

Curating Music: Understanding Material Relationality in Music Performance

Matthijs Mantel

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Student Number: 5702909
Supervisor: Dr. Rick Dolphijn
Second Reader: Dr. Toine Minnaert

Abstract

This thesis explores how a changing material relationality in music performances challenges curatorial practices in music. By analysing the artistic work of Rafeale Andrade, BUI, and Tactology Lab, I illustrate how material relations between the instrument and the performer's body, and between site and performer can be approached differently. This raises questions about how music can and ought to be curated. I aim to answer the research question: what are the curatorial implications of a changing material relationality in music performance? Drawing from relational ontology, as introduced by Karen Barad, and the insights it provided to musicology, I question the taken-for-granted dichotomies between the performer and instrument, and performer and performance site. Through the notion of somatechnics I provide an understanding of the mutual affective relationship between the performer's body and the instrument. By engaging with discourses on site-specific art and the concept of becoming-with, I introduce the notion of becoming-with-site to stress the site as an active force in site-specific music performance. At last, through theorizing curating as reality making itself, I propose to turn away from individualized and logocentric curatorial approaches. By using diffraction as a methodology I can take into account both the interdisciplinary aspects of the works discussed and my position as a researcher in relation to the research object. The analysis provides an understanding of how material relationality in music performance can impact curatorial practices. Being attentive to the way how the bodies of performers are implicated with instruments opens up new possibilities for a reality-making curatorial strategy. Through the notion of becoming-with-site it's illustrated how performances are not only referring to reality through narratives but become part of reality itself. Lastly, I argue that structuring a curatorial project as an educational project can be a way to address the material relationality in music performance.

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Introduction

Knurl is a 3D-printed and reprogrammable cello built with biodegradable materials developed by Rafael Andrade. This cello makes it possible to interact with her audience through Open Source Control, enables technological interaction between instruments, and is designed in a way that is ergonomically healthier to the performer's body. Andrade exemplifies a new generation of artists that rethinks the structure of music by rethinking the material aspects of a performance, in her case through her instrument. Her practice doesn't fit in the box of composer, musician, instrument builder, or curator; she's all these roles and none of them at the same time. During Gaudeamus Festival 2021, an Utrecht-based festival for contemporary music, she showcased the many possibilities of Knurl in the different spaces of De Nijverheid, an industrial area at the edge of Utrecht's Cartesius area. For three years I have been part of the curatorial team of Gaudeamus, and by working with Andrade and other artists, I could closely follow how this generation of artists explore new ways of performing music. Apart from Andrade, the Utrecht collective BUI, short for *Bevordering Utrechtse Improvisatie*,¹ presented a site-specific performance that took the audience on a journey in and around the De Nijverheid, and Dianne Verdonk and Roald van Dillewijn hosted Tactology Lab, a series of workshops on tactile technologies in which twelve artists could work in groups on sound installations and music instruments that were presented in the different spaces of De Nijverheid. While all these artists have their unique practices, they share a new approach to materiality in relation to music. They view the site as an active participant in their creative process, they rethink the relationship between their body and their instrument, and they seek new ways of relating to their audience. By establishing new material relations, they challenge how music can be presented and perceived.

Within the humanities, there is broader attention for material relationality. From the zeroes on a field of studies called New Materialism arose, which got wider attention within musicology and sound studies from the 10s, and has been explored by authors such as Milla Tiainen,² Marie Thompson,³ and Tom Davis.⁴ This field of research is grounded in a relational ontology that seeks to deprive the human of its privileged position. Instead of seeing subject and object, such as musician and instrument, the performance site as a passive object, or interactive installations and the audience, as distinguished categories, this approach emphasises the relationality between entities.

¹ *Bevordering Utrechtse Improvisatie* can be translated as *Supporting Utrecht Improvised Music*.

² Milla Tiainen, "Sonic Technoecology: Voice and Non-anthropocentric Survival in The Algae Opera," *Australian Feminist Studies* 32, no. 94 (2017): 359-376, <https://doi.org/10.1080/08164649.2017.1466651>.

³ Marie Thompson, "Whiteness and the Ontological Turn in Sound Studies," *Parallax* 23, no. 3 (2017): 266–282, <https://doi.org/10.1080/13534645.2017.1339967>.

⁴ Tom Davis, "Towards a Relational Understanding of the Performance Ecosystem," *Organised Sound*, 16, no. 2 (2011).

Within this thesis, I draw on these ideas, and the insights they provided to musicology, in the following of authors such as Donna Haraway, Karen Barad, and Rosi Braidotti. These scholars are not only important references within new materialism but also for the closely linked field called posthumanism. Both share a non-anthropocentric, politically engaged, and interdisciplinary approach that forms the basis for my theoretical framework. I will refer to both to support an understanding of the material relationality within music performance.

By challenging the physical circumstances of a concert, either through installation art, the positioning of the audience, the technologically advanced instruments they use, or through their site-specific approach, Rafael Andrade, BUI, and Tactology Lab raise a lot of questions on the curatorial work. What are the right venues? What are interesting places for site-specific performances, and how to relate to its communities? Are you going to move to the contested white cubes to present installations? What are the curatorial possibilities of these new instruments? Those are just a few curatorial concerns of the many questions that these new material relations raise. While there is a long tradition of reflections on presenting and contextualizing exhibitions in visual arts, the use of the concept of curating is still new in the context of music, and accordingly, scholarly reflections on curatorial practices in music are lacking behind.⁵ In 2021 Brandon Farnsworth set out a framework to understand the current state of curating in contemporary music in his book *Curating Contemporary Music Festivals* in which he draws on insights of scholarly reflections on performing arts. According to Farnsworth “Curating music, at least in the way that it has been translated in other performing arts, means a revision and restructuring of the role of artistic directors of festivals and concert venues, and a rethinking of the limits of musical practices.”⁶ In line with Farnsworth, musician and curator Heloisa Amaral shows in her 2020 essay *Producing Situations: How Performer-Curators Are Rethinking Roles and Formats* that it is not merely a translation of the ‘curator’ to the context of music, but that the practice itself is changing as well. Performers are taking the initiative to create the right context for their music more actively, which according to Amaral “denote[s] a paradigm shift from an interpretive tradition of musical performance to an understanding of performance as relational, critical and, ultimately, performative practice.”⁷ Amaral brings forward why it can be productive to use a contested concept of the curator with its long history within the visual arts, as it provides a lens to understand a changing practice. On top of that, Florian Malzacher points out that

⁵ Brandon Farnsworth, *Curating Contemporary Music Festivals: A New Perspective on Music’s Mediation* (Bielefeld: Transcript Verlag, 2020), 20.

⁶ Brandon Farnsworth, “Rethinking Institutions: Curating (New) Music,” (paper presented at Fifth Sibelius Academy Symposium on Music History, Helsinki, June 2018), 5-6.

⁷ Heloisa Amaral, “Producing Situations: How Performer-Curators Are Rethinking Roles and Formats,” *On Curating* 44 (January 2020): 29, <https://www.on-curating.org/issue-44-reader/producing-situations-how-performer-curators-are-rethinking-roles-and-formats.html>.

the concept of curating creates expectations and challenges to take up this performative task.⁸ In this thesis, I will explore the possibilities and challenges of taking up this performative task through an exploration of material relationality in music performance.

In advancing this material relational understanding of music performance, I aim to contribute to the debate on music curation. By connecting insights of the new materialist discussion on music performance to the debate on curating music, I will show how the projects of Rafaela Andrade, BUI, and Tactology Lab can challenge curatorial practices in music. My research question is: what are the curatorial implications of a changing material relationality in music performance? To do so, this thesis will address the following three sub-questions:

- How does a changing relationship between the performer's body and the instrument impact music performance?
- How can musicians relate differently to the performance site when approaching the site as an active participant?
- How can curatorial strategies address a changing material relationality and its challenges?

These questions will guide me throughout this thesis. In the first chapter, I will lay out a theoretical framework, by first going deeper into an understanding of music performance from a relational ontological understanding, to from there explore the relation between the performer's body and the instrument, the role of the site in site-specific performance, and at last, provide a curatorial lens. In the second chapter I will explore the concept of diffraction as a methodology to on the one hand understand the entanglement of interdisciplinary aspects of the individual performances, and on the other to read the insights of these performances through each other. In the third chapter, I will analyse the work of Rafaela Andrade, BUI, and Tactology Lab to illustrate how the introduced concepts in the first and second chapters can inform curatorial practices in music.

⁸ Florian Malzacher, "Empty Stages, Crowded Flats: Performative curating performing arts," in *Performing Arts and The Young*, ed. Sidsel Graffer and Ådne Sekkelsten (Oslo: Vidarforlaget AS, 2014), 117.

1. Theoretical framework

In this chapter, I will lay out my theoretical framework by first engaging with the new materialist discussion within musicology and sound studies. On that basis, I will explore Karen Barad's relational ontology, to overcome dichotomies that are at stake in the understanding of music performance. In the second paragraph, I will dive into the relationship between the performer's body and the instrument. In the third paragraph, I will explore site-specificity within music performance by emphasizing the active role of the site. Lastly, I position these discussions within curating, to show how these insights are relevant to curating.

1.1 Material Relationality in Music Performance

In their performance, BUI takes the audience on a journey around the area of De Nijverheid. During the performance, they constantly have to adapt to what's happening at the site. From honking cars, the regular visitors coming for a drink, the soldering workmen at the industrial area next to the site, challenges like distance, to natural aspects such as wind and the water. To adapt they build instruments, use their bodies to capture the audience's attention, but more importantly, they are always attentive to interventions of the site itself.

BUI does not only illustrate that making music is an active job, they also illustrate that many more actors take part in this process. Music performance is a happening in which the musicians constantly have to respond to what's happening. It is for this reason that Christopher Small conceptualized music as musicking to underline it as an active doing. He captures it as follows:

“To music is to take part, in any capacity, in a musical performance, whether by performing, by listening, by rehearsing or practicing, by providing material for performance (what is called composing), or by dancing. We might at times even extend its meaning to what the person is doing who takes the tickets at the door or the hefty men who shift the piano and the drums or the roadies who set up the instruments and carry out the sound checks or the cleaners who clean up after everyone else has gone. They, too, are all contributing to the nature of the event that is a musical performance.”⁹

Not only does Small understand music as an active doing, but also he extends the understanding of music performance by including more actors than just the musicians, composers, or the audience. Everyone who is actively taking part in constituting the performance, including the cleaners, the roadies, and the ticket seller, is musicking. Yet, Small focuses on human actors to capture music as an

⁹ Christopher Small, *Musicking: The Meanings of Performing and Listening* (Middletown: Wesleyan University Press, 1998), 9.

active process, while as BUI's practice illustrates, many nonhumans are involved as well that actively contribute to the performance. Pirkko Moisala et al. underline the relationality of Small's concept, but they expand on the concept "with the aim of diversifying the relations and processes that can be discerned within musicking. In our examples, the notion of musical performance, central to Small's approach, takes on new forms and participants, stretching beyond its more established meanings."¹⁰ This opens up the discussion of how seemingly passive material entities, such as the performance site and instruments, play an active role in the music performance.

The work of physicist and feminist scholar Karen Barad addresses the relationality of matter. In her seminal essay *On Posthuman Performativity: Toward an Understanding of How Matter Comes to Matter* she lays out a relational ontology that challenges the dichotomy between subject and object. To interfere in this subject/object relation she introduces the neologism intra-action.¹¹ Where interaction between two entities indicates certain independence and individual agency, intra-action challenges the idea that entities pre-exist as an active subject separated from passive objects, and posits an interdependent relationality. The concept challenges to think not in terms of a pre-existing subject that interacts with an object, but to see matter, including human bodies and nonhuman entities, as intra-active and thus co-constitutive and interdependently related agential forces. Humans are thus no longer the only one with agency, as she states: "'Human bodies' and 'human subjects' do not preexist as such; nor are they mere end products. 'Humans' are neither pure cause nor pure effect but part of the world in its open-ended becoming."¹² Barad focuses with the notion of 'open-ended becoming' on the process in which different entities, human and nonhuman, constantly respond to each other in an interdependent relationship. Barad's account over years got more attention within the humanities, a field in which the role of matter was often overlooked. It challenges music as a solely human practice, as laid out in Small's concept of musicking. Instead, it takes materiality into account by posing human bodies and nonhumans as not ontologically distinct and focusing on the specific ways material entities are interdependently related.

In recent years, several scholars within musicology have picked up this relational understanding to consider the role matter plays in music performance and theorise specific material relations. Milla Tiainen proposes that "the relationality of sound is not just human, but also more-than-human, and this entails notable potential with regard to understanding the ontologically co-constitutive and non-

¹⁰ Pirkko Moisala et al., "Noticing Musical Becomings: Deleuzian and Guattarian Approaches to Ethnographic Studies of Musicking," *Current Musicology*, no. 98 (September 2014): 72, <https://doi.org/10.7916/cm.v0i98.5334>.

¹¹ Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* 28, no. 3 (Spring 2003): 815, <https://doi.org/10.1086/345321>.

¹² *Ibid.*, 821.

anthropocentric aspects of reality”¹³ As such, Tiainen points out how the way sound exists in the world can’t be explained by a human centred perspective. Instead, she argues that sound exists within a web of relations between human and nonhuman entities, through her case study about algae. Algae are exceptional agents in producing sound in the context of music performance. Therefore, Tiainen’s work opens up thinking about the possibilities of nonhuman entities that play an active role in producing sound. A broader framework to understand the relationality of music performance is laid out by Tom Davis. He argues that a music event consists of interdependent human and nonhuman actors that together create “a field of possibilities for interaction: a field that crystallises or collapses into the performance through the interaction of the interdependent elements of audience, performers, instruments and environment.”¹⁴ Like Tiainen, Davis sees a music performance not as solely an act of a musician, but as a field of possibilities in which also instruments and the environment play an active role, that at the same time understands the performance as a process. This offers a broader framework that can apply to several performances. Building on the one hand further on Tianen’s specific understanding of nonhumans in the production of sound, and the other hand on Davis broader focus on instruments and the performance environment, I will, in the next paragraphs, zoom in on specific relations between the instrument and musician, and site and musician.

1.2 The Instrument and the Body

One of the motivations for Dianne Verdonk to develop a new instrument is the unsatisfying relation she has with electronic music instruments. Interfaces for electronic music instruments already largely determine the way a performer can use one’s body. For Verdonk, the search for new music instruments, therefore, is a way to build instruments that fit her body in a meaningful way.

The inseparable relationship between a performer’s body and the music instrument has been part of the daily experience of musicians,¹⁵ but theoretical understandings of these relations are still relatively new. The issue of the relation between body and music instruments fits in a larger discussion on the relation between the body and technology that has been conceptualized by Nikki Sullivan as somatechnics. The concept somatechnics is a neologism for the unification of the human as subject, and technology as an object. It thinks of the two as an interdependent and inseparable relation: “bodily-being, (...), is always already technologised, and technologies are always already

¹³ Tiainen, “Sonic Technoecology,” 371.

¹⁴ Davis, “Towards a Relational Understanding of the Performance Ecosystem,” 122.

¹⁵ Marie Thompson, “Experimental Music and the Question of What a Body Can Do,” in *Musical Encounters with Musical Encounters with Deleuze and Guattari*, ed. Pirkko Moisala et al., (London: Bloomsbury, 2017), 150.

enfleshed.”¹⁶ Herewith she explains that there is no such thing as an organic body on the one hand and ‘cultured’ technologies on the other. So many technologies that intervene in how the human body works are always already involved in daily life, such as a trivial example as the use of glasses, to more complex technologies such as contraception pills. It makes the question of where the body begins and ends rather difficult. For that reason, Sullivan argues that the body doesn’t pre-exist as such, but is always already technologised.

Within the context of music, a somatechnical understanding blurs the dichotomy between the performer and his/her instrument and thus rethinks the relation between them. Rather than considering the musician as a subject and an instrument as an object, it poses them as interdependently related. In 2017, Marie Thompson offers a perspective to rethink this specific relation by defining the relation between the body and the instrument as mutual affective relation between different types of bodies. Grounded in the same relational framework introduced in the first part of this chapter, she explains: “The human body is not ontologically distinct – it is only differentiated from other bodies (including non-human and inorganic bodies) by its dynamic and affective capacities.”¹⁷ She thus invites us to consider “the complex, affective relations that occur across and among performing human bodies, media technologies, instruments and environments.” Insisting that: “Such relations are integral to all musical practice, not just the examples considered here.”¹⁸ Through the notion affective relations, Thompson describes how relations between human bodies, but also nonhuman bodies occur. Herewith she puts the attention on the way the performer’s body is shaped by the instrument and vice versa. There is not essentially a different way of how different type of bodies exists in the world; rather they are constantly impacted by each other in a mutual affective relationship. Explaining the relation between instrument and performer bodies in terms of affect, shifts the focus to different type of questions regarding music performance. Instead of thinking about how a performer can come up with new uses of playing the cello by exploring extended techniques, it directs the attention to the affective qualities of the instrument itself; so instead of asking what an instrument is, it means asking what an instrument does or can do. This ranges from its practical possibilities of an instrument to ergonomic implications on the performer, but also to its political entanglements, as I will illustrate in the case of Andrade’s cello.

Within a study on the relationship between the performer’s body and new electronic instruments, Adam Harper illustrates how bodily norms become implicitly part of the instrument design, and thus

¹⁶ Nikki Sullivan, “Somatechnics, or Monstrosity Unbound,” *Scan Journal of Media Arts Culture* 3, no. 3, (December 2006): 2.

¹⁷ Thompson, “Experimental Music and the Question of What a Body Can Do,” 165.

¹⁸ *Ibid.*, 165.

can impact the performer's body. He shows that norms embedded in the use of traditional instruments, such as the effort and pain a virtuoso violist has to go through, were valued and reproduced in the design of electronic music instruments.¹⁹ Electronic music instruments were often frowned upon because 'just' pressing buttons was not considered as expressive, so to reconnect the instruments to the performer's bodies, a painful effort was valued. A somatechnical and affective understanding takes into account how the performer and the instrument shape and impact each other. An awareness of a mutual affective relation can therefore impact the way instruments are designed and built.

1.3 Becoming-with-site

In the '50s two historical works marked a new understanding of the role of location in music: John Cage's 4'33" and Edgar Varèse's Phillips Pavilion. The first one radically stripped a music performance to the bare bones, leaving only the relations between the performer, instrument, audience, and the site. This emphasises the site itself as an entity that, among other aspects, frames the event as music performance, and makes an audience understand the performance as such. Varèse on the other hand explored the site-specificity through what he called the fourth dimension of music: the spatial projection and the specific location of the sound itself. The specificity here does not change the way an audience understands a performance but relates to the spatial location of the sound as part of the compositional process.

These two examples show how complicated the term site-specific can be in the context of curating music. Yet, as a reference within curatorial discourse, the concept can be helpful to work towards a better understanding of the role the site plays in music performance. The term site-specific arose in the '60s as a response to the commodification of material art by making the meaning of the object specific to its site. Since then, as Miwon Kwon shows, the definition of the site has changed from referring to a physical location, to the site as a discursive vector.²⁰ The site as a discursive vector means that the experience of the work is specific to the site, such as the institutional context of the concert hall letting the audience experience 4'33" as music performance. Within the performing arts, site-specific performances became popular in the '90s, both for artistic exploration and for institutional purposes.²¹ Leaving the black box and its plush seats seems like an opportunity to leave behind contested venues with hierarchical structures between audience and performer and its

¹⁹ Adam Harper, "Out of Touch? Challenges in Reconnecting Bodies with Instruments 'of the Future,'" *Contemporary Music Review* 39, no. 2 (September 2020): 258-259, <https://doi.org/10.1080/07494467.2020.1806629>.

²⁰ Miwon Kwon, *One Place After Another: Site-specific Art and Locational Identity*, (Cambridge, Massachusetts: The MIT Press, 2002), 29-30.

²¹ Malzacher, "Empty Stages, Crowded Flats: Performative Curating Performing Arts," 122.

associated conventions, but it could lead to entering even more contested spaces such as the white cube, as Florian Malzacher points out.²² As Kwon remarks, these issues overlap: the site-specific meaning of a work is both related to an institutional context of a space and the communities involved, as well as how the site adds to the meaning of a work of art.

Kwon's ideas draw a clear outline of the rise of site-specific art, but focus mainly on the visual arts, and so doesn't fully capture the particularities and artistic challenges that are specific to music. Lauren Hayes argues therefore that the concept site-specific doesn't fully represent music practice, so instead, she uses the term site-responsive to capture her practice as an electroacoustic musician in spaces that are not developed for music experiences. She states: "Common to the plurality of practices that will be addressed is the theme that sound is produced *in response* to certain perceived attributes of a particular site."²³ As a musician, there are very different challenges in working site-specific than a visual artist or a theatre-maker. Not only the acoustics of the space but also the lack of technical facilities, limited time, or lack of knowledgeable staff are challenges you face as an electroacoustic musician, says Hayes. Also, for music there is an important difference between performances inside and outside, as Hayes also highlights: "Natural phenomena such as water and wind become improvisation partners, providing energetic collaborators to negotiate with. The unpredictable and the serendipitous make regular appearances in site-responsive performances. As improvisers, it is important to be able to respond to these scenarios, and recognise when to leave behind pre-planned ideas."²⁴ The ephemeral quality of site-specific art and performance is even increased within music performance taking place outside. It requires constant attentiveness and an open approach to interventions from the site itself.

From a new materialist perspective, the site-responsive concept is difficult to hold, as it implies the binary between the performer as responding subject and the site as a passive receiver. Therefore I want to suggest the concept of *becoming-with-site* to stress the relationality between site, performer, audience, and instrument, in which all have an interdependent relationship that co-constitute the performance. The process of becoming is always a becoming-with as Donna Haraway states: "If we appreciate the foolishness of human exceptionalism, then we know that becoming is always becoming with – in a contact zone where the outcome, where who is in the world, is at stake."²⁵ Haraway's approach of becoming stresses the relationality and the importance of nonhumans that shape the world. Understanding becoming-with together with the insights of Kwon

²² Ibid., 122.

²³ Lauren Hayes, "From Site-specific to Site-responsive: Sound Art Performances as Participatory Milieu," *Organised Sound* 22, no. 1 (March 2017): 83, <https://doi.org/10.1017/S1355771816000364>.

²⁴ Ibid., 90.

²⁵ Donna Haraway, *When Species Meet*, (Minnesota: University of Minnesota Press, 2007), 244.

underlines how the site in site-specific performance adds to the meaning of a performance, but also acknowledges how the site actively contributes to the performance. Becoming-with takes into consideration the nonhumans that make up the performance as active agential forces, but of course, also the audience is not a passive agent. Yet, discussing the role of the audience and represent the wide literature on participation falls out of the scope of this thesis.

1.4 Curatorial Lens

The primary curatorial focus of Gaudeamus is the support of the talent of musicians and composers in contemporary music. To do so we have several curatorial strategies and ‘tools’, such as setting up call for scores, co-producing performances, providing workshops with experts, initiating seminars for and with young professionals, and commissioning new works. With these strategies, we seek the right context to function as a stepping stone in their careers.

Finding the right context is one of the ongoing challenges of the curator. This context is what can be theorized through what Florian Malzacher and Shannon Jackson call performative: understanding a curated event, such as a festival, as a reality-making event. In their book *Empty Stages, Crowded Flats* they not only introduce performativity as a concept to theorize curatorial practices in the performing arts, but also as a practical suggestion for a curatorial strategy. For them the curatorial potential then lies in:

“thinking about them [the performance and curatorial work] together as different aspects of the same approach: adapting ‘theatre-like’ strategies and techniques enables the curation of ‘reality making’ situations that not only describe reality but create an awareness of their own realness. By putting the focus less on the product or the result (...) but on its own becoming, performative curating highlights liveness, the co-presence of all participants, the temporary community – all this being core aspects of most definitions of theatre and performance.”²⁶

This quotation emphasises curating as reality-producing itself. Organising a festival implies bringing together communities, involving artists, working together with venues, and relating to audiences. Jackson and Malzacher focus reality-making draws on a humanist understanding of performativity, but also state: “while definitions of performativity are numerous, often contradictory, and regularly rather vague, most are connected to a constructivist belief that there are no fixed concepts of objectivity, reality, or truth, and that everything is constructed individually, influenced by context and interaction.”²⁷ This quotation shows how they stress relationality, but without pinning too much on

²⁶ Florian Malzacher and Joanna Warsza, eds. *Empty Stages, Crowded Flats: Performativity as Curatorial Strategy*. (Berlin: House on Fire, 2017), 31.

²⁷ *Ibid.*, 30.

one firm definition of performativity. This leaves the possibility to affirmatively read their insights on curating, while also drawing on Barad's emphasis on matter. The somatechnical understanding of the performer/instrument relation and the becoming-with-site stresses how instrument and site are also important agents, besides the performers, in the reality-making process of curating.

The ramifications and possibilities of focusing on instruments and site in a reality-making curatorial strategy are endless. The relation of the performer with their instrument is also very personal, so taking up this performative act should be handled with care to prevent an individualized account of the curator, as often the case in curatorial discourse, as Elke Krasny, Lara Perry and Dorothee Richter point out.²⁸ Malzacher on the other hand states: "The phantom of the *über*-curator, boldly creating his own piece out of other people's artworks, is not to be feared in the performative domain anyway. On the contrary, there is rather a lack of courage for imparting meaning at all – and not least because of modesty, but out of being afraid of the task."²⁹ Taking into consideration nonhuman agency within curating has been criticized as well, as Nanne Buurman warns for "contradictions between the post-humanist stance and the focus on the lives of the artists, or between the critique of logocentrism and the strong role played by texts."³⁰ A performative curatorial strategy that takes into account material relationality, should therefore address the active force of matter not through text, but by direct representation. Within music performance, one such way is taking into account how the instrument and the performance site are not passive entities but actively co-constitute the music performance with the performers and audience.

²⁸ Dorothee Richter, Elke Krasny, and Lara Perry, "Editorial," *On Curating* 29 (May 2016): 2, <https://www.on-curating.org/issue-29.html>.

²⁹ Malzacher, "*Empty Stages, Crowded Flats: Performative Curating Performing Arts*," 126.

³⁰ Nanne Buurman, "Angels in the White Cube? Rhetorics of Curatorial Innocence at dOCUMENTA (13)," *On Curating* 29 (May 2016): 149, <https://www.on-curating.org/issue-29.html>.

2. Methodology: Diffraction

In this chapter, I will lay out my methodology to analyse the work of Rafaele Andrade, BUI, and Tactology Lab from a curatorial lens. I will build further on Mieke Bal's thesis that "interdisciplinarity in the humanities, necessary, exciting, serious, must seek its heuristic and methodological basis in *concepts* rather than *methods*,"³¹ by exploring Haraway and Barad's concept diffraction in the context of cultural analysis. Diffraction, a phenomenon within physics, is mostly used as a methodology to read different insights in philosophical texts through each other.³² I will use this concept to analyse video, text, sound, and other materials, code interviews, and understand the insights of the different cases through each other.

2.1 Interdisciplinary Approach

The work of Rafaele Andrade, BUI, and Tactology Lab each show different aspects in which they are related to the material world. When taking into consideration how human bodies and instrument bodies have a mutual affective relationship, it touched on multiple disciplines. The functioning of Knurl can't be explained with mere insights from musicology, as also artificial intelligence, ergonomic concerns, and the used materials play a role. But not only the individual cases are interdisciplinary, but also the three cases together show different insights to curating. The complexity of these cases touches on Rosi Braidotti's concern with the humanities: "The idea of the 'Human' Implied in the Humanities, that is to say the implicit assumptions about what constitutes the basic unit of reference for the knowing subject, is the Vitruvian model."³³ Herewith she explains that too often the knowing subject within the humanities is not challenged, as often the white heterosexual man has been taken as default. To challenge this bias, she proposes a new approach to the humanities which steps away from the human as a universal reference. To escape this limited and problematic centring of the human within the humanities, she proposes to "reshape the identity of humanistic practices, by stressing heteronomy and multi-faceted relationality, instead of autonomy and self-referential disciplinary purity."³⁴ To do so, new methodologies and mechanisms for knowledge production have to be developed that take into account the relationalities between humans and nonhumans. In line with Braidotti, Mieke Bal offers with *Travelling Concepts in the Humanities* a guidebook for interdisciplinary cultural analysis in the humanities. Bal underlines the

³¹ Mieke Bal. *Travelling Concepts in the Humanities: A Rough Guide* (Toronto: Toronto University Press, 2002), 5.

³² Iris van der Tuin, "Diffraction as Methodology for Feminist Onto-Epistemology: On Encountering Chantal Chawaf and Posthuman Interpellation," *Parallax* 20, no. 3 (July 2014): 234, <https://doi.org/10.1080/13534645.2014.927631>.

³³ Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013), 143.

³⁴ *Ibid.*, 145.

use of concepts as the basis for heuristics and methodologies in interdisciplinary research within the humanities.³⁵ While the object of study has changed, the method often did not,³⁶ and so the use of concepts as a methodology can be an answer to take into account the different disciplinary insights. “Concepts play a crucial part in the traffic between disciplines because of two consequences of their power to propagate, found and define an object domain: they capture, in a conflation of epistemology and scientific practice, the scientificity of the methodology they ground; and moving in the opposite direction, they ‘harden’ the science in question by determining and restricting what counts as scientific.”³⁷ Thus, a concept-based methodology can help to shift from different insights and to ground the complexity of phenomena.

2.2 Diffraction

In line with Karen Barad’s relational ontology, I will use diffraction as a concept-based methodology. The diffraction offers a productive way of rethinking curating because it is both a methodology as well as offering a theoretical explanation. Diffraction as a concept was first introduced by Donna Haraway in 1997 in response to reflection: “Diffraction is an optical metaphor for the effort to make a difference in the world.”³⁸ Diffraction in physics, simply put, is the phenomenon that occurs when light, sound, or water waves interfere causing new patterns. Imagine for example a pool in which two rocks are dropped. The rocks will create waves in the water, that at some point will also interfere with each other, creating again new patterns in the water. The patterns seen in the water create new patterns. Karen Barad builds further on this phenomenon and the suggestion of Haraway to propose diffraction as a methodological practice “of reading diffractively for patterns of differences that make a difference.”³⁹ Just like the rocks, reading diffractively seeks those patterns that again create new patterns. But more than that, the method “allows you to study both the nature of the apparatus and also the object.”⁴⁰ This method emphasizes the reading for patterns that makes a pattern, so it not only analyses the phenomena, but also the nature of it. Coherent with the relational ontology that grounds Barad’s work, subject and object cannot be seen as separate categories; so also a method should take into account the subject position of the researcher, as this is always already related to the object of research.

³⁵ Ibid., 5.

³⁶ Ibid., 7.

³⁷ Ibid., 34.

³⁸ Donna Haraway, *Modest_witness@second_millennium.Femaleman_meets_oncomouse: Feminism and Technoscience* (New York and London: Routledge, 1997), 16.

³⁹ Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews and Cartographies* (Ann Arbor: Open Humanities Press, 2012), 49.

⁴⁰ Ibid., 52.

