DIFFRACTING ALTO SAXOPHONES — LAURA TOXVÆRD

Abstract

This article presents a study that utilises a performative research approach, contributing to our comprehension of music-making by grounding it in Karen Barad's theory of agential realism and expanding upon Donna Haraway's use of the concept of diffraction. The starting point is a lecture performance held in 2022 at the Arts in Action: Urgencies in Art and Art Education, where a piece of music for alto saxophone was coming into being, while the saxophonist partly played and improvised and partly talked about what she sensed and imagined. With saxophones as a pivotal point, a diffractive field is established by the lecture performance and a concert that took place in 2019. Effects that cross time and space are analysed through two agential cuts in the concert in the form of two pieces of music. Empiric material is generated through sound and video recordings of the soundcheck and concert, supplemented by research notes and a concert review in the Danish daily newspaper, Politiken. The study aims to contest the anthropocentric tendency to centre human subjects in the making of music. Instead, it asks what human and nonhuman bodies and materialities do in the study's music-making.

KEYWORDS:

PERFORMATIVE RESEARCH / MUSIC / IMPROVISATION / AGENTIAL REALISM / DIFFRACTION

INTRODUCTION

This article presents a study with a performative research approach, enhancing our understanding of music-making on the basis of Karen Barad's theory of agential realism and her elaboration on Donna Haraway's use of the concept of diffraction.¹ The starting point is a presentation in the form of a lecture performance held June 8-10, 2022, at the University in Agder, Norway, at the International Arts in Context symposium 'Arts in Action: Urgencies in Art and Art Education.' During this presentation, a piece of music for alto saxophone was coming into being, while I, as the saxophonist, partly played and improvised, and partly talked about what I sensed and imagined.

With saxophones as a pivotal point, a diffractive field is established by the lecture performance and a concert which took place at the Klub Primi venue in the former meatpacking district in Copenhagen on November, 12, 2019. Klub Primi is a venue for creative, improvised and genre free music. Four musicians collaborated during the concert: Marilyn Mazur on drums and percussion; Peter Friis Nielsen on electric bass; and Julie Kjær and myself on alto saxophones. Through two agential cuts in the concert in the form of two pieces of music from the album *The Winds*.² effects that cross time and space are analysed. Empiric material is generated through sound and video recordings of the soundcheck and the concert, supplemented by research notes made after the concert and a review of the concert that appeared in the Danish daily newspaper, Politiken.

A major urgency for the world is the anthropocentric tendency to centre human subjects at the expense of both human and nonhuman bodies and materialities. In my practice as an artist, I sense possibilities to decentre human subjects and give space for bodies and materialities of both humans and nonhumans. The research question is as follows: What do human and nonhuman bodies and materialities do in the study's music-making, which contests an anthropocentric tendency to centre human subjects in the making of music?

I begin by positioning myself as researcher and my research, then sketching out the article's theoretical background, as well as setting out the methodological framework upon which my research is based. Through two agential cuts in the concert, I analyse the effects of the saxophones in the diffractive field followed by my conclusion.

POSITIONING THE RESEARCHER AND THE RESEARCH

I position myself as a researcher in what has been referred to as a performative research paradigm with a background in Brad Haseman's manifesto for performative research.³ The performative research paradigm covers post-approaches to and extensions of qualitative research as well as artistic research perspectives.⁴ Researching within this paradigm can be understood as a creation and not as a representation of something that existed before my research. I am entangled and in multiple relations in my research, and I move and change with the research process.⁵ I move beyond the human-centred world views and approach my research material with a curiosity of performativity, materiality and relationality. I look for what human and nonhuman bodies and materialities do performatively in their mutual relations. In the musicmaking's doing, focus is shifted from music as an object to music as a dynamic doing and becoming with effects that I account for.

With my performative study, I research music-making as an entanglement of multiple intra-acting components while I ask what human and nonhuman bodies and materialities do in this ongoing dynamism of music-making. Other recent studies with professional musicians and their music-making and agential realism include 'In Close Combat with the Note Enemy: Shame, Empowerment, and Performative Learning' (Schøien et al. 2022), 'Untamed Stories Told by Artfully Creative Artists in Malawi and Norway' (A.-L. Østern & Hovde 2019) as well as 'To Learn with Becomings of Graphic Notation in Music as Iterative Intra-action' (Toxværd 2022). When compared to these studies, this article's research makes use of two agential cuts in a concert in the form of two pieces of music and analyses effects that cross time and space.

Since there is little work yet done on agential realism and music-making based on improvised music, I aim to contribute with this performative study to the growing field of studies that contest the notion of human agency in the centre of musicianship and instrumentality in the field of critical organology.6 Agential realism and music performance in the field of sound art are researched in the study 'Composing Fragmented Relations With Materials, Locations, and Archives,'7 which builds on a relational perspective where sound is used as a connective tissue bringing fragments into relationship. Another study is 'Materiality: The Fabrication of Sound,'8 in which sound is described as a kind of fabricated fabric made of the interweave of multiple elements. In relation to agential realism and composition, Hermansson offers in her master's thesis an understanding of music that gives prominence to music's material and bodies.9 And in Øvrebø's PhD dissertation, he combines audience research and artistic perspectives with an agential realist approach.¹⁰ With my work described in this article, I want to add an exploration of a diffractive field with alto saxophones as a pivotal point in the realm of experimental jazz and improvised music.

DIFFRACTION AS AN ALTERNATIVE TO REFLECTION

In this article, I use the concept of diffraction as a tool to opening up the lecture performance in time and space by establishing a diffractive field. Instead of dwelling on the lecture and concert themselves, I am more interested in how the alto saxophones from both events challenge the anthropocentric tendency to prioritise human subjects in music-making.

In practice, both in relation to the lecture performance and the concert, I have been aware of the possibilities of decentring human subjects and giving attention to bodies and materialities in order to find the effects of human and nonhuman doings. That means that it is the alto saxophones that are the pivotal point and not the alto saxophonists. Focusing on the alto saxophonists would have centred the human subjects in the music-making, which is not my purpose here.

In my study, diffraction comes into view as an alternative to reflection. Whereas reflection can be understood as the well-known interaction between two mirrors which reflect each other to infinity without one being able to see more,11 the diffractive field that this study establishes can be viewed as an ongoing dynamism that continues to show new perspectives. The alto saxophone does not reflect me or my autonomous intention as a subject. The alto saxophone decentres the subject in its mutual iterative doings with human and nonhuman materialities. Barad's elaboration on the concept of diffraction builds on Haraway's use of the term. Haraway explains diffraction as a mapping of interference, and not as a reflection or a reproduction or replication. She explains that a diffraction pattern does not map where differences appear, but rather maps where the effects of difference appear.¹² When I explore my study's generated empiric material, what interests me is the effects of the alto saxophones in the diffractive field framed by the lecture performance and concert.

AGENTIAL REALISM, INTRA-ACTION AND AGENTIAL CUTS

The theory of agential realism is based on the inseparability of agentially intra-acting components of human as well as nonhuman bodies and materialities. Barad writes about intra-action, saying that it should be understood in contrast to interaction. which contains a sense of the existence of earlier unconnected entities.¹³ In my study, I use the concept of intra-action as opposed to interaction to emphasise that everything that participates in the intra-action cannot be separated into unconnected entitites. Therefore, I examine each part in its entanglement with all the intra-acting components. However, although I follow Barad and work on the basis of the inseparability of agentially intra-acting components, she points out at the same time that the possibility of objectivity can be established through a specific agential cut, which

generates a local agential separability within the phenomenon.¹⁴

Barad understands objectivity as a part of the universe making itself intelligible to another part in its ongoing differentiating intelligibility and materialisation.¹⁵ Objectivity, according to Barad, means being accountable to marks on bodies.¹⁶ In this study, my researcher body is a part along with other parts of the universe in its ongoing differentiating intelligibility and materilisation. I need to be accountable to the agential cuts that I choose to make in my research material because the agential cuts make marks on human and nonhuman bodies and have effects in the world.

ANALYSIS

With saxophones as a pivotal point, I establish a diffractive field where two agential cuts in the concert are made. My choice to make these two agential cuts was based on the lecture performance I held in June 2022 at the International Arts in Context Symposium Arts in Action: Urgencies in Art and Art Education. During this conference presentation, a piece of music for alto saxophone was coming into being, while I partly played and improvised and partly talked about what I sensed and imagined. For example, I talked about the music that was affected both by the sunlight that suddenly poured in through the window, and by a good colleague, who was close to me while I played, and by the corners of the room, which attracted and repelled me and my saxophone as I walked around and played.

While being part of the doings of human and nonhuman materialities, I researched the music-making of the lecture performance. I had sensed that music was not something that I composed alone, because I had become aware that, for example, the sunlight had an effect on the atmosphere in the room, and that the presence of my good colleague had a calming effect on the situation. Additionally, the room's corners had an effect on the acoustics. And I realised that by exploring the effects of the alto saxophone from the lecture performance I would also be able to look for the saxophones' effects of the former

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concert and its recorded music pieces and analyse the effects across time and space.

FIRST AGENTIAL CUT

This agential cut is artistically articulated as music.

The concert's fourth piece of music, 'Done with the Chart'

Using words, I will articulate the agential cut as follows: Scarcely halfway into the concert, we found ourselves in a space where only the percussionist and the electric bassist were playing. The music was airy and had some repeating phrases. At this point, the other alto saxophonist began to play a short phrase. Before she was about to end the phrase, I also began playing a short phrase on my own alto saxophone. On the video recording, we can see that I was at the side of the stage, where I squatted on my haunches and took something to drink. But just as the other alto saxophonist began to play, I got up and walked into the middle of the stage to my microphone, and started to play. For the three minutes that followed, the two alto saxophones played phrases which wove themselves in and out of each other. Neither of the alto saxophones were further forward or backward than the other. It sounds like one instrument, even though you can hear that there are two instruments playing. You can hear the phrases being played, breaking through and then holding back, but it is not clear where the phrases begin and end, and there are insertions and rephrasing exchanged from one alto saxophone to the other which made musical waves whose boundaries remained unclear.

Analysing the effects of the alto saxophones of this first agential cut in the diffractive field of the concert and the lecture performance maps effects in relation to decentreing human subjects in the study's music-making. The effects that contest the anthropocentric tendency to centre human subjects are the sunlight, my good colleague and the room's corners during the lecture performance, as well as the entangled sound of the alto saxophones. At the concert, I sensed that it was my alto saxophone that suddenly wanted to go to the microphone and play along with the other alto saxophone. It was not me as the alto saxophonist who intentionally controlled that I wanted to play with the other alto saxophonist. Nor did the alto saxophone control me.

The two alto saxophones are two alto saxophones, but there would be no musical point in separating them; the phrases being played are like waves that break through and hold back and which boundaries remain unclear. The music-making is intra-activity in which the alto saxophones cannot be separated into unconnected entitites in correspondance to Barad's description of intra-actions.¹⁷ Similarly, as waves with blurred boundaries, I sensed the alto saxophone in the lecture performance intra-act with the sunlight, my good colleague and the corners of the room while the music came into being. To unfold this intra-action, I talked about what I sensed during the lecture performance. Both in the lecture performance and in the first agential cut, the music comes into being by multiple human and nonhuman bodies and materialities and not by human subjects alone.

SECOND AGENTIAL CUT

Artistically, this agential cut is articulated as music.

<u>The concert's first piece</u> of music, 'The Winds'

To articulate this second agential cut in words, I will use a note I made on the night after I came home from the concert. In the note, I wrote that my plan in the concert had been that the other alto saxophonist should come onto the stage and play around fifteen minutes after the start of the concert. At the soundcheck, I told the musicians that this was the plan, but the electric bassist protested. He thought that she should be there from the beginning. And so it was, an entirely different concert to the one I had planned. The concert was reviewed, and awarded five out of six hearts, in the Danish daily newspaper, Politiken.¹⁸ The reviewer wrote:

Laura Toxværd's slender sax voice glides around the registers, untroubled, Marilyn Mazur strokes her drums and strikes bells whilst Julie Kjær allows her sax voice to roar, distorted, in the background. At the bottom, Peter Friis Nielsen's electric bass wanders uneasily around on the fretboard while the other voices become stronger and stronger. Everything picks up speed until the four musicians in Toxværd's quartet each hammer energy in all directions into the room at Halmtorvet in Copenhagen. The musicians allow themselves to give up all control over the situation.

The review begins by introducing the concert, describing all four musicians and their instruments in various ways. Firstly from the starting point in the musicians' bodies' gestures, e.g., 'strokes her drums and strikes bells.' Secondly by coupling their instruments with their bodies, e.g., 'sax voice' and thirdly by taking off from their instrument, e.g., 'electric bass wanders uneasily around on the fretboard.' Later in the review, the musicians are described as a shared energy:

> [...] After the wild introductions, the four musicans fell into an examining, vegetating state in which they whistled, rattled and howled, as if they were all seeking a mystic land with wonderful creations and rare growths. Everything caused by curious exploration of their instruments in a kind of search for what they can also say when you push them.

Analysing the effects of the alto saxophones of this second agential cut in the diffractive field of the concert and the lecture performance maps effects that contest the anthropocentric tendency to centre human subjects in the making of music. The reviewer of the concert listened to the music and put into words what he sensed that night. The effect of his writings as well as the effects of sunlight, of the presence of a good collegue and of the attraction and repulsion of corners during the lecture performance are decentreing human subjects in the study's music-making. The concert reviw's focus on the musicians' bodies' gestures, by coupling their instruments with their bodies, and by taking off from their instrument, as well as describing the musicians as a shared energy articulates music-making as intra-action that cannot be separated into unconnected entitites corresponding with Barad's explanation of intra-activity.¹⁹

At the concert, my plan was for my fellow alto saxophonist to enter the stage about fifteen minutes later than the rest of the musicians. My subjective reasoning was that introducing a new musician and thus a fresh musical voice at some point during the concert would establish a variety in the concert. Two days after the concert, when I read the newspaper review, I became aware that the concert being reviewed could have turned out very differently if I had kept to my plan. The protest from the electric bass player had an effect on the concert's music in a similar way as the sunlight, my good colleague and the corners had effects on the lecture performance. Both in the lecture performance and in the second agential cut the proces of music-making is an entanglement of human as well as nonhuman bodies and materialities.

CONCLUSION

In this article, I have addresssed a major urgency of the world-namely, an anthropocentric tendency to centre human subjects at the expense of both human and nonhuman bodies and materialities. On the basis of Karen Barad's theory of agential realism and her elaboration on Donna Haraway's use of the concept of diffraction,²⁰ I have researched to answer my study's question of what human and nonhuman bodies and materialities do in the study's musicmaking. In my practice as an artist, I have sensed possibilities to decentre human subjects and to be aware of bodies and materialities of both humans and nonhumans in music's becoming. In the article's study a diffractive field with saxophones as a pivotal point has been established by a lecture performance held in June 2022 at Arts in Action: Urgencies in Art and Art Education and a concert which took place at

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the *Klub Primi* venue in Copenhagen in the autumn of 2019.

The analysis based on the two agential cuts in the concert contests the anthropocentric tendency to centre human subjects in the study's music-making. If the sunlight had not suddenly poured in through the window during the performance lecture, and if my good colleague had not been present, and if the room had not had corners, the music would not have come into being the way it did. And if the alto saxophone I am playing had not wanted to get close to the microphone and play with the other alto saxophone, there would not have been this moment where the alto saxophones sound so inseparable, playing phrases like waves which boundaries are blurred. Similarly, if I had stuck to my plan and introduced my fellow alto saxophonist fifteen minutes later than the rest of the musicians the concert would have been a completely different concert.

The lecture performance and the concert decentreed human subjects, because the process of music-making sensed to be an entanglement of human as well as nonhuman bodies and materialities. There has not been much work done on agential realism and music-making on the basis of improvised music yet, so I see my work as a contribution to the growing field. With this study I aim to create an understanding of music-making as an ongoing dynamism that gives space for all kinds of bodies and materialities of both humans and nonhumans and continues to let us sense new perspectives. What the human and nonhuman bodies and materialities do in the music-making of my study contests an anthropocentric tendency to centre human subjects in the making of music by unfolding how music-making is entangled in multiple intra-acting components that we do not limit nor control.

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BIBLIOGRAPHY

- Barad, Karen, 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter.' Signs: Journal of Women in Culture and Society 28, no. 3 (2003): pp. 801–831. https://doi.org/10.1086/345321.
- —, Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham: Duke University Press, 2007.
- —, 'Diffracting Diffraction: Cutting Together-Apart.' *Parallax* 20, no. 3 (2014): pp. 168-187. <u>https://doi.or</u> g/10.1080/13534645.2014.927623.
- Bovermann, Till, Alberto de Campo, Hauke Egermann, Sarah-Indriyati Hardjowirogo, and Stefan Weinzierl (eds), *Musical Instruments in the 21st Century. Identities, Configurations, Practices.* Singapore: Springer, 2017.
- Friis, Henrik, 'Hyggelige
 klangeksplosioner [Pleasant Sounding
 Explosions].' Politiken.
 November 14, 2019. http://
 lauratoxvaerd.dk/Politiken-14-11-2019.
 pdf.
- Haraway, Donna, 'The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others.' In *Cultural Studies*, eds. Lawrence Grossberg, Cary Nelson and Paula Treichler, pp. 295–337. New York: Routledge, 1992.
- Haseman, Brad, 'A Manifesto for Performative Research.' Media International Australia incorporating Culture and Policy no. 118 (2006): pp. 98-106. <u>https://doi.org/1</u> 0.1177/1329878x0611800113.
- Hermansson, Elin, 'A Posthumanist Aesthetics of Physicality in Music. An Understanding of The Mind-Body Problem with Music by Marie

Samuelsson.' Master's thesis, Stockholm University, 2014.

- Jusslin, Sofia, Linnea Bodén, Lena 0. Magnusson, and Tone Pernille Østern, 'Post-Approaches to Education and the Arts: Putting Theories to Work in Arts Educational Practices.' Journal for Research in Arts and Sports Education 6, no. 3 (2022): pp. 1-10. <u>https:// doi.org/10.23865/jased.v6.4017.</u>
- McKinnon, Dugal, 'Materiality: The Fabrication of Sound.' In The Oxford Handbook of Sound Art, eds. Jane Grant, John Matthias and David Prior, pp. 273-286. New York: Oxford University Press, 2021.
- Østern, Anna-Lena and Sunniva Skjøstad Hovde, 'Untamed Stories Told by Artfully Creative Artists in Malawi and Norway.' In *Performative Approaches in Arts Education. Artful Teaching, Learning and Research*, eds. Anna-Lena Østern and Kristian Nødtvedt Knudsen, pp. 168–192. New York: Routledge, 2019.
- Østern, Tone Pernille, Sofia Jusslin, Kristian Nødtvedt Knudsen, Pauliina Maapalo, and Ingrid Bjørkøy. 'A Performative Paradigm for Post-qualitative Inquiry.' *Qualitative Research* 23, no. 2 (2023): pp. 272–289. <u>https://doi.</u> org/10.1177/14687941211027444.

- Øvrebø, Daniel Henry, 'Performative Arts-Based Audience Research. Investigating Experiences with High Modernist Works for Solo Flute.' Doctoral dissertation, University of Agder, 2021.
- Schøien, Kristin Solli, Bjørn-Terje Bandlien, and Anna-Lena Østern. 'In Close Combat with the Note Enemy: Shame, Empowerment, and Performative Learning.' Journal for Research in Arts and Sports Education 6, no. 3 (2022): pp. 27-44. <u>https://</u> doi.org/10.23865/jased.v6.3570.
- Southern, Jen and Samuel Thulin, 'Composing Fragmented Relations With Materials, Locations, and Archives.' In *The Oxford Handbook of Sound Art*, eds. Jane Grant, John Matthias and David Prior, pp. 471–486. New York: Oxford University Press, 2021.
- Toxværd, Laura, 'To Learn with Becomings of Graphic Notation in Music as Iterative Intra-action.' Journal for Research in Arts and Sports Education 6, no. 3 (2022): pp. 63-75. <u>https://</u> doi.org/10.23865/jased.v6.3567.
- —, 'The Winds.' With Julie Kjær, Peter Friis Nielsen, Marilyn Mazur. ILK Music, 2023. CD and digital album. <u>https://www.ilkmusic.</u> com/products/laura-toxvaerd.

