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## Listening to EDM: Sound Object Analysis and Vital Materialism

*Écouter la dance music : analyse d'objets sonores et matérialisme vital*

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# Listening to Electronic Dance Music: Sound Object Analysis and Vital Materialism

par

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**Abstract:** In electronic dance music (EDM), melody, harmony, and rhythm are often indistinguishable, hence are inadequate as descriptive categories. EDM's timbres are equally elusive: describing electronic sounds in terms of their sources tell us little about the sounds themselves. Perhaps this music's descriptive evasiveness is partly what drives analysts to deem EDM an aesthetic failure outside the dance club. I investigate the possibility that sound object analysis, a listening technique which I designed to address "avant-garde" music, might also help listeners to discuss EDM in terms of sound, not just cultural context. Connections between sound object analysis and vital materialism – the theory that anything with the ability to affect other phenomena constitutes a material body – suggest that listening is, as much as dancing, an encounter between material bodies and an embodied form of dialogue.

**Keywords:** *Electronic dance music – sound objects – listening – analysis – Yasushi Miura.*

**Résumé :** Souvent, dans l'*electronic dance music* (EDM), on ne peut distinguer la mélodie, l'harmonie et le rythme, catégories qui se révèlent ainsi inadéquates pour décrire cette musique. Les timbres de l'EDM sont tout aussi insaisissables : décrire une musique à partir de ses sources ne nous dit pas grand-chose des sons eux-mêmes. Peut-être ce flou descriptif explique-t-il pourquoi certains chercheurs travaillant sur l'EDM considèrent qu'elle est un échec esthétique en dehors de la boîte de nuit. Je défends l'idée que l'analyse des objets sonores, une technique d'écoute que j'ai élaborée afin d'étudier la « musique d'avant-garde », pourrait permettre à des auditeurs de décrire et de débattre de l'EDM, en vue d'analyses concentrées sur sa texture sonore et non pas simplement sur ses contextes culturels. Je la relie au concept de « matérialisme vital », selon lequel tout ce qui a la capacité d'affecter d'autres phénomènes constitue un corps matériel. Ce lien suggère que l'écoute est, tout autant que la danse, une rencontre entre des corps matériels et une forme incarnée de dialogue.

**Keywords:** *Electronic dance music – objets sonores – écoute – analyse – Yasushi Miura.*

**November** 21, 2009: Walt Disney Concert Hall, home of the Los Angeles Philharmonic. It's opening night at the LA Phil's *West Coast, Left Coast* festival. On the program are solo and collaborative performances by Terry Riley and the Kronos Quartet, veritable pioneers in American experimental music. Also included is Mike Einziger, experimental composer and founder of the rock band Incubus. But I believe the evening's triumph belongs to Matmos: the EDM duo from Baltimore. Matmos duets with the Kronos Quartet in «For Terry Riley», then performs the track «Supreme Balloon» (2008). *LA Weekly's* Randall Roberts (2009) would describe it as «an epic instrumental meditation ... To hear it in Disney's vast space is to experience a very specific kind of bliss.»

To hear, not to dance. The audience is quiet and still, no evidence of psychedelic drugs: this is the string quartet's audience, Riley's audience. Disney Hall, Frank Gehry's marvel, brings out every particle in Matmos' velveteen textures. Given the sheer size of the place, the characteristic bass-drum beat of EDM, four-on-the-floor, acquires seismic proportions. We're flattened to our seats. Under the sociocultural, historical, and sonic circumstances, we can't help but sit and listen.

Later, the experience proves difficult to describe. Roberts offers a short list of the instruments involved in «For Terry Riley», and a vague characterization of its structure:

The piece began rather gently, with Kronos and Matmos creating sounds with toy hammers, percussion, and whistles. They banged on their music stands

and stools, and gradually the chaos morphed into a patterned rhythm. This approach is Matmos' stock-in-trade: from randomness to order...

Roberts capably describes what he saw that night, but cannot be specific about what he heard. He barely mentions the blips and beeps that constitute most of Matmos' textures in these pieces: sounds for which descriptions in terms of their instrumental sources – synthesizers, samplers, and laptop computers – would be of little help in characterizing the sound itself. In fact, to describe the warm, electronic sound of «Supreme Balloon», Roberts invokes other artists. Sonically, «Supreme Balloon» «draws from Kraftwerk (they use similar early modulators and synthesizers) and Brian Eno's ambient work.» The point is, *what one hears* in EDM is difficult to characterize precisely on its own terms: sounds, often of unidentifiable sources (it's not easy to hear the difference between digital synthesizers); relationships between such obscure sounds; and the modes of one's engagement with the sounds.

Yet, from Roberts' glowing review, one thing is clear: EDM, electronic dance music, succeeds as music for *listening*, not only for dancing. Listening to EDM in a serene concert setting, even alongside «avant-garde» bastions, is viable and enjoyable. It works. But how? How might we discern and describe EDM's musical complexities?

Given that conventional, score-based analysis, which emphasizes the visible relationships between notated pitches and durations, cannot adequately describe the timbres, gestures, and memories involved in listening experiences, perhaps *sound*

*object analysis*, an exploratory listening technique that I recently designed as an approach to “avant-garde” or experimental “classical” music, might also be applicable to EDM. In this article, I investigate the descriptive potential of the categories involved in sound object analysis with regard to EDM, in the hope of suggesting a specific and telling vocabulary for this music and the experiences it affords. Identifying points of agreement between sound object analysis and Jane Bennett’s (2010) theory of vital materialism, I propose that listening to EDM is, like club dancing, an encounter between material bodies. As an embodied form of dialogue, listening does not compromise, but rather complements, the co-inhabitation and co-creation of EDM that happens on the dance floor. Thus, listening and dancing are comparable and valuable avenues of engagement with EDM.

