

Towards a Response-able Electroacoustic Composition Practice in Search of Sympoietic Multivalence: Entangling with More-Than-Humans

Fulya Uçanok

Istanbul Technical University (Doctoral Candidate)

Istanbul Bilgi University (Research Assistant)

fulyaucanok@gmail.com

Abstract

This paper proposes a relational model for electroacoustic composition practice. Informed by a socio-musical imagination, the paper focuses on cultivating response practices of the composer with more-than-human¹ agents. It is interested in working within an entangled network of relationalities in the process of musical composition. Using this model as a springing board, the paper questions and re-figures some of the conventional ways of thinking about the concepts of poietic agency, its' relations, and of multivalence within the composition practice.

1. Introduction

Music is more than an object of study, it is a way of perceiving the world. A tool for understanding (Attali, 1985, p. 4).

The model presented within this paper, springs from an interest and desire to attend otherness, and cultivating productive and creative practices through listening and collaborative making within socio-musical² engagements. It is first and foremost interested in the interface of connection and co-creation within composition practice that situates itself within a multivalent, decentred and response-able practice. In pursuit of such composition practice, the model looks at relationality through a lens of feminist, non-anthropocentric and new-materialist strands of thought, focusing on various perspectives and concepts proposed by Karen Barad (theoretical physicist and feminist theorist) and Donna Haraway (scientist, philosopher and feminist scholar).

By tracing how may such practice bring about the producing and sharing of knowledge in a musical context, and specifically in the process of composition, the model proposes one strand of possibility, among a sea of possible others. Beginning by briefly unpacking some terms that

¹ Today, “more-than-human” points to a post-anthropocentric thinking. Within the scope of this paper, more-than-human agents include living beings, environmental sounds, and non-living things. This paper focuses on relations with agents within recorded sounds (fixed media sound files) and physical material objects/instruments. Further explained within the paper.

² In this paper, socio-musical imagination springs from the term “sociological imagination”, which means to read things through a web and network of social connections, highlighting relational ontological positions.

are key to the model, the paper then offers an exemplary process, which is traced through my practice-based research³. Let's begin by unpacking what type of multivalence is meant within this paper.

1.1. Towards A Multivalent Model

Multivalence, by definition is a system that is capable of having more than one value, application, meaning and/or interpretation. Therefore, in a multivalent space, the existence of dissimilarities is a *sine qua non*. It is generally assumed that difference paves way for separatism, suggesting power relations of I/other, insider/outsider which are positions that are based on binary categorizations. In order to setup a multivalent space, there is the need to establish a logic of the "and" rather than a "either/or" one; and this doesn't mean to get rid of the binary, it is about including it to form an expanded understanding of this plural space.

The objective of the model within the paper, is neither about eliminating differences, nor about seeking unity. It is about staying in-relation with differences, including situations where there is no resolution, hence developing forms of abilities to stay in relation and act from within it. Here, the interest is in recognizing and overthrowing fantasies of one-way control systems, of top-down hierarchies, and to open a space of heterarchical relational spaces, where power moves and shifts, either singular or at times shared and multiple, but always in flux.

Within such milieu, with the acts, arise a series of resistances and accommodations on multiple ends, therefore, the skill of having the ability to respond, depends highly on attending, noticing, caring and the fragile negotiation of balances. It is a messy and lively act. Such perspective, carried within the musicking⁴ practices and specifically into the understanding of the role of composer, suggests a move away from the conventional, essentialist and centralized understandings of composerhood, and into practices of decentring⁵.

In the socio-musical model presented here, two important connectable ends emerge as 1) decentred position of composer, that cultivates one's own abilities and capacities to respond with other, and 2) doing this through a complex, multivalent and entangled relational network. Let's take a closer look into the decentred position of the composer within the model.

1.2. A Posture for Decentring

The model, informed by multivalent thinking as explained above, is interested in widening the centre to include more-than-human others, where they are not the object of study, but the generator of the knowledge itself.

³ As a practitioner, I work within the fields of composition, performance, and improvisation. I am not a musicologist, at least not from an analytical and historical understanding. The observations and conclusions are arrived at through the situated perspective of my ongoing practice. I hope some of these would be of use and inspiration for others.

⁴ *Musicking* is a term coined by Christopher Small (2007) to include all acts related to a wide definition of performing music, highlighting music as a social act, rather than a thing. For more detail, see Small, 2007, p. 9.

⁵ Such perspective is not something new, as today, one of the prominent characteristics of 21st century musicking practices, we find the interest in the transformation of the roles of composers, interpreters, instruments, works, and audience.

In the scope of this paper, more-than-human agents are narrowed down to 1) agents within fixed sound recordings, i.e. acousmatic agents which could include a wide variety of living and non-living entities and 2) physical material objects, which could range from conventional and non-conventional musical instruments, to everyday objects, found objects⁶ etc.

I highlight these two categories of agents in this paper to trace an engagement process that diverges from the weighty, historical-conventional understanding of composerhood. In the historiography of the bulk of our electroacoustic music discourses, aside from strands of soundscape studies, and other occasional mentions, within the engagement process, these two types of agents are particularly described as passive, inert and static things that are to be controlled and manipulated. These are expressed in language through the use metaphors, images and symbols. From 1990's on, this posture of composerhood has been criticized by many scholars in the domain (McClary, 1991; Citron, 1993; McCartney, 1997, 2002, 2006; Bosma, 2006, Rodgers, 2010, 2013; Massey, 2019; to name a few). Passing on information to one another in adding to the common knowledge, language plays an important role in informing music-making practices. I believe that following this shift in perspective and behaviour through attentive outlook and awareness of the language -which effects engagement strategies- establish a basic feature in which we can begin delving into the world of a multivalent, decentred sympoietic practice.

As an evident result, the model presented in this paper, moves out of the understanding of treating physical objects as well as recorded sound⁷ as things that are passive, but rather proposes to take them in hand as agential forces, and then to listen into what does such understanding do to the human agent and its process of composition. Here it is important to point out that, the model does not ostracize the object-based discourses, which would go against the grain of multivalence. The aim of this model is not about restoring; nor the aim is to address an ideal, ethical or moral compositional strategy. The practices introduced here are about proposing expanded modes of perceptive capacities, and to open up a variety of other discourses through modest ways of partial and situated practices. However, even though not defined as an ethical model, it is inevitably interweaved with it, as the whole practice could be read under what Barad (2007) calls ethico-onto-epistemological approach, which is an enmeshed understanding of being, knowing and valuing, in which this model aims to exercise through its acts of caring, daring and sharing. It is interested in thinking-by-sounding-with, how a response-able composition practice might be like. Let's take in hand a final term, *response-ability*, which further clarifies the relational engagement proposed by the model.

1.3. On Cultivating a Response-able Practice

Put briefly, response-ability, is the ability and/or capacity of oneself to respond to others. Within this model, the term response-ability follows feminist, new materialist strands of thought, proposed by Barad (2007, 2010, 2014) and Haraway (1992, 1997, 2008, 2016). Both Barad and

⁶ It is important to note that in music-making practice, material can mean many things. From the physical electronic hardware to various acoustic objects that could be categorized under conventional and non-conventional musical instruments, form digital interfaces to the sound file itself — and the list can go on. As noted above, the model presented within this paper only focuses on physical material objects.

⁷ Recorded sound is historically expressed as “sound object”: *L'objet sonore*, coined by Pierre Schaeffer in his *Traité des objets musicaux*, Paris, Éditions du Seuil, 1966; 2nd ed., 1977.

Haraway's understanding of the production of knowledge is read under the relational. And their understanding of response-ability is about holding full accountability on one's own thoughts and actions, knowing that they have consequences for others. This understanding of response-ability surface as key in the practice of the model: 1) By recognizing that there is a consequence of our *musicking* practice that sets the common record, 2) it's interested in *going visiting* and inviting a wide variety of agents into the compositional process, 3) building response practices on cultivating, acts of attention, noticing, care through a heightened form of listening within relational acts, 4) tracing and expressing ones own process of composing with others as explicitly as one can, and 5) making these cartographies available for others to trace the process themselves; opening up fields for further discussion.

From this place, we can begin to ask, how may a multivalent, decentred and response-able practice bring about the producing and sharing of knowledge in a musical context, that focuses on the process of composition? And of course, there are many possible ways to realize such approach. Here, let's go ahead and look into the one strand of the model, introduced with this paper.

2. Through a Looking Glass of a Situated Practice

The starting point within the model, is engaging with recorded sounds which have agential acousmatic presences within them; they are tied to bodies, space, time and situation⁸. The immediate question that arises is: How is the self to interact with such agencies that reside within sound recordings once the recording is fixed? Hence, they cannot respond back, what type of relational positions are possible here?

The particular strand of the model introduced within this paper, is interested in exploring levels of engagement through learning, acceptance and ability to relate to a world "before me/without me" (the self), and asking the question, how can the self join-in as an inquirer, and cultivate abilities to respond from within this world? Here, the model positions itself in line with the Arendtian understanding of *going visiting*. As Haraway explains:

"Hannah Arendt and Virginia Woolf both understood the high stakes of training the mind and imagination to go visiting, to venture off the beaten path to meet unexpected, non-natal kin, and to strike up conversations, to pose and respond to interesting questions, to propose together something unanticipated, to take up the unasked-for obligations of having met. This is what I have called cultivating response-ability" (Haraway, 2016, p.130)⁹.

In exploring such practice, the model aims to develop the skill of aural presence to *go visiting* and trace these encounters within the act of composition. And a valuable approach to working within such condition is through what Donna Haraway (1988) calls *situated knowledges*. In

⁸ If the sound recording is done by the self, then, the relational process begins with act of recording, between the self, the other, the environment, the recording machine etc. Within the scope of this paper, the act of making the recording is taken out, and the focus is on the question: how may the self work with the recording once it is fixed?

⁹ When Haraway suggests "going visiting", she is quoting Hannah Arendt, writing: "To think with an enlarged mentality means that one trains one's imagination to go visiting" (Arendt, H., *Lectures on Kant's Political Philosophy*; as cited in Haraway, 2016, p.126).

situated knowledges and practices, the acts are tied to bodies, geographies, economies, cultures and historically specific perspectives. They are partial, they are situated. Haraway states:

Situated knowledges are about communities, not about isolated individuals. The only way to find a larger vision is to be somewhere in particular... Its images are not the products of escape and transcendence of limits (the view from above) but the joining of partial views and halting voices into a collective subject position that promises a vision of the means of ongoing finite embodiment, of living within limits and contradictions-of views from somewhere. (Haraway, 1988, p. 590; my emphasis)

From various practices and disciplines ranging from biology, gender, political and social theories we know very well today that embodiment situates us. And within the model, response-practices highlight bodies; where a series of bodily acts are invited in engaging with others. The main acts entail: 1) Aural analysis response; 2) Response through movement of body that is performative, tactile; and finally, 3) A re-evaluation response, which reads different results from within one another and further generates responses. Switching modalities between the aural, and the motion-based/tactile, create a constant feedback loop of thinking through doing, and doing through thinking. The goal is to generate a series of leakages and ruptures that occur in the translation of the process, which are valuable tools to disorient and de-centre a fixed, and authoritarian posture. Next, let's unpack an exemplary process, and look further into the tools used within the model.

2.1. Aural Analysis Response

In engaging with the sound recording, the first encounter is with an aural analysis process that is interested in tracing what is heard; it is not about extracting data that could not be perceived by the ear. In other words, the model is interested in embodied and situated understanding of analysis—constantly analysing, what do I hear? how do I listen? how can I listen differently? what happens when I do so? etc. The analysis is not about critiquing, but developing awareness about, and working with practices that move beyond one's own likes and dislikes, where the interest is in visiting the other, and tracing the affects of this visit on oneself. Here, the posture is of listening/responding-with, rather than listening/responding-to, which shifts perspectives from object-based thinking to agent-based one, opening up planes of dialogic possibilities.

In developing capacities to work with a wide variety of agents within sound recordings, that have a wide variety of sound types and behaviours, on top of that, sounding within a variety of different musical contexts, we need musical tools that enable us to do so. Let's go ahead and unpack some of these used in the model.

For both the aural and embodied practices, the model takes in hand a sound-based¹⁰ approach, which provides equal ground to a wide variety of sound types. And it implements spectromorphological¹¹ descriptions of these sounds, which afford to describe sound-based music, and is devised to be used with aural perception, where individual follows interaction

¹⁰ The term sound-based is coined by Leigh Landy (2007) to describe music that is based on a wide range of types of sounds that fall outside the solely note-based organizations.

¹¹ Spectromorphology is a term coined by Denis Smalley (1997) for describing sound shapes, based on an interaction between the sound spectra and the ways it changes through time.

between the sound spectra and the ways it changes through time, tracing ones own listening, memory and attention.

Both the sound-based approach and spectromorphological terminology are used because they allow to connect with a wide range of sound types, sources and contexts within a common ground, providing a general level of coherency within the engagement process.

Through this frame, the practice focuses on listening to movement, tracing energy trajectories and motion to help guide the relational experience. For this, the model uses Temporal Semiotic Units¹² (TSU's). There are nineteen units, and they are used to describe movements through morphological descriptions and semantic meanings. These units are informative enough to evoke narratives and vague enough not to impose and assert a particularly specific narrative. They direct intentionality, accompany listening, and afford one to explore a sense of shared action, which paves way for potentialities for entrainment, empathy, and therefore rendering possible, a response-able composing. These units are used as main apparatuses in the model, as they provide a fruitful plane for an embodied reading as well as function to frame and limit contact zones between differences.

From both the analysis and performance perspective, neither apparatus here, function to pin-down acoustic elements through scriptural reading, but act as companions in supporting the listening experience of the self. They also allow multiplicities of readings, affording to diffuse monolithic ways of listening and acting.

Here a cartographic study begins, the self traces, and tries to make one's own thought and engagement patterns as explicit as one can. This results in creating an initial analysis of the fixed sound recording, which might include sketches, transcriptions, graphics, words etc. In generating these affective traces, usually, one ends up with more than one interpretation of sound and motion types, as well as various different contexts and narratives.

The next phase is about exploring of the hunches of the movement of body together and against what the listening had produced, and explore how might various abstract concepts could be brought to life through sounding.

2.2. Motion-Based, Tactile Response

As we know, thoughts are inscribed within the body, and moving/touching bodies think and express differently than the motionless body. So here, information from the movement and experience of the body is invited into the compositional process. Up to this stage in the model, the self responds to the sound recordings by listening; in this stage, material agents are invited to participate, populating the assemblage of agents within the practice.

In doing so, the model takes in hand a practice proposed by Guy Reibel called *séquence-jeu* (play-sequence)¹³. The goal of Reibel, was to introduce intentionality that links gestural and

¹² *Les Unités Sémiotiques Temporelles* (UST): Developed in Music and Informatics Laboratory of Marseille/France (MIM) in 1992, by a group of composers and artists led by François Delalande.

¹³ Reibel devised play-sequence first at *Paris Conservatoire national Supérieur de Musique et de Danse de Paris* (CNSMD) in 1975.

bodily listening within electroacoustic composition¹⁴. In his play-sequence, by means of a performer, a sounding object-body and a microphone, the composer explores various gestures of sounding capabilities of the object (and of course, one's own capabilities). Within the response-able model presented here, play-sequence is uprooted from its initial mode of practice and carried within the new-materialist thought, which proposes a rather unconventional and experimental view into the *musicking* practice.

New Materialist Outlook into Relations with Material

There are various forms of new materialist practice. The particular model proposed here follows feminist new materialist thinkers, where, the matter of agency lies at the heart of the practice. I specifically follow Barad's (2007) understanding that is interested in the matter of non-human agency and stresses that agency is not something inert, but an action, it is empirical, it is bodily production, and it is enacted through relations.