More than considering one's subject position, it assumes an interdependent relationship in which the researcher will also affect its research object and the other way around. Instead of reflecting on the researched phenomena, and thus mirroring what is already there, diffraction seeks to “circumvent and provoke change.”⁴¹ As such, my relation to these artists is more than just research. Through my work at Gaudeamus, I have been part of the curatorial process. My position, therefore, is not neutral, as my understanding of their work came forth out of close collaboration during my working practice and will also affect future collaborations. This thesis will diffract my curatorial practice, in the sense that what I am learning from these artists, from these theories, from the instruments, technologies, and spaces will shape my practice. Within the process of this research, I aim to build further on what I learned, and because of this, it might also affect them, as, most likely, I will keep on working with these artists. Diffraction allows my research to exist as a dynamic interdependent relationship between myself as a researcher and the research object, rather than a static, one-way relationship.

2.3 Interviews and Other Materials

The primary source for my analysis is the interviews I conducted with the artists. I interviewed Rafaela Andrade in August 2021 at her rehearsal space in The Hague where she also showed me the different prototypes of Knurl and her 3D-print set-up. In the last week of August, I interviewed the members of BUI altogether at De Nijverheid during their last residency week. In September, I interviewed Dianne Verdonk and Roald van Dillewijn at De Nijverheid while the artists were setting up their installations. The conversations lasted between 60 and 75 minutes, and during this time I discussed their performance, working methods, and artistic goals. The interview with Rafaela Andrade was conducted in English, while the interviews with BUI and Dianne Verdonk and Roald van Dillewijn were conducted in Dutch. The translations of the quotations in this thesis are my own. Apart from the interviews, I took field notes during the curatorial process, the performances of BUI and Andrade, and my encounter with the installations of Tactology Lab. At last, I will use materials produced by the artists themselves, such as their websites and earlier interviews.

Diffraction demands a specific approach in the encounter with interviews and other materials, as Hellevi Lenz Taguchi points out that a reflection is always to interconnect with something.⁴² This means that “instead of identifying differences from or between bodies to produce codes and categories, thinking diffractively is a process of interference and overlapping.”⁴³ Following, I will use

⁴¹ Iris van der Tuin, “Diffraction” in *Posthuman Glossary*, ed. Rosi Braidotti and Maria Hlavajova (New York: Bloomsbury, 2018), 100.

⁴² Hellevi Lenz Taguchi, “A Diffractive and Deleuzian Approach to Analysing Interview Data,” *Feminist Theory* 13, no. 3 (December 2012): 272, DOI: 10.1177/1464700112456001.

⁴³ *Ibid.*, 272.

quotations of the artists that illustrate that the different aspects of the performances, which often interfere with each other, happen at the same time, or are in a way entangled, instead of presenting the analysis in separate categories and topics.

3. Analysis

3.1 Rafaela Andrade – Knurl

Rafaela Andrade is a cello player, composer, instrument builder, and conductor and has worked on Knurl throughout recent years. Knurl is an interactive solar-powered cello built with biodegradable materials. Andrade studied composition and conducting in Brazil, continued her studies in Leipzig, and ended up in The Netherlands to study Sonology and New Audiences and Innovative Practices at the Royal Conservatory of The Hague. In the meantime, she made her 63rd version of Knurl in collaboration with a team of coders, technicians, and instrument builders. Rafaela Andrade showcased the many possibilities of Knurl during Gaudeamus in three different collaborations. *This isn't solo* is a collaboration between Rafaela Andrade, Sabrina Vernhage, and Germán Greinier, that uses a digital interface on the audience's smartphone that enables control and manipulation over Knurl. *A Classic Trio* is an improvisation between CodeKlavier (Felipe Noriega and Anne Veinberg) and Knurl that transfers music into code language that allows communication between the different instruments. *Riffs Battle* is a battle between two hybrid instruments, Banjelo, an augmented Banjo using Bela technologies,⁴⁴ and Knurl, in which the musicians explore the cultural heritage of their instruments through new technological means.



1: Rafaela Andrade performing with Knurl at De Nijverheid. Photograph by Paulus van Dorsten.

⁴⁴ Jonathan Reus, "Hacking the Five-String Banjo: Re-imagining the Banjo with Bela and Supercollider," *Bela (blog)*, June 5, 2020, <https://blog.bela.io/hacking-the-banjo/>.

3.1.1 Knurl

Knurl is “sort of a cello”⁴⁵ as Andrade names it, but more often she refers to it as a tool. A tool that allows her to express herself as she likes, which means resetting the relationship between the tool and what she wishes to express or enact: sustainability, shareability, and interaction are the building blocks of her artistic expression. Accordingly, the name Knurl is derived from *knurling*, a metal surface pattern to provide more grip. It refers to “the apprehension involved in human body movement, from the friction on the performer’s knees necessary to change the position of the instrument in relation to their body.”⁴⁶ But “It was also inspired by the way crickets grip their legs on a knurling surface to produce ‘energy.’”⁴⁷ The name already shows the multifaceted aspects of Knurl that discover the relation between technology and the human body, while at the same time taking into account environmental issues. This is reflected both in its materiality by using compostable recycled PLA materials, and through its interface, designed by live coders, that makes Knurl reprogrammable in real-time which allows for collaborations between live coders, other hybrid instruments, and audience. The instrument is hybrid in electroacoustic terms, which means that it allows for both electronic and acoustic output.

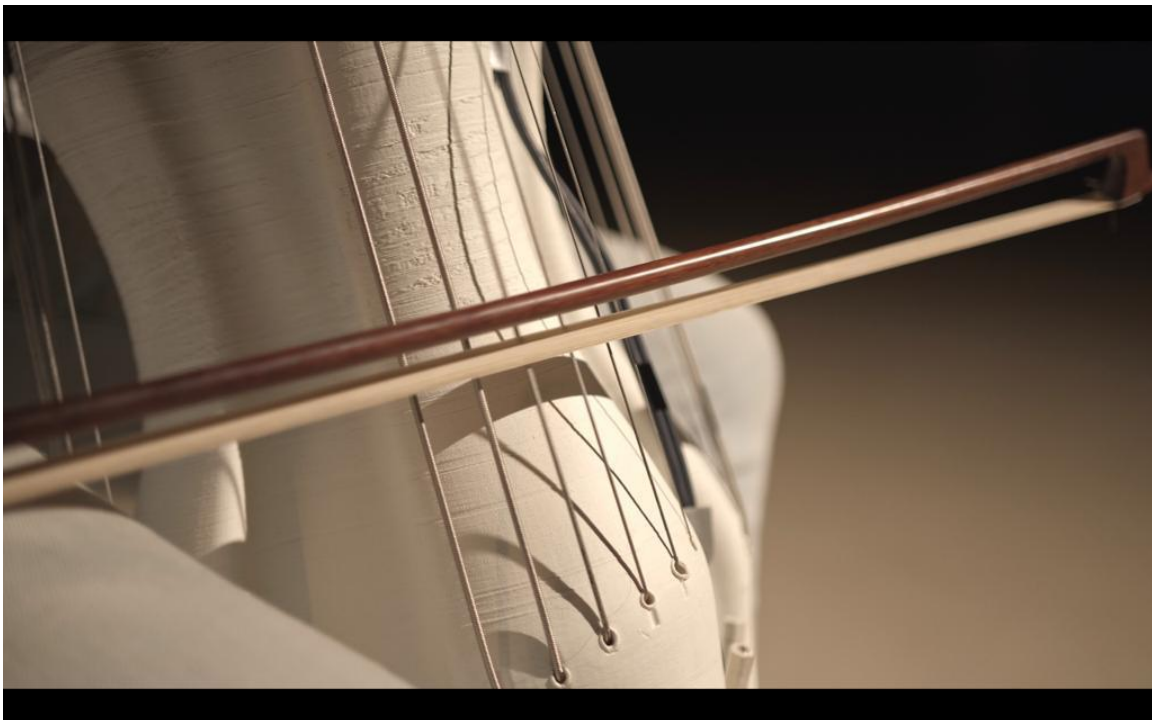


Figure 2: Close-up of Knurl. Photograph by Francesco Enriquez.

⁴⁵ Rafael Andrade, interview by author, The Hague, August 25, 2021.

⁴⁶ Rafael Andrade, “Knurl: Reimagining the Cello with Supercollider,” *Bela (blog)*, April 23, 2020, <https://blog.bela.io/knurl-hybrid-cello/>.

⁴⁷ Ibid.



2. Close-up of Knurl. Photograph by Francesco Enriquez.

The relation between Knurl and Rafaela Andrade's body has different dimensions. The design of Knurl starts with an ergonomic concern, that's at the same time an artistic concern, as she explains:

"because I'm a cellist, I learn to use my body to express in a certain way. And I think when you're designing tools you should have this concern about ergonometic. Imagine that people can use their bodies differently for their purpose. Because in a cello, again a very direct example, usually you're stuck. You have to be on the ground, sitting, your spine just turns around 40 degrees, and that's all. At the end of your life, your body is completely broken."⁴⁸

So, while at the same time a cello limits a way of performing and dramaturgic possibilities, it affects your body which causes severe issues at a later age. She adapts to these concerns, as she explains:

"I am doing a standing version of Knurl, so that I don't have to sit. That's a very good thing already, that allows me also to have all the possible ways of using my spine. Also, the way of

⁴⁸ Andrade, interview.

sitting allows me to use my spine just a little bit more and it also rotates. And because I'm using motors to rotate, I don't have to use the bow all the time."⁴⁹

So Knurls allows her to redefine the physical relation between the body and the instrument: how her body can perform with the instrument and the other way around how the instrument affects her body. Attending to these material-affective relations with the body of the instrument she is developing, Andrade has been incorporating her learnings in the many versions of Knurl designed in the last years.

This materialization goes further than only the use of a body for artistic and ergonomic concerns. Also, the heritage of the instrument and its cultural uses can be adapted materially. One of the reasons why she sometimes still plays her older cello is the string spacing, the distance between the different strings. But to adapt this particular fingerboard set would "destroy my idea of using the circle of harmonics in the cello."⁵⁰ So instead, she shifted her focus to temperaments and different tuning systems: "There are so many temperaments of different cultures to explore, and to divide your 5ths in a same proportion is to lose the opportunity to explore colour, expression and cultural heritage."⁵¹ "It never came [to] my mind to explore better microtonality, until the end of December 2020 [for] a specific reason: using 32 faces gives me the exact possibility to work the standard string spacing of a cello with the body ratio that I am currently working on (0.73 in the head, 1.6 in the bridge)."⁵² By 32 faces she means the number of sides of the polygon shape of Knurl. The shape of the instrument is grounded in a physical motivation to adapt the instrument to her body and to make different tunings possible, her approach is entangled within political issues: "Microtonality has been always present in cultural music but it seems during the development of our civilizations that the Pythagorean system took it over to make music education accessible and understandable to everyone. We are nowadays not educated to listen [to the] difference between halftone[s]."⁵³ This illustrates how Andrade herself is affected by hegemonic ways of thinking, as she explains how in an early stage it didn't come to her mind to step away from the Pythagorean model, as it is standard for music education. So, the awareness of how an instrument limits the possibilities and pushes you towards historical hegemonic models can be the starting point to rethink what tool you need that both fits your body, to express yourself as you like. The three performances showcase Knurl's

⁴⁹ Ibid.

