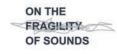
Irene Lehmann, Pia Palme (eds.) Sounding fragilities. An anthology

Sounding fragilities An anthology

edited by Irene Lehmann and Pia Palme

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I Preliminaries

An anthology as polyphony An introduction

Pia Palme

Sounding Fragilities invites the reader to submerge themselves in a polyphony of articulations and findings as it reviews interactions surrounding present-day composition and music theatre.¹ With the intention of cultivating literacy, the anthology brings together authors from a wide range of disciplines and different cultural backgrounds. As artists or researchers in art or science, some work independently, others are employed in various institutional contexts. Occasionally, they oscillate between disciplines and are familiar with mixed working situations. The artists among them mainly practice disciplines that are in some way connected to contemporary music theatre or opera.² These disciplines include composition and/ or performance of new, experimental, improvised, or electronic music, sound art, performative arts, dance and choreography, dramaturgy, performance art, and, last but not least, literature and writing. Some artists work in multidisciplinary ways, and the same unprejudiced approach can be found with the scientific researchers in this book: their contributions cross boundaries between disciplines. Some researchers are also artists, and vice versa.

The writing formats mirror the authors' diversity, ranging from essays, research studies, experimental reflections, poetic or artistic presentations and personal scribblings, to conversations and interviews. The themes and questions that arise from the composition, performance, staging, and reception of music theatre today are manifold; the contributions look further into the way the core terrains interact with the current political and cultural contexts, taking into consideration aspects of feminism and diversity, economic and ecological discussions, digitalisation and the pandemic crisis. What draws these various positions and practices together into an anthology is the common theme of articulation through soundings and voicings in word-based formats.

The book project is anchored to a large-scale programme in artistic research conducted at the University of Music and Performing Arts Graz (KUG), *On the fragility of sounds* (2019–2022), a PEEK programme of the FWF Austrian Science Fund, operated through the university's Centre of Gender Research. Under the direction of the composer, performer, and artistic researcher Pia Palme and assisted by co-researcher and musicologist Christina Fischer-Lessiak, the programme investigated contemporary music theatre and the compositional process. Several

¹ The pronouns they/them are used when referring to people.

² In the following, the terms *opera* and *music theatre* are used as synonyms.

productions and premieres of musical (theatre) pieces within the framework of this unique programme provided case studies and opportunities for investigation and experimentation.³

In 2021, the theatre and performance researcher Irene Lehmann joined the team with the aim of shifting a focus of research towards the processes of writing. articulating, and contextualising knowledge—and to publish this book. Already in 2019, Lehmann had started an association with On the fragility of sounds as researcher and advisor, mainly on questions related to theatre practices and theatre studies. Aiming at a wider audience, the two editors guided their book project Sounding Fragilities in several directions. First and foremost, the artistic process is given ample recognition and space; in particular, the composers' practices, foregrounding their ideas and activities. Secondly, the editors found it important to nourish a vibrant mycelium of knowledge by encouraging interactions between practices and disciplines. Furthermore, a significant number of female* contributors was invited to participate, as well as diverse artists from different cultures. Palme and Lehmann believe these works and visions are urgently needed to advance development as without them, the fields of art and research around music theatre would suffer from 'a lack of intellect, a lack of vision, and a lack of imagination,' instead of 'being informed by the world.¹⁴ Finally, the relatively young discipline of artistic research takes a fundamental position in the overall conception of the anthology project.

Let us return to the idea of the book as polyphony: as a composition technique, polyphony is much valued in musical cultures across the world. Polyphony combines parts of equal compositional importance, which move independently and often follow their own timing—one might say, they operate in a 'democratic' and non-hierarchical way. Sounding together, the parts become a 'whole'. The auditory experience of the 'whole' is *solely* available through *listening*. It is a narrative that happens in dimensions beyond the visual and cannot be seen in the score.

To be more precise, every listener (re-)composes unique versions of 'whole', in their individual processes of perception.⁵ It is our intention as editors of this anthology that the reader's journey through the book becomes a journey of listen-

³ The website www.fragilityofsounds.org gives a comprehensive documentation and overview of the activities, presentations, publications, music contributions, collaborations and partners.

⁴ These words were used by the artists Mendi and Keith Obadike in November 2021, when they declined an honorary mention for the Giga-Hertz Award for Electronic Music of the ZKM Zentrum für Kunst und Medien Karlsruhe because of what they saw as grave issues regarding diversity among the jury. Read about the incident and find their statements under https://www.facebook.com/permalink.php?story_fbid=1022656213489726 0&id=1162860843 (accessed 1 December 2021).

⁵ This is the perspective of neuroscience and recent research in cognitive science (Kandel 2012; Varela, Thompson & Rosch, 2016).

ing, and that individual readings will contribute to a multi-voiced literacy around music theatre.

Sounding fragilities

Pairing *fragilities* with *sounding*, the book's title traces essential lines of a complex discourse. Living beings are open and permeable as they constantly interact with their surroundings: the term *fragility* resonates with interdependence and interactivity. We are intrinsically vulnerable and fragile, yet this is also how we can communicate, live, reproduce, or decompose: nothing on earth exists in isolation. (Odum 1971; Keller & Golley, 2000; Capra & Luisi 2014). On such a fundamental level, *fragilities* refer to our co-dependent biological and ecological situation. This situation influences composition and theatre production: we inter-relate as human beings in art making. *Fragility* characterises communities and cultures—and that includes various conceptions of identity or gender. In the plural *fragilities*, aspects of feminism, inclusion, diversity, and political practices converge, reaching into the artistic process and music theatre.

Sounding addresses the totality of acoustic phenomena—the sonosphere. Sounding relates to the production and propagation of sound waves and to those who actively produce sound or perform music. It refers to the many instruments and technologies which humans can use in their musical practices. Sounding evokes hearing, perception and touch. It refers to the body resonating and sounding, to our voices and to language sounding out towards others. It relates to the editors' intention to facilitate the articulation of ideas and discourse around music theatre. Sounding also refers to the inner dimensions: to the 'inner' voices that sound within the spaces of our minds, and further to human activities such as writing, reading, thinking, and reflecting. The auditory quality of these processes has been described by linguists and phenomenologists alike (Ihde 2007). In this way, sounding is about literacy, music, theatre, and culture—and that includes our personal, intimate inner spaces as individuals.

According to the cