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## Sound studies without auditory culture: a critique of the ontological turn

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### ABSTRACT

'Sound studies' and 'auditory culture' are terms often used synonymously to designate a broad, heterogeneous, interdisciplinary field of inquiry. Yet a potential disjunction between these terms remains. Some scholars within sound studies, by turning to the ontology of sound and to the material–affective processes that lie 'beneath representation and signification', reject auditory cultural studies. In this essay, I consider the 'ontological turn' in sound studies in the work of three authors (Steve Goodman, Christoph Cox, and Greg Hainge) and offer a few arguments against it. First, I describe the Deleuzian metaphysical framework shared by all three authors, before addressing their particular arguments. Then, I consider Goodman's vibrational ontology. While Goodman claims to overcome dualism, I argue that his theory is more rigidly dualist – and poorer at explaining the relation of cognition to affect – than the cultural and representational accounts he rejects. Next, Cox and Hainge's aesthetic theories are considered. Both are proponents of *onto-aesthetics*, the belief that works of arts can disclose their ontology. I argue that onto-aesthetics rests on a category mistake, confusing *embodiment* with *exemplification*. Because of the confusion, Cox and Hainge slip culturally grounded analogies into their supposedly culture-free analyses of artworks. Finally, I reflect on the notion of an 'auditory culture', and suggest the 'ontological turn' in sound studies is actually a form of 'ontography' – a description of the ontological commitments and beliefs of particular subjects or communities – one that neglects the constitutive role of auditory culture at its peril.

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It has been nearly a decade since Michele Hilmes published her review article 'Is There a Field Called Sound Culture Studies? And Does it Matter?'<sup>1</sup> In the decade since, no one can deny that sound has captivated the imagination of scholars across many disciplines. Alongside the publication of numerous articles and books on sound and listening, there has been a steady stream of anthologies, such as Michael Bull and Les Back's *Auditory Culture Reader*, Veit Erlmann's *Hearing Cultures*, Jonathan Sterne's *Sound Studies Reader*, Trevor Pinch and Karin Bijsterveld's *Oxford Handbook of Sound Studies*, and Routledge's four-volume *Sound Studies*.<sup>2</sup> These volumes, like all anthologies, delineate a canon of texts, organize topics,

define central problems, and establish methodologies, if only by example. The same might be said about the creation of a flagship journal like *Sound Studies*. Looking back at the title of Hilmes' article, I cannot help but notice two interesting features. First, the 'is' in Hilmes' title suggests that there was some uncertainty about whether the field of 'sound culture studies' existed *at all*. Her question is very different one currently being debated: 'Is sound studies a field or a discipline?'<sup>3</sup> Here the 'is' functions as a copula, not as an existential quantifier. Second, the phrase 'sound culture studies' does not exactly roll off the tongue. Our current terms for denoting the field/discipline are sleeker: 'sound studies' and 'auditory culture'. The former is akin to academic disciplines like American Studies or Film Studies. The latter is more akin to Visual Culture, a field defined through its distinction from the traditional methods and objects of Art History and its affiliation with Anthropology. The phrase 'sound culture studies' is probably more descriptive of what actually goes on under the banner of 'sound studies' and 'auditory culture' than either term alone. In the seminar room, 'sound studies' and 'auditory culture' are often used synonymously to denote the same authors, texts, case studies, and methodologies. As general labels, one might be foolish to read too much into their difference. Like Hesperus and Phosphorus, 'auditory culture' and 'sound studies' may indeed refer to the same thing, even if their sense differs.

However, I want to explore a possible disjunction between the two terms. In this essay, I will address a niche of scholarship within sound studies that sets itself apart from studies in auditory culture by focusing on the ontology of sound. This niche builds on the work of Gilles Deleuze in order to develop a philosophical naturalism with respect to sound. The 'ontological turn' in sound studies, setting itself against the so-called 'linguistic turn' in the humanities, directly challenges the relevance of research into auditory culture, audile techniques, and the technological mediation of sound in favor of universals concerning the nature of sound, the body, and media. To examine this in more detail, I will focus on the work of three authors: Christoph Cox, Steve Goodman, and Greg Hainge. All three develop their theories of sound in ontological terms. All three are also explicitly influenced by Deleuze or his students, most importantly, Brian Massumi. Hainge, in *Noise Matters: Towards an Ontology of Noise*, develops an ontological theory of noise applicable across media; Goodman, in *Sonic Warfare: Sound, Affect, and the Ecology of Fear*, develops an ontology of sonic vibration, focusing on vibration's bodily and affective force; Cox, a philosopher and art critic, develops a material ontology of sound in various articles and book chapters.

My purpose is neither to encourage nor discourage the use of 'sound studies' or 'auditory culture' as labels, but to challenge a collection of arguments that I find troublesome and unconvincing. After addressing the metaphysical framework shared by Goodman, Cox, and Hainge, I will consider Goodman's work on vibration, with a special focus on the relationship between affect and cognition. Then, I will consider Cox and Hainge together and address the relationship between the ontology of sound and their theory of artworks. In all cases, I will be attentive to those places where the 'ontological turn' directly confronts questions of culture and value.

## 1. The virtual and the actual

Goodman, Cox, and Hainge produce distinct ontologies of sound while sharing a metaphysical system committed to Deleuze's dichotomy of the 'virtual' and the 'actual'. According to Cox, the terms 'actual' and 'virtual' denote 'the difference, within the flux of nature, between

empirical individuals and the forces, powers, differences, and intensities that give rise to them.<sup>4</sup> Forces of nature, which are intense and differential, are distinct from the objects that emerge on the basis of such forces. Nature as force is perpetually differing, while the objects that emerge from these forces have the appearance of solidity and permanence characteristic of *res extensa* in the modern philosophical tradition. The 'actual' is the name for those ostensibly fixed, empirical things. The 'virtual' is the name for the welter of perpetually differing forces that brings the actual into being. If the 'actual' denotes the domains of realized possibilities, the 'virtual' is the realm of pure possibility or pure potential. In *Difference and Repetition*, Deleuze describes the dichotomy in terms of 'difference' and 'diversity', arguing that:

Difference is not diversity. Diversity is given, but difference is that by which the given is given, that by which the given is given as diverse. Difference is not the phenomenon but the noumenon closest to the phenomenon ... Every phenomenon refers to an inequality by which it is conditioned.<sup>5</sup>

The diversity of things (the actual) relies on the difference (the virtual) that is at the very heart of nature. Deleuze often characterizes the dichotomy between the actual and the virtual in terms that resemble Kant. Yet, as Cox notes, the 'virtual' is not to be confused with Kantian conditions of possibility, since Deleuze's 'conditions of possibility are not conceptual or cognitive, as they are for Kant; they are thoroughly material, immanent in nature itself.'<sup>6</sup>

