

## MUSIC AS NOMAD RESEARCH

### A MÚSICA COMO PESQUISA NÔMADE

### LA MUSICA COMO PESQUISA NÓMADA

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**ABSTRACT** This essay uses the Deleuzo-Guattarian concept of the war machine to develop a way of thinking about research-creation, following Erin Manning's suggestion that the latter—as a hyphenated compound structure—can function as a knowledge-producing act on its own terms, as a 'making as thinking'. After considering several examples of musical processes that exemplify this concept (as nomadic conjunctions with 'State' apparatuses that rearrange the latter as new knowledge-producing expressions), it engages two moments from Benjamin Boretz's *Language as a music* as an example of an original expression of research-creation that operates between music and verbal discourse. It closes by considering how this shift in thinking can function as a potent form of radical pedagogy.

**Keywords:** Benjamin Boretz. Carolyn Shaw. Musical composition. Nomad. Research-creation. War machine.

**RESUMO** Este artigo usa o conceito de Deleuze e Guattari da máquina de guerra para desenvolver um modo de pensar sobre 'pesquisa-criação' seguindo a sugestão de Erin Manning que o último —como uma estrutura composta hifenizada— pode funcionar como um ato produtor de conhecimento em seus próprios termos, como um 'fazer como pensar'. Depois de considerar vários exemplos de processos musicais que exemplificam esse conceito (como conjunções nômades com aparatos de 'Estado' que rearranjam o último como novas expressões do produtor de conhecimento), ele engloba dois momentos da *Language as a music* de Benjamin Boretz, como um exemplo de uma expressão original de pesquisa-criação que funciona entre a música e o discurso verbal. Termina considerando como essa mudança de pensamento pode funcionar como uma forma potente de pedagogia radical.

**Palavras-chave:** Benjamin Boretz. Carolyn Shaw. Composição musical. Nômade. Pesquisa-criação. War Machine.

**RESUMEN** Este ensayo utiliza el concepto Deleuzo-Guattariano de la máquina de guerra para desarrollar una forma de pensar acerca de la investigación-creación, siguiendo la sugerencia de Erin Manning de que esta última - como una estructura compuesta con guiones - puede funcionar como un acto que produce conocimiento en sus propios terminus, como un 'hacer como pensar'. Después de considerar varios ejemplos de procesos musicales que ejemplifican este concepto (como conjunciones

nómadas con aparatos 'estatales' que reorganizan este último como nuevas expresiones productoras de conocimiento), capta dos momentos del lenguaje de Benjamin Boretz, como música como ejemplo de un original. Expresión de la investigación-creación que opera entre la música y el discurso verbal. Se cierra considerando cómo este cambio de pensamiento puede funcionar como una forma potente de pedagogía radical.

**Palabras clave:** Benjamin Boretz. Carolyn Shaw. Composición musical. Investigación-creación. Máquina de guerra. Nómada.

## 1 INTRODUCTION

'This element of exteriority [...] will give time a new rhythm....' (DELEUZE; GUATTARI, 1987, p. 356).

'[...] the magician-king and the jurist-priest [...] the despot and the legislator, the binder and the organizer. Undoubtedly these two poles stand in opposition term by term, as the obscure and the clear, the violent and the calm, the quick and the weighty, the fearsome and the regulated....' (DELEUZE; GUATTARI, 1987, p. 351).

In this second epigraph we can easily spot the polar relation between composers (and compositions) and theorists (and theories) as they are articulated in music-institutional discourses. Lay narratives have the former—obviously, necessarily, unquestioningly—preceding the latter: theory follows practice, etc. ad nauseam. The truth or untruth of this position does not particularly matter; it *works* as a narrative, and it has political force in institutional structures and disciplinary polemics. My contention is that the two, to the extent that they are discrete practices at all, continuously and irreducibly flow through one another, impinge affectively on one another, have constantly to do with one another, in ways that effectively molecularize any possibility of either's molarization into a discrete autonomous stratum, dialectically tugged-upon by the other. This is not to say that there are no molarizations—there are, of course, including epistemologically crippling ones—and so it is incumbent on us to be actively searching for the molecularizing lines that open molarizing movements to new relational possibilities, and tending those openings. I will return to this point at the end of this essay, including its implications for the radical pedagogies of Paulo Freire and Jacques Rancière. I will also return shortly to the first of of each of those last pairs of terms—obscure, violent, quick, fearsome—in my conceptualization of nomadic forms of artistic research.

As if anticipating my refusal, Deleuze and Guattari continue:

But their opposition is only relative; they function as a pair, in alternation, as though they expressed a division of the One or constituted in themselves a sovereign unity [...]. They are the principle element of a State apparatus that proceeds by a One-Two, distributes binary distinctions, and forms a milieu of interiority (DELEUZE; GUATTARI, 1987, p. 351-2).

The composition–theory bifurcation turns out to be a State operation, a stratification. The bifurcation is bureaucratic in the worst way, assigning predetermined roles to different parties—*this is what practitioners do, and this is what theorists do*—and disallowing transversal communication in a way that effectively neuters both of them. If the bifurcation is a State operation, it is because the State apparatus has already captured the nomadic practices that comprise *both* terms, composition and theory. In other words, the proper binary that we should be beginning with is not composer as magician-king/despot/binder and theorist as jurist-priest/legislator/organizer, it is the enactment of both composing and theorizing, independently and in transversal conjunction, as nomadic practices *or* as State practices, as rhizomatic procedures that invent smooth spaces or as arborescent forces that continually re-striate them. This essay will focus on the former by showing some ways in which theory and practice are strategically and creatively folded back into one another, as a nomadic research practice and a form of pedagogical resistance to the forces that seek to limit the possibilities for what either, alone or in conjunction, can be. The aim of this essay is threefold: to provide some conceptual ballast for thinking about the theory-practice relation via a close engagement with aspects of Deleuze and Guattari's work, to consider the productive micropolitical and radical-pedagogical implications of rethinking how these different binary relations have been set in place and how they might otherwise proceed, and to briefly engage several case studies that set these concepts to work, thinking of them as acts of 'practice-based research' or 'research-creation' that locate their authors right in the middle of the inquiry-action. Indeed, I will suggest that the concept of research-creation in what Erin Manning calls its hyphenated form<sup>1</sup> has been a potent space not only for reimagining

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<sup>1</sup> MANNING, 2016; see below.

music research but for using music research—as a lively double movement of creative and critical forces—as a productive space for imagining new modes of being and new pedagogies.

