of this provocative work: an unheard music which I could only guess sounded something like the sound garden I heard in Border Field State Park» (Hertzog 2018).

The larger significance of the event is that it brings to the fore what I want to include as a final characteristic of the holes of holey space: they may function as what Deleuze calls «vacuoles of noncommunication, circuit breakers» (Deleuze 1995: 175), which interrupt the ceaseless, redundant and mindless communication of control societies and Integrated World Capitalism. As Deleuze and Guattari say in *What Is Philosophy?*, «We do not lack communication. On the contrary, we have too much of it. We lack creation» (Deleuze & Guattari 1994: 108). And it is precisely in the holes of holey space that genuine creation may take place. I want to insist that what is so obviously true of the border performance is also true of every performance of *Inuksuit*: each is a form of nonviolent resistance, a protest against ecological depredations of all sorts, a political demonstration, or in French, a *manifestation*, but also a creative demonstration and manifestation of unrealized possibilities and alternative modes of existence.

In comparing painting and music, Deleuze and Guattari say that «music seems to have a much stronger deterritorializing force, at once more intensive and much more collective» (Deleuze & Guattari 1987: 302), for which reason it may serve a revolutionary purpose and form part of a transformative war machine. But it is also evident that music may function as an adjunct of the State apparatus (think national anthems). Holey space is the «subsoil [sous-sol], passing through both the striated land [terre] of sedentary space and the nomadic ground (sol) of smooth space» (Deleuze & Guattari 1987: 414). Holey space «is always connected to nomad space, whereas it conjugates with sedentary space» (Deleuze & Guattari 1987: 415). When music's deterritorializing force is activated, the holey space of music is connected to nomad space and becomes a part of «nomadic assemblages and war machines [...] a kind of rhizome, with its gaps, detours, subterranean passages, stems, openings, traits, holes, etc.» But music may also become a part of «sedentary assemblages and State apparatuses [that] effect a capture of the phylum, put the traits of expression into a form or a code, make the holes resonate together, plug the lines of flight» (Deleuze & Guattari 1987: 415). Music's holey space has a certain autonomy, in that it forms a quasi-territory of auto-reterritorialization. Its instruments are neither weapons nor tools, but implements characterized by directions of injection, ejection and parajection; the vector of lines of the universe and extemporality; the model of free play; the trait of expression of incantation; and the tonality of affects-percepts. Yet this autonomy, like its territory, is provisional, temporary. Music's holey space is always connected with smooth space or conjugated with striated space. Each musical event may open a vacuole of noncommunication that provides resistance to the intolerable, but it may just as well be subsumed within a code that plugs up lines of flight and makes the holes resonate together. Neither smooth nor striated, music's holey space of hollowing and following a sonic movement-matter is the subsoil beneath nomad soil and sedentary land, and though it may be appropriated for nefarious ends, in its positive guise, it is the workshop of cosmic artisans who summon forth «a new earth and people that do not yet exist» (Deleuze & Guattari 1994: 108).

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