

# Transcendental Psychodelia: hearing hearing in the work of Maryanne Amacher

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## Abstract

Listening, understood as an active or synthetic production of auditory experience rather than a passive reception of external events, was a central concern for the composer Maryanne Amacher, whose work this chapter focuses on. Her work had a distinctly transcendental orientation indicating not a movement beyond but rather, in a Kantian sense, a movement towards the *conditions* of experience. Amacher's work has been described as containing "psychedelic sonorities," so this chapter details the way Amacher's work might be understood to construct a transcendental psychodelia that explores the limits and conditions of auditory experience. To do so, a dialogue is established between Amacher's compositional thought and methods and Gilles Deleuze's transcendental empiricism. It is also argued that Amacher's methods and processes have a wider significance for contemporary scholarship on sound in the arts and experimental music. Despite the distinctly affective and embodied orientation of much of her work, Amacher's research and compositional methods presents a challenge to some forms of materialism active within this field of study through her use of methodological abstraction, representation, modelling and formalisation. It is argued that by attending to not only the sensations produced by Amacher's work but her wider artistic practice, compositional

thought and methods of production, we might enhance the scope and subtlety of the materialist and realist orientations in contemporary scholarship.

## Introduction

Much of the work produced by North American composer Maryanne Amacher (1938-2009) was built atop an understanding of listening as a synthetic process that not only received but actively *produced* the objects and events of auditory experience. This developed a broader concern for the ways that sonic events are shaped by the mediums through which they travel. The scale and complexity of the majority of Amacher's works exceeded available forms of recording, documentation and containment. Despite these challenges, these central concerns are evident in her own theoretically rich writings and some of the few works available in common formats such as CDs and digital audio files. Although these recordings do little to represent the true scale and ambition of Amacher's work, they nonetheless provide insight and focus on a single thread that runs throughout much of her work, a focus on the productive capacities, limits and potentials of listening itself, a focus that gives her work a distinctly transcendental orientation. The nature of this transcendentalism is uncovered through exploring the overlap that exists between Amacher's compositional approach – which in part drew upon psychoacoustical experimentation and research – and Gilles Deleuze's transcendental empiricism. A concern of this chapter is to show how these compositional and philosophical programmes shed light on each other, but do so via a peculiar mirroring that sees each other at times moving in opposing ways about a common point: the generative potential of sensation itself. Identifying connections between these approaches adds depth to both, but

also provides us with a practical and theoretical framework that develops a critique of recent materialist trends in sound studies and aesthetics: where some scholars view the asymbolic affectivity of sonic events as establishing a vibrational continuum connecting us with a materiality beyond the human, the overlapping concerns of Amacher and Deleuze paint a more complex picture that is sensitive to the mediating and productive role of auditory sensation.

Promotional literature accompanying the release of Amacher's few recorded works refers to a psychedelia active within her music; this connection with psychedelia is established less on the grounds of aesthetic commonality than it is a more fundamental aspect of psychedelia, the journey undertaken to the limits of possible experience, and specifically sensory experience, not so that we might peer beyond but so that the intensity of sensibility itself might rise up from its subliminal status, flooding our conscious experience and thereby (re)introducing an intensive creative force into thought.

## **ACTIVE SOUND PRODUCTION**

*Sound Characters* is a two-volume collection of works by the North American composer Maryanne Amacher. These recordings, released in 1999 and 2008, are somewhat anomalous in the wider context of Amacher's oeuvre which comprises works which exceeded in scope, scale and duration common forms of containment such as audio-visual recordings, slots in a concert programme or gallery exhibitions. While not characteristic of Amacher's work as a whole, the *Sound Characters* volumes focus upon a notable and consistent theme running throughout

much of Amacher's work: the use of “psychedelic sonorities” that foreground listening as a synthetic activity.<sup>1</sup> Amacher's work beyond *Sound Characters* was often vast in scale, with performances of single works occupying multiple floors of buildings or spanning large distances between districts and cities via telecommunications networks.<sup>2</sup> This emphasis upon space can lead to an all too hasty deployment of the sound art label, yet Amacher's work is distinctly musical and compositional. If not a true microcosm – no attempt is made to distil all aspects of Amacher's work in these pieces – the *Sound Characters* spotlight the consistent focus placed upon the synthetic capacities of auditory perception that runs throughout much of Amacher's work: an understanding of listening as “ACTIVE SOUND PRODUCTION, NOT JUST A PASSIVE ECHO OF EXTERNAL SOUND” (Amacher 2008, 11).