## 2 AESTHETICS AND THE WAR MACHINE

One way that Deleuze and Guattari characterize nomadic practices is through the concept of the *war machine*. As Deleuze explains, a war machine has “nothing to do with war but to do with a particular way of occupying, taking up space-time, or inventing new space-times: revolutionary movements [and] artistic movements...are war machines in this sense” (DELEUZE, 1995, p. 172).<sup>2</sup> What, then, is a war machine? Or, rather, what does it *do*? It is, first of all, an active, collective, minoritarian practice. What it practices is resistance and rearrangement: resistance to the State forces that would capture and repurpose those nomadic movements, and rearrangement in the sense that a continual process of reterritorialization is what defines the openness of the smooth space. War is not the object of the war machine: war is the result of such a State capture.<sup>3</sup> In fact, war is probably the less important of the two terms: it is important to understand ‘machine’ in Deleuze and Guattari’s technical sense before we can determine what kind of a thing (or event) a war machine is, and what it does.<sup>4</sup> It is not necessary to rehearse all of the nuanced variations that machines undergo in Deleuze and Guattari’s conception (from desiring-machines to machine-assemblages to abstract machines<sup>5</sup>), but one underlying concept is crucial to understand: that

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<sup>2</sup> While the war machine is, essentially, a nomadic practice, Deleuze and Guattari eventually reverse the terms, casting the nomad as a product of the war machine (DELEUZE; GUATTARI, 1987, p. 422–423).

<sup>3</sup> “It is precisely after the war machine has been appropriated by the State...that it tends to take war for its direct and primary object, for its ‘analytic’ object.... In short, it is at one and the same time that the State apparatus appropriates a war machine...that war becomes subordinated to the aims of the State.” (DELEUZE; GUATTARI, 1987, p. 418)

<sup>4</sup> I am tempted to borrow a strange conjugation from Anne Sauvagnargues here, following her chapter “Machines: How Does It Work?” (SAUVAGNARGUES, 2016, p. 185). I’ll resist this urge, but do wish to remind the reader to keep in mind the essentially pluralistic nature of any machinic assemblage: plural not only because of the transversal linkages that it enacts, but because of the active in-between-ness of any such enactment and the way that each effects an opening onto virtual forces.

<sup>5</sup> Or this much longer list from Guattari: “Neolithic...machines of hewn stone, agrarian machines [leading to] urban mega-machines.... As for the great capitalistic machines, their foundational machinisms were prolific: urban State machines, then royal machines, commercial and banking machines, navigation machines, monotheist religious machines, deterritorialized musical and plastic machines, scientific and

*machines proceed by breaking down*. Machines are productive to the extent that they fail; their “very misfirings are functional”; they “proceed by breaks and flows” (DELEUZE; GUATTARI, 1983, p. 285-6). Machines proceed by breaking down because their very enactments produce deterritorializing cuts into ongoing processes; production produces change, and what was will never again be. In this language of the productive force of failure we see what the war machine does: it operates by coupling with a State apparatus, enacting its practices of resistance and rearrangement that open structures to new variations.

If machines are productive, what do they produce? They produce difference or alterity:

[...] machine-machine alterity...operates in relations of complementarity or agonistic relations (between war machines) or [...] in the relations of parts or apparatuses. In fact, the wear and tear, accident, death and resurrection of a machine...are part of its destiny and can become central to its essence in certain aesthetic machines [or] happening machines [or] delirious machines [...]” (GUATTARI, 1995, p. 42)

The turn Guattari is enacting here, toward a certain class of machines that he is now calling *aesthetic machines* (of which happening machines and delirious machines are sub-types), will prove fruitful for thinking about research-creation. Aesthetic machines define a very specific class of conjunctive operations that Guattari describes as crystallizations of “singular and dynamic constellations” of practices that “bring mutant nuclei of subjectivation” into being (GUATTARI, 1995, p. 108; p. 18). This process depends on, but radically transcends, two historically prior machine-types: the “aggregated and territorialized” proto-aesthetic machine that folds ever back into ritual or mythic structures, and the “autonomized and transcendentalized” capitalistic machine that proceeds by enacting new binaries and new hierarchizations. An aesthetic machine recenters aesthetics in a “key position of transversality,” intensifying “creationist nuclei of autopoietic consistency” (GUATTARI, 1995, p. 105). This means that, unlike the reproductive modes of their proto-aesthetic and capitalistic predecessors, aesthetic machines open essentially onto newness: onto new

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technical machines, etc.” (GUATTARI, 1995, p. 41). That Guattari conceives of literally everything as a kind of machine speaks to the connective/conjunctive relational reality that Deleuze and Guattari put forth in *Anti-Oedipus* (DELEUZE; GUATTARI, 1983).

configurations, new textures, new resonances, new knowledges. New modes of thought and new ways of expressing them. This has profound implications for research-creation, for thinking about theory and practice as a transversal rather than causal relation, and for thinking about music research as an autopoietic process that, in its very enactment, invents a new affective consistency.