## Perspectives

Many authors feel that, outside clubs and raves, EDM is an aesthetic failure (see for instance Gaillot, 1998; Taylor, 2001; Ferreira, 2008). For Hillegonda Rietveld, house music is “meaningless” unless it is “played to and interacted with a dancing crowd” (quoted in Butler, 2006: 13). Similarly, Timothy Taylor (2001) takes psychedelic trance music itself to be reducible to the gatherings (and drugs) that often but not always attend this music. Mark Butler subsequently bemoans the extent to which “the significance of EDM’s musical aspects has been argued *against*” (Butler, 2006: 13, emphasis original). Thus, many analyses of EDM confront aspects of the genre other than

its relationship to listening. Michel Gaillot, Simon Reynolds (1999), Timothy Taylor, Brian Wilson (2006), and Robert Strachan (2010) discuss the critical social perspectives or quasi-religious escapism conveyed by EDM in various sociocultural contexts. With several of the aforementioned authors, Matthew Collin (2010) links the characteristics of EDM to the effects of hallucinogens.

Other authors do address how EDM might be heard, by analyzing its musical qualities. Butler (2006) identifies the formal, rhythmic, and textural structures typical of EDM. Joanna Demers (2010) interrogates all experimental electronic music from aesthetic, ontological, and epistemological perspectives. She also theorizes “aesthetic listening” – a mode in which the listener’s attention constantly and arbitrarily mutates, intensifies, or recedes – as a potential avenue of approach to electronic music (pp. 151-161). I’ll have more to say on this below, since sound object analysis relates to aesthetic listening.

But both Butler and Demers comment on the difficulties involved in their attempts to describe what they hear in EDM. EDM poses a daunting challenge to discourse and description – to language. It is one thing to listen intently to an EDM track and enjoy it, and know within oneself, without saying a word, *why* one is enjoying it. It’s another thing to communicate what one has heard in a manner that enables an interlocutor to appreciate it: here is the challenge. While Butler, Demers, and other authors rise to it admirably, in verbal presentations of EDM’s aesthetic qualities, they realize that to do so is to take up a formidable burden. Butler observes that several analysts cave

beneath this burden, with the consequence that analyses of EDM “tend to trade too much in generalizations” (Butler, 2006: 8). See for instance Dan Sicko’s far from informative description of Juan Atkins’ music as “complicated, murky, and grim” (Sicko, 2010: 44). Butler writes: “discussion of EDM as music remains at such a general level that one could easily discover most of the characteristics mentioned in currently published accounts of its sound after a few minutes’ casual observation” (Butler, 2006: 8). Moreover, he notes that such discussion characteristically relies on metaphorical descriptors. He takes as an example Simon Reynolds’ account of Hyper-On Experience’s “Thunder Grip” as “melody shrapnel whizz[ing] hither and thither...infested with hiccupping vocal shards...sheer Hanna-Barbera zany-mania” (quoted in Butler, 2006: 9). This description is affirmative and exciting, replete with strong action verbs. And indeed, Demers suggests that metaphor is inevitable in descriptions of electronic music. In her words, figurative language is the “crutch” that enables her to proceed from listening to description, from private to communicable experience (Demers, 2010: 85). “Nevertheless,” says Butler, such language “does little to help us understand *how* the music creates these effects” (Butler, 2006: 9) [emphasis original].

Additionally, Ramzy Alwakeel (2009) demonstrates how difficult it can be to differentiate electronic genres, even though such differentiation may be valuable to certain EDM subcultures. He describes IDM’s (“intelligent” dance music’s) struggle for generic identity, as evidenced in album art and track titles. He thus devotes his

analysis to what some artists consider a subgenre of EDM that is meant only for listening and contemplation, not for dancing. As Alwakeel (2) points out, the label “intelligent” is contrived and nonsensical. Matmos (1999) shares this opinion; the electronica band Future Sound of London finds “IDM” redundant and “restrictive,” since it yet includes the term “dance” while claiming to eschew dance (Alwakeel p. 5); and Demers (170) rightly concludes that IDM is a marketing ploy used by “record labels [who] have found it a useful tool for appealing to consumers’ elitism.” Nevertheless, although I would be hesitant to declare IDM an actual subgenre, the term’s existence (whether it signifies a body of work or empty flattery) testifies to an interest, shared by artists and labels, in EDM as music for close listening.

However, Pedro Ferreira attests that *dancing* “defines” EDM, therefore to listen to EDM without dancing is to fail to hear the music at all:

EDM is made, above all, for non-stop [*sic*] dancing. Admittedly, it is possible to do many other things while listening to EDM, but it is the immersion in the intense experience of nonstop dancing, more than anything else, which defines its specificity, its operative nexus. The failure to grasp this elementary principle has led many to take EDM for what it is not. (2008: 18)

In particular, to merely listen to electronic dance music is to conflate it with “electronic art music,” a marriage with which Ferreira (*Ibid.*) cannot hold. Like Ferreira, several other authors (including Karlheinz Stockhausen, 2006 cited in Cox and Warner, 2004: 382-383) would probably find my use of the same approach for both “academic” and “popular” genres untenable. Nevertheless, sound

object analysis will hopefully provide a perspective that may illuminate the superfluity and artificiality of a total, irrevocable distinction between “academic” and “popular” in electronic music. I endorse Demers’ (2010: 6) position: that “metagenres” of electronic music may be loosely distinguished according to how they interact with their venues and sources of funding (institutional or commercial), with the understanding that venues and funding are often shared between metagenres; and that “all [electronic] metagenres here constitute high art.” Further, Demers (*Ibid.*: 8) points out that several EDM artists also produce “high-art” experimental music (Matmos, Vince Clarke, and Taylor Deupree are just a few examples). From this standpoint, using a single analytical vocabulary to approach both EDM and “electronic art music” is a valid practice that may yet do justice to both.

The vocabulary supplied by sound object analysis may account for EDM’s most provocative aspect: its repeated defiance of norms, thwarting the tendency toward normativity traditionally displayed in musical analysis. As we’ve seen, EDM flouts attempts to confine analysis to closed spheres circumscribed either by generic terms or labels such as “academic” and “popular”; it “rejects the very notion[s] of genre” and canon (Alwakeel: 2-4). Hence there is no “authority” or paradigmatic example against which individual tracks might be measured, and no hope of isolating an “essence” of EDM (*Ibid.*: 5). As I’ll discuss below, EDM also dissolves the boundaries between artist, artwork, equipment, and listener. Thus the identities of a track and its creator relentlessly vary (*Ibid.*: 9). Collaboratively, democratically genera-

ted, EDM encourages dialogue rather than definition or “solution” (*Ibid.*: 5). Likewise, as we’ll see, by being flexible enough to accommodate EDM’s insubordination to categories, sound object analysis may perhaps withstand normative temptations.

### Sound Object Analysis

Regarding most musical genres, listeners can describe what they hear by pointing to melodies, harmonies, basslines, and rhythmic patterns, and by naming timbres according to their instrumental sources. But in many EDM tracks, harmony is absent, timbres unnamable – while melodic, bass, and percussive tracks may be difficult to differentiate. This is not necessarily the case in all EDM genres: psy-trance, for instance, often utilizes clearly demarcated, even catchy, melodic lines and harmonic progressions (as in Eat Static’s music or Juno Reactor’s early work). In other cases, however, such as Dominia’s track, also called “Dominia,” for the techno compilation *Tresor Three*, the four-on-the-floor beat is rendered by a low, *pitched* sound, and is therefore as much of a “bassline” as it is “percussive.” Like many techno tracks (for instance Joey Beltram’s music), “Dominia” lacks melodic and harmonic movement. An isolated chord marks every other downbeat; but for the duration of the track, the pitches of this chord remain unchanged. There is thus no “linear” movement (directed changes in pitch) that could qualify as a “melody” or as a “harmonic progression.”

Alwakeel therefore suggests that we try to hear and think EDM “vertically,” in terms of overlapping “blocks of sound,” rather than adopting the “linear” focus on development over time, that dominates our engagement with other genres (*Ibid.*: 13-15). Sound object analysis is a form of engagement with just such “blocks of sound.” Now, I am not suggesting that all listeners do or should hear EDM in terms of sound objects; rather, my goal is to assess the potential of sound object analysis as one of many possible vocabularies that may serve as tools for describing and discussing this music, which has been known to elude traditional classifications.

The term *sound object* began as Pierre Schaeffer’s conceptualization of music’s “raw element,” which the pioneer of *musique concrète* believed that listeners could learn to hear (1967: 65). Typically we listen for what sounds signify, and assess how they contribute to meaningful structures. But Schaeffer observed that, precisely because the habitual aim of listening is to locate meaning in sound, *meaning* diverts our attention from a sound’s intrinsic features as soon as we detect its communicative potential. In contrast, a sound object results from what Schaeffer (1966: 265) named *reduced listening*: a skillful hearing that deliberately ignores sound’s possibilities for referring beyond itself, barring from perception any suggestions of sources, semantic functions, or significations that the sound in question may imply. Instead reduced listening aims at the *sound object* or decontextualized essence peculiar to each sound, with the goal of identifying the innate features that make sounds “musical.” Schaeffer coined the term *sound object*

to describe what we hear in this unusual mode: a sound that gives no indication of its source or any other connotation. I add the qualifying term *reducible*, to differentiate his notion of sound objects from others’.

Schaeffer wrote that sound objects may be sounds of any kind, including noises, hoping that identifying and describing varied sound objects – their “typology and morphology” – would encourage listeners and composers to liberalize their understanding of what constitutes musical sound (1966: 365). Sound object identification and description constitute what I call *sound object analysis*. This method has several advantages. Godøy attributes a certain “universality” to the technique: since a sound object may be any kind of sound, sound object analysis may apply to any kind of music besides and including that of the western classical tradition (2009: 73). Moreover, sound objects are purely audible, not notated. Thus sound object analysis enables discourse on sonic details that score-based analysis consigns to the margins, and is appropriate to experimental, electronic, and improvised genres that are independent of notation. Sound object analysis takes *sound* as its starting point instead of fixed, abstract systems, a priori conditions that many listeners cannot even detect, such as twelve-tone rows and large-scale tonal forms. Indeed, perceiving sound objects requires idiosyncratic listening techniques additional and in contrast to our usual modes, that question the unspoken, foundational assumptions of analytical discourse. Because, as we will see, a sound object’s characteristics depend on how each listener hears it, analysis via sound objects challenges the pre-

sumed stability of every signifying category, and the basic presupposition that it is possible to draw conclusions about what a sound *is*.

Overall, sound object analysis is grounded in *perception*. Schaeffer conceived sound objects as unitary fragments of “medium duration,” neither too long nor too short for the listener to memorize (Chion, 1983: 35), with the idea that sound object analysis proceeds in the same way as perception: synthesizing discontinuous perceptual “chunks” into coherent experiences (*Ibid.*, 1983: 35). In these manageable chunks, listeners may detect and enjoy characteristics imperceptible in shorter fragments and swallowed up by larger structures. As examples will demonstrate, sound object analysis invites the apprehension of details that neither acoustic measurements nor musical notation can capture.

Schaeffer recognized reduced listening as only one of many listening techniques, realizing that we can and do slip between different listening modes within the course of a single experience. He sought to “facilitate” a “swirl” of multifarious listening modes enabling a listener to hear a single sound in numerous, even contradictory ways (1966: 343). For Schaeffer a sound object is thus objective and subjective: a sound come from without, potentially manipulated so as to trigger perceptions, yet wholly contingent on a certain type of perception. Objectively, a sound object is at once an element of a structure and a structure composed of elements, thus abstract and concrete, internally static and unstable. Subjectively, it is a personal yet culturally-conditioned perception. To deal in sound objects is to deal in contradic-

tion; to acknowledge that sound has no fixed essence; and to admit that this, along with our alternation between listening modes, precludes the coherent, linear narration of musical experience. As we’ll learn, different kinds of sound object may coexist even within a single sound.

After Schaeffer’s death in 1995, the term *sound object* was adopted and transformed by several analysts and composers of electronic music. For instance, it appears in Cutler’s work on the illegal use of samples. He redefines the term *sound object* as a “found (or stolen) object,” a sound copied from one context and pasted verbatim into another (2000: 94). Though he consciously appropriates Schaeffer’s terminology, Cutler’s definition of *sound object* differs widely from Schaeffer’s. For the sake of clarity, I call the Cutlerian sound object a *transcontextual sound object*, following Smalley’s definition of transcontextuality as a sound’s suggestion of multiple interpretations based on its current and initial contexts (see Smalley, 1997). Transcontextuality is contingent on listeners’ recognition of the sound in question *from its original context*. Only with such a priori knowledge can listeners appreciate the sound’s transplantation between contextual arenas. In fact, says Cutler, “a plundered sound ... holds out an invitation to be used because of its cause and because of all the associations and cultural apparatus that surround it” (2000: 97). The transcontextual sound object thus depends on a mode of listening opposed to the disavowal of meaning that characterizes reduced listening. Where reduced listening invites singular focus on a sound’s characteristics independent of every circumstance, transcontextuality



presents an opportunity to knit new experiences out of previous encounters, past and present circumstances.

Both reducible and transcontextual sound objects qualify as *structural sound objects*. This is a significant concept to theorists and composers of microsound such as Curtis Roads, who uses the term *sound object* to distinguish sounds of a few seconds' duration ("from about 100ms to several seconds") from micro-sounds too short for any but a computer to process, and from macro-structures too long for listeners to conceive as single sounds (2004: 16). Like all sound objects, structural sound objects are timbrally flexible: they may consist of noises, electronic beeps, vocal sounds, or any other kind of tone.

Another variety of structural sound object is the *gestural-sonorous object* coined by Godøy (2003). His research on motor-mimetic music cognition finds that listeners' imaginations, limbs, or both respond to music with imagery or imitations of sound-producing, sound-accompanying, or emotive gestures, or by tracing a sound's envelope in movement (Godøy 2010: 60). In fact, because movements instigate sounds, and because sound is the movement of air, Godøy (*Ibid.*: 60) considers gesture to be an "integral element" of sound. The mind forms "memory images" of sounds along with their implicit gestures, retains and reapproaches these images as though they were "solid" (*Ibid.*: 54). Godøy calls these hypostatized images "gestural-sonorous objects," a concept that encapsulates the "holistic," unified experience of sound and gesture (*Ibid.*: 58). For instance, a climactic point in a melody and a dancer's response

in the form of a gesture collectively constitute a gestural-sonorous object. Just as a musical note isolates pitch and duration, the gestural-sonorous object offers analysts a way to consider how gesture, *specifically*, contributes to musical experience. However, contra musical notes, gestural-sonorous objects and transcontextual sound objects are defined by personal, extra-sonic connotations.

Sound object analysis relies on one aspect of a multifarious mode that Demers calls "aesthetic listening." I will draw attention to just one aspect of this complex mode: its awareness of and allowance for fragmentary attentiveness. "Aesthetic listening heeds intermittent moments of a work without [necessarily] searching for a trajectory that unites those moments" (2010: 151). Each listener notices the music's "transient delights" or "larger-scale patterns" if and as she desires (*Ibid.*: 151-2). "Aesthetic listening resembles the way many listeners hear popular ... musics" (*Ibid.*: 16): in particular, as a fragmentary process in its own right, it complements the often fragmentary aesthetic of EDM (*Ibid.*: 78). Aesthetic listening goes hand in hand with sound object analysis by allowing listeners to slip between various kinds of attention, and to consider individual sonorities instead of large-scale forms.

Neither sound object analysis nor aesthetic listening relies on prior knowledge of the historical circumstances surrounding a piece of music. In EDM, such details are frequently unavailable to listeners, as artists go out of their way to maintain their anonymity behind multiple aliases or, as in the case of Yasushi Miura, by avoiding promotional materials. This is not to say that historical

details are irrelevant. Quite the contrary: historical data is vital to hearing *in certain ways*, for example from the traditional musicological standpoint. Even in sound object analysis, knowledge of the work's history may help listeners to detect and describe sounds' transcontextuality, where it is present. However, transcontextuality need not be detected for a sound object analysis to be viable. Listeners may describe what they hear in terms of reducible, structural, or gestural sound objects, the discernment of which requires no background knowledge.

Let me demonstrate how sound object analysis functions regarding an "avant-garde" or "high-art" electroacoustic work. This particular example foregrounds several sound-object categories, revealing them to interpenetrate one another.

### I Am Sitting in a Room

Alvin Lucier's *I am Sitting in a Room* (1969, hereafter ISR) requires the performer to recite and record a short text. The performer plays back and records his recording, and repeats this process indefinitely, with the result that the same sounds pile on top of themselves several times over. Multiple instances of the same frequencies activate simultaneously, reinforcing one another's stimulation of the air in the performance space. By the end of the piece, all we can hear is the space itself ringing at the frequencies of the performer's voice. Linguistic articulations metamorphose into unbroken sound.

Wishart interprets ISR as the evolution of a mysterious sound object:

At the beginning of the piece we would unreservedly state that the sound-object is the voice. At the end of the piece the sound-object is clearly a more "abstract" entity whose characteristics derive from the room acoustic. Somewhere in between these extremes our perception passes over from one interpretation to the other. (1996: 158)

Wishart seems to read the vocal utterance as a structural sound object. Additionally, recording the utterance changes it from a human encounter to a machine encounter, or to a human encounter mediated by time, memory, and the recording device. In other words, the recorded-replayed utterance is transcontextual. But as it stacks upon itself, the monophonic utterance becomes polyphonic and eventually loses its vocal quality, taking on the anonymity of a reducible sound object. The layered recordings eliminate the possibility of hearing words in the sound, and invite us to forget the sound's origin in a human voice. Soon we can no longer tell when new iterations of the utterance begin, so that we cannot follow the structure of the piece. In the end we can infer nothing from what we hear except the sound itself and its intrinsic features. Overall in ISR, a structural, transcontextual sound object changes into a reducible sound object when successive layering renders it unrecognizable, its source indistinguishable from the surrounding space.

Sound object analysis is appropriate to ISR because, in one sense, Lucier's endeavor is *about* entities in space. A performer's vocalizing body, his recording equipment, and their collaborative sounds work upon one another and the surrounding room, causing the space itself to resonate. Space, sounds,

and bodies manifest one another, before one another. Space brings sound to the forefront of attention and vice versa; both mediate the performing body to attention. In the same way, in everyday living, spaces articulate visible, tangible objects; objects dictate the contours of spaces; both interact with and situate our bodies, making us apparent to others. Relating Lucier's sounds to tangible objects by thinking them as *sound objects* may help to clarify the relations that he subtly brings to the forefront. Sound object analysis also accounts for his deliberate attempts to engage certain receptive modes – his use of layered recordings to *propose* “reduced” hearing of speech, for example. Listening for different kinds of sound objects, we shift between listening modes: we experiment with diverse standpoints from which we may encounter and describe sonic experiences. Thus, as a quasi-gestural metamorphosis of our attention (which could conceivably involve actual gesture), sound object analysis may enable listeners themselves to experience or enact the gradual transformation that utterance undergoes in ISR. Sound objects also conceptualize what musical notes cannot, for instance sounds' provocation of memory, affording a succinct vocabulary that enables listeners to approach Lucier on his own terms, to describe and hence to share their transformational experience of his work.

However, as I've argued elsewhere (Wong, 2012), the term *sound object* may mask the temporality of sounds and their origin in movement, as the word *object* can imply fixity, self-sufficiency, and objectivity. The word *object* lends a givenness to sounds that may in fact obfuscate the listener's partial

responsibility for her experience, and obscure the foundation of every sound object in *subjectivity*. But this is precisely why Wishart emphasizes “perception,” not only sound, as the changing element in ISR. Perception, the perceiver's personal qualities, her decisions, and her circumstances are all qualifying factors of sound objects. The characteristics of sound objects are contingent on how we hear them, ergo no sound object needs necessarily possess any particular feature.

Sound object analysis demonstrates that we can never definitively categorize sound, music, listening, or analysis. I do not mean that sonic experience is ineffable in a transcendent sense. Rather, sound object analysis suggests the opposite. Sonic experience eludes determinateness because it relies on subjective factors: interpretations, memories, cultural and epistemological predispositions of individual listeners. Analysis is correspondingly elusive because the variety of possible listening modes may be close to infinite. As such, sound object analyses are specific to the performing analyst. Sound object analysts must be constantly aware that their conclusions are contingent and therefore likely to be temporary. In other words, sound object analysis accentuates the personal, performative qualities of all analytical activity.

What kind of activity is analysis? As the identification and description of objective elements within a sonic structure, traditional score- or program-based analysis proposes a narrative of a musical work: a tracing of its semantic structure relative to a pre-established musical system plus, in many cases, a translation of the “musical semantics” into linguistic *communiqués* relative to socio-histori-

cal circumstances. The narrative forms a coherent, autonomous whole, an organized presentation and objective presence with a claim to truth. This claim is strengthened by the narrative's basis in an established system that fixes the terms in which all narratives proceed. In western systems, for example, G# is always G#, even when its setting varies. Western analysis depends on categorizing pitches, volumes, attacks, rates and sequences of change, using inflexible terms determined prior to any hearing. The predetermination of such categories prior to *any* analysis limits the extent to which analyses can vary.