In contrast to the scale of much of Amacher's work the *Sound Characters* compositions are selected for playback in small-scale listening environments and work surprisingly well in more everyday and even domestic situations. Despite this enhanced portability which makes Amacher's work much more accessible, *Sound Characters* still requires a particular listening scenario, as many aspects of Amacher's work fail to materialise well on headphones and require listening through loudspeakers. Given the aesthetics of the compositions this requirement entails a certain domination and transformation of the listening environment; these are not

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<sup>1</sup> Amacher's *Sound Characters* volumes are described by the Tzadik label as works containing “spectacular acoustical effects take you to expansive worlds of dancing difference tones and psychedelic sonorities”. See <http://www.tzadik.com/index.php?catalog=7043>.

<sup>2</sup> It is beyond the scope of this essay to enter into discussion of Amacher's other works, which were of a complexity and scale that cannot be sufficiently attended to herein. Materials from the Amacher archive which describe these varied works in depth have recently been published in an edited collection of her own writings, notes, scores, diagrams, and so on (Amacher 2020), see also various articles by Amy Cimini (Cimini 2017b; Cimini 2017a).

ambient works that subtly modulate the affective qualities of a domestic soundscape, it is hard to do anything other than listen when playing recordings of many of Amacher's "ear tone" works which forcibly activate listening. This domination and forcible activation of the listening environment highlights the situated and embodied mode of listening that Amacher's work demands. The importance of this situatedness and embodiment can be seen in Amacher's assertion that "how certain sounds are to be perceived in a sonic world becomes as important as the sounds themselves" (Amacher 2008, 10). This "how" refers to a multifaceted distinction between inner and outer planes, identifying the diverse roles of acoustical signals as sources of excitation shaped by architectural and infrastructural materials external to the listener, the listener's position within architectural and acoustic space, and to the role of listening itself in shaping auditory experience.

The compositions heard in the *Sound Characters* collections can be described as "ear tone" works, or what Amacher also referred to as "ear dances", pieces composed with the specific intention of drawing the otherwise subliminal, synthetic capacities of the ear and wider auditory system into intentional compositional acts. The ear tone works draw upon Amacher's expertise with electronics which serve not as objects of fascination in themselves but as efficient means of activating the ear and wider auditory system's own synthetic capacity to produce sounds and not simply receive them. These ear tone works draw upon Amacher's research into psychoacoustics to create a series of "psychedelic sonorities" based upon phenomena such as difference tones – an internally generated tone with a frequency equal to that of the difference between two externally generated tones ( $f=f_1 - f_2$ ) – or otoacoustic emissions (OAEs) which are tones produced spontaneously or sympathetically within the inner

ear.<sup>3</sup> Of significance is the distinction drawn between *external* sources of excitation and the *internal* tonal sensations that are the compositional materials proper to the ear tone works. While this foregrounds an otherwise subliminal aspect of everyday audition – the ear is always working this way but we are usually unaware of it – asserting the active, synthetic interiority of sonic experience, a clear and complementary sense of exteriority is also accentuated; these works not only assert the force of synthetic interiority but also a clear sense of exteriority. This distinction is most stark when the excitation and ear tones are high in frequency, something that can be contrasted with the experience of listening to high-intensity low-frequency sounds – such as in club and festival environments or a Mark Bain performance – wherein we experience waves occupying both architectural and organic or bodily spaces in a way that creates a sense of resonant continuity between the two. In contrast to this low-frequency continuity, the ear tone works are often felt to straddle two distinctive planes or strata of experience; rather than a smooth continuity a radical difference is asserted with the force of a cut, marking if not a complete separation then a difference in kind between the waves without and the ear tones within. The forceful assertion of this synthetic interiority has the effect of accentuating a divide or difference between these two tone-spaces, between interior and exterior, rather than collapsing both into a pure interiority. This is reflected in the way that Amacher categorises the signals used within her compositions according to three differing strata: (a) acoustic space (b) the ear and (c) the brain. While (a) refers to sounds that are acoustically present within the room or broader architectural spaces which house Amacher's works, (b) and (c) belong to the realm of “tone sensations originating within the human anatomy, which *are not acoustically*

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<sup>3</sup> OAEs were also the subject and material of Jacob Kirkegaard's 2008 composition *Labyrinthitis*.