An aesthetic machine is potentially set into operation any time an artist comes into contact with her material; for example, when a composer finds herself in the middle of composing in conjunction with the historically-mediated concept of 'string quartet', or when a jazz musician interacts with the formal, melodic and harmonic content of a song from the Great American songbook. If we cleave to Jacques Rancière's definition of the aesthetic—which proceeds as the enactment of an egalitarianism that interrupts and calls into question a distributive logic that determines right and wrong ways of making art<sup>6</sup>—then this suggests that the operation of a Deleuzo-Guattarian aesthetic machine aims precisely to produce a new smooth (e.g. egalitarian) space by unfolding and redistributing the (State) striations that it encounters. The aesthetic machine thus produces difference precisely by operating on and deterritorializing the representational, hierarchizing actions of a State apparatus, reterritorializing or repurposing them in pursuit of new, open, ranges of expressive possibilities. This is what happens when Bach transforms a proscribed French dance form into a wholly new expressive plane, or when Brahms spins out a rhapsodic multi-planar web after inventing connections to virtual forces swirling within a simple Haydn theme.

This, then, is why the aesthetic machine *is* a war machine. It is not just any coupling, it is the seizure and setting-into-motion of sedentary forces that destratify a State apparatus and open it to new virtualities. In other words, the nomadic movements that produce new smooth planes do so by seizing reproductive functions and redeploying them. Here those four terms—obscure, violent, quick, fearsome—become useful touchpoints: a nomadic music-compositional assemblage might *obscure* the regularity of a prototypical phrase model, a common-tone modulation might *violently* redirect a harmonic trajectory, the deterritorializing force of digital signal processing

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<sup>6</sup> RANCIÈRE, 1995, 2004. I suggest that the plane (or regime) of the aesthetic, in the precise way that Guattari is developing it here, is a very fruitful to bring Deleuze and Guattari's thought into orbit with Rancière's.

might enact a *fearsome* transformation of a cello's tone, as we experience in Saariaho's *Petals* for cello and live electronics. In all of these examples, a forceful movement is enacted whereby what was known about some aspect of musical being—expectations of phrase regularity, harmonic function, instrumental timbre—is twisted opened to reveal new possibilities.

Take for example the recent string quartet by Caroline Shaw, *Entr'acte*. According to Shaw's composition notes,

*Entr'acte* was written in 2011 after hearing the Brentano Quartet play Haydn's Op. 77 No. 2—with their spare and soulful shift to the D-flat major trio in the minuet. It is structured like a minuet and trio, riffing on that classical form but taking it a little further. I love the way some music (like the minuets of Op. 77) suddenly takes you to the other side of Alice's looking glass, in a kind of absurd, subtle, technicolor transition (SHAW, *Entr'acte* composition note, cited in JUDD, 2015).

Shaw's description moves doubly. She is at once describing the process that unfolds within *Entr'acte*, in which we hear multiple displacements and disjunctions, from the simple triple meter of a Haydn minuet transposed into a doubled triple meter, three within three, each beat broken into three parts, to the almost immediate re-territorialization of that compound time-feel: threes melting into twos and fours, enacted through melodic and harmonic groupings. This co-occurs with what begins as Stravinskian 'wrong notes' that complexify straightforwardly syntactic harmonies, and which gradually transform further into pitchless event-complexes. But Shaw is also describing a process that was already there in her source material—in Haydn's 'spare and soulful shift' that redistributes the logic of sense of the composer's Enlightenment-era rational syntax. Haydn's transformative gesture is the enactment of an aesthetic machine—a war machine—that seizes aspects of State harmonic syntax and redeploys them for the enactments of new expressions. That Shaw describes this as 'soulful' is quite poignant. To fold Rancière in once again, this is aesthetic in part because of the way it reveals the contingency and the constructedness of State harmonic syntax.<sup>7</sup>

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<sup>7</sup> See RANCIÈRE, 2004. Note that the reason I keep returning to Rancière's very specific conception of aesthetic is because I will return to Rancière at the end of this essay in order to consider the radical pedagogical aspects of his thinking, in conjunction with that of Paulo Freire, and their implications for research-creation.

What is important is that all of these actions express the double folds Deleuze and Guattari insist have essentially to do with one another: magician-king–jurist-priest, despot–legislator, binder–organizer. These are not dialectical oppositions, they are ongoing practices of differential impingements: the war machine deploys its resources in order to break open a crack in the structure of the State apparatus; the apparatus refolds around the aberrant nomadic space in order to restructure it, now with a difference. Practice and theory need each other, and their impingements are not just temporal; these foldings operate transversally across co-occurring events. It is important to note that there *are* nomadic theories and sedentary practices, and vice versa, but these are largely products of State operations that determine not what counts within the system, but what counts as an aberration—what counts as a legitimate movement outside, or syntactic torsion of, a State logic (the rules of engagement about how to temporarily step outside the chord changes in jazz is an excellent example). Furthermore, it is easy to get excited about the creative potential of nomadicism and worry overly about the stultifying power of royal science, but Deleuze and Guattari make clear that the relational assemblage that holds them together in a continuous double movement is precisely the active space where creativity best inheres. As Ian Buchanan describes,

[...] it isn't their respective creativity that is of primary concern; rather [...] what is crucial is that royal sciences give rise (through formalization) to a power of autonomous development, while nomad sciences do not. It is for the lack of this power...that nomadic sciences fail to thrive, and ultimately wither and die [...]. [N]omadism finds itself without the means of prolonging itself, of extending itself into new domains, and falls into a stubborn inertness (BUCHANAN, 2000, p. 118-19).