But in sound object analysis, the listening act proposes and explores all possible descriptive categories, allowing for contradictory categorizations: it is completely acceptable to hear the vocal sounds in ISR as at once transcontextual and reducible. Sound object analysis requires the listening subject to interrupt and contradict every attempt at coherent narration, even her own, by moving at will or unconsciously between contrasting listening modes. Where traditional analysis closes itself off from variations of its categories, sound object analysis calls on an Other, any other listening subject, to *interrupt* every application of every category. Thus sound object analysis functions less like a declaration and more like an interaction. It illuminates the egocentrism of traditional methods, which undermine the very existence of listening subjects by categorizing sounds before anyone hears them, and assuming that everyone hears in terms of these categories (despite that, for example, the category "G#" has no experiential correlate for listeners without perfect pitch).

Sound object analysis evades this presumption by empowering the listening subject as a critical and creative agent, allowing each listener to shape (via experience) every sound object, and thereby putting traditional norms into crisis. I am not suggesting that sound objects should replace musical notes and other traditional categories; rather, I seek a supplementary vocabulary that may come into play especially when what we hear exceeds the descriptive capabilities of traditional nomenclature.

### Capricious

ISR is without a backbeat, spun out of human vocal sounds, and reliant on electric but not necessarily computerized equipment. It is utterly unlike EDM. Can sound object analysis, though it served ISR reasonably well, do similar justice to digital, beat-based dance music?

In this portion of the discussion, I will apply sound object analysis to "Capricious" (2008) by Japanese EDM producer Yasushi Miura. This track is experimental in that it consistently strains EDM conventions. Miura abstains from structural formulae typical of EDM tracks, which center around gradual buildups of textual layers (see Butler, 2006), and even from making clear distinctions between melodic, bass, and percussive lines. Even more than Matmos' "Supreme Balloon", which begins tunefully and later relies on minimalistic repetitions of consonant three-note figures, Miura's "Capricious" questions the identities of EDM and its basic constituents, by means

of those very constituents. Hence my selection of “Capricious” as a test subject for sound object analysis: though it is EDM, it eludes traditional categories. As “Capricious” challenges typical conceptions of EDM, it poses challenges to accustomed or formalized modes of listening, including analytical modes. This track provides rigorous terrain on which analytical perspectives, including sound object analysis, may reveal their strengths and give away their blind spots.

Unlike “Supreme Balloon”, which could be comfortably described in terms of melody and harmony, most of Miura’s music is notorious for its obscurity. Of the bare handful of online reviewers willing to take on Yasushi Miura, most of them chalk up their experiences to psychiatric disease. As one author put it, an album of Miura’s music “becomes pretty demanding and one can only imagine that his music perhaps reflects ... newly discovered psychiatric diagnoses such as Techno Stress and Techno Phobia” (Electronic Music World, 2004). Another concluded that either “[t]he music seems to showcase Yasushi’s schizophrenic nature ... [or] there seems to be some sort of joke going on” (Heathen Harvest, 2009). Both these reviewers warn that “if you ever get ahold [*sic*] of it [Miura’s music], good luck understanding it ... [as it is] simply just too abstract in nature” – and above all, “don’t try dancing to it.” Miura himself is even more inscrutable. Hidden somewhere behind his empty website, he sends his music to reviewers on CD-Rs with handwritten titles and nothing else – no note, sometimes not even a sleeve. Can listening via sound objects provide productive insight on his work?

“Capricious” is a swarm of corpuscular sounds. Pitched sounds are just as percussive as the percussive sounds and just as dissonant as the erratic buzzing sounds, with the result that every sound in the piece – and none of them – could constitute “melody,” “bassline,” “noise,” or “percussion.” Therefore parsing “Capricious” into contrapuntal lines is impossible. So instead of hunting for linear trajectories, perhaps hearing the piece as a host of structural sound objects may be more telling. Recall that a structural sound object may be a sound of any kind, even a noise or melodic figure, that is long enough to be perceptible but extends no longer than a few seconds. We may interpret “Capricious” as the interaction of a crowd of such diverse objects. If we listen via headphones, this characterization is not just metaphorical. Particularly during the first minute of the track, I hear an assortment of sonic individuals in my right and left ears; on occasion they even seem to come from the center of my head. Like tangible objects in visible space, the sounds shape, demarcate, and populate the interior space in which I experience the music. Similarly, heard over large loudspeakers, these variously colored and positioned sound objects would define and articulate the shape of the surrounding room. Instead of a schizophrenic movement between high pitches, low pitches, and noises over time, listening for sound objects reveals a horde of stable individuals marking out a space.

The difference lies in listening for individual sounds instead of musical trajectories. As Alwakeel points out, listening “vertically” for sonic objects may even change our view of Miura’s incessant repetition of the aforementioned sounds. “Cycling

units do not have to be seen as an undeveloping sequence documenting [a] subject's movement in time through the music, but might be devoid of a linear subject altogether, and therefore exist to some degree outside time" (2009: 14). Instead of a single, obsessive-psychotic movement, we may hear in "Capricious" the persistence of individuals which, like tangible objects, possess a degree of permanence that enables us to reidentify them. In my opinion, this interpretation could apply to most EDM tracks that partake of the typical styles and layered structures. In tracks from Model 500's Detroit-techno anthems and Joey Beltram's Belgian-style "Energy Flash" (1988) to Eat Static's psy-trance escapades and the latest experiments by IDM promoter r\_garcia, there are elements that persist continually, repeat precisely, or return consistently: brief synth melodies or punctuating figures, samples from film dialogue or other musical genres, and of course the beats, all of which are identifiable and reidentifiable as circumscribed individuals. Alternately, regarding Miura's track, since there is no reason why sound objects cannot be of any duration (the limits imposed by Roads are arbitrary), we may reasonably hear the entire track as a single, multicolored object with a complex, rippling texture: as a gestural-sonorous object comprised of sound and undulating movement. Since there are no melodies, harmonies, or gradual buildups to imply any kind of trajectory; and since the 4/4 beat, typically responsible for EDM's propulsion, never stabilizes in this track: it is reasonable to encounter the track "face-to-face" as a quasi-permanent object, instead of "moving through" it.

We may compare our listening experience to that of walking around a sculpture, taking it in from multiple perspectives. From this standpoint, the track takes on a certain self-sufficiency, again mirroring tangible objects, which Miura exacerbates by absenting himself from the music and its promotion. Moreover, none of the digital blips and buzzes in "Capricious" resemble human vocal timbres or the sounds of traditional musical instruments. It is admittedly difficult for sound object analysis to thoroughly describe the timbres in this track. We can be certain only that they are electronic. We might therefore call them transcontextual sound objects, acknowledging their emigration to the world of music from the insides of computers, which were not designed to be musical instruments. I find that interpretation tautological in electronic music, but it is valid nonetheless. It is my instinct to call these beeps and buzzes reducible sound objects, thus underscoring their meaninglessness except as they refer to the electronic and mechanical in general. This refusal of communication compounds Miura's effacement of human presence, including his own, from his music. It is almost as if the track has no creator except perhaps itself or an unknown computer. At the potential risk of invoking Romantic, phantasmagoric notions of erasing the effortful human conduit between supernatural genius and its artistic products, Alwakeel identifies the conflation of producer, equipment, and product/artwork as a distinguishing feature of experimental EDM (*Ibid.*: 18). Sound object analysis calls attention to this provocative confounding of identities.

The concept of the transcontextual sound object may help us to rationalize the near-absence of a 4/4 bass drum beat in “Capricious”. At several points during the track, the beat attempts to take hold, only to cease abruptly after a maximum of ten seconds, sometimes remaining absent for long stretches. The beat is yet recognizable as an EDM beat, especially when a syncopated hi-hat-like sound enters during a brief passage. In fact the beat as a whole is the only sound in the track that I can name definitively (as an EDM beat). As a whole, we could consider the beat – a bass-percussive timbre played in steady quarter-note rhythms – a single sound object. It is a gestural sound object certainly, in all EDM tracks, for those who associate this idiosyncratic rhythmic figure with club dancing, as for those who cannot help moving to it. But Miura invites an additional interpretation. In “Capricious”, it is tempting to call the 4/4 beat a transcontextual sound object, because its erratic presence and familiarity – both striking amid repetitive textures and unnamable sounds – make it seem almost foreign to the track, as though it came from elsewhere. The beat is circumscribed, parenthesized, by its own frequent absences: set off from the rest of the track almost as a self-sufficient entity. Perhaps, relative to “Capricious”, the genre of EDM, represented by its unmistakable beat, is somewhat “elsewhere,” set off yet close by. The notion of transcontextuality thus enables speculation on this track’s relationship to genre: EDM is part of the track, but there is more to this music than EDM or its conventions. In general, the categories of sound object analysis

achieve reasonable success in accounting for the idiosyncrasies of “Capricious”, including its resistance to categories.

## Embodiment

Sound object analysis constitutes a dialogue between a listening subject, sounds, and analytical categories. As the listener shifts between listening modes, she participates in creating “what” she hears. At the same time, sounds impose themselves on her and, by being as they are, invite or even compel her to hear them in certain ways. As such, analysis is a creative, performative, collaborative act not just of contemplation but also participation. Ferreira notes that “EDM is not a kind of creative message sent by a performer to his audience, but the sonorous dimension of a particular collective movement” (Ferreira, 2008: 18). He means the movement on the dance floor; but listening and sound object analysis are also collective, embodied activities that are therefore viable interactions with EDM – that do as much justice to the genre, on its own terms, as dancing does.

Nina Eidsheim reveals that listening is always collective and embodied: “aural experience is predicated on our physical contact with sound waves through shared media ... [such that] sound is a multisensory experience, tactile as well as aural” (2011, pp.146-7). The concept “sound *object*” serves as a reminder that the analytical act is likewise embodied. As it invites associations of sounds with objects, hence with visible, tangible, material things (as well as objects of thought, objectivity,

and other phenomena), the notion of the sound object makes explicit the fact that analysis is an encounter between material bodies: sonic/aerial and human bodies (see Wong, 2012).