What may such understanding of material do to the com-position practice? And what types of consequences can it produce? The immediate answer is that recognizing agency in objects, changes ones view of material, from inert to a dynamic one, which makes possible an instrument-human collaboration in the making, where the instrument may equally play the human. In a way, this allows the self a fresh look into questioning, how do objects shape one's ideas and movements?

The model especially focuses on working with contingent materials i.e. instruments with unstable and unpredictable sound qualities and behaviours that could not be fully-controlled to every extent. Therefore, it invites the unstable and unforeseeable characteristics of the instrument into the making. In such a case, the self might expect a particular sound to occur with its interaction with the material, but the sounding result might be different, which in return, changes the following response of the self, creating a dialogic relation. The self then, rather than forcing materials to give exact replications of what one visions or anticipates, affirms the resistances of contingent materials. This includes working with what could be called an uncooperative instrument, creating tension and challenging response-able acts.

Here, multiple notions of playing-with the material could be explored: including playing-on, playing-to, playing-in, playing-by, being played by etc. Therefore, we end up with an expanded understanding of material; one that is physical, a sonic thing, and performative. Material agency works through speculative thought in guiding the practice, and it overthrows conventional habitual human experience, which in return enables heightened forms of listening¹⁵.

The self, plays with these objects/instruments in real-time dialog in response to the fixed sound recording. Here the model proposes working with a seemingly simple and contradictory processes as to guide and trace the responses of the self; responding through a similarity and difference response.

¹⁴ Annette Vande Gorne, in her book *Treatise on Writing Acousmatic Music on Fixed Media* introduces Reibel's play sequences along with another series of gesture archetypes to serve as tools within electroacoustic composition (Vande Gorne, 2018, 10).

¹⁵ Today, the new materialist understanding of objects, and of instruments within field of *musicking* practices are an emerging and rich field (Ingold, 2008b; Pickering, 1995, 2010; McLaughlin, 2014; Davis, 2019, to name a few).

Similarity response is connected to empathetic thinking, working through mimicking the other. However, the relation is not about direct mimesis, somewhat wearing the other like a costume, aiming to represent the other, but in a more generative approach that is interested in exploring what might becoming-the-other be like.

The differential response on the other hand, is about highlighting difference, it opposes, contrasts and diverges from the other, in terms of sound types, behaviour and context. Without being destructive to the other, the response aims to figure differential forms of co-existing. Such dual approach, produces strands of likeness and difference patterns, affirming both, which result in affording to position oneself in a third position that is able to contemplate and move within a perspective that these positions provide. Trinh T. Minh-ha's (filmmaker, writer, literary theorists) approach to the inside-outside opposition frames rather eloquently, the understanding of working with these positions:

The moment the insider steps out from the inside she's no longer a mere insider. She necessarily looks in from the outside while also looking out from the inside. Not quite the same, not quite the other, she stands in that undetermined threshold place where she constantly drifts in and out. Undercutting the inside/outside opposition, her intervention is necessarily that of both not quite an insider and not quite an outsider. She is, in other words, this inappropriate other or same who moves about with always at least two gestures: that of affirming 'I am like you' while persisting in her difference and that of reminding 'I am different' while unsettling every definition of otherness arrived at. (Trinh, 1997, p. 374-5)

Going visiting, and joining-in with the other, as an *inappropriate other*, affirms both the similarity and differential positions, affords unanticipated questions to emerge and render capable acts to shake fixed and scriptural readings. Such positions allow entanglement with the other in a multiplicity of networks, within the compositional act. After these responses are given, finally, the self moves into a generative re-assessment response.

2.3. Re-evaluation Response

The reassessment stage is about somewhat becoming an archaeologist; looking underneath all the notes and sound recordings, to find the ancient city, listening to each and every element, dusting them, and piecing them together in relation with the concepts and theories. In this stage, the composing self moves to a 3rd person view, re-editing, re-evaluating the analysis and performance of self-in-relation. It listens-back with accumulated experience and through contemplation, gives further responses by editing and shaping the results through electroacoustic means, which keeps on generating responses.

Through such practice, we end up with a process which is not sequential but consequential; one where the self can go back and change previous decisions, actions, sounds, responses, as well as the theoretical and conceptual ground in which everything sprang out of in the first place. By such a system, the model deliberately subverts simple processes of composition. And by doing so, the aim is to unlock closed systems, move out of linear as well as top-down thinking/doing and create complex modulations between relational processes. Here let's introduce a final tool, a tool that allows the self to read the different results from within one another; a diffractive methodology.

Diffraction Reading

Diffraction methodology was first introduced by Haraway (1992) and later developed by Barad (2007). Many scholars propose a diffractive methodology as a way of troubling dualisms. In the model, it is used to read these differences through one another, which further generates other responses. Barad describes diffractive approach:

Diffraction is not merely about differences, and certainly not differences in any absolute sense, but about the entangled nature of differences that matter... Diffraction is a material practice for making a difference, for topologically reconfiguring connections (Barad, 2007, p. 381).

Haraway describes diffraction as a practice of “critical consciousness”, as it provides the opportunity to become more attuned to how differences are being created in the world, and what particular effects they have on subjects and their bodies. She states (1992): “A diffraction pattern does not map where differences appear, but rather maps where the effects of difference appear” (p. 300). Following these pathways, the model works with diffractive methodology as a means for working with the processes of differentiation, through a commitment to negotiate differences, not as oppositions but rather as generating particular production of patterns of difference. Looking at possibly contradictory differences from a positive angle, implies there is more to discover about the agents, concepts, acts and results, rejects all-too simplistic, singular definitions.

As an evident result, the processes of such response-able practices do not aim to produce singular and fixed, ultimate end-products that are interested in accuracy of immediate experience, but aims to produce particular examples that emerge within the process. Although presenting a final version of the musical work is possible, there is also the possibility of an explicit representation: presenting the process of the work as the work itself. On the surface of the audible level, the connections and relations may, or may not be initially apparent in the “final works”. This attribute is something that the practice affirms, as the goal is not to essentialize the process within the work, but rather, move with-in the process with the concepts and leave the final work to become a potentiality that may open up to other possibilities.

Within this context then, the whole process, become a series of enacting, differentiating and entangling i.e. dealing with a paradox. And through disrupting itself through a system and a process, it aims to disrupt the conventional, paving ways for processes that lead into new ways of relational thinking, listening and acting, as well as a mesh of multivalent possibilities ready for re-negotiation.

3. Conclusion

“Do I contradict myself? Very well, then I contradict myself, I am large, I contain multitudes” (Whitman, 1855, p. 55).

I believe, within such *musicking* practices, where, having a large enough inner world to be able to hold together multitudes, and not being torn by paradoxes that come with spaces of pluralities, is a fruitful place where one can begin listening and acting within multiplicities. This may bring with itself narratives within narratives, multiplicity of spaces, and even possibly, multiple belongings. A reworking of the poietic process through relational and

experimental practices, carry potentiality to pave way for new ways of thinking-with and acting-with various agencies in the composition process, and to explore various forms of response-able symbiosis.

Informed by a socio-musical imagination, the entangled response-able acts entail continual consideration of issues of power, desire, empathy, resistance, affirming both acts of similarities and differences. I believe, such posture offers engaged insights to various forms of listening/making-with others; which carries a potential to cultivate aware, caring and thoughtful outputs into the common record of our *musicking* practices.

4. References

ATTALI, Jacques., *Noise: The Political Economy of Music*, Minneapolis, University of Minnesota Press, 1985.

ARENDT, Hannah., *Lectures on Kant's Political Philosophy*, edited by Ronald BEINER, The University of Chicago Press, 1992.

BARAD Karen., "Posthumanist Performativity: Towards an Understanding of How Matter Comes to Matter" *University of Chicago Press*, 28(3), 2003, pp. 801-831.

BARAD Karen., *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Duke University Press, Durham and London, 2007.

BARAD Karen., "Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, Spacetime Enfoldings, and Justice-to-come" *Derrida Today*, 3(2), 2010, pp. 240-268.

BARAD Karen., "Diffracting Diffraction: Cutting Together Apart" *Parallax (Tandfonline)*, 20(3), 2014, pp. 168-187.

BOSMA, Hannah., "Musical Washing Machines, Composer-Performers, and Other Blurring Boundaries: How Women Make a Difference in Electroacoustic Music" *Intersections*, 26(2), pp. 2006, 97-117.

CALDERON-GARRIDO Diego, Josep GUSTEMS., *Temporal Semiotic Units (TSUs) in Audiovisual Analysis*, in *Reinventing Sound: Music and Audiovisual Culture*, edited by Encabo ENRIQUE, 2015, pp. 118-127, Cambridge Scholars Publishing.

DAVIS Tom., "Instrumental intentionality: an exploration of mediated intentionality in musical improvisation" *International Journal of Performance Arts and Digital Media*, (15)1, 2019, pp. 70-8.

HARAWAY Donna., *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*, In *Simians, Cyborgs and Women: The Reinvention of Nature*, Routledge, New York, 1991.

HARAWAY Donna., "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others" in *The Monster Theory Reader*, edited by Jeffrey A. WEINSTOCK, University of Minnesota Press, Minneapolis; London, 2020, pp. 459–521.

HARAWAY Donna., *The Haraway Reader*, Routledge, London, 2004.

HARAWAY Donna., *When Species Meet*, Minneapolis: University of Minnesota Press, 2007.

- HARAWAY Donna., *Staying with the Trouble: Making Kin in the Chthulucene*, Duke University Press, NC, 2016.
- INGOLD Tim., “Bringing Things Back to Life: Creative Entanglements in a World of Materials”, *NCRM Working Paper*, Realities/Morgan Centre, University of Manchester, 2008b.
- LANDY Leigh., *Understanding the Art of Sound Organization*, Cambridge, Massachusetts, MIT Press, 2007.
- MCCARTNEY Andra., “Gender, Genre and Electroacoustic Soundmaking Practices”. *Intersections: Canadian Journal of Music*, 26(2), 2006, pp. 20-48.
- MCCLARY Susan., *Feminine endings: Music, gender, and sexuality*, Minneapolis, University of Minnesota Press, 1991.
- MCLAUGHLIN Scott., “Intra-Agencies” *CeReNeM Journal*, 4, 2014, pp. 76-88.
- MINH-HA Trinh T., “Not You/Like You: Post-Colonial Women and the Interlocking Questions of Identity and Difference” in *Dangerous Liaisons: Gender, Nation, and Postcolonial Perspectives*, edited by, Anne MCCLINTOCK, Aamir MUFTI, and Ella SHOHAT, 1997, pp: 415-419. Minneapolis: University of Minnesota Press.
- PICKERING Andrew., *The Mangle of Practice*, London, University of Chicago Press, 1995.
- PICKERING Andrew., *The Cybernetic Brain: Sketches of Another Future*, London, University of Chicago Press, 2010.
- RIX, Emmanuell, Marcel FORMOSSA (Eds.), *Vers Une Semiotique Generale Du Temps Dans Les Arts. (Toward a General Semiotics of Time in Arts)*, Sampzon, Delatour-France, Musique/Sciences edition, 2008.
- RODGERS Tara., *Pink Noises: Women on Electronic Music and Sound*, Durham, Duke University Press, 2010.
- SCHAEFFER Pierre., *Traité des objets musicaux*, Paris, Éditions du Seuil, 1966; 2nd ed., 1977.
- SMALL Christopher., “Musicking—the meanings of performing and listening. A lecture” *Music Education Research*, 1(1), 1999, pp. 9-13.
- SMALLEY Denis., “The Listening Imagination: Listening in the Electroacoustic Era” *Contemporary Music Review*, 13(12), 1996, pp. 77-107.
- SMALLEY Denis., “Spectromorphology: explaining sound-shapes” *Organized Sound*, 2(2), 1997, pp. 107-126.
- VANDE GORNE Annette., *Treatise on Writing Acousmatic Music on Fixed Media*. Ohain, LIEN, Musiques & Recherches, 2018.
- WHITMAN Walt., *Walt Whitman's Leaves of grass: the first (1855) edition*, New York, Penguin Books, 2005.