Erin Manning, we will see, makes a similar point. What I have been insinuating thus far is that music is a pedagogically valuable way of occupying, taking up, and inventing spacetimes that express the double impingements of nomadic and sedentary practices.<sup>8</sup> All of the examples I have touched on thus far are what we might characterize as specific enactments of what is called in the UK 'practice-based research' and in Canada 'research-creation', in that, as creative expressions that also

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<sup>8</sup> I describe this in slightly different terms—music as taking, making, and expressing time—in STOVER 2019.

launch forth new ways of conceptualizing what is musically possible, “on the thread of a tune,” as Deleuze and Guattari would say, they seem to operate as transversal assemblages of music and thinking about music: what I began by characterizing as the conjunction of composition and theory, but which we should think of more generally in terms of the more conventional conjunction of theory and practice.

### 3 RESEARCH-CREATION AS A NOMADIC PRACTICE

Linda Candy describes two types of practice-related research: that for which “a creative artefact is the *basis* of the contribution to knowledge,” and that which “*leads* primarily to new understandings about practice” (CANDY, 2006, p. 1). The former category, *practice-based* rather than *practice-led* research, is our concern here. In practice-based research, a creative output is a primary component of how one’s research findings are presented to the world. In some cases this may be the only output, but in general a creative work is a central piece of a multifaceted project that also includes more conventional (prose) research outputs. Candy makes this clear: in the model approved by the UK Arts and Humanities Research Council, “the outcomes of a practice must be accompanied by documentation of the research process, as well as some form of textual analysis or explanation to support its position and to demonstrate critical reflection” (CANDY, 2006, p. 2). There is a strong consensus around practice-based research (especially in research contexts that require external accountabilities, like the PhD guidelines that Candy describes) that insists on keeping one foot planted firmly in positivist knowledge claims, for example of shareability and verifiability.

Erin Manning’s 2016 *The Minor Gesture* offers many compelling illustrations of how what she refers to, following Canadian institutional usage, as ‘research-creation’, can unfold. While it similarly locates artistic practice as a viable site for knowledge production, research-creation as typically practiced again “sees the research component as extra to the artistic practice, thereby emphasizing...the theory-practice split” (MANNING, 2016, p. 27). Manning (2016, p. 27), however, asks us to “take seriously that research-creation in its hyphenation of research with creation proposes singular forms of knowledge which may not be intelligible within current understandings

of what knowledge might look like”. In other words, Manning is asking us to imagine a hybrid form where the creation and the research are one and the same: not a creative work with accompanying theoretical text as, for example, has become the norm for US Doctorate of Musical Arts theses, but an eventful space where the creative act does the work of theorizing *and* of disseminating that theorizing.<sup>9</sup> A pedagogically useful meta-narrative flows through Manning’s book, as she is using words, arranged in the conventional format of a rhetorically persuasive scholarly exposition, to describe what it is that happens—what research questions are being asked and critically engaged—in the ‘more than human’ artistic practices she describes.

It is shrewd to pause here and consider how the composer-ly expressions of Haydn, Brahms, etc. might be considered acts of research-creation under this hybrid definition. If the primary goal of research is to make an original contribution to knowledge (CANDY, 2006, p. 5), then one of the first questions that research-creation activities should be asking is: what can potentially count as knowledge, and what can an artistic practice *do* to mobilize a new knowledge-trajectory? Manning (2016, p.28) offers several ways into these questions, by way of a series of propositions about artistic practice as knowledge creation. First, art, as a practice, is a *way*—as a form of knowledge creation we should resist thinking of art as an object or form and instead turn to its enactment as a *making* or *doing*. Second, “making is a thinking in its own right” : one of the ways that we can resist the State bifurcation of theory and practice is to recognize how practice can be a form a theorization, and what is at stake in this radical epistemological turn.<sup>10</sup> Third, research-creation “is a mode of activity that is at its most interesting when it is constitutive of new practices.” Manning suggests that this works best when research-creation communicates “with existing disciplinary models and institutional structures.” This important point is what makes any act of research-creation a *minor gesture*, which for Deleuze and Guattari operates as “that which a minority constructs within a majority language” (DELEUZE; GUATTARI, 1986, p. 16), which is to say it operates (in the manner of the war machine) as the seizure and

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<sup>9</sup> See COOK, 2015 for more on the distance between US Doctorate of Musical Arts programs as initially conceived and as practiced.

<sup>10</sup> Deleuze reminds us of the opposite too: “theory is an inquiry, which is to say, a practice” (DELEUZE, 2001, p. 36).

creative, productive torsion of existing frameworks in order to create new expressions, the making of each of which is a form of thinking too. This is absolutely key for thinking through Deleuze and Guattari's productive apparatus: this torsion operates as a transversal communication between the *actual* structuring forces of the State apparatus and the *virtual* processes of becoming-other that nomadic impingements or minor co-options make possible. So from the perspective of research-creation, when Haydn continually transforms his normative phrase prototypes he is (1) revealing virtualities that were already immanent to those melody-planes, thereby opening the practice of phenomenological variation onto the virtual, the latent, the what-could-be, beyond the just-there, (2) setting them into a differential freeplay with other now-actual processes, such that they can participate in multidirectional affective transactions, and in doing so (3) constituting new contexts that reveal how the very concept of knowledge is a continually unfolding process that epistemology—as a scientific/philosophical posture that strives to understand what can be known and how—fails to capture, since knowledge even at the most seemingly straightforward level is always in motion, always escaping, always caught up in double movements of molecularizing and reforming.