The metaphysics of the actual and virtual entails a specific view about culture and nature. Appearances, or the 'diversity' of empirical things, 'are the products or manifestations of material intensive "differences" that operate at the micro-level of physical, chemical, and biological matter but that remain virtual, unapparent at the level of actual, extensive things.' If one accepts that premise, it follows that '[these] differences are not linguistic, conceptual, or cultural in origin. Operating beneath the level of representation and signification, these differences subsist in nature itself.'<sup>7</sup> Cox moves quickly from saying that the virtual is not 'cultural in origin' to the claim that it operates 'beneath the level of representation and signification'. In this discourse, terms like 'representation' and 'signification', which are aligned with the 'actual', do not simply denote representation in the Kantian sense or linguistic signification. Rather, these terms stand in for a variety of hermeneutic and interpretative commitments, like those of cultural studies, phenomenology, historicism, and deconstruction, to name a few. Broadly speaking, 'representation' denotes all varieties of anthropocentric ways of encountering the world, from the a priori categories of Kant to the historical modes of cognition of neo-Kantianism, and from the *epoché* of Husserlian phenomenology to the *différance* that inhabits the very limits of representation in Derrida. Similarly, 'signification' denotes not only the linguistic-centred tradition of Analytic philosophy but also structuralism and semiotics. Cox, Hainge, and Goodman, in their affirmation of the metaphysics of the virtual and the actual, are involved in a shared critique of 'representation and signification'. Their shift toward ontology, despite their distinct ontological projects, is an attempt to outwit the so-called linguistic turn, or the privileging of cognition, consciousness, anthropocentrism, phenomenology, or culture.<sup>8</sup>

## 2. Sound and the ontology of vibrational force

In Goodman's work, affects occur when one body acts on another.<sup>9</sup> Affects are not to be confused with emotions or other conscious or cognitive states of a subject. Rather, they are to be understood as forces operating prior to representation and signification. In the action

of one body on another, affects are imperceptibly transmitted. For Goodman, transmission occurs by means of vibration. Sound as vibration is first registered in the rhythmic action of vibration on the body of the listener. Temporally prior to its perception, the affective action of a body on a body *precedes and thus conditions* a subject's cognitive response. Before the activation of 'cognitive listening, the sonic is a phenomenon of contact and displays, through an array of autonomic responses, a whole spectrum of affective powers.'<sup>10</sup> Goodman's account is focused on the moment of vibratory impact before cognition gets underway. Once committed to this account, any attempt to describe listening in phenomenological terms would fail since the data described always arrive too late to be relevant. The sonic, as a vibrational force, initially impacts the body intermodally or 'synesthetically' before it is divided into discrete sensory modes, such as hearing, seeing, and touching.<sup>11</sup> Vibrational impacts, which are pre- or pan-modal in nature, 'ontologically precede the designation of a sensation to a specific exteroceptive sensory channel (the five senses)'.<sup>12</sup> Goodman supports his claim by appealing to the work of psychologist Silvan Tompkins, and the notion of a 'plane of pure sensation' that precedes its discretization and capture into sensory modalities.<sup>13</sup> Given the lateness of the sensory modes, Goodman discourages accounts of the sonic in terms of conscious hearing or listening in favor of an unconscious, affective, intensive account of sound as material impact.

In any sonic experience therefore, it is primarily the vibrational (microrhythmic) nexus of sensory modalities that constitutes an encounter ... [W]here there is a visceral perception initiated by a sound and in a split second the body is activated by the sonic trigger, then the gut reaction is preempting consciousness. <sup>14</sup> Interoception always precedes exteroception, even if by a 'split second'.

The 'split second' has important ramifications in Goodman's theory. In that tiny interval, the autonomy of the affective system is shown to be wholly detached from, and wholly prior to, a subject's cognitive responses. Goodman appeals to the experimental results of Joseph Ledoux, the theorist of 'basic emotions', citing his discovery that 'the higher cognitive faculties of the auditory cortex do not need to be engaged for fear responses to be engaged'. In the production of fear responses, 'cognitive faculties are short-circuited' and 'conscious emotion is unnecessary'.<sup>15</sup> In fact, 'the higher cognitive functions of the cortex merely serve as filters for decisions already made, subtracting some, complying with others'.<sup>16</sup> A rift appears between the sensorium, a term typically used to designate the five senses and their relations, and the 'affective sensorium', which registers the imperceptible impacts of bodies on bodies.<sup>17</sup> In the split-second precedence of affect over perception, the latter is rendered ineffective because unnecessary. Goodman, citing Massumi, writes: 'The immediacy of visceral perception is so radical that it can said [*sic*] without exaggeration to *precede* the exteroceptive sense perception. It *anticipates* the translation of the sight or sound or touch perception ...'<sup>18</sup>

Once cognition (or sensory perception, or exteroception, or, broadly, the mind) has been put in its place as anterior to affection (or visceral perception, or interoception, or, broadly, the body), the final move comes quickly. Goodman argues that contemporary forms of power use affective means to control populations, instilling fear and terror distinct from any real threat. Power rules by means of an ecology of fear, operating at the visceral level by distributing 'bad vibes'.<sup>19</sup> Since the work of affect is imperceptible the only way to expose it is through analysis 'operating on the pre-individual plane of affect, in the turbulent layer between subjective experience and the world, where virtual threats have real effects. Such modes of control operate impersonally.'<sup>20</sup> If one wants to resist such powers, the options

are limited. Since these modes of control operate beneath the level of beliefs, ideologies, phenomena, or cultures, non-affective analyses are powerless to offer resistance. To stick with the old techniques (ideology critique, consciousness raising, institutionally sanctioned forms of political dissent, etc.) would be retrograde and dangerous, colluding with the affective powers-that-be. 'A veneer of cognitive processing and phenomenological subjective agency therefore only conceals power's real pressure points.'<sup>21</sup> Cognition, always subsequent to affect, is affect's puppet; one might say that its rationality can only be a rationalization in the face of affect, which precedes everything the thinking and feeling subject does. Thus, Goodman repeats Massumi's assertion that power addresses 'bodies from the dispositional angle of their affectivity, instead of addressing subjects from the positional angle of their ideations, shunt[ing] government function away from the mediations of adherence or belief and toward direct activation.'<sup>22</sup> If this analysis of power is correct, then one can only fight power at the level of affect itself. Goodman's politics of vibration seeks out 'the transduction of bad vibes into something more constructive.'<sup>23</sup> This is what Goodman means by a 'politics of frequency.'<sup>24</sup> Much of *Sonic Warfare* is given over to describing this reversal of bad vibes into good vibes through the 'experimental practices' that Goodman affirms, like Afrofuturism and electronic dance music, those that 'intensify vibration ... unfolding the body onto a vibrational discontinuum that differentially traverses the media of the earth, built environment, analog and digital soundscapes, industrial oscillators, and the human body.'<sup>25</sup>

### 3. Objections

I want to pose an objection to Goodman's theory. To make this objection clear, I need to borrow an example from the realm of fiction. Franz Kafka's unfinished tale, 'The Burrow,' describes an elaborate underground burrow, made by a mole or badger, designed to offer absolute security to the burrower.<sup>26</sup> Midway through the tale, the burrower begins to hear a sound in the burrow, a piping [*Pfeifen*] or whistling [*Zischen*], yet cannot identify its source, cause, or location. The sound in the burrow is constant, 'always on the same thin note,' and always at the same volume no matter what part of the burrow the burrower investigates.<sup>27</sup> The story is marked by an intense anxiety throughout. Kafka's burrower flits from fickle hypothesis to fickle hypothesis, ever insecure, ever threatened, but never finding the source of the sound. Since the tale is unfinished, the reader never learns the source of the sound that so disturbs the burrower. In many respects, 'The Burrow' seems precisely the kind of situation that Goodman is describing. A sound, a vibration, affects the burrower, triggering immediate and autonomic responses of fear and terror. Yet the affect seems wholly detached from any particular object, just as the affect of terror prevalent in our contemporary ecology of fear is detached from any particular threat. The burrower's cognitive faculties, short-circuited by terror, can do nothing but follow affect's lead.

Now, imagine a situation where Kafka finished the story and (perhaps in a very un-Kafkaesque manner) the burrower discovers the source of the sound, finding it benign. All of the fear and anxiety triggered by the sound would be dissipated at that moment. Terror would transform into relief. Over time the burrower might even find the constant sound a source of comfort, the sound of an underground companion. While the sound would remain unchanged – for it is fixed at a constant volume on the same thin note – the burrower's affect would be drastically altered. And yet, there appears no simple way that Goodman's 'ontology of vibrational force' can account for this change in affect. Since the ontological situation

has not changed, the only way to account for the change in affect would be to appeal to something other than ontology, namely a change in the burrower's knowledge about the situation, or a change in the status of the sound's signification. Yet, if affect is ontological, operating at an imperceptible level beneath the subject's representation, how can a change in knowledge produce a change in affect?

First, Goodman might respond that when the burrower discovers the source of the sound, there is in fact a change in the vibrations that triggers a change in the burrower's affect. This challenges my characterization of the ontological situation above in that before and after discovering the sound's source the situation is not ontologically identical, but crucially different. Then, however, the onus would be on Goodman to explain how knowledge about the source of a sound could produce a change in its material and vibrational make-up. That seems implausible. Second, Goodman might respond that when the source of the sound is discovered, there is in fact no actual change in the affect of the burrower but only an apparent change. The fear caused by the sound's vibration would still be present, but veiled (or camouflaged) by the 'veneer of cognitive processing and phenomenological subjective agency'.<sup>28</sup> The apparent change would actually be emotional and cognitive but not affective. This would be consistent with Goodman's views that affect is impervious to cognitive states of the subject. No matter how cognition, sensation, or emotion might subsequently treat affects – rationalizing them away, transforming them into emotions, confusing them with the subject's own intentions, and so on – affects always come first.

If Goodman were to take the second response it would expose a troubling feature of his theory. Namely, the separation of affect from cognition reifies both into a rigid and untenable dichotomy. This dichotomy hinges on the temporal priority of affects over cognition. In Goodman's theory, temporal priority is highly esteemed in that it makes irrelevant everything temporally anterior. Yet, there is no reason to think that the temporal priority of an event in a causal chain makes it more relevant than an anterior event. Goodman cannot account for cases where the end result of a process is more important than its initial conditions. Nor can he account for very common instances of feedback, where the output of a process is fed back into its input. The possibility that affects and cognitions might be related in such a manner is never considered. This is doubly problematic. First, much of the scientific evidence that Goodman cites from psychologists and theorists like Ledoux and Tomkins is based on interpretations first presented in Massumi's work, interpretations that have come under question. In her recent article, 'The Turn to Affect', Ruth Leys offers a critique of Massumi's interpretation of Ledoux and Tomkins' experimental results. It was those findings that were used to argue that affects and cognitions were utterly distinct, with temporal precedence given to affect. In many cases, Leys revisits the experiments cited by Massumi, those that endorse the strong separation of affect from cognition, and challenges the validity of his interpretations and thus the scope of his claims. As Leys notes, 'The problem here is not the idea that many bodily (and mental) processes take place subliminally, below the threshold of awareness'. Rather, she argues that Massumi holds a faulty view of the relation of mind to body. His mistake is

to idealize the mind by defining it as a purely disembodied consciousness and then, when the artificial requirements of the experimental setup appear to indicate that consciousness of the willing or intention comes 'too late' in the causal chain to account for the movements under study, to conclude in dualist fashion that intentionality has no place in the initiation of such

movements and that therefore it must be the brain which does all the thinking and feeling and moving for us.<sup>29</sup>

The same dualism pervades Goodman's work, despite his assertion that the ontology of vibration challenges Cartesian dualism.<sup>30</sup> Goodman sees his own project as closely allied to Spinoza's monism, the source for the Deleuzian/Massumian theory of affect. Goodman speaks often about affect overcoming mind/body dualism – that 'the throb of feeling is not perceived by a subject but rather constitutes the actual occasions out of which the distinction between subject and object emerges',<sup>31</sup> or that vibration simply 'traverses mind and body, subject and object, the living and the nonliving'<sup>32</sup> – but this is betrayed by his rigid temporal and theoretical separation of affective from cognitive realms. To throw out the mind in the name of the body is not to overcome dualism, but to prolong it.<sup>33</sup>

Second, Goodman's reification of mind/body dualism is less supple than the auditory cultural theory it seeks to critique. Take, for example, the concept of an audile technique, theorized by Jonathan Sterne in *The Audible Past*. Sterne's concept builds on Marcel Mauss' 'techniques of the body,' that is, the various ways in which the body, 'man's first and most natural technical object,' is trained and cultivated into the performance of actions.<sup>34</sup> These actions become tools for investigating, knowing, and interacting with the surrounding world. They are 'assembled for the individual not by himself alone but by all his education, by the whole society to which he belongs, in the place he occupies in it.'<sup>35</sup> Sterne extends these techniques of the body to include sensory activities, such as listening, looking, tasting, and so forth. When Sterne considers the history of practices like mediate auscultation he is not making the argument that these activities are simply cognitive or mental. Rather, new audile techniques involve bodily training and, in turn, bodily training shapes audile techniques. Sterne is sensitive to the coordinated effort involved in teaching audile techniques. He offers accounts of the cultural and institutional programmes involved in producing and maintaining modes of listening. In his focus on mediate auscultation, on the training of telegraph operators, or on the discernment of timbre, Sterne demonstrates that the relation between bodily training and sensory perception is never a one-way street.<sup>36</sup>

Studies in auditory culture are not simply studies in 'representation' or 'signification' without consideration of the body. Rather, scholars in auditory culture seek to demonstrate the successions and relays between cognition and affect, or, speaking broadly, between the mind and the body. As listeners acquire new skills, much of the cognitive effort involved in the initial training is offloaded onto the body. At the same time, bodily capacities constitute both the basis upon which training occurs and the ground for potential future cultivation. There is a crucial dialectic missing in Goodman's account. *The capacities of the body are cultivated at the same time that cultures become embodied.* By focusing on training and acquisition of skills, where bodies are pressed into action in order to produce and maintain modes of listening, studies in auditory culture articulate the interaction of mind and body in more nuanced ways than the sharp dichotomy presented in Goodman's theory.

#### 4. The sonic ontology of artworks

Unlike Goodman, Cox and Hainge do not directly address questions of affect. Their focus is on the description of ontologies (of sound and noise) that are appropriate to contemporary artworks. Before addressing a fundamental problem in their ontologically centred aesthetics, I must briefly describe Cox's and Hainge's respective projects.

#### 4.1. Christoph Cox and the ontology of sound (art)

Cox is a philosophical naturalist. He argues for a materialist ontology of sound as a 'ceaseless and intense flow' of matter, 'capable of entering into differential relations'.<sup>37</sup> This sonic flux 'precedes and exceeds individual listeners and ... composers',<sup>38</sup> and is 'actualised in, but not exhausted by, speech, music and significant sound of all sorts'.<sup>39</sup> Cox's project focuses on the difference between sound art and music. As opposed to the autonomy and formalism of absolute music, sound art reveals the very nature of sound: a material flux or flow, a site for perpetual difference, and a series of gradients and potentials in constant change. Rather than limit sound to what is heard in audition or to the ratios of human perception, Cox argues that sound itself is endlessly creative and self-differing. Musical forms actualize sound, yet sound itself is always aligned with the virtual.

Given his resistance to 'representation' and 'signification', it is surprising that Cox first articulates the difference between music and sound art in historical terms. However, this is a special kind of history. It is not a history of cultural formations or successions of audile techniques, but the steady march of philosophical concepts, audio technologies, and compositional acts that slowly expose the nature of sound as virtual. Access to the sonic virtual began in the philosophy of music with Schopenhauer and Nietzsche. Both critiqued the idea that music was a form of representation, finding it a manifestation of the endless striving of the will or the Dionysian power of nature.<sup>40</sup> The next major step toward the disclosure of sound's virtuality was provided by the invention of recording technology. Cox often quotes Friedrich Kittler's line that 'the phonograph does not hear as do ears that have been trained immediately to filter voices, words, and sounds out of noise; it registers acoustic events as such'.<sup>41</sup> The revelation of acoustic events as such exposes the ubiquitous conceptual and anthropocentric grid that human listeners throw over sound and thus liberates access to, what Kittler calls 'the real'. Cox explicitly identifies Kittler's real with the Deleuzian virtual, describing them in similar terms: '[the] plenitude of matter that obstinately resists the symbolic and imaginary orders'.<sup>42</sup> Music, participating in the symbolic and imaginary order, is an assemblage that captures sound and turns it into form. Through composition, music directs attention away from sound as such and onto formal features of its organization. However, when it encounters naturalist philosophy, recorded sound, and forms of avant-garde experimentation (Russolo, Varèse, Cage, etc.), music becomes less a demonstration of formal relations among sounds than an investigation into sound itself. As artists probe sound's ontology, they develop a separate field called sound art. According to Cox:

The most significant sound art work of the past half-century...has explored the *materiality* of sound: its texture and temporal flow, its palpable effect on, and affection by the materials through and against which it is transmitted. What these works reveal, I think, is that the sonic arts are no more *abstract* than the visual but rather more *concrete*, and that they require not a *formalist* analysis but a *materialist* one.<sup>43</sup>

Music, in its organization, is tied to form and thus to the diversity of forms characteristic of the actual; sound art, as a material investigation into the differential and immanently creative aspects of sound, directs the listener to the potentiality of the virtual. '[Sound art] turns fully toward this virtual dimension of sound and makes it the subject of its inquiry. As such, it broadens the domain of the audible and discloses a genuine metaphysics of sound'.<sup>44</sup> While both music and sound art are, ontologically, made of sound, only the latter aims at disclosing its ontological condition.

## 4.2. Greg Hainge and the ontology of noise

Hainge's *Noise Matters* presents an ontology of noise that is applicable across media. Like most theorists of noise, Hainge begins by observing that the category of noise is overdetermined, always seeming to operate as the contrary of some other term: noise versus signal, noise versus silence, noise versus music, and so forth. Hainge tries to organize this overdetermined category by theorizing noise in terms of Deleuze's theory of expression. For Deleuze, expression should not be understood as the expressive acts of a creator who shapes or forms material. Rather, matter itself is endlessly creative. Matter generates its own forms, and each form, in its transitory existence, is an actualization of the virtual. Expression is simply what happens when the virtual condenses into the actual. To clarify this metaphysical vision, Hainge draws an analogy between Deleuze's notion of the virtual and white noise. White noise is a chaotic field of energy across a sonic spectrum. Through processes of filtering or subtraction, various sonic forms are actualized. Similarly, the endless chaotic creativity of the virtual is actualized through a process of contraction or 'expression'. Throughout Hainge's text, white noise offers a model for the expressive relation of the virtual and the actual. Everything that exists (all the 'diversity' of the world) is an expression of the virtual and its condensation into the actual.

It is important to keep in mind that, for Hainge, noise is not to be mistaken for everyday noise or for things that sound or look noisy, like static, stains, or distorted signals. Noise, 'the sound of the virtual', is shifted upward, from an ontic register to an ontological register.<sup>45</sup> Ontological noise is omnipresent because everything that is is an actualization of the virtual. And, since everything in the world is an actualization of the virtual, everything is expressive. 'Noise inhabits everything because everything is in actuality formed out of noise.'<sup>46</sup> What is unique about Hainge's project is that he considers this process of expression in terms of multiple media. Every medium, he argues, both enables its content while resisting it. The same holds for the relation of the virtual and the actual. In the process of actualization, the virtual both enables and resists the production of the actual. The moment a phenomenon appears, the moment that the virtual is actualized in a form, it veils the noise from whence it came. This expressive passage from the virtual to the actual is never completely smooth. Ontological noise indexes the resistance that accompanies any act of expression.<sup>47</sup> To hear ontological noise is to attend to the roughness of this expressive passage, to hear the noisy channel that permits the expressive passage in the first place. This is no simple task since, according to Hainge, it is easy to confuse everyday noise with ontological noise. Yet, artworks provide a privileged place where ontological noise is disclosed.<sup>48</sup>

## 5. Onto-aesthetics

Earlier, I intimated that there was a problem with Cox's and Hainge's aesthetics. Both build their aesthetic theory around works of art that disclose their ontological condition. This idea is not new. For example, Clement Greenberg, the great art critic and champion of Abstract Expressionism, offered an influential formulation of it in his account of modernist painting. In order to save itself from becoming mere entertainment, modernist painting underwent a process of reduction, sloughing off all features that were unnecessary to it *as a painting*. 'What had to be exhibited and made explicit,' Greenberg writes,

was that which was unique and irreducible not only in art in general but also in each particular art. Each art had to determine, through operations peculiar to itself, the effects peculiar and exclusive to itself ... It quickly emerged that the unique and proper area of competence of each art coincided with all that was unique to the nature of its medium.<sup>49</sup>

Greenberg's 'reductionist conception of modernist painting' is, in the words of Michael Fried, an enterprise in which a certain quality (e.g. literalness), set of norms (e.g. flatness and the delimitation of flatness), or core of problems (e.g. how to acknowledge the literal character of the support) is progressively revealed as constituting the *essence* of painting.<sup>50</sup>

While Greenberg never pursued his line of thought beyond the visual arts, his suggestion anticipates Cox's account of sound art and its slow emergence from music. Like Cox on sound art, Greenberg's narrative is nothing less than the progressive revelation of painting's ontology.<sup>51</sup>

The principle that a work of art can disclose its ontology, while articulated in many places in the history of aesthetic theory, has never been given a convenient name. I will coin one: *onto-aesthetics*. Greenberg, Cox, or Hainge, whether defending an ontology of the medium of painting, an ontology of sound as material flux and flow, or an ontology of noise, defend a theory of the work of art as a disclosure of its ontological condition. In this sense, they are all onto-aesthetic thinkers; artworks are selected, discussed, and esteemed when they disclose their ontology.<sup>52</sup>

Cox addresses works, such as Alvin Lucier's *I Am Sitting in a Room* and Jacob Kierkegaard's *Four Rooms*, which explore the phenomenon of room tone and the resonant frequency of physical spaces.<sup>53</sup> Room tone is important because it is normally imperceptible although omnipresent. By bringing room tone to the foreground these works encourage a reversal of attention from figure to ground (or form to sound). Lucier's piece 'moves from personal, human and domestic speech to pure anonymous sound'. Kierkegaard's drones 'disclose the immemorial background noise out of which human sounds emerge and into which they recede'.<sup>54</sup> These descriptions of the impersonal, the anonymous, the background, also describe the Deleuzian virtual. Similarly, Hainge focuses on *musique concrète*, claiming that Pierre Schaeffer's assemblages eschew all attempts to offer the listener a sense of harmoniousness and unity. They disclose their contingency, their dependence on media, and thus on the expressiveness (the affordances and resistances) of media.

Tape-based *musique concrète* and its primary mode of structuration show us ... that all music is necessarily tied to and constrained by the material, real-world assemblage that brings it into being. Music, in other words, is always already conditioned in advance by the technological or corporeal assemblage through which it passes and it therefore carries that assemblage with it in its very expression.<sup>55</sup>

The privileged example of *musique concrète* discloses the *very nature of all music* – to be a condensation of the virtual, to be an assemblage that exposes its own noisy contingency.

The problem with onto-aesthetics is that it relies on a category mistake. It confuses *embodiment* with *exemplification*. *Exemplification*, according to Nelson Goodman, is a form of reference where items 'symbolize by referring to certain properties of their own'.<sup>56</sup> Goodman's famous example is the tailor's swatch.<sup>57</sup> The pattern on the swatch exemplifies the pattern on the entire bolt of fabric. A sample need not be like the thing it exemplifies in all respects – the shape of the swatch tells us nothing of the shape of the bolt, for instance – but it must be like it in some respects. Exemplification can come in degrees. A square swatch of fabric, cut from a bolt of cloth into a shape that shows the basic pattern, exemplifies that pattern better

than a long, thin swatch that shows only part of the pattern. Neither swatch exemplifies the bolt's shape, even though both swatches are shaped. *Embodiment*, in contrast, means that some item *is* of a certain kind. A square swatch *is* a swatch, just as a long, rectangular swatch *is* a swatch. Both *are* things. Objects *embody* their ontology. *Embodiment* does not come in degrees. It is all or nothing.

Ontology, being embodied, is not *capable* of being exemplified. As W. V. O. Quine argued, ontology concerns the question 'What is there?' To determine the answer to that question, Quine studied how different linguistic statements entail ontological commitments. In his famous essay 'On What There Is', he argued that ontological commitments were gleaned by a speaker's use of bound variables, or variables of quantification, like 'there is an  $x$ ' or  $\exists x$ .<sup>58</sup> In a famous phrase, Quine writes: 'To be assumed as an entity is, purely and simply, to be reckoned as the value of a variable.'<sup>59</sup> To say there exists a  $p$  such that  $p$  is  $q$ , entails an ontological commitment to some object in the world picked out by  $p$ , otherwise the sentence lacks semantic value. The use of bound variables shows only what a speaker's ontological commitments are, not whether the ontology they are committed to is true or false. According to Quine:

We look to bound variables in connection with ontology not in order to know what there is, but in order to know what a given remark or doctrine, ours or someone else's, *says* there is ... What there is is another question.<sup>60</sup>

In order to adjudicate between rival ontologies one must look elsewhere. Quine's own solution to the question of what there is was minimalist. His parsimonious ontology included only objects and sets.<sup>61</sup> I do not mention Quine to defend *his* rival ontology as opposed to Cox or Hainge. On the contrary, many have argued that Quine's ontology is too parsimonious to account for our ontological commitments – fictional objects, to name one.<sup>62</sup> My point is simply that he does not make the same category mistake as the onto-aestheticians. In his theory of ontology, no matter what rival ontology a speaker might endorse and no matter how the world actually turns out to be, ontology does not come in degrees. There is no object that better exemplifies being an object than any other object; thus Quine's slogan, 'To be is to be a value of a variable.' Any  $x$  that can be plugged into the bound variable,  $\exists x$ , is just as good as any other  $x$ .

Perhaps our onto-aestheticians would object to my use of Quine. They might insist that the privilege he grants to linguistic analysis in determining ontology is part and parcel of the 'linguistic turn' that they are criticizing. In response, I should note that this is not an idiosyncrasy of Analytic philosophy. I could have appealed to ontological theory in philosophical traditions far removed from Quine. For instance, Bruno Latour, in his recent tome, *An Inquiry into Modes of Existence*, does not make the category mistake of the onto-aestheticians.<sup>63</sup> Latour describes 15 distinct modes of existence, each with their own 'felicity conditions', 'hiatuses', and 'trajectories'. He endorses an ontology that is anything but parsimonious. Yet, for each mode, there is no confusion between exemplification and embodiment. All fictional beings, for example, exhibit the same hiatus, trajectory, and felicity conditions. There are no fictional beings that are somehow more or less fictional than other fictional beings. To reiterate, my point is not that Quine or Latour has discovered the correct ontology, but that neither make the category mistake of confusing exemplification and embodiment. No object (to use Quine's language) or no mode of being (to use Latour's language) better exemplifies its ontology than any other object or being. Rather, it *is* its ontology, it *embodies* it, it *lives* it.

By comparing *embodiment* and *exemplification* we note that they operate differently. Exemplification is a form of reference; embodiment is a condition. We can articulate this

difference by considering a model sentence, one that distinguishes and contrasts exemplification and embodiment.

(1) A fish may *taste* fishier than another, but no fish *is* fishier than another.<sup>64</sup>

The first half of the sentence renders a predicate ('fishier') operating at the level of exemplification, the second half renders the same predicate as it operates on the ontological level. The utility of this model is that it makes the difference between exemplification and embodiment perspicuous. By following it, we can formulate a parallel statement about artworks. Because Hainge works with two notions of noise – one that functions as an everyday, ontical descriptive predicate and the other as an ontological condition – we could say:

(2) An artwork may *sound* (ontically) noisier than another, but no artwork *is* (ontologically) noisier than another (since all things are, ontologically, noise).

In Cox's case, we can render the following statement:

(3) A work of sound art may *sound* more sonic (that is, may draw your attention to its 'sonicity' more) than another, but no work of sound art *is* more sonic than another.

Sentence 3 deserves further consideration. In terms of exemplification, what would it mean to 'sound sonic' or to draw one's attention to the 'sonicity' of a piece of sound art? If I understand Cox's argument, to draw attention to the sonicity of a work would be to attend to features of a work such as its fluidity, its flux, its texture, perhaps even its impersonality. However we construe the predicates, exemplification, like all symbolic or referential acts, only occurs when the predicates that are being exemplified are already organized into systems of signification.<sup>65</sup> There is no natural resemblance that guarantees or grounds acts of reference, which includes acts of exemplification. Rather, we would need to know what predicates constitute 'sonicity' and what predicates are being contrasted with it. If sound art, according to Cox, discloses material (or virtual, or ontological) properties of sound and music explores its formal properties, then we need to know how to sort and differentiate those properties that are to be construed as formal and those that are to be construed as material within some symbol system.

This leads to two problems. First, if acts of exemplification are referential and rely on the pre-existence of symbol systems in which the predicates exemplified are organized, then, even if an artwork could exemplify its ontology, no act of exemplification is 'beyond representation and signification'. It would be already inscribed within systems of signification and representation.<sup>66</sup> This undermines the critical thrust of onto-aesthetics, which was to remove artworks from their cultural contexts (claims about hermeneutics, interpretation, meaning, intention, reception, and so forth) by suturing them to their ontological conditions. Every time some feature of an artwork is claimed to exemplify this or that ontology would be a moment where the onto-aesthetician begs the cultural basis of such a claim.

Second, by eliding the difference between exemplification and embodiment, the onto-aesthetician is often forced to draw an analogy between some ontic feature of the work (or some feature of the act of beholding a work) and some aspect of the work's ontology. In the case of Cox and Hainge, their commitment to the Deleuzian metaphysics of the actual and the virtual forces them to acknowledge that the virtual can never be manifest as such. Anything that is perceived is actual and thus cannot be directly identified with the virtual. This generates an insuperable problem: how do you show the virtual when the virtual cannot be shown? Given this condition of perpetual evasion, Cox and Hainge are left with accepting the next best thing. When an artwork (supposedly) discloses its ontological condition, we

get an intimation of the virtual as seen through the veil of the actual. For Cox and Hainge, this process of intimation takes place by means of an analogy; the shift from the actual to the virtual is analogized as akin to a shift of attention from figure to ground.

In Cox's analyses of sound art, the listener's attention is guided away from the foreground, overladen with actual objects and things, toward the virtual background of conditions of possibility. Describing Francisco López's *Wind*, Cox says it 'draws our attention to a host of auditory phenomena that ordinary hearing ignores or relegates to the background'.<sup>67</sup> By drawing attention to air – 'the very medium of sonic transport' – a figure/ground reversal occurs and the listener is made aware of the conditions of possibility of sound. Cox, while describing the relationship of air to sound, simultaneously *analogizes* the relationship of the virtual to the actual. Often, the analogy is so close that it improperly crosses the insuperable line between the actual and the virtual and identifies them. The reader cannot tell if the virtual or actual is being described. 'Wind is pure becoming, pure flow. It is immemorial, but never the same. And it is nothing but the play of differential forces ...'.<sup>68</sup> What exactly is being described here, air or the virtual? In both cases, the shoe fits. Then, Cox steps back from the improper identification of air and the virtual, aware that the virtual as such can never be manifested. He writes: 'we hear not only empirical noise – background noise – but *come close* to grasping its inaudible conditions of possibility, the differential forces from which sound and hearing spring'.<sup>69</sup> The actual (empirical noise, background noise, sound, hearing), as a product of differential forces or condensations of the virtual, can never *be* the virtual, it can only 'come close'. At such moments, Cox seems aware of his own analogizing. But then, he steps over the line again, claiming that López's *Wind* offers a 'deactualization or virtualization of sonic material'.<sup>70</sup> At that moment, he breaks the rules of his own metaphysical commitments – effacing the difference between the actual and virtual, and producing the category mistake characteristic of onto-aesthetics.

Hainge also analogizes the shift from the actual to the virtual in terms of shifts of attention from figure to ground. By making noise ontological, he acknowledges that it cannot be heard as such in ontic noise. Since all artworks manifest ontological noise, the presence of ontic noise may in fact draw the listener's attention away from ontological noise. The first half of Hainge's book analyzes numerous examples where ontic noise is mistaken for ontological noise, with disastrous results.<sup>71</sup> His primary example comes from Jean-Paul Sartre's *Nausea*.<sup>72</sup> Roquentin, the novel's protagonist, experiences the profound contingency of the world when undergoing his famous episodes of nausea. Exploiting the etymological connection between *nausea* and *noise*, Hainge argues that Roquentin experiences the ontological noise of the world at these heightened moments. Roquentin's response in the face of this profound, noisy contingency is to affirm the powers of the imaginary, of the aesthetic object that remains (for Sartre, and thus for Roquentin) unsullied and isolated from the rest of existence. For Hainge, Roquentin's resolution to overcome nausea through writing is an unfortunate and futile fantasy.

As much as Roquentin may then claim to have become his nausea, ultimately *he does not attend to it*, or mishears it, as he does with noise throughout the novel. That he cannot ultimately accept the full ramifications of his nausea and chooses instead to write ... is perhaps not surprising.<sup>73</sup>

Roquentin is the example of the inauthentic subject, the bad listener living under the illusion that an escape from the profound contingency of the world (and thus from ontological noise) can be found. Roquentin's solution mistakes ontological noise for ontic noise and subjects the latter to an act of noise reduction. Throughout *Noise Matters*, Hainge's challenge is to

draw attention away from ontic noise (and the various ways, ethical and aesthetic, in which it can be reduced) toward ontological noise.

To attend to noise is then to admit the finitude of the contents of expression ... for noise pulls the contents of life and expression back to the plane from which they are enfolded and thus brings us to the edge of the abyss that would engulf all forms.<sup>74</sup>

The shift of attention from figure to ground analogizes a shift from the actual to the virtual, from ontic noise to ontological noise. The difficulty of maintaining this attentive shift analogizes the difficulty of holding onto the tough, metaphysical truth of ontological noise without recoiling into inauthenticity.

The reason why we should attend to noise, no matter how hard it may be to recognize, is because ... it is not external to being, something that can be sublimated, but is the condition of possibility for all matter in an expressive state.<sup>75</sup>

There is no other way for Cox and Hainge to attend to the virtual than via analogy, since the metaphysics of the virtual and the actual automatically makes the virtual unrepresentable.<sup>76</sup> My argument with Cox and Hainge's onto-aesthetics is not that the virtual can never be presented as such but that their use of *analogies* betrays the fact that their supposedly culture-free ontology presupposes a cultural ground.

In order to make this final point clear, I need to discuss the notion of an auditory culture. While it is deeply problematic to talk about 'culture' as a single, homogenous block, we can avoid the problem of overgeneralization by cashing out the notion of an auditory culture in terms of the shared likenesses *heard in* sounds among a community of listeners. That is, we can describe the ways in which certain sounds are *heard as* being like (or unlike) other sounds in various respects. Whitney Davis, in *A General Theory of Visual Culture*, argues that not everything relevant to a visual culture will be constituted in terms of vision alone.<sup>77</sup> Within a specific visual culture, practices of seeing and practices of making artifacts are often recognized as analogous to non-visual practices. A building may not only morphologically resemble other visual artifacts or features within the visual field (this building *looks* grey and tall), it may also have analogical relations to non-visual aspects (this building *looks* regal, expensive, etc.) Beyond morphological likeness there will also be analogical likeness. The same holds for auditory cultures. Not only do listeners *hear in* sound morphological resemblances to other sounds, they *hear in* sound analogies to other practices and predicates in their culture.