ENDNOTES

- 1 Karen Barad, 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter,' Signs: Journal of Women in Culture and Society 28, no. 3 (2003): pp. 801-831, https://doi.org/10.1086/345321; Karen Barad Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning (Durham: Duke University Press, 2007); Karen Barad, 'Diffracting Diffraction: Cutting Together-Apart,' Parallax 20, no. 3 (2014): pp. 168-187, <u>https://doi.</u> org/10.1080/13534645.2014.927623; and Donna Haraway, 'The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others,' in Cultural Studies, eds. Lawrence Grossberg, Cary Nelson and Paula Treichler (New York: Routledge, 1992), pp. 295-337.
- 2 Laura Toxværd, 'The Winds,' with Julie Kjær, Peter Friis Nielsen, Marilyn Mazur, ILK Music, 2023, CD and digital album, <u>https://www.</u> ilkmusic.com/products/laura-toxvaerd.

- 3 Brad Haseman, 'A Manifesto for Performative Research,' Media International Australia Incorporating Culture and Policy no. 118 (2006): pp. 98-106, <u>https://doi.</u> org/10.1177/1329878x0611800113.
- 4 Sofia Jusslin et al., 'Post-Approaches to Education and the Arts: Putting Theories to Work in Arts Educational Practices,' Journal for Research in Arts and Sports Education 6, no. 3 (2022): pp. 1–10, <u>https://</u> doi.org/10.23865/jased.v6.4017.
- 5 Tone Pernille Østern, 'A Performative Paradigm for Post-qualitative Inquiry,' *Qualitative Research* 23, no. 2 (2023): pp. 272-289, <u>https://</u>doi.org/10.1177/14687941211027444_
- 6 Till Bovermann et al. (eds), *Musical Instruments in the 21st Century. Identities, Configurations, Practices* (Singapore: Springer, 2017).
- 7 Jen Southern and Samuel Thulin, 'Composing Fragmented Relations With Materials, Locations, and Archives,' in The Oxford Handbook of Sound

10.37198/APRIA.05.06.A12

Art, eds. Jane Grant, John Matthias and David Prior (New York: Oxford University Press, 2021), pp. 471-486.

- 8 Dugal McKinnon, 'Materiality: The Fabrication of Sound,' in *The Oxford Handbook of Sound Art*, eds. Jane Grant, John Matthias and David Prior (New York: Oxford University Press, 2021), pp. 273–286.
- 9 Elin Hermansson, 'A Posthumanist Aesthetics of Physicality in Music. An Understanding of The Mind-Body Problem with Music by Marie Samuelsson' (master's thesis, Stockholm University, 2014).
- 10 Daniel Henry Øvrebø, 'Performative Arts-Based Audience Research. Investigating Experiences with High

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Modernist Works for Solo Flute' (PhD diss., University of Agder, 2021). 11 Barad 2003, pp. 802-803. 12 Haraway 1992, p. 300. 13 Barad 2003, p. 815. 14 Barad 2003, p. 815. 15 Barad 2003, p. 824. 16 Ibid. 17 Barad 2003, p. 815. 18 Henrik Friis, 'Hyggelige klangeksplosioner [Pleasant Sounding Explosions],' Politiken, November 14, 2019, http://

lauratoxvaerd.dk/

Politiken-14-11-2019.pdf.

- 19 Barad 2003, p. 815.
- 20 Barad 2003, 2007, 2014; Haraway 1992.