This leads to Manning's fourth proposition: "New processes will likely create new forms of knowledge that may have no means of evaluation within current disciplinary models" (MANNING, 2016, p. 28). This is a crucial political and pedagogical point. It also reveals some institutional and disciplinary challenges that we need to continue to work through, since a new *form* of knowledge is different than 'some new knowledge', and new forms of knowledge resist old modes of testing and verifying. The problem, as Candy makes clear, is that we are fully caught up in these institutional and disciplinary modes of verification and sharing, and that there are real-world consequences to ignoring them, in terms of funding, publication, review and promotion, and more. For example, in the blossoming world of post-qualitative data analysis, everyone I have ever spoken to has told stories about unsympathetic or even hostile colleagues, puzzled funding bodies or journal peer reviewers, and crippling periods of self-doubt related not to the quality of their work, but to the nature of their research

*outputs*.<sup>11</sup> The tension we need to be working through, then, which is being pulled toward *three* dimensional poles, is to continue to proselytize for research-creation as a self-standing practice that quite literally speaks for itself; to find sensitive ways to provide parallel (or meta-) commentary on acts of research-creation that do not dismiss or downplay the central epistemological importance of the artwork itself (that is, that resist dislocating the knowledge-production part of research to the writing-about, and in doing so objectifying the artistic part, denying it its status as ‘making as thinking’); and to imagine hybrid spaces where artistic creation becomes more like writing-about and vice versa. This last dimension was the purview of a number of composer-theorists beginning in the early 1970s (around the same time that Deleuze and Guattari began their collaborative work) and associated with Princeton University, especially Benjamin Boretz, Elaine Barkin, and James K. Randall.<sup>12</sup>

I will turn to an example of Boretz’s hybrid work in the last part of this essay. But first, one more musical illustration might help clarify the way in which artistic expression can be a form of research, and why we ought to think of certain such expression in this way. In 1968 composer Steve Reich wrote a small essay titled “Music as a Gradual Process.” Reich begins: “I do not mean the process of composition, but rather pieces of music that are, literally, processes” (REICH, 2002, p. 34). Or, as he rephrases this tenet, “a compositional process and a sounding music that are one and the same” (REICH, 2002, p. 35). These process, for Reich, ought to be easily perceptible and, in order to engender a certain listening posture, once they are set in motion they ought to unfold very slowly, methodically, and predictably. This last point connects to the research-creation aspect of Reich’s works from this period: by constituting a musical context through which our perception changes, we open onto new modes of knowledge-production. We do this by hearing differently, by re-hearing our way through the world, which Reich ultimately describes both as liberation and as “an impersonal kind of ritual.”

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<sup>11</sup> See HUGHES AND BRIDGE-RHOADS, 2013 for an interesting self-reflexive account of all of these themes.

<sup>12</sup> See GLEASON, 2013 for a detailed history of what he calls the ‘turn’ that occurred at Princeton around this time, and its relation to the starkly positivist practices for which Princeton had become famous in the preceding decades.

What is interesting about this essay is that it did not need to be written. As with the relationship between Manning's prose and the acts of research-creation that it examines, Reich's essay stands in as a kind of meta-commentary on something that was absolutely evident to any sensitive listener of his works from this period: compositions like *Piano Phase*, *Pendulum Music*, *Four Organs*, and *Clapping Music* already do the work of refiguring our conceptions of how musical time can be experientially constituted, which amounts to a new constellation of potential knowledge forms. That is to say, they already do the work of announcing their own modes of 'making as thinking'. A curious relationship inheres here: the nomadic forces that comprise Reich's conceptual apparatus (including making the process fully transparent, as well as radically reimagining how repetition can work in music) immediately refigure themselves in a new striated space, since, once set in motion, the very action of the process working itself through to its necessary conclusion staves off the impingements of further war machines. This was important for Reich in this early compositional period, where he was working out his ideas and their implications; in later works like *Music for Eighteen Musicians* he introduced various elements of performer determinacy that opened small gaps within which a war machine might do its deterritorializing work.

To think of research-creation in the Deleuze-Guattarian terms I have been orbiting around amounts to a turn toward the nomadic practices that feel their way along the texture of a project, context, experiment, etc.; that continually recognize and acknowledge their striations and seek pathways that open onto new smooth spaces. To repeat, this is a thinking by doing: the doing does the work of thinking, as a kind of thinking in its own right. Thinking is not exterior to the creative project.

#### **4 THINKING-WITH-MUSIC**

The remainder of this essay extends beyond the idea that a musicking act (SMALL, 1998) can be considered on its own terms as an immanently heterogeneous instantiation of research-creation, to focus on a productive space between music and writing about music that responds to the obvious gap between Candy's institutionally pragmatic insistence that practice-based research be accompanied by cogent explanatory text and Manning's provocative suggestion that making is a form of

thinking that, in the end, should be allowed to speak on behalf of its own knowledge-formations, in its own manner of doing so. There are many examples of this productive liminal space that I could turn to (see for example Maggie MacLure's marvelous examination of Meredith Quatermain's *Matter 9: to texture to verb*<sup>13</sup>). I would like to engage the texturing–verbing practices that flow through the opening moments of Benjamin Boretz's *Language, as a music (six marginal pretexts for composition)* I: "Thesis," originally published in *Perspectives of new music* and anthologized in Boretz and J.K. Randall's aptly titled *Being about music: textworks 1960-2003* (BORETZ, 2003).