*present* in the room; produced internally by the listener” (Amacher 2008, 17). A clear distinction is thereby established between external and internal sound events. Composing for the realm of “tone sensations” Amacher is focused on the role of sensation itself, on the synthetic capacities of sensation to generate its own objects that, in the Deleuzian framework drawn upon below, can be thought of as “paradoxical” objects indicating “the being of the sensible”.

## **Transcendental Psychedelia**

The psychedelic sonorities heard in the *Sound Characters* volumes are less the product of intoxicated abandon and revelry than a careful, programmatic approach to composition informed by research into psychoacoustic phenomena. If this seems an unduly sobered psychedelia it simply reflects that the means of transit ultimately remain secondary to the essential movement of experience beyond an everyday, common-sensical remit to its limit, a movement that seeks to unbind experience and thought from recognition, turning it towards novel production. This movement beyond is not a journey to a fantastical other world or supernatural plane through the aesthetically weird, but a methodical exploration of the limits of auditory experience through that which is ordinarily excluded in the service of recognition. Recognition is considered exclusive in that it subjects the perceived to preformed concepts, the form of which the perceived must conform to and only that in the perceived which conforms to the concept held in anticipation is permitted to pass, thereby filtering out any excess. Within the Deleuzian framework drawn upon below – in order to articulate philosophical aspects of Amacher's practice that are otherwise carefully nestled within detailed discussion of compositional methods – there is a degree of hostility to recognition which, within the context

of the current musical discussion can be understood by initially drawing upon the standard Barthesian distinction that “*hearing* is a physiological phenomenon; *listening* is a psychological act” (Barthes 1992, 245). This distinction is maintained in Amacher's work, not in the sense that one is elevated above the other but rather that a difference is upheld between physiological capacity and cultural technique. This is done in two ways: the creative force of hearing itself is separated out from that of listening so that it might be the source of new materials otherwise passed-over, giving rise to new compositional ideas, forms and creative strategies, but also so that it might be *subject to* listening which turns its critical attention to itself, a listening which listens to and *critically* interrogates its own conditions, not only as a means of recognising external objects but as a synthetic source of sound itself. In what follows this distinction between hearing and listening in Amacher's work as a means of generating new compositional approaches will be linked to the Deleuzian paradigm of transcendental empiricism which seeks to reactivate the creative force in thought through a return to the original site of sensibility which has a particular privilege within Deleuze's philosophy:

It is true that on the path which leads to that which is to be thought, all begins with sensibility. Between the intensive and thought, it is always by means of an intensity that thought comes to us. The privilege of sensibility as origin appears in the fact that, in an encounter, what forces sensation and that which can only be sensed are one and the same thing, where as in other cases the two instances are distinct. (Deleuze 2004, 182)

The distinction between hearing and listening forms a precondition for a momentary unbinding of auditory experience from recognition so that its own peculiar intensity might provide a shock to thought and thereby give rise to new forms of compositional practice and auditory



experiences. This displacement of recognition is a key component of Deleuze's transcendental empiricism. For Deleuze “what is recognised is not only an object but also the values attached to an object” (Deleuze 2004, 171). This identifies the way in which listening as a cultural technique is a means of indexical perception imbued with cultural values; the implication here is that the values framing and bound up in the perception and recognition of objects serve as filters that must actively close down the intensity of experience itself, rendering imperceptible the sensorial processes by which objects and events are perceived and passed to the conceptually oriented understanding, in order for common sense and recognition to operate effectively. Deleuze therefore seeks an unbinding of sensoriality from recognition as “recognition [...] measures and limits the quality by relating it to something, thereby interrupting the mad-becoming” (Deleuze 2004, 178). It is the productive force of this “mad-becoming” that Deleuze wishes to maintain in order to unleash the creative potentials found in sensibility itself, and the intensive specificities of each sense, unbound from their limitation and reduction in the recognition of common sense objects.