The point is that all of these likenesses are formed in the context of (and recursively constitute) auditory cultures. They are woven together into a mesh or network of practices that communities of listeners participate in when they hear relevant features of the auditory world, communicate them to others, and pass them on through training. The employment of audile techniques is central to an auditory culture, since it encourages and maintains ways of hearing, both cognitively and bodily. To *hear in* sounds likenesses (both morphological and analogical) is to participate in an auditory culture through acquiring audile techniques. Of course, one cannot assume that every listener in an auditory culture would hear the same likenesses; however, they could negotiate such differences. The potential sharing of practices and techniques is the very condition of the possibility of such negotiations. Without an auditory culture and the audile techniques it employs we cannot make sense of a great part of the world of sound studies. It would simply be opaque. Much of the recent scholarship in sound studies has been devoted to tracing the ways in which modes of listening have been

culturally, historically, and institutionally developed. They show how likenesses, morphological and analogical, are instituted, cultivated, maintained, and transmitted.

There is no purely logical reason that the movement of attention from figure to ground should be 'like' the movement of the actual to the virtual. If this analogy makes sense, it is not because of any metaphysical or ontological truth, but because of shared cultural practices and shared conceptual schemes. The analogy draws together these domains. The attempt to move 'beyond signification and representation' founders on the fact that its mechanism of movement – analogy – relies on cultural patterns of likeness and the practices that develop and encourage the hearing of likenesses. Even when the onto-aesthetician rejects such cultural practices, they are presupposed in the very argument against them.

If this description of an auditory culture is valid, how are we to respond to those writers in sound studies who follow the 'ontological turn', who critique auditory culture in order to get beyond representation and signification? Perhaps we might then re-read these ontological accounts as a disguised exercise in 'ontography'. Michael Lynch, responding to the ontological turn in science and technology studies, coined this term to designate the description of the ontological commitments of particular subjects or communities; this is in contrast to ontology proper, which offers a metaphysical description of how the world is and the conditions for determining the truth values of linguistic reference and semantics.<sup>78</sup> 'Ontography' would be a local form of ontology, a kind of ontology that is relativized to support the likenesses (morphological and analogical) *heard in* an auditory culture. To re-describe the projects of Cox, Hainge, and Goodman as participating in an 'ontographical' turn in sound studies is to contest the critical force of the ontological turn. It is to focus less on the consequences of their rival ontologies, than on the reasons that motivate their ontological commitments.<sup>79</sup> This is a deflationary move; but it is also a necessary corrective. The arguments developed by proponents of the 'ontological turn' in sound studies neglect the role played by auditory cultures in shaping affective responses to sound and in 'ontological' claims about sound. But more than neglect, a 'sound studies' without 'auditory culture' is ultimately question-begging in that it crucially ignores the constitutive role that auditory culture plays in determining its object of study.

## Notes

1. Hilmes, "Is There a Field Called Sound Culture Studies?"
2. See Bull and Back, *Auditory Culture Reader*; Erlmann, *Hearing Cultures*; Sterne, *The Sound Studies Reader*; Pinch and Bijsterveld, *The Oxford Handbook of Sound Studies*; and Bull, *Sound Studies*.
3. As reported on the blog, *Sounding Out*, at the January 2014 meeting of the European Sound Studies Organization the question of field versus discipline was prominent. 'Co-organizer Mara Mills asked whether the publication of such anthologies as *The Sound Studies Reader* in 2012 and *The Oxford Handbook of Sound Studies* in 2013 meant that sound studies was a proper discipline. Is it, she asked, moving away from its roots as an interdisciplinary field consisting of displaced scholars formerly unable to tackle questions of sound within the confines of their traditional disciplines?' (Kromhaut, "Sound Studies").
4. Cox, "Beyond Representation", 152.
5. Deleuze, *Difference and Repetition*, 222. The idea that a phenomenon can *refer* to a noumenon will be questioned in Section 5, on onto-aesthetics.
6. Cox, 'Beyond Representation', 153.
7. Ibid.

8. Goodman arrives at conclusions that are in agreement with Cox while focusing on affect. 'Affect comes not as either a supplement or a replacement to the preoccupations of cultural theories of representation, but rather as an approach that inserts itself ontologically prior to such approaches ...' (Goodman, *Sonic Warfare*, 10). By engaging with 'theories of affect and the imperceptible', Goodman's project 'sidesteps those preoccupations of cultural studies' critical musicological approaches that tend to limit discussion around issues of representation, identity, and cultural meaning' (Ibid., 9–10).
9. In adopting this definition of affect, Goodman is following Massumi who is himself following Deleuze's seminal interpretations of Spinoza. See Massumi, *Parables for the Virtual*; Deleuze, *Spinoza*; and Deleuze, *Expressionism in Philosophy: Spinoza*.
10. Goodman, *Sonic Warfare*, 10.
11. 'Some attempts have refocused phenomenologically around the concept of audition. However, probing deeper than the merely auditory, the vibratory materialism developed here focuses, before human hearing, on the primacy of the synesthetic' (Ibid., 9).
12. Ibid., 47.
13. Ibid., 28. Goodman again follows Massumi, *Parables for the Virtual* and borrows his controversial interpretation of Tomkins' research.
14. Goodman, *Sonic Warfare*, 48.
15. Ibid., 70.
16. Ibid., 71.
17. Before a sound is heard, the sonic triggers a 'basic autonomic response' in the 'affective sensorium' (Ibid., 47ff). Similarly, before perceptions are cognitively processed there is the 'visceral perception' of the body. Terms like 'affective sensorium' and 'visceral perception' double the processes of sensation and perception, splitting them into cognitive and affective halves. I address the problem with this split view below.
18. Ibid., 70, citing Massumi, *Parables for the Virtual*, 60–61 (my emphasis).
19. Ibid., xvi, 73, and 76.
20. Ibid., 71.
21. Ibid.
22. Ibid., citing Massumi, *Parables for the Virtual*, 34.
23. Ibid., 73.
24. Ibid., xx.
25. Ibid., 79.
26. See Kafka, *The Complete Stories*. For a much more elaborate analysis of this tale see Kane, *Sound Unseen*.
27. Kafka, *The Complete Stories*, 344.
28. Goodman, *Sonic Warfare*, 71.
29. Leys, "The Turn to Affect", 456–457.
30. In Goodman's diagnosis, 'cognitivist philosophy remains ensnared in the Cartesian legacy of Western thought, leaving no room for the body'. The virtue of Goodman's vibrational ontology is that, like Spinoza's monism, it 'discards such narrow cognitive approaches to culture in favor of affective contagion' (Goodman, *Sonic Warfare*, 37). Thus, 'an ontology of vibrational force' puts pressure on the 'weak spots in the history of Western philosophy, chinks in its armour where its dualism has been bruised' (Ibid., 81).
31. Ibid., 97.
32. Ibid., xiv.
33. Leys makes this point with respect to Massumi. 'Massumi and many other cultural theorists present themselves as Spinozists who oppose dualism in all its guises. Yet a little reflection suffices to demonstrate that in fact a classical dualism of mind and body informs Libet's and Massumi's shared interpretation of Libet's experimental findings. Indeed, it is only by adopting a highly idealized or metaphysical picture of the mind as completely separate from the body and brain to which it freely directs its intentions and decisions that they can reach the skeptical conclusions they do' (Leys, "The Turn to Affect", 455).
34. Sterne, *The Audible Past*, 91.