⁵⁰ "Format," Rafeale Andrade, accessed January 25, 2022, <https://www.knurl-lab.in/projects/knurl/project-journal/general-format>.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

possibilities, and based on that I will illustrate the way it materializes values and new possibilities in staging music performances.

3.1.2 Performances

Riffs battle

Riffs Battle is not only a confrontation between the instruments Knurl and Banjela, but also an exploration of cultural traditions. While for Rafele Andrade, Knurl is a way of leaving a cello's reference to its classical tradition behind,⁵⁴ for Jonathan Reus his Banjela is a trace of the materially embodied traditions of the instrument and a way to let these traditions coexist. He explains that the banjo can't be seen apart from its rich history that stems from Winti rituals: "the word bania is actually not an instrument at all, it's a whole ritual, it's a Winti ritual that involves dance, music, ancestor worship and all of these things."⁵⁵ The history of the banjo follows colonial history through Surinam and its role with steel strings in North-American folk music. The social traditions that came with the instrument are shown in the different ways of using the instrument. Jonathan's technological approach to making digital music is grounded in the "materiality, sociability, and egalitarianism" of the instrument.⁵⁶ It is an augmented banjo, in the sense that it seeks to embody the different versions that existed within different cultural versions through technological means. He aims to "further explore an extended sonic language for the banjo that carries with it a sense of multi-temporality. Making it possible that the multiple music histories of this instrument can co-exist and perhaps project towards the future."⁵⁷ Similarly, but approached from a different angle, Andrade aims to materialize new traditions: "With a cello you bring a whole historical reference; when you think cello, within a second you think Bach. (...) Knurl allows me to bring different references on stage, human values, like sharing, interacting, accessibility."⁵⁸ Although still drawing on her skills as a cellist, using a new tool on stage leads to different outcomes. The musical possibilities realised through technological means in this performance are enacted within the instruments themselves, rather than through communication between instruments or audience:

"with Jonathan... we have basically the same idea, to approach cross-relationships or code, but between the instruments. So there is way more eye contact. (...) We want to explore what the heritage of these instruments means to us. In this performance, we are working

⁵⁴ Andrade, interview.

⁵⁵ Forecast, "Jonathan Reus, Celestial Fruit on Earthly Ground," Facebook, October 20, 2020, <https://www.facebook.com/forecast.platform/videos/2771526043105717/>.

⁵⁶ Reus, "Hacking the Five-string Banjo."

⁵⁷ Ibid.

⁵⁸ Andrade, interview.

with riffs. He gives me a riff, and I interpret as I want, or repeat and we are basically communicating between riffs. So it's pretty fun."⁵⁹

So while their technological approach to their instruments leads to extended possibilities, the way of communication is still 'traditional,' compared to the other performances where live coding plays a bigger role in communication between instruments, and between audience and performer. The augmented and hybrid technologies create possibilities to express new musical ideas or to integrate different traditions.

This isn't solo

For the piece *This Isn't Solo* Sabrina Vernhage, Germán Greinier and, Rafaele Andrade built a digital interface that the audience can access through their smartphone. When entering the interface the user is sorted into a group. In total there are four groups, each with a different colour and shape. Through the interface on one's smartphone, each audience member can create a figure and modify its form and shape, to send it to Knurl. Through Open Source Control (OSC) Knurl can receive and respond to the figures. Each group has different capacities so the shape that I could send could either make a sound or change the instrument's timbre. Several challenges come with this way of audience interaction. It is a way of giving away control as a musician, so how do you make sure it won't create chaos? It's finding a balance between how much control you give to the audience and taking your audience seriously. It's a vulnerability that's also valuable, as Andrade puts it: "Any artist who attempts to deal with unpredictable factors (including physical and emotional situations) needs mechanisms of support that allows a healthy relationship between its audience."⁶⁰ This is shown by the connection established between the performer, the space, and the audience. As part of the audience, I listened differently as I became more attentive to hear how I affected Knurl. I also paid more attention to the rest of the crowd to see if I could find people from my group to send instructions to Knurl together. By having this tool audience and performer become more attentive to each other. It created a different experience that displayed other values such as vulnerability and shareability through a new dynamic in hierarchies between composer/performer and performer/audience.

Audience participation has always been a long interest of Rafaele Andrade, and so she's interested in an active role of the audience. As for everything, her approach starts with redesigning the tools, because to her new tools lie at the origin of new ideas: "Like every time we have a new study, project, or an initiative in science, in the scientific world, there is always a tool behind it. Making a

⁵⁹ Ibid.

⁶⁰ "Audience Engagement," Rafaele Andrade, accessed January 27, 2022, <https://www.knurl-lab.in/projects/audience-engagement>.

new tool means introducing means having a new way of working, making and, thinking.”⁶¹ It shows the immanent enfolding of technology and subjectification, which is reflected in Knurl. The tools allow for new ideas, and new ideas rely on the tools.



3. Audience interface to manipulate Knurl in *This Isn't Solo*. Photo by Paulus van Dorsten.

To think of new tools for audience interaction, and approaching this relation differently, can reset what it means to be a listener: “I like to imagine that new tools can give you new possibilities to be a listener.” So rather than asking how she as a performer can interact with her audience, she thinks of what tools or ideas she can give the audience to listen. She explains her approach to how the artificial intelligence of Knurl is programmed as follows:

“In the end, you learn to listen and learn to give space for the sounds around you. Because sometimes it feels like technology is more a thing, like an extension of you. But as we were talking it’s more about understanding the surroundings, interpreting what people are saying and how generally people are thinking. (...) So actually the machine gives you certain sounds that you repeat or that you interact with, and then the machine repeats or interacts and you

⁶¹ Andrade, interview.

go together somewhere. I think this would be a pretty nice exploration or path for using or talking about it in music.”⁶²

This approach also indicates the performance as a process of becoming-with in which audience, performer, instruments, and the site are interdependently related and are in constant dialogue. This awareness of Knurl's relation to the site is also reflected in the design:

“200 years ago it was amazing to have such a louder instrument for a chamber that was like, 20 by 20 meters. But nowadays, look where we are, we always use rooms that are very small (...) So is it necessary to have a loud instrument? (...) you are depending on multiple products and multiple workflows, philosophies, multiple tools that are designed for one purpose. And sometimes they don't match. Most of the time they are different, and this can give you a lot of stress. Because when you go to another space, and you have a certain amount of hours to make everything ready, it can be really harmful.”⁶³

This is an issue commonly recognized by musicians in electro-acoustic music, as Hayes states in her article on site-responsiveness.⁶⁴ The pragmatic circumstances of different sites, ranging from the difficult set-up of electroacoustic music, the different acoustics, to the lack of knowledge of technicians of the venue makes that the electroacoustic music practices always become site-responsive acts, as Hayes argues. But in the way Andrade approaches this, her instrument allows her to become with-site, as it is a continuous process of interacting between the performer, the instrument (as AI), the site itself, and the audience.

Classic Trio

Within the performance *Classic Trio* Andrade collaborates with creative coder Felipe Noriega and pianist Anne Veinberg on CodeKlavier. This collaboration allows for different forms of communication between the instruments through coding. The CodeKlavier is a piano that functions as an interface to send code through OSC to Knurl. Andrade, states in a blogpost for Bela: “The different performance modes (...) manipulate the sound through live processing and more musical compositional methods that relate to piece structure.”⁶⁵ This becomes more clear with an example of an earlier performance she gives in the interview:

“We [Rafaele Andrade and Timo Hoogland] were collaborating in each other's programs. So I was sending data to him through everything I was playing, frequencies and amplitudes. I was

⁶² Andrade, interview.

⁶³ Andrade, interview.

⁶⁴ Hayes, “From Site-specific to Site-responsive,” 87.

⁶⁵ Andrade, “Knurl: Reimagining the Cello with Super Collider.”

sending through OSC messages, and he was sending me like a code, exactly like how he writes it. He gives a name of a synth, for example, *ambiance 1*, so it means ambiance, the synth, turns on. So he was triggering things and changing parameters. I was on my side giving him data, that he could use for his live code synthesis.”⁶⁶

This illustrates how creative coding can work with Knurl, as illustrated by the collaboration with creative coder Timo Hoogland. In the performance with CodeKlavier Andrade brings this form of communication even further. She calls the collaboration with Veinberg and Noriega a “deep way of thinking communicating in instruments. Because they developed their system in a way that music *is* a language.”⁶⁷ This means that what Anne Veinberg plays on the CodeKlavier is transferred into data that can be received by Knurl. Veinberg and Noriega have a similar goal as they seek for an embodied electronic music performance, as they explain: “Our project aims to take advantage of the pianist’s embodied way of making music and apply this to the act of coding, observing how this embodiment impacts the produced code and similarly, how the requirement to code whilst playing influence the music.”⁶⁸ So by making the piano itself an interface there is a constant interaction between the performer and the instrument, but now taking it further also between the two different instruments. Approaching code from an interdisciplinary perspective, by directly transferring code into sound, makes the rhythm of writing the code audible.



4. From left to right: Anne Veinberg performing with CodeKlavier, Rafaele Andrade performing with Knurl, and Felipe Noriega coding on his computer. Photograph by Paulus van Dorsten.

⁶⁶ Andrade, interview.

⁶⁷ Ibid.

⁶⁸ Anne Veinberg and Felipe Noriega, “Coding with Piano the First Phase of the CodeKlavier’s development,” *International Computer Music Conference Proceedings*, 2018, 1.

3.2 BUI

BUI is a Utrecht-based collective started in 2017 in support of the Utrecht improvisation scene by hosting free play sessions in the venue and exhibition space Moira. These free-play sessions became a breeding ground for new collaborations leading up to BUI forming a performing collective as well. As a collective, they stand out in their interdisciplinary approach. The members share a background in improvised music, but they all bring in expertise from different disciplines. The collective is formed by Elsa van der Linden (saxophone, scenography), Mees Siderius (percussion, composer), Lucas Kloosterboer (trombone, literature), Koen Boeijinga (saxophone, composer), and Rogier Hornman (cello, circus). Since 2019 they host the *Onderbuik*, a rehearsal and community space for over twenty Utrecht musicians, located in one of the old bunkers of Utrecht.