It is recognition that our “audile technique” (Sterne 2003) - culturally trained, attentive listening - usually services. The intensity at the core of Amacher's work, the use of ear tones to activate an experience of hearing itself, provides a sensory shock that momentarily suspends this service, decoupling listening and recognition not so that it might be abandoned to asymbolic auto-affection but, rather, so that it might be reoriented or redirected towards a new and ordinarily overlooked set of paradoxical “sound objects” – or perhaps sound “elements” to distinguish them from the Schaefferian reduced object – that populate the limits and condition

of possibility for auditory perception.<sup>4</sup> It is in this sense that Amacher's compositions entail a movement beyond everyday audition in retraining listening towards its own conditions of possibility, to the seemingly otherworldly sonorities that in fact mark the limits and conditions of this one. The psychedelic aspects of Amacher's work do not transport the listener to another world or supernatural plane but rather explore the limits of this world and seek to enrich the practice of composition within it. It is in this sense that Amacher's "psychedelia" operates within what Deleuze described as the "prodigious domain of the transcendental" (Deleuze 2004, 171). To seek the transcendental, rather to seek a higher plane that exists atop this material existence, is to seek the limit or condition. It is this searching for both limits and conditions that marks Amacher's practice as transcendental in orientation. For Deleuze the icon of this transcendental endeavour is Immanuel Kant whom is briefly identified as "a great explorer-not of another world, but of the upper and lower reaches of this one" (Deleuze 2004, 171). Clarifying the extent to which the transcendental is to be considered immanent and distinct from any elevated conception of transcendence Kant claims that:

My place is the fruitful bathos of experience; and the word "transcendental," [...] does not signify something passing beyond all experience but something that indeed precedes it a priori, but that is intended simply to make cognition of experience possible.

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<sup>4</sup> Derrida (1997, 98) has famously criticized the way in which hearing oneself speak establishes an auto-affective circuit that affirms self-presence, something contrasted with the exteriority of the written word and, within sound studies and auditory culture, the 'distal orientation' of the visual. Within the latter field of studies, this collapse into asymbolic sonic auto-affection is seen as a radical alternative to what Cox (2011) has called the 'hegemony of the visual'. For an extended critique of this argument see Schrimshaw (2017). An excellent discussion of Pierre Schaeffer's taxonomy of listening and the phenomenological reduction of sound objects can be found in Kane (2007).

If these concepts overstep experience, their use is termed “transcendent,” which must be distinguished from the immanent use (Kant 1977, 373n, 106–7)

While Deleuze will go on to catalogue what he sees as the failings of Kant's exploratory mission, it is in this immanent delimitation of the transcendental domain described as the “upper and lower limits of this world” rather than an otherworldly domain, that Kant is celebrated. If Amacher's work is to be recognised as containing 'psychedelic sonorities' this is a distinctly transcendental psychedelia in that the hallucinations to which it gives rise allow us to explore the limits or extremes of this world, rather than being a vehicle transporting us to another. In her compositional exploration of the limits of sensation, the boundary or condition at which point sensation begins or ends, Amacher focuses on the sensation of tones that are not acoustically present but are internally produced and sensed tones for which no source exists in external acoustic space. The absence of a directly corresponding external object places the ear tones within the realm of hallucinations as described by Diana Deutsch: Deutsch labels “*hallucination* [...] a definite sensation when no external object capable of arousing that sensation was present [...] hallucinations should be clearly distinguished from illusions, which are distortions in the perception of external objects” (Deutsch 2019, 137). In the use of “tone sensations originating within the human anatomy, which *are not acoustically* present in the room” (Amacher 2008, 17) the aforementioned difference tones, widely used in Amacher's compositions, which have only internal existence for the listening subject serve as an example of the hallucinatory orientation of aspects of Amacher's work. For example, a difference tone might be produced through the presentation of two tones, 1kHz and 1.5kHz, in acoustic space (a) which then give rise to a third tone, 500 Hz., for which no direct correlate exists in (a), having

not been produced by synthesis equipment and not existing in the air around the subject yet nonetheless giving rise to a definite sensation of 500Hz. This can be distinguished from Deutsch's description of the octave *illusion*. In this illusion rapidly alternating tones an octave apart are presented to each ear via headphones; in the right ear the pattern begins by descending an octave – e.g. G4 - G3 – while in the left ear the pattern begins simultaneously but ascending an octave – G3 - G4. Both tones are presented simultaneously to each ear as an alternating chord – G4 right & G3 left followed by G4 left & G3 right – yet what is usually experienced is a sequence of tones an octave apart alternating between the left and right ear – e.g. G4 in the left ear followed by G3 in the right ear ad infinitum.<sup>5</sup> In this *illusion* the tones – G3 & G4 – are present in (a) yet perceived in a distorted way as the localisation of the tones is consistently erroneous. This is to be contrasted with the hallucinatory orientation of aspects of Amacher's work which engenders definite sensations of tones that have no direct correlate in (a), being a synthetic product of hearing itself.

## **Perceptual Geography and the Transcendental Exercise**

Amacher's work occurs along an adjoining *boundary* between three spaces: (a) acoustic space (b) the ear (c) the brain, exploring the distinctive tonalities proper to each and their synthesis in auditory experience. The demarcation of a compositional territory along this line is what leads Amacher to define her practice as “perceptual geography”: “what I am calling ‘perceptual geography’ is the *interplay*, the meeting of these tones, *our processing of the given*” (Amacher 2008, 16). This interplay occurs along the boundaries that mediate the “meeting of these

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<sup>5</sup> For a discussion of the octave illusion see <http://deutsch.ucsd.edu/psychology/pages.php?i=202> or (Deutsch 2019, 24–45).

tones”, the point at which transduction occurs between tones in spaces (a), (b) & (c). Amacher's ear dances relied upon sound synthesis technologies for the production of catalytic tones to which the ear would respond, yet these technologies were themselves intermediaries rather than objects of fascination, the focus of Amacher's work being on what such technologies could patiently and obediently engender: a foregrounding of the synthetic capacities of listening itself.<sup>6</sup> Sound synthesis thereby takes place in two locations simultaneously, at the synthesizer producing carefully chosen simple tones and within the ear which responds with its own ear tones or otoacoustic emissions. Mapped onto the three tone spaces between which Amacher plots her perceptual geography we find a concept of synthesis that extends across a number of domains: (a) the production of acoustical signals with electronic instruments, (b) the active sound production taking place with the ear itself, and (c) the production of knowledge as an act of "synthesis or combination, considered as a spontaneous activity of the understanding on materials given from without" (Allison 2004, 163). It is this latter point that Amacher's practice works towards in training the ear to *recognise* the sounds of its own conditions.

What Amacher identifies in the quotation above as the “processing of the given” is what Deleuze referred to as “that by which the given is given”:

The object of encounter [...] gives rise to sensibility with regard to a given sense [...] It is not a sensible being but the being *of* the sensible. It is not the given but that by which

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<sup>6</sup> Amacher's sound characters are electronic out of necessity rather than preference or technological fetishism. She describes how musicians would have perhaps had less patience and stamina for the kind of patient and sustained exploration of simple sounds and their complex, non-linear interaction with the listener; electronics permitted uninterrupted hours of exploration in the studio.

the given is given. It is therefore in a certain sense the imperceptible. It is imperceptible precisely from the point of view or recognition (Deleuze 2004, 176).

The “processing of the given” or “that by which the given is given” adds specificity to the sense in which Amacher's practice can be thought as transcendental: being not only transcendental in the general sense that it explores the limits and conditions of possible experience but, more specifically, that it is a transcendental empiricism. Transcendental empiricism is opposed not only to a transcendental idealism that would define the limits of possible experience according to the forms of a priori thought but also to a more general empiricism that places sensation at the service of common sense and recognition. In contrast to the empirical use of the senses in the construction of common sense perception, the search for limits and conditions in transcendental empiricism exposes that which is particular to each faculty, that which can only be sensed and constitutes its limit, but also more specifically that which is particular to each sense, the intensity of hearing itself when it is not “measured and limited”, formed and shaped, in the service of recognition but uncovered as productive intensity. Transcendental empiricism thereby locates these limits not within the forms of *a priori* knowledge but within sensation or a “fundamental encounter” (Deleuze 2004, 178). What Deleuze describes as the fundamental encounter is the site at which a passion for thought is engendered through an encounter with that which constitutes both its limit and foundation, asserting the priority of “the contingency of an encounter with that which forces thought” (Deleuze 2004, 176). This priority is reflected in Amacher's assertion that her work must be experienced and cannot be imagined (Amacher 2008, 10). What Amacher is asserting here is that the work cannot be imagined by drawing upon pre-existing knowledge or concepts of the understanding, the work cannot be known

through thought alone but only via the intensity of the encounter wherein sensation generates its own objects. In this assertion Amacher also distances her work from the way in which imagination is itself distanced from sensing, something which Wilfrid Sellars clarifies through contrast with perceiving: “imagining is an intimate blend of imaging and conceptualisation, whereas perceiving is an intimate blend of sensing *and* imaging *and* conceptualization” (Sellars 1978, 4). In stating that her work cannot be imagined Amacher is stating that the connection to sensing cannot be jettisoned without destroying the work.

Residing beyond imagination, the sensations and tones that Amacher composes are what Deleuze refers to as the paradoxical “object of the encounter”, paradoxical in the sense that it is both imperceptible *and* that which can only be sensed (Deleuze 2004, 176–8). Here Sellars' distinction is again useful; where the imagination from which Amacher's work is distinct is decoupled from sensing, the imperceptibility that Deleuze states is characteristic of the paradoxical elements exposed through the methods of transcendental empiricism are decoupled from the conceptualization that Sellars includes within the definition of perceiving; it is via conceptualizing that perception joins recollection and draws upon common sense. As the “processing of the given” it is the process itself which constitutes the paradoxical element or object, “that by which the given is given”, the rendering of the object as such. The processing or rendering must itself remain imperceptible or, in Amacher's terminology, subliminal, for the stable appearance of external objects and the operations of recognition. Where this process itself does become perceptible we witness the foundation or ground rising to the surface and dissolving the objects of common-sense understanding and recognition in the process. This is what Deleuze means when claiming that the paradoxical element of the encounter “is not a

sensible being but the being *of* the sensible”, it is the being of the sensible that is sensed when we sense sensing, when we hear hearing in action, rather than perceiving an external object. The paradoxical object is imperceptible from the perspective of common sense and recognition, but can only be sensed (Deleuze 2004, 178) in that it constitutes the foundations or conditions of conceptual understanding rather than an object produced therein.

If transcendental empiricism defines Deleuze's early philosophy in broad terms, what is referred to as the “transcendental exercise” identifies the method in slightly more specific terms, exposing “the paradoxical element within the transcendental exercise” (Deleuze 2004, 178). The transcendental exercise is distinct from the “empirical exercise of the senses in which sensibility grasps only that which also could be grasped by other faculties” (Deleuze 2004, 176). The transcendental exercise entails the exploration of the specific limits of each faculty. Whereas the empirical exercise of the faculties takes from each that which is required for recognition and the construction of common sense, the transcendental exercise of the faculties concerns that which exists only for each faculty and cannot be carried into their collaborative efforts in establishing common sense. The transcendental exercise thereby involves taking a faculty, with sensibility being the most immediately relevant, to its limit. Just as there is a transcendental exercise of the faculties, we find a more specific transcendental exercise of the senses. The paradoxical element of audition is thereby that which can only be heard, that which must be sensed to be grasped, but that which also goes unnoticed or remains imperceptible from the perspective of common sense listening where listening is in the service of recognising external objects. This paradoxical object is precisely what Amacher brings to the surface in her works, removing its subliminal status; the paradoxical object is exposed in hearing hearing, hearing that which can



only be heard but must ordinarily remain imperceptible for hearing to effectively service listening and recognition. Where we are focused on the paradoxical object of audition, we are focused on the intensive interiority of auditory experience rather than the recognition of external objects through listening or determination of meaning in speech, for example.