35. Mauss, quoted in Sterne, *The Audible Past*, 91.
36. Sterne is not alone. I could cite many theorists of auditory culture here. In lieu of a long list, I will simply mention that I offer an account of the history of acousmatic listening as a cultural practice in Kane, *Sound Unseen*. Acousmatic listening, a mode that brackets the source of the sound in order to the sonic effect or 'sound object', was produced through the use of various body techniques and technologies. These include everything from architectural screens and scrims, to the development of new concert halls, to the propagation of closed-eye listening as an ethical and aesthetic ideal.
37. Cox, "Sound Art", 22.
38. Cox, "Beyond Representation", 155.
39. Cox, "Sound Art", 22.
40. Cox, "Beyond Representation," 149ff.
41. Kittler, *Gramophone, Film, Typewriter*, 23. Cited by Cox in "Beyond Representation", 154; and "The Alien Voice", 179.
42. Cox, "Beyond Representation", 154. While glossing Kittler's emphasis on the innovations of Wagner, Cox writes: 'Exploration of the auditory real – the virtual, Dionysian domain of sound – has marked the entire history of the sonic arts ever since' (Ibid.).
43. Ibid., 148–149.
44. Cox, "Sound Art", 25.
45. Hainge, *Noise Matters*, 22.
46. Ibid., 14.
47. '[Noise] constitutes the nature or essence of the relation that is inimical to all expression when everything is conceived of as expression' (Ibid.).
48. 'For whilst it is my contention,' Hainge writes, 'that noise necessarily inhabits all expression and therefore all cultural forms, this is not to say that noise is always easily identified or perceived. I will then seek out cultural forms where noise of some kind is foregrounded, entering the text or expression through that noise to see what it might tell us about that expression' (Ibid., 24). Hainge presents numerous analyses of music, film, novels, photographs, and even typography, where common noise is differentiated from the ontological noise that inhabits all expressions. Works that disclose ontological noise are held in high regard; for Hainge, these include the films of David Lynch, the photographs of Thomas Ruff, *musique concrète* and Merzbow, among others.
49. Greenberg, *Modernism with a Vengeance*, 86.
50. Fried, *Art and Objecthood*, 35–36.
51. Greenberg quickly moved away from the view that the purpose of a painting was to disclose its ontological condition. A few years after his earlier statement, Greenberg wrote: 'By now it has been established, it would seem, that the irreducible essence of pictorial art consists in but two constitutive norms: flatness and the delimitation of flatness; and that the observance of merely these two norms is enough to create an object which can be experienced as a picture: thus a stretched or tacked-up canvas already exists as a picture – though not necessarily a *successful* one' (Greenberg, *Modernism with a Vengeance*, 131–132). Greenberg's aesthetic criteria shifted away from works that exhibit their ontological condition – for what could do this *more successfully than a tacked-up canvas?* – toward the question of aesthetic value. The ontological condition of artworks is distinct from their evaluation or estimation, in that establishing whether something is or is not art is different from establishing whether it is good or bad art.
52. By identifying Cox and Hainge's theories as 'onto-aesthetic', I do not intend to understate the important differences in their accounts. For instance, Cox and Hainge hold contradictory views concerning the categories of music and sound art. Cox argues that sound art is distinct from music, even though both are ontologically made of sound; music organizes sounds in order to explore *formal* relations among sounds, while sound art explores the *material* properties of sound. (Of course, one should also be skeptical of any argument that distinguishes music from sound art along such essentialist lines. For a broader context and perspective on attempts to differentiate music from sound art, see Kane, "Musicophobia.") In contrast, Hainge argues against any distinction between sound art and music, since both are expressions of noise. Noise-based work with sound, like the work of Merzbow, has often been thought of as sound

art, not music. But if ontological noise is indexed in all artworks, then the amount of ontic noise present in a work cannot be a criterion for including or excluding a work as music. (To be fair, Hainge develops a more sophisticated ontology of music than I have addressed here.) Despite such differences, Cox and Hainge select artworks that are always understood onto-aesthetically when arguing their points; in each case, the artwork is discussed because it discloses its ontology.

53. Lucier, *I am Sitting in a Room*; Kierkegaard, *Four Rooms*.
54. Cox, "Sound Art", 24–25. Also see Cox, "The Alien Voice", where the shift from phonic to sonic in Lucier's *North American Time Capsule 1967* is another instance of a shift of attention from figure to ground.
55. Hainge, *Noise Matters*, 254.
56. Goodman and Elgin, *Reconceptions in Philosophy*, 19.
57. Goodman, *Languages of Art*, 52ff.
58. Quine, *From a Logical Point of View*, 6.
59. *Ibid.*, 13.
60. *Ibid.*, 15–16.
61. Quine included sets because they offered the minimal basis for the abstract objects required by mathematics and logic. For a useful summary of Quine's work on ontology, see Chateaubriand, "Quine and Ontology".
62. See Kripke, *Reference and Existence*; and Thomasson, *Fiction and Metaphysics*.
63. Latour, *An Inquiry into Modes of Existence*.
64. But onto-aesthetics is pretty fishy indeed.
65. Goodman, *Languages of Art*. For more on the philosophical role of pre-existing symbols systems, see Goodman's 'new riddle of induction' in *Fact, Fiction, and Forecast*. In the riddle, Goodman defines a new predicate, 'grue'. An object is 'grue' just in case it is observed before *t* and is green, or else is not so observed and is blue. The riddle is puzzling because of the fact that 'grue' is a perfectly logical and coherent predicate. The problem is that it does not fit into our symbolic system, in that we do not associate colour predicates with temporal conditions.
66. Goodman, in *Ways of Worldmaking*, argues that art, as participating in symbol systems, can also remake and reorganize those systems. When it does, it contributes to remaking the world or to 'ways of worldmaking'. Yet, even if some work of sound art were to remake these symbol systems, they are simply reorganized but never evaded.
67. Cox, "Sound Art", 25.
68. *Ibid.*
69. *Ibid.* (my emphasis).
70. *Ibid.*
71. Hainge's project is to separate out the ontic and the ontological, in order to show why it has been so hard to attend to ontological noise. 'Precisely because the common sense definitions of noise relate predominantly to noise as a sonic or auditory concept [i.e. ontic noise], this kind of noise is subject to an enormous amount of overcoding that comes from beliefs and positions held for so long and with such conviction that they are imbued with a seemingly incontrovertible rightness or even naturalness. To put it another way still, it is indeed incredibly difficult to listen to [ontological] noise' (Hainge, *Noise Matters*, 170).
72. Sartre, *Nausea*.
73. Hainge, *Noise Matters*, 79.
74. *Ibid.*, 80.
75. *Ibid.*, 123.
76. Hainge is perfectly lucid about this. 'I have ... always been aware that noise would remain out of reach in some way, that we would only ever be able to move towards it.' (*Ibid.*, 273)
77. Davis, *General Theory of Visual Culture*.
78. Lynch, "Ontography".
79. I take one of these reasons to be exhaustion with the so-called 'linguistic turn'. Exhaustion is not an argument.

## Notes on contributor

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