In 2020 Gaudeamus invited BUI to develop, in the context of the Corona pandemic, a walking concert around the site of Amelisweerd. This formed the start of a one-year residency in which they had the opportunity to work on individual projects and learning goals and develop a new site-specific performance, resulting in the *Listening route along the Nijverheidskade*. This performance was part of the *In Situ/City* project, an international curatorial project conceived as a collaborative effort of the Ulysses Network, a network and platform consisting of eleven different festivals and ensembles in contemporary music across Europe, among them IRCAM, Ultima, and Gaudeamus. Within *In Situ/City* five different festivals reflected on their urban context by “putting young artists squarely in the middle of various European social contexts and creating closer relationships with European citizens. The city – with all that it implies from a historical, cultural, political and social perspective – will be the focal point of these activities.”⁶⁹ Within this context, BUI reflected on the Cartesius area in Utrecht, a fast-changing and gentrifying neighbourhood. Apart from the context of *In Situ/City*, they had a *carte blanche* in their approach.

3.2.1 The performance

The performance starts with a performer, Diederik van Rijsewijk, placing a big rock in front of each member of the audience, twenty in total, and handing each one a small stone. After everyone received their stone van Rijsewijk collects the rocks and carries the full physical weight in a bag. Following him, we leave the area of De Nijverheid passing a parking lot where during the day a lot of men hang around. We continue our walk over the decks across the canal next to De Nijverheid, passing empty bottles of liquor and excrements. Arriving across the area of De Nijverheid, van Rijsewijk spreads out the rocks indicating the audience’s position, standing in a line opposite of De

⁶⁹ “In Situ/City: Utrecht – Life of the City,” Ulysses Network, accessed January 27, 2022, https://project.ulysses-network.eu/event/insitucity_utrecht/.

Nijverheid. Here we get slowly accustomed to the playfield of BUI with a nice view on the stage set. Then, we see Koen Boeijinga, Elsa van der Linden and Lucas Kloosterboer appearing each on top of one of the small towers at De Nijverheid to perform together, before Mees Siderius and Rogier Hornman start playing woodblocks, accompanied by some soldering workmen on the workplace next to De Nijverheid.



5: Koen Boeijinga performing at one of the towers of De Nijverheid. Photograph by Herre Vermeer.



6: The audience placed at the decks opposite of De Nijverheid. Photograph by Gwen Sierra.

After some time, we return to the parking lot, welcomed by some honking cars, to see a duo performance by van Rijsewijk and Hornman, also commented by the people hanging around at the parking lot with exclamations like “Is this art?”. Van Rijsewijk dances through audience members, while Hornman plays cello responding to his surroundings, sometimes joined by arriving cars that turn around the moment they see the crowd. The performance continues, and while walking back to De Nijverheid, Siderius and Boeijsinga perform on respectively a lantern and a soprano saxophone in a bowl of water; exploring the sound worlds the space has to offer while also shifting the audience’s attention to the location itself.



7: Diederik van Rijsewijk leading the audience back to De Nijverheid after his performance with Rogier Hornman. Photograph by Herre Vermeer.

While entering De Nijverheid, we also join the regular crowd of De Nijverheid that just came to have a drink at the terrace. Passing the terrace we arrive at a boat, that was formerly a prostitute boat from the Utrecht Red Light District *Het Zandpad*. Here we hear the whole ensemble performing together. Although this might be the most concertante part of the performance, it’s here where the space becomes ‘alive’ by using all the physical elements the space has to offer. From left to right on the photo below you can see Lucas Kloosterboer reciting poems in a self-made language, Elsa van der Linden on a construction of a PVC with contact microphones amplifying the splashing water, Rogier Hornman jumping in the water to play the flute while swimming, Koen Boeijsinga on different

saxophones prepared with a.o. bowls of water, while Mees is invisibly playing a remotely controlled drum machine around the boat. After this, the performance finishes with a cathartic ritual in which Koen Boeijinga and Elsa van der Linden play a soothing soundscape while circling three times around the boat, to end up where we started with one last piece to end the performance.



8: The 'concertante' scene around the former prostitute boat of *Het Zandpad*. Photograph by Gwen Sierra.

3.2.2 Creative Process

Although site-specific performances in music are not as common as they are in theatre, what's so special about this one? What's special about this, is how the site itself continually intervenes in the performance. The collective is in a constant conversation with the site, but always with respect and interest for what's already there. By doing so, they blur what's part of the performance and what's not. To illustrate how they become with the site, it's helpful to understand their working method.

BUI had sixteen days to work on the performance on-site. In May, they could work in total eight days at the location to do research and make the first draft for their performance. In September, ahead of the performance, they could work another eight days on location to try out and implement their ideas. One of the reoccurring themes in the conversation I had with them on their work is the interdisciplinary approach and their shared authorship. While in their previous performances different scenes could feel like individual projects, in this performance they integrated their different backgrounds into a whole. This shows for example in the piece around the boat when they turn the

boat into an instrument, as van der Linden explains: “I brought seven contact microphones to the rehearsal. A set-up with which you can record sound through an object. Mees and Lucas picked up on this and started to experiment with the installation. In the end, it resulted in a remotely controlled drum machine in which all sorts of different skills from the collective are reflected in a sound installation.”⁷⁰ This is an example of how the combination of their individual skills are integrated in one sound installation.



9: A snare drum that can be remotely played. Photograph by Gwen Sierra.

But the need for an interdisciplinary approach also works the other way around, when physical circumstances push them to work together. As opposed to a regular venue, they can't hear what they're doing themselves. As Kloosterboer explains one of the challenges such a space gives you when experimenting:

“When Mees and I were playing woodblocks with a synchronized metronome... I stood there and he was standing over there, and the others had to listen from the other side. We have no idea how we sound and we also never will know. We have to rely on that it sounds good, but it makes intentionality a strange thing. (...) I will play with full conviction, but I don't know what I'm doing with full conviction.”⁷¹

⁷⁰ Elsa van der Linden, interview by author, Utrecht, August 26, 2021.

⁷¹ Lucas Kloosterboer, interview by author, Utrecht, August 26, 2021.

This shows that working with the site is a constant process of becoming, as Kloosterboer from his point of view doesn't know what he is exactly responsible for. As such, what he does is immanently intertwined with the site and the rest of the collective. There is no other option than to discard individuality, or as Siderius captures it nicely: "Everything goes to the filter of the collective."⁷²



10: Koen Boeijinga and Mees Siderius, hidden from the audience, playing with Lucas Kloosterboer (not on photo) by listening to the same click track. Photograph by Gwen Sierra.

BUI's aesthetic is rooted in their goal to blur the boundaries of genres and improvisation that is grounded in a relational understanding of music performance. The free-play-sessions, that formed the start of their collective, were not only aimed at supporting the local scene, but also in giving the scene an identity: "We felt the need to give a face to what Utrecht is, and part of that is that a sort of a genre arises in which a lot is possible,"⁷³ so Siderius explains. This urge to both create a community and to find their musical language comes from their understanding of what performance should be. "There's a cloud and everyone who sees the performance is part of this cloud. That's the performance, and both the performers and the audience create the full experience."⁷⁴ Here they already touch upon the relationality between audience and performer in a process of becoming, as the performance is constituted by both the audience and the performer. The notion of 'cloud' is still

⁷² Mees Siderius, interview by author, Utrecht, August 26, 2021.

⁷³ Ibid.

⁷⁴ Ibid.

a humanist understanding of the performance, that resonates Christopher Small's concept of musicking. But this idea of the cloud is also reflected in their site-specific approach. It starts with taking the audience more seriously, as Hornman explains: "There is a trend going on, also within other art forms, in which the audience is taken much more seriously."⁷⁵ At the same time as this motivates them to redefine their relationship with their audience, it also motivates their interdisciplinary approach: "I think that we want to bring the sound to ears of the audience, instead of using dramaturgy as a frame to communicate something."⁷⁶ Practically, they seek different approaches, which means that "we don't necessarily take the standard concert setting for granted. It means that we don't accept that there is only one way to bring music to your audience. So we think that what you want to communicate to or make with the audience, is also dependent on the whole setting on how they will perceive it."⁷⁷ This illustrates that they take into account how meaning is produced in relation to the site. Just playing music is not enough to convey a message, as what the audience will perceive or contribute themselves gets meaning in the process of becoming-with-site. In that sense, they're not seeking to create an explicit narrative. "I think that much music out there is meant to let you dream away and escape your daily life. I don't think we do that, we create a reality that exists next to reality, that makes part of that reality and partly refers to the other reality."⁷⁸ The way their performance is part of reality is reflected in their performance by the direct involvement with the site, when the men at the parking lot or the visitors intervene and become part of the performance. As they are constantly in dialogue with the forces at the site, their performance is reality-making itself. This is also how they see the narrative of their performance:

"What's nice is that we don't necessarily need a societal concept, but that space itself is the concept from which we work. I find that pleasant, as we don't have to link the performance to the narrative or have to convey a message; we already know that sounding the space as good as possible is already the strongest message that can touch the most."⁷⁹

As their performance is part of the world, it already creates a narrative through its relation with what is happening at the site. Although narratives on gentrification are not intended, they are inescapable through the contrast between what's happening at the parking lot just and the vibrant terrace of De Nijverheid.

⁷⁵ Rogier Hornman, interview by author, Utrecht, August 26, 2021.

⁷⁶ Ibid.

⁷⁷ Siderius, interview.

⁷⁸ Hornman, interview.

⁷⁹ Van der Linden, interview.

Their awareness of how the site itself plays an active role changes their artistic approach. The respect for the site plays an important role, as Hornman explains: “It’s not as if in one introduction day we have a look, and make a plan like ‘here comes a big screen, here comes a stage, here’s the audience,’ and suddenly the whole site is gone. No, we let something grow from the seed, so the site itself is always visible.”⁸⁰ Van der Linden confirms: “It’s always in support of the site.”⁸¹ The open attitude is inescapable because if you don’t adapt to the site, you’ll lose from your environment. To illustrate this, Siderius elaborates on an earlier performance: “for us the idea of playing in the moment is important, and during this specific performance we already felt that we didn’t connect to the audience. There was wind, and well the acoustics... it was stronger than what we could project, so it just didn’t arrive.”⁸² Their approach to always be in the moment shows that they sometimes have to leave pre-planned ideas behind and join the site in an open-ended becoming. Also, simply, because just leaving the site as it is, is not artistically interesting anymore: “you have to do something with the silence, you have to bring it further,” as Hornman states. This relation to the natural forces of the site shapes their approach as improvisers in the performance to not only be attentive for the audience and the other performers: “We’re always open to interruption from the environment.”⁸³ Hornman elaborates: “When playing with the environment, or with nature, there’s just so much chaos. You have to dare to join that chaos and not want to study everything perfectly. Then you’ll lose.”⁸⁴ This notion of chaos illustrates how there is always a level of uncertainty, as also nonhuman forces are only to a certain extent able to be taken into account. Boeijinga concludes: “In the end, it’s a game”, Hornman confirms: “Yes, but one of which the rules constantly change.”