Dora Hanninen characterizes *Language, as a music* as 'a polysemous, self-referential music-text' in which each of its six parts

[...] stakes out a distinct position in a music-text hyperspace in which notes and words, sonic qualities and transformations, rhyme and repetition, segmentation and continuity, associative and syntactic organization, and expository versus improvisatory mode[s] of discourse are all significant dimensions for variation. (HANNINEN, 2006, p. 14)

She goes on to describe the particular musicality of the text, especially in Boretz's recorded rendering, but then extends beyond this rather simplistic evocation of music-text assemblage:

Thesis" [is a "music-text"] in a much deeper sense: approaching the subject of musical experience from the inside out, [it] is not only "about" music, but "is also of" music, "also is" music. "Thesis" is a musical composition composed of words, organized in ways more characteristic of music (HANNINEN, 2006, p. 15).

Hanninen's project then becomes one of creative music-analytic investigation, unpacking the ways in which "Thesis" is music, and as such, how techniques such as segmentation and association (the purview of qualitative data analysis too) can be brought to bear to reveal different constellations of music-gestural relationships. I will take a slightly different tack here, by reading the opening moments of "Thesis", the closing moments of "Epilogue" (the sixth and final movement of *Language, as a music*)

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<sup>13</sup> MACLURE, 2014, p. 177-179. The eventful contexts that comprise the individual chapters of Manning's book are also fruitful in this regard.

and the Deleuzo-Guattarian concepts I've been working with thus far through one another, to show how Boretz's work provides a compelling case study for the viability of research-creation as a self-standing, nomadic practice. Since the spatial distribution of *Language ,as a music's* material-relational content (the way it is laid out on the page) is significant, I will proceed a page at a time (five pages in total), each taken as a small whole, which is to say assembling with it in this one-page-at-a-time manner in order both to make some points about the role experience plays in the particular kinds of knowledge forms that research-creation engenders and to demonstrate the degree to which the nominally clarifying moves of textual analysis falsify, or at least fall cripplingly short of, the expressive, knowledge-producing actions of the artwork itself.

Here is how "Thesis" opens:

A language, a music

An utterance within, a view about

Circumventilation of hypercritical  
counterfactuals nowhere metabounded  
without utterance within, without  
view about

What is there to be on to,  
logically; or ontologically  
(without benefit of philosophistry):

What is about, is also of, also is:

We first encounter two pairs of word-concepts: *language* and *music*; *an utterance within* and *a view about*. But not just language and music; rather *a language*, *a music*, one of each, singularities (or singularities that express immanent multiplicities; more on this below): *this language*, *this music*, and the fold that turns each outward, from the interiority of a private or technical-expressive utterance to a view from the mountaintop, taking-in (assembling), double folds that invent or discover new expressions. We cannot read this without also taking into account the title of the work—*Language ,as a music*, with that curiously displaced comma that resists semantic explanation: a purely music-temporal dislocation—and the way that it inverts dominant

contemporaneous (early 1970s) discourses that strove to understand music in structural-linguistic terms. We might even say that the initial thesis of “Thesis” is exactly that: a critique of the then-dominant disciplinary position that suggested that music can be understood in terms of linguistic structures by un-disciplining it, by turning to what Deleuze calls the “rebel becoming” of language (DELEUZE, 1990, p. 4) that thinking-in-music can help animate.

We then encounter the first of a proliferating list of fantastical portmanteaus, *circumventilation*—“circumventilation of hypercritical counterfactuals”—with a double movement of meanings: *circumvent*, as in strategic steps taken to prevent a negative outcome (the purview of the war machine); *ventilation*, as in movements or flows of air enacted by respiration—but also, appending the prefix circum- to ventilation as a machinic assemblage that breaks each apart to create a new conceptual apparatus. A becoming-breathing-around. What work does this neologism do? What new forms of knowledge does it produce? It is already important to resist trying to ascribe semantic meaning to Boretz’s word-complex: this would only fix it in a problematic representational mode. It is also important not to reduce away its context, not to wish away the ‘mess’ that the multiple impingements of word-constellations around it produce. So, for example, we might be tempted to say something like: *what Boretz is doing here is insisting upon a mode of resisting analytic models grounded in logical formations (or ontological criteria) that purport to describe or explain something about music, on the basis that these amount to, at best, pseudo-philosophical sophistries that fail doubly: they do not satisfactorily reach the immanently-relational expressive content of the music (the utterance within), and they miss the outward-flowing lines that connect any given musical utterance to its infinitely complex constellation of contexts (the view about). (And at worst they are simply wrong, counterfactual...)* Instead, Boretz is going to present a model through which what is about music (the meta-musical analysis) is also of music (by inhabiting the same discursive spacetime that music does), and also is itself music, thereby breaking down the unbridgeable gap between music and language that aims to elucidate it. But does this ‘explanation’ do any useful work that Boretz’s music-text doesn’t already do, much better? Not only does it unnecessarily complicate Boretz’s elegant formulation, it misses multiple registers: for example, it ignores the keyword through which all of this proliferates: that

original portmanteau, “circumventilation.” And to pause and try to unpack that word would not only require its own long, winding, stuttering paragraph, it would utterly miss the creative expressivity of its conjunctive nature—already different-from-itself—and the way its newness untethers our connection to anything like a stable semantic meaning.