Adding further specificity to the methodological aspects of transcendental empiricism, the transcendental exercise is referred to by Deleuze as a “pedagogy of the senses” (Deleuze 2004, 297). The phrase has significant resonances with Amacher's accounts of her compositional processes with ear tones. This pedagogy works in two directions for both Deleuze and Amacher, with one learning from the senses not of external objects and events but of the senses themselves and developing creative and compositional practices based upon this learning process. There is also a training of the senses, in Amacher's case a specific practice of reorienting listening towards its own conditions, learning to listen to listening itself. Referring to methods commonly ascribed to psychedelia Deleuze refers to “pharmacodynamic experiences” as situations within which a pedagogy of the senses takes place, but also of sensory distortion and experiences akin to vertigo:

The point of sensory distortion is often to grasp intensity independently of extensity or prior to the qualities in which it is developed. A pedagogy of the senses, which forms an integral part of "transcendentalism", is directed towards this aim. Pharmacodynamic experiences or physical experiences such as vertigo approach the same result: they reveal to us that difference in itself, that depth in itself or that intensity in itself at the original moment at which it is neither qualified nor extended. At this point the harrowing character of intensity, however weak, restores its true meaning: not the

anticipation of perception but the proper limit of sensibility from the point of view of a transcendent exercise (Deleuze 2004, 297).

The purpose of the transcendental exercise, for both Deleuze and Amacher, is not simply immersion in sensation unbound, but transit to the site and source of a shock to thought, a method of engendering the new and to break the reliance of thought upon recognition, to fracture the forms of common sense and to affirm the equivalence of thought and creativity, a commitment to the idea that “a true critique and a true creation are the same” (Deleuze 2004, 176). While the transcendental exercise, exposing hearing to its own conditions, entails an uncoupling of sensing from recognition, this uncoupling is not the telos of the operation, it is not a site to be dwelled in – which would risk the “mad-becoming” becoming permanent – particularly for Amacher who returns to recognition as an explicit component of her methods and own “pedagogy of the senses”.

## **Returning to Recognition**

While the direction of travel in the above outline of Deleuze's argument would seem to vacate the site of conceptual thought this is not entirely the case; it is not that thought itself is the enemy but rather an image of thought that presupposes itself and seeks to grasp the world in its own image. The transcendental exercise seeks to step beyond this somewhat hermetic orientation and encounter that which forces or gives rise to thought yet ultimately resides beyond it. What we find is an argument for situating thought in a continuum that includes that which resides beyond and constitutes its limit, a continuum that includes the physical, chemical and biological. Whereas Deleuze's argument, as summarised herein, departs from an image of

thought whose empirical form is structured through the selective operations of common sense and recognition, Amacher's account of her own research is presented as travelling in the opposite direction, setting out from what she describes as the subliminal sensoriality of listening that remains hidden in our everyday, common-sensical or “empirical exercise” of listening. Deleuze moves from an image of thought to its conditions, whereas Amacher's trajectory is from the conditions of listening to a new image of compositional thought. While Amacher's new forms of compositional thought and practice are structured *with* and *through* sensation – prepositions suggestive of a Laurellian form of immanence (Galloway 2014, 26–27) popular within a branch of sound studies scholarship focused on outlining a specifically sonic form of thought (Herzogenrath 2017) – we find none of the hostility towards abstract modelling – an important part of Amacher's compositional method – representation and the symbolic that is characteristic of this latter school of thought, but rather a complex intertwining of conceptualization and affectivity within a transcendental-empirical approach, a circuit of abstraction and affection. In contrast to the pursuit of affective immediacy, Amacher describes a patient process of learning and experimentation that leads *towards* rather vacating recognition so that a “fundamental encounter” with the limits of auditory experience might enrich compositional practice:

to enhance the so-called psychoacoustic responses in composing it is first necessary to learn to recognize them. And this can only be achieved experientially, unlike most music which can be imagined mentally without having physically experienced it. Thus it was never the use of electronic devices to produce sounds which interested me. (Amacher 2008, 10)

Recognition returns for Amacher, and thus the formation of new models, languages and forms for composition; Amacher's work does not refute recognition and representation, but through a momentary dissolution of recognition in the force of the encounter decouples thought from existing models, languages, forms and concepts so that thought might arrive at not only a new set of objects for composition but a new sense of the conditions of objectivity in general, this latter point defining the project as transcendental.