The theory of sound objects is thus an instance of what Jane Bennett calls “vital materialism,” which theorizes the existence and importance of nonhuman bodies as “actants.” An actant is “that which has efficacy, can *do* things, has sufficient coherence to make a difference, produce effects, alter the course of events” : a “source of action...[that] can be human or not, or, most likely, a combination of both”. (2010: viii) As such, an “actant is neither an object nor a subject but an ‘intervener’...which, by virtue of its particular location in an assemblage and the fortuity of being in the right place at the right time, makes the difference, makes things happen, becomes the decisive force catalyzing an event.” (*Ibid.*: 9) For Bennett, metal, garbage, and electricity are actants. By her definition, sounds and sound objects are also actants. As both objects (approached by a listener) and subjects (affecting a listener), sounds are partially responsible for catalyzing the event that is the listening/analytical act. A sound is a nonhuman actant that produces effects on listeners and their surroundings. A sound *object* is also such an actant, with the additional caveat that its mode of being is determined by what human listeners hear, how what they hear interacts with what they know, and how they choose to describe the total experience. We could say, then, that sound objects are nonhuman actants that are nonetheless dependent on human experiences and choices.

For Bennett, events are “encounters between ontologically diverse actants, some human, some not, though all thoroughly material” (2010: xiv). She underscores the power (“thing-power”) of nonhuman things to instigate and participate in events, and to produce effects (*Ibid.*: 6). In fact she “equate[s] affect with materiality”: the ability of a thing to affect others, to produce change, is what makes the thing a material body. *Hence, as actants, sounds and sound objects are genuine material bodies.* She emphasizes that “[o]rganic and inorganic bodies, natural and cultural objects (these distinctions are not particularly salient here) *all* are affective,” (*Ibid.*: xii-xiii) and that human bodies should not be considered the only active participants in any interaction, hence the only material bodies in existence. Instead, Bennett offers a vibrant monism, in which everything – sounds and humans alike – constitutes the same affective material in different forms, unconstrained by any “hierarchy of being”. Of course she acknowledges the “differences between the knife that impales and the man impaled,” between the sound that is heard and the hearer; but such differences do not imply that humans dominate their every encounter (*Ibid.*: 9-10). Activities like listening and eating are thus “encounter[s] between various and variegated bodies, some of them mine, most of them not, and none of which always gets the upper hand” (*Ibid.*: viii).

The same occurs in sound object analysis. Listening bodies meet sound objects in an encounter, the shape of which is determined by both embodied parties. Sound object analysis foregrounds the fact that all music is a collective encounter



between human and nonhuman bodies. So does electronic dance music as, even in its moniker, it summons both the nonhuman and corporeal movement. In fact, once we “flatten out” the differences between human and nonhuman (electronic and sonic) bodies, the difference between close listening and collective dancing to EDM is likewise revealed not to be as vast as we might have believed (*Ibid.*: 9).

This is not to say that the relationship of equality between humans and things or sounds is in any way simple. Sounds change our minds about them even as we change them by hearing them in certain ways. Sound objects, in particular, are ontologically determined by listeners’ subjective choices, memories, and so on. In a sense, then, we are the sounds and the sounds are us. “[T]he us and the it,” the human and the nonhuman sound object, “slip-slide into each other” (*Ibid.*, 4). Nevertheless, despite the fact that it is shaped by the activities of listeners and artists, the sound object possesses being and affectivity of its own, separate from those of the artist, his equipment, and his listeners. This is evident in Miura’s “Capricious”: sound objects constitute both the artist’s creative acts and self-sufficient entities, alternating between these modes of being in the analyst’s attention. Generally, as Bennett puts it, things such as sounds and sound objects:

shimmied back and forth ... between, on the one hand, stuff to ignore, except insofar as it betokened human activity ... and, on the other hand, stuff that commanded attention in its own right, as existents in excess of their association with human meanings, habits, or projects. In the second moment, stuff exhibited its thing-power: it issued a call, even if I did not

quite understand what it was saying. At the very least, it provoked affects in me ... a nameless awareness of [its] impossible singularity... (*Ibid.*: 4)

If a thing is to reveal its singular power, it must appear to us in the right place at the right time – as the idiosyncratic placement of the EDM beat in “Capricious”, in the context of Miura’s infamous obscurity, reveals its transcontextuality. At the same time, though, we must harbor “a certain anticipatory readiness,” adopting a perspective or “perceptual style” that is “open” to things’ affective power (*Ibid.*: 5). Sound object analysis summons just such an “open perceptual style” by inviting us to hear sounds “vertically” as individuals, rather than as moments in a trajectory; and by following in the footsteps of Schaeffer, who recognized that we can change how we hear at will, enabling sounds to “shimmy back and forth” between various characterizations as our attention continually mutates, waxes and wanes. All the same, as we’ve seen, perception is not a mere looking-on but a participation-with and a creation, a rendering-manifest. “To ‘render manifest’ is both to receive and to participate in the shape given to that which is received,” with the understanding that, as participants within it, we cannot see or hear absolutely everything about a thing or sound. Bennett counsels us to relish our mystification. “Vital materialists will thus try to linger in those moments during which they find themselves fascinated by objects, taking them as clues to the material vitality that they share with them” (*Ibid.*: 17).

## Conclusion

Vital materialism can serve as a comprehensive ontology for sound object analysis, and demonstrate that this analytical mode is literally a collective movement and interaction of material bodies. This interaction is democratic rather than dogmatic, permitting sounds and listening subjects to affect and be affected by one another. As

such, sound object analysis engages with EDM on a level that is historically attributed only to club dancing, and offers a vocabulary that accounts for EDM's defiance of norms as well as the embodied nature of listening. The point is, we can encounter EDM in a variety of ways, via multiple, embodied activities, and "shimmy back and forth" between them.

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