In the interview I had with BUI, they constantly question when something is music. During the rehearsals, they mostly work on, in their words, the frame of the performance. The work is set in two different worlds; the vibrant Nijverheid where young urban professionals celebrate their weekend with a drink, and a world literally between shit and empty liquor bottles. It becomes interesting when the men at the parking lot choose to join by confronting the artists by honking, questioning their artistry, or just turning around when seeing the crowd; by doing so they also become part of the work. They adapt to this uncertainty in the preparation of the performance. Although they worked a total of sixteen days on-site, they did not make any compositions: “I think that we can rely on our improvising qualities. We have worked a lot on it before the residence week. Like, we can do this. We’ll get back to it if we have a better idea of what we’re going to do. Now we’re creating a frame.”⁸⁵

⁸⁰ Hornman, interview.

⁸¹ Van der Linden, interview.

⁸² Siderius, interview.

⁸³ Koen Boeijinga, interview by author, Utrecht, August 26, 2021.

⁸⁴ Hornman, interview.

⁸⁵ Van der Linden, interview.

Preparation entails knowing how to respond to things that happen in the moment, rather than laying out a plan: “improvising is about being in the moment, and listening to what sounds and to how that relates to what you’re playing. And I think that that’s always in the background of what we compose. Through composition we make space to let that exist.”⁸⁶ What they prepare in advance is what Kloosterboer calls: “the skeleton of the performance, and the flesh is the improvisation.” Van der Linden confirms: “The skeleton supports the experience of the improvisation, it’s not a sequence in which we improvise in between.”⁸⁷ Hornman captures it as “During such a process you improvise the frame, to frame the improvisation during the performance. You’re looking for what the boundaries are, you’re going to improvise these and lock them, to then again improvise these.”⁸⁸ It also is a challenge within their creative process, as Kloosterboer explains “What I find challenging in these different roles, is that only at a very late stage in the process of such a performance, we’re really making music.”⁸⁹ It is a matter of trust “When composing, and creating the frames, you don’t know how it will sound. But I think that we can rely on it.”⁹⁰ Concretely, the frame of the six performances they did during the festival was the same, but the performances were not, because the world around them was not; and even changed by the hour. Meaning is not fixed but is continually re-established in time, as different relations, between audience, performer, and other material bodies, such as the location and the present human and nonhuman bodies, are formed during different performances. So all these aspects of BUI’s creative process, the use of the site, the approach to the audience, the interdisciplinary method, and the narrative of the performance are not separate from each other. The collective’s approach to supporting the Utrecht community cannot be seen separately from how they view the role of the audience. The audience cannot be seen separately from how it relates to space, and the space shapes the concept of the collective’s performance and is leading in what they do. This interrelatedness also shows the blurred line of where the performance starts and the world stops. Performer, audience, site, tool, community, meaning; everything is entangled.

3.3 Tactology Lab

Tactology Lab is curated by Sounds Like Touch, a new organisation in the Utrecht cultural field that aims to “experiment with physical forms and ways of interacting with technology.”⁹¹ This platform is initiated by Dianne Verdonk, performer, composer, and instrument builder. Coming from a background in cello and an education in Music Technology at HKU, she seeks new forms of

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ Hornman, interview.

⁸⁹ Kloosterboer, interview.

⁹⁰ Van der Linden, interview.

⁹¹ “Sounds Like Touch,” Sounds Like Touch, accessed February 1, 2022, <https://www.soundsliketouch.com>.

technology that allow her to make the connection between physical movement and electronic music instruments. *Sounds Like Touch* is the next step in her career in which she envisions building a platform, both digital and physical, for other artists interested in this relatively unexplored field of technology within the performing arts. Tactology Lab is their first activity for which she joined forces with Roald van Dillewijn, a sound artist, creative coder, designer, and lecturer. Both artists, but now in the role of curator, developed a series of four workshops in which they guide a total of twelve participants to work on a performative installation using tactile technologies. The workshops are given by experts in the field and cover the different facets of the creative process: inventing, building, interacting, and exposing. By bringing artists with different backgrounds and sets of skills together, four completely different works were realized:

Lamantijnengezang by Silva Westera, Loden Rietveld, and Wouter Termeer, is a small instrument and installation which confronts assumptions about technology. What looks like a small cushion can be squeezed and touched to create different soundscapes.

Draad in which Michelle Vossen, Wouter van Veldhoven, and Gert-Jan van der Kooij found each other in the use of e-textiles. With a shared knowledge of the materials, from fashion and tape music, they developed a harp shirt in which the strings are made from tape that can be played with sensory gloves.



11: Michelle Vossen wearing a sensory glove to play on *Draad*. Photograph by Herre Vermeer.

Houtje Touwtje is an interactive installation in which interaction with wooden sticks triggers samples, and evokes a playful manner with unexpected materials; the collaborative work of musicianship, soldering skills, and digital coding by Veerle Pennock, software expert Owen Storni Hoogenboezem and musician Julian Jack.

SPOOSH, made out of biomaterials, functions both as a performance and an installation, in which Jasna Veličković, Nathan Marcus, and Vincent Schoutsen not only explore the material's structure but also the temperature to create tactile experiences.



12: Visitors interacting with *SPOOSH*. Photograph by Herre Vermeer.

3.3.1 Tactile Technologies

Dianne Verdonk's earlier work *Bellyhorn* illustrates beautifully the potential of tactile technologies. *Bellyhorn* can be roughly described as a huge sack with an enormous trunk that invites you to interact with it in different ways, either by diving with your head into its trunk, by laying on top of it, or just gently stroking it. It's developed in a way that takes into consideration intuitive bodily motion by adjusting sonic qualities to the way the performer moves. For example, when putting your head in the trunk, a sound emerges the deeper you go. While it feels as if your movements increase the loudness, this is merely an illusion, as Verdonk explains: "I try to create an illusion in which movement and output come together. So how it looks, how it feels, how big it is, what shape it has,

should all be linked to how it sounds and what you have to do. The movements are supposed to be logical and intuitive, or just funny or pleasant.⁹² So, instead of starting from sound or technological possibilities, Verdonk starts her creative process from the body. Technology serves the senses and is adapted to the body. Bellyhorn is not only adapted to the performer's body, but also to the experience of the audience. An anecdote of her experience of a presentation of the works of Mark Rothko shows the entanglement of curatorial decisions and some of the motivations behind her work:

“The audio tour said: ‘These works are made to be watched from a 20-centimeter distance, because then the whole surface, your complete view, is filled with colour, so the work is experienced the best.’ But then it said: ‘but for the conservation of the work you have to keep one-meter distance.’ So ridiculous! It made me angry that no one can experience these works as they are meant to. (...) There are many people when they see Bellyhorn, they hesitantly ask if they can touch it. Children just do it. Often their parents interfere: ‘I don’t know if that’s allowed.’ If I’m around I always say that it is allowed. It is Bellyhorn’s character that invites people to interact with it. It has been a conscious decision in its design.”⁹³

This fragment shows how the institutional curatorial constraints to preserve a work of Rothko motivated Verdonk, among other reasons, to do things differently and make work with which audiences can actively interact. Yet, in her experience, audiences are so used to institutional curatorial conventions that it becomes impossible to experience works as they are meant to, even though the works intuitively invite the audience to touch them or get close. Within Tactology Lab this is reflected in the organising of a workshop on the use of tactile technologies in relation to space.

As reflected in the name ‘Tactology Lab,’ touch is an important feature of the interactive aspect of Bellyhorn, which also draws on the relation between body and technology. Rather than seeing touch as a way of interaction, it is touch that is the centre of developing technology. Verdonk’s approach to technology comes from an artistic search for expressiveness. With her approach to embodied technology, physical interaction becomes expressive by redeveloping physical interfaces to make the way of playing the electronic instrument expressive. This opens up many possibilities for technological uses, as Verdonk and van Dillewijn elaborate: “If you talk about interaction design, and it’s only about interaction with screens, then so many forms of interactions are excluded.”⁹⁴ Not only does it preclude forms of technology, but many current forms of interaction design also do not fit their needs, or can be even harmful: “Just the way we interact with screens through a keyboard and

⁹² Dianne Verdonk, interview by author, Utrecht, September 7, 2021.

⁹³ Ibid.

⁹⁴ Ibid.

a mouse... All sorts of problems arise, bodily as well. That's not only relevant to ergonomic concerns, but it touches on the question of how we can make sure that technology fits our body. Instead of just the practicality of a device that fits in our pocket, we're looking to add something which makes it fitting."⁹⁵ It shows how Verdonk and van Dillewijn consider the entanglement of body and technology. Too often the relationship between technology and the body is neglected, so in the designing process, the body is not concerned. In the curated series of workshops, artists are motivated to think differently on this relation by centring touch in their design.



13: *Bellyhorn*. Photograph by Viorica Cernica.

Tactile technology is still a relatively unexplored field within performing arts, claims Dianne Verdonk,⁹⁶ and has the potential to blur the distinction between installation art, music performance, scenography, and technological approaches in the performing arts. The range of material possibilities for interaction through tactility is enormous: "Electromagnetic waves are in that case material as well. While you might not see it, it is there. You see something move when the performer does something with the materials."⁹⁷ It illustrates that the focus on touch is not limited and that different materials can have different forms of interaction, and thus impact the performer differently. Seeking

⁹⁵ Ibid.

⁹⁶ Ibid.

⁹⁷ Ibid.

a different affective relation between technology and the body means therefore also a search for the right materials. The different works developed during the Lab show the range of possibilities that tactile technology can involve, as van Dillewijn elaborates “You can touch the foam of *SPOOSH* which has a really warm feel. I think because of the air insulation. It is a very tactile experience.”⁹⁸ Verdonk adds: “And it’s so different from the cushion of *Lamantijnenzang*. You can squeeze it and feel the texture.”⁹⁹ Verdonk and van Dillewijn both have a background in the performing arts, but these technologies are not limited to the performing arts: “The motive this time are the performing arts, and mainly music. But I have the idea that it can be interesting to many art forms. I think mainly of performing arts and installation art, but there are many aspects to it.”¹⁰⁰ The lack of clear-cut boundaries also makes up a challenge for the music curator. The works can be perceived as an interactive installation, as performance, as both of them at the same time and neither of it. The presentation space should allow for both performances as an ongoing installation, yet at the same time, the space should invite visitors to interact with the works.

3.3.2 Curatorial Approach

The curatorial approach of Tactology Lab does justice to the interdisciplinary aspects of tactile technology. The curatorial process started with the selection of the participants that responded to the open call they launched: “We took it broader to other art forms. We didn’t want only people from music. That’s also because there is a need for a diversity of skills.”¹⁰¹ Accordingly, they took this into account in their curatorial process: “We the whole process of creating a piece of art into account. With Tactology Lab we wanted to make sure that people joined from every phase of the process.”¹⁰² This ranged from participants with very practical skills to ones with more conceptual knowledge:

“So that you have people who know something of material handling. That is very specific of course. We had someone from fashion, who works a lot with e-textiles. We have someone who can work with wood and metal, who has a background in physics. But now he became an inventor, he basically builds anything. But there were also people from the HKU who learned to work more conceptually. But also performing musicians. So it all comes together.”¹⁰³

⁹⁸ Roald van Dillewijn, interview by author, Utrecht, September 7, 2021.

⁹⁹ Verdonk, interview.

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid.*

¹⁰² *Ibid.*

¹⁰³ *Ibid.*

How the curation of bringing people from different backgrounds together is shown in *DRAAD*: Michelle Vossen with a background in fashion, Wouter van Veldhoven as a magnetic tape artist, and Gert-Jan van der Kooij with a background in physics could integrate their knowledge in the material they use. With e-textiles, a fabric that can be integrated with digital components, they created a wearable electroacoustic harp with audible magnetic threads.

The next step was the structuring of the workshops. Roald van Dillewijn, also an experienced teacher at the HKU compared this phase to setting up a teaching program: “I experienced it as I was developing a teaching course. Thinking of what works best at which point during the workshop. And we were lucky, or just the fact that it was a good idea, that people worked along so well.”¹⁰⁴ The workshop series contained the various facets of the creative process: “In the first lab we had Shirley Niemans, who could enthusiastically tell about biomaterials, which was immediately reflected in the works.”¹⁰⁵ While being introduced to a new material to work with, the creative process starts from a point of imagination and the question to the artists is what ideas they want to communicate, rather than using their set of skills and experiences as a starting point. “That was grounded in the concept development, from the first day on. We only asked them questions like ‘What do you want to communicate? What do you want to show? What will it look like?’ but not ‘How are you going to make it?’”¹⁰⁶ The second lab was aimed at building, in which the different makers could assist each other and learn from each other. The third and fourth labs were aimed at interaction and presentation, provided by Marloeke van de Vlugt and Cocky Eek, respectively an artist-researcher who invested her work in interfaces as performance, and a visual artist and teacher at the KABK known for her designing work for interdisciplinary theatre performances. Their work made an important contribution to the series of workshops: “You can tell that they have so much experience as artist, performer, scenographer and installation artist, to, indeed, see the space as part of the work. As something where you move in, and which does something to the work.”¹⁰⁷ By including the expertise of artists' experience to include the site itself as an active participant within the work, the notion of becoming-with-site becomes part of the curatorial process. This lab took place at De Nijverheid already, so that the artists could explore the different spaces of the site: a garage box, a container, a stage next to the terrace, and a white cube space. Just as the body can't be seen apart from the instrument, the space can't be seen apart from how a performer performs with the installation or instrument, and the way the audience perceives the work. As Verdonk and van Dillewijn take the relationality between the space and the tactile technology seriously, they make

¹⁰⁴ Van Dillewijn, interview.

¹⁰⁵ *Ibid.*

¹⁰⁶ *Ibid.*

¹⁰⁷ Verdonk, Interview.

sure that the way of presenting in space, from a scenographic point of view, becomes an integral part of their curatorial approach by providing a workshop on it.

A third aspect of the curatorial approach is the sense of community embedded in the set-up of Tactology Lab and the long-term goals of Sounds Like Touch. Dianne Verdonk, in the long term, envisions a physical space where artists can meet, also in an informal setting: “A motivation is also to have an environment where people can meet each other. To build a network of artists from Utrecht and around.”¹⁰⁸ An educational, or curatorial, project such as Tactology Lab functions as a platform. “A space where you can experience things, but also can learn stuff and meet others.”¹⁰⁹ The need for physical space as a platform has, pragmatically, to do with the physicality of tactile technology: “It must happen at location. To experience tactile technologies you have to be there in person.”¹¹⁰ But also the building of a community and the exchange of knowledge, as they experienced during this first Tactology Lab, plays a role: “Tactology Lab in the future is supposed to be a community of people who know things you don’t know and the other way around. That you always know: ‘that person works on this, so I can ask him or her for that.’ Such a community is often around while you’re still studying. But after your study, everybody starts doing different things and I’m sitting here in my attic figuring things out.”¹¹¹ Sharing knowledge between different participants is a key point of Sounds Like Touch, but there is another important aspect to it: “I think that a lot of people are scared away at the open day of Music & Technology at the HKU. Everything digital is just more elusive, so more difficult to comprehend.”¹¹² Their approach to tactile technology is therefore also a way to make it more accessible. By developing new building blocks, anyone can use these technologies within the performing arts. “So, when you would like to do cool stuff, but the threshold is too high. And we like to come up with tools that can lower that threshold. That can be an interface or a type of software. If you can offer that, a lot of people can be included who are now scared away.”¹¹³ With Tactile Technologies they can enable others: “With these tools, people can express themselves in a way that fits them.”¹¹⁴

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

4. Conclusion

The work of Rafaela Andrade, BUI, and Tactology Lab each show different approaches to material relationality within music, and each project questions and challenges different aspects of the curatorial process. A relational ontology explains the way matter is intra-actively related, and thus that, and different bodies, including human bodies and nonhuman bodies, are not separate categories. Applied to musicology, it emphasizes the relation between, in this thesis limited to, the performer's body and the instrument and the different relations with the performance site. This understanding highlights specific aspects of the work of BUI and Rafaela Andrade, and offers a lens to understand the curatorial practice of Tactology Lab. By first answering the sub-questions and combining the insights of the individual projects, an image arises of the implications and challenges of material relationality for curating music.

The question of how the changing relationship between the body and the instrument impacts music performance can be answered through the work of Rafaela Andrade. She illustrates how the human body and the body of the instrument cannot be seen as separate entities, but are strongly entangled in a musicking process. Instead of focusing on adapting her body to the instrument to create new musical possibilities, such as the invention of new extended techniques, she looks for new affective possibilities by rethinking and redesigning the instrument itself. By doing so, she seeks to relate differently with her audience by integrating Open Source Communication which makes communication between different instruments possible, breaking down the hierarchies of music performance. The somatechnical understanding of the instrument/performer relationship can deconstruct traditions embodied by the instruments themselves and provides a more healthy relationship to her own body as it extends the possibilities of how an instrument can be played. Andrade searches for artistic expressiveness by thinking about what the instrument allows her to do, and what she can do to an instrument. This chiasmic relationship creates practical possibilities for music performance such as new forms of communication, while it also brings different values to the stage such as sustainability, equality, and, diversity.

The notion of becoming-with-site answers the question of how musicians can relate differently to the performance site when approaching the site as an active participant. This notion captures site-specific music performances as a process, in which the site, performers, audience, and instruments are constantly in dialogue with each other. BUI's work illustrates how their musicking practice is in constant dialogue with the site itself. The site itself constantly intervenes within the performance, and by doing so blurs what is part of the performance and what is not. This requires a different approach from musicians, who have to be constantly open to interventions, and have to adapt their

creative process to what the site demands. Apart from a respective stance toward the De Nijverheid itself and the communities involved, BUI's approach required interdisciplinary tools. Integrating different skills such as scenographic approaches, improvising skills, and collective approaches also involve the audience within the process of becoming-with-site. The fact that the site itself becomes an active participant makes also the performance is reality-making itself. The performers make an impact and are impacted by the site, and by doing so they let the site itself speak. They don't create narratives that refer to reality but blur the line between what is part of the performance and what is not. Preparing for such performances comes with its challenges, as it requires a lot of preparation site to be able to build a good relationship between the site and the performers. The reality-making aspect of it makes that the performers can be potentially harmful to the site, or the other way around.

The last sub-question can be answered through the work of Tactology Lab as they enact to change the material relationality between the body and technology within their curatorial focus. By centring tactile technologies in the commissioning of new work, Dianne Verdonk and Roald van Dillewijn aim to contribute to new perspectives on the performing arts, as they can provide new approaches that are relevant outside of the arts. By exploring touch within the workshops they provided, the twelve different artists illustrated just a few of the many possibilities of what a tactile experience can be. By exploring different materials, different affective relations between body and instrument can be established. But to do so, knowledge of different disciplines is necessary, ranging from conceptual artistic approaches to hands-on knowledge of electric circuits. Moreover, the staging and therefore the experience of these works themselves cannot be seen separate from the space in which they are presented. One Tactology Lab workshop addressed the conceiving of installations and instruments in relation to space; a curatorial issue of which much more can be explored in future workshops. Within explorations of new approaches to material relations, an interdisciplinary strategy seems inevitable. both between artistic disciplines, such as fashion and sound art for example, and between scientific disciplines, to facilitate the needs of these artists, such as knowledge of physics and musicology.

The combined insights of Rafaele Andrade, BUI, and Tactology Lab provide an answer to the question of what the curatorial implications of a changing material relationality in music performance are. Andrade and BUI set a concrete example of the implications of materiality on curatorial practices. A performative curatorial strategy takes into consideration curating is reality-making itself by bringing together communities, making an impact on audiences and artists, and collaborating with venues. Taking into consideration a changing material relationality means that a curatorial strategy is attentive to the way matter actively contributes to music performance. By doing so, it is a move away from a strong emphasis on text within curatorial strategies, to focus on matter itself. Commissioning

site-specific performances, therefore, have to take into consideration how site, performer, audience, and instrument become-with each other, and instruments adapted to the performer's body open up a new world of possibilities in the commissioning of new pieces and staging concerts. At the same time, the relations between the instruments and sites are very personal. The role of the curator in addressing this relationship, therefore, becomes mainly facilitatory as musicians and performers take up the role of curators themselves. Tactology Lab sets an example of how to work with concerns on the body, and the role site plays in a performance by addressing these issues within the scope of tactile technologies. By structuring a set of workshops, drawing on didactic and educational experience, they provide possibilities to explore new material affective qualities in their curatorial practice.

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