## **Conclusion**

What links Deleuze's transcendental empiricism to Amacher's perceptual geography are shared commitments to a fundamental encounter within which the privilege of sensibility as both origin and limit is grasped. The paradoxical elements of Deleuze's transcendental exercise – that which is imperceptible but can only be sensed – find clarification in Amacher's account of the usually subliminal status of our own synthetic capacity to produce and not only receive the audible. Where Deleuze sets out towards the domain of the transcendental from a critique of the role of recognition in limiting the intensity of experience and the creative potentials of thought, Amacher makes the return journey through the development of an audile technique that seeks to recognise these paradoxical elements and develop a taxonomy and methodology for composing with ear tones, to develop new forms and systems of value in response to the transcendental exercise of the auditory.

In this link between Deleuze and Amacher the status of this fundamental encounter as an encounter with sensation itself, as opposed to what is sensed, is clarified; by bringing together

Deleuze's transcendental empiricism and Amacher's distinction between internal and external tone spaces, a methodical return to recognition and the careful development of an audile technique articulated towards a taxonomy of ear tones and compositional technique, we arrive at a point of criticism regarding discourse on sonic materialism and realism that might draw upon such intensive sonorities as a means to transgresses such distinctions in pursuit of an immediate encounter with the real. The pedagogy of the senses undertaken in Amacher's work exposes the intensive origins of auditory experience, a reality of sensation that is carefully distinguished from the reality of the signals external to the listening subject in tone space (a). The intensive interiority which is the primary domain of many of Amacher's work--spaces b & c – has the effect of accentuating rather than eliding differences in kind between interiority and exteriority, between acoustic signals and the sensation of auditory experience itself. This is an important distinction to make as, in the materialist vein of much recent sound studies, the kind of intensive asymbolic sonorities populating Amacher's compositions might be called upon as the pre-symbolic flux of a materiality that exceeds the anthropocentric and establishes a connection with a reality without.<sup>7</sup> A complex and somewhat striated conception of reality is one of domains traversed by Amacher's perceptual geography through which she undertook a continuous process of “learning more about the reality of the world – of my existence” (Amacher 2020, 13). Within the context of some recent trends in philosophy and aesthetic theory, Amacher's work might present an apparent resonance with, and provision of an acoustic counterpart to, the “new materialist” perspective according to which we might access or “enjoy

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<sup>7</sup> While not explicitly linking Amacher's work to a philosophical realism, Christoph Cox discusses Amacher's work within the context of a broader argument for the primacy of materialism and realism in our interpretation of the role of sound in 20th century art and music (Cox 2018, 13–18).

existential contact” with the “immanent generativity of existence” via immersion within an “anonymous prepersonal visibility” (Coole 2010). Where new materialism seeks a chiasmic double-sensation or the auto-affection of a body to “open it onto a world” (Idem) the complexity of this opening, its mediations and filters, are pronounced in Amacher's work in a way that is elided in the new materialist sleight of hand that equates sensation and a generalised impersonal materiality. In contrast to idea that the asymbolic materiality of sonic experience transports us beyond the anthropocentric domain of representation, the suspension of recognition which features in both Amacher's compositional method and the transcendental exercise is not to arrive at a concept of materiality associated with inhuman exteriority but the intensive conditions of sensation itself. In place of a vibrational continuum we find careful distinction in Amacher's tripartite structure, with asymbolic psychedelic sonorities presenting not an unmediated access to the real through circumvention of representation but rather a *mapping* of the transformative mediation embodied in perception in a complex and non-linear relation to external events. The intensive site of Amacher's transcendental exercise should be understood as the site of an original mediation more than an immediacy. With specific relation to auditory phenomena we can identify the difference elided in the new materialist equation of sensation and materiality as corresponding to that which Amacher so carefully makes between spaces a & [b, c]. An aversion to abstraction, measurement and representation in the new materialist perspective and its phenomenological architecture leads to a focus on the experience of the works at the expense of an understanding of their processes of production which entail abstraction, modelling and formalisation in the production of intensive sonic

experiences that in accordance with the transcendental psychedelia outlined above take us to the limit of sensation itself rather than transporting us to generalised materiality beyond.

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