This first page ends with a curious punctuation mark: a colon. Hanninen emphasizes the musicality of punctuation, in the sense that its different forms invite us to think about the temporality of a language-expression in ways that are music-like (HANNINEN, 2006, p. 35); I alluded to this above in my treatment of the displaced comma of the title. A colon suggests continuation. What continues in this case is doubly musical: a single compound word-grapheme, “within:”, the word pointing back to its earlier utterance (motivic repetition, with a difference), the second colon inviting further continuation. What continues is an acceleration and the first of many wild proliferations, pregnant with provocative neologisms:

within :

also everspecious metapresent worldnow,  
somewhere, metabounded nowhere :  
utterance within nascendant sempiternal,  
being, about to be of; coming, contained;  
elapsing, incontinent: unshaded, urtexturous,  
unextirpreted hereplace, anytime  
immemorial, a leading edge of a vanishing  
act, uncatalogued hoards of phenomenal  
finds, all comprehended within (without  
benefit of theory), all systems gone  
without a trace: not a language, not  
a music, within sound, or sight; not  
a thing for a thing to be, nor anything  
leftover to do: utterance within view  
( : about), nowhere metabounded (without : )  
view within utterance about,

Boretz is continuing his doubled utterance: research-creation (language and/as music, in the singular) and incisive critique, each flowing irreducibly through the another. Again, we could take all of this apart and ‘explain’ what Boretz is saying, but that would be to utterly miss the point and to fall into the “counterfactual,” “everspecious,” “nowhere metabounded” position that he is very specifically arguing against. The slippages enacted by Boretz’s multiply-directed neologisms become

passages for new nomadic movements. They resist categorization by being already other-than-themselves (“uncatalogued hoards of phenomenal finds”), or in Deleuzian terms, each function as a little transcendental-empirical machine, “all comprehended within,” immanent to its own openings onto the virtual.

“Thesis” continues for another 15 pages; *Language, as a music* continues for five more movements. The extended gesture that closes *Language, as a music* is a remarkable denouement with further Deleuzian implications, as well as further self-referential directives for why we ought to be taking the work as a whole as a self-standing act of research-creation. Three pages from the end we encounter a single word, isolated in the upper right corner: “Listen:”, again assembled with a colon suggesting continuation. (We have by this point encountered this word several times, in different isolated spatial arrangements.) The rest of the page a white field, an extended pause through which we might ruminate on that directive. We turn the page, and the continuation ensues:

to an image  
of thought presented  
asking only to be  
received,  
as a heavily indexed  
sense of something  
imagined,

not,

to a symbol  
of points to be scored  
as for and against  
or grist for a mill  
of doctrines and truth.

no textbook need be rewritten  
nor footnote obliged  
to acknowledge  
the present occasion.

This is certainly one of the clearest indications of what *Language, as a music* aims to be and where it intends to direct our thinking. It is also rife with language that

runs parallel to Deleuzian concepts: 'image of thought', 'sense', 'imagined', 'occasion'. And it states its political motivation, implicit in varying ways and through a vast multiplicity of means, in frankly overt terms: a work of research-creation, engaged creatively and thoughtfully on its terms, does not need the kinds of evaluative valorizations that State images of thought insist upon. But this requires attention; for Boretz, listening; listening-with. He closes with an entreaty:

Somewhere, metabounded nowhere,  
there may arise  
a language which might be a music  
a music which might be a language:

I,

have been listening,  
for something to speak,

listening to hear language speak  
listening to hear music speak

listening to language  
listening to music  
listening to find a voice  
for myself to speak

so that I  
may speak  
to  
you.

## 5 RESEARCH-CREATION AS RADICAL PEDAGOGY

In this process, one counts on the ability of the popular masses to do, to think, to know, and to create. One does not [...] deal with delivering or transferring to the people more rigorous explanations of the facts, as though these facts were finalized, rigid, and ready to be digested. One is concerned with stimulating and challenging them. (FREIRE, 2005b, p. 53)

A turn to the immanent making-as-thinking possibilities of research-creation brings with it several concerns that we should take care not to lose sight of. First is to resist the idea that an artistic expression can or should be *about* some concept (e.g. that expresses a philosophical or scientific apparatus). This would be to fall back into

a problematic representationalism, where the artistic expression is somehow standing in for or exemplifying the concept. Deleuze and Guattari make clear that art, philosophy, and science are separate domains of thought, each of which produces different knowledge-forms that absolutely have to do with one another, but at an affective or perhaps a cartographic level rather than a mimetic one.<sup>14</sup> One thing that research-creation can do, from this perspective, is map a creative pathway through, say, a scientific plane, a pathway that opens onto new productive possibilities and new modes of experiencing. I'd argue that this is what Iannis Xenakis's formulations do, for one example.

We also need to resist over-valuing the nomadic at the expense of the sedentary. It is very easy to attach value judgments to Deleuze and Guattari's many doubled terms: smooth–striated, molecular–molar, rhizome–arborescence. But this is to reproduce the very Cartesian binary thinking that in every breath Deleuze and Guattari are striving to subvert. As both Buchanan and Manning make clear above, a nomadic impingement rearranges the terms of the striated apparatus—here the alternative translation of *agencement* as 'arrangement' rather than 'assemblage' becomes useful, since it suggests that (a) *agencement* is an eventful happening, and (b) what happens is a reconfiguration of forces that open onto new differences. That nomadic movements get re-striated is by no means a cause for alarm or resignation: it is the very force of this double movement that keeps the machine working.<sup>15</sup> In other words, each coalescence into a reified function is—immediately and concurrently—broken apart by the operation of the war machine. Machines produce by breaking down. This is what art makes clear—science and philosophy proceed in the same way, but art's production of affects and percepts is overtly machinic in a way that has heuristic value—that the force of *agencement* produces difference, and that in difference can be found new knowledge forms, new knowledge trajectories.

Along this line, and following Manning's activist entreaty, nomadic practices must be *tended*. This is the role of the research-creator: assembling various nomadic

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<sup>14</sup> See DELEUZE AND GUATTARI (1994, p. 21-24).

<sup>15</sup> This is to say, there are certainly highly problematic striations or State molarizations—the neoliberal reterritorializing machine of Guattari's Integrated World Capitalism being only the most pervasive and destructive one (GUATTARI; ROLNIK, 2007), but it is not the fundamental concept of striation or molarization that is the problem.

forces and deploying them in some productive direction. Haydn's transformations do not just smash open his archetypes like some kind of anarchist nihilism-machine; they creatively redistribute them as new expression-trajectories. Haydn's war machine is not a marauding horde, it is a clinical procedure that pinpoints where in the State blockage it can insert itself with surgical precision in order to rework the forces of the State apparatus in terms of new potentialities. Similarly, Shaw's syntactic redistributions draw their expressive power from their relation to the State apparatus with which they assemble (that is, the newly reterritorialized apparatus enacted as Haydn's expressive deterritorializations sediment into new orders), and in doing so draw upon a listener's enculturated sense of expectation inherent in those orders to create her own expressive otherings. And Boretz's manifold assemblage draws its own expressive force from the way it arranges different familiar and unfamiliar knowledge-trajectories to create its own triply-operative construction: at once music, of music, about music. In each case a pure nomadicism is kept at bay through the careful tending and expressive focusing of nomadic forces and their creative deployment in new expressive configurations.

The corollary to this kind of tending that directs nomadic forces in particular artistic, expressive directions links to the concept of research-creation more broadly and to a point that I made at the beginning of this essay. While it is important, as a general posture, to resist getting caught up in the nomadic/molecular/rhizomatic = good versus sedentary/molar/arborescent = bad binary, it is also political crucial to be vigilant about recognizing the kinds of molarizing forces that foreclose possibilities about what gets to count as knowledge, and to tend the kinds of molecularizing actions that seek ever to reconnect differently with openings onto virtual forces. This means not only doing the work of research-creation as reconfigurations of the world that produce new knowledges, but also proselytizing for the value of those knowledges that might not yet have State-sanctioned systems for evaluation. Royal science is very good at keep nomadic forces out—at least as good as it is at refiguring them in its own image. So to proselytize for the new knowledge formations that research-creation produces, we must strive to keep open the question of what knowledge can be rather than fall into the reproductive trap of assuming that we know what it is.

All of this, then, amounts to a kind of radical pedagogy: a creative pedagogy of radical reconfigurations of the world made possible by research-creation in the hyphenated form that Manning invites us to participate in. This is a Nietzschean pedagogy that sings and dances, that draws new lines of escape rather than tracing existing lines of demarcation. It is, furthermore, a political enactment that offers new techniques for resistance and rearrangement: for resisting the stultifying forces that insist upon reproducing old forms of knowledge, for erupting within and redistributing those forms, and for rearranging the very terms through which we understand what knowledge can do and be. By considering research-creation's potential in this way is to reveal how it can resonate with the practice of two of radical pedagogy's most significant theorists, Jacques Rancière and Paulo Freire, each of whom begins in his own way with an assumption of equality that underlies and in some important way conditions what Deleuze and Guattari would call State stratifications. For Rancière, this refers from a political perspective to the underlying egalitarianism that precedes the distributive force of a police logic that determines who has a voice and whose voice is heard as speech in a given regime, and from a pedagogical perspective to the insistence that all are equally capable of learning, an understanding of which is necessary to prevent pedagogical "stultification."<sup>16</sup> For Freire this is the insistence on an equality of intelligences that interrupts hierarchical orders that, for example, reify the erudite language of legal or scientific discourse as more valid than others, as well as a corresponding insistence that the un- or re-covering of epistemological egalitarianism is "a task for radicals" that "cannot be carried out by sectarians."<sup>17</sup> In both cases, the political and pedagogical implications of equality as an underlying premise are deeply implicated in one another, and in both cases the very notion of 'making as thinking' is precisely the kind of rupture that calls attention to the problematics of given distributions and accepted norms of discourse.

As Freire writes, "Within the word we find two dimensions, reflection and action.... There is no true word that is not at the same time a praxis. Thus, to speak a

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<sup>16</sup> See RANCIÈRE, 1991 and RANCIÈRE, 1995.

<sup>17</sup> FREIRE, 2005a, p. 39. The distinction between radical and sectarian in Freire's thought clearly resonates with Deleuze and Guattari's nomad/State and Rancière's politics/police, but Freire's concepts are far more fully steeped in value politics (which is to say Freire's political theory is more unequivocally partisan than Deleuze and Guattari's or Rancière's, even though all four share similar activist ambitions).

true word is to transform the world” (FREIRE, 2005a, p. 87). Likewise with artistic practice: in every iteration a reflection, an action, a transformation of the world. Artistic practice is in many incarnations a paralinguistic practice that operates alongside or instead of discursive language, and as such opens Freire’s entreaty to other kinds of meaningful utterances, including what we saw in Boretz’s language-composition as utterances that work between discursive language and non-language (and especially through the ways these two forces fold into one another). The practice of research-creation thought in this way unfolds as a series of nomadic deterritorializations of State structures, which include continuing operations of ‘re-deterritorializing’ that reopen each action in the very moment that it begins folding into a new micro-structure. This concept is encapsulated very well in musical terms in Arnold Schoenberg’s notion of ‘developing variation’, which he coined to describe what he heard as an ever-ongoing transformative process that unfolds doubly in Brahms’s music: as the gradual rearrangement or redistribution of musical materials that takes place in each moment as new forces impinge upon and redirect existing ones, and as the continuous process of perceptual reterritorialization that the listener enacts as the music unfolds. Throughout this essay I have suggested that different acts of musical composition—from Haydn and Brahms to Boretz, Reich, and Shaw—can be productively thought of as research-creation. But of course all of these examples should be thought of as case studies, for ways into thinking about research-creation, the possibilities for which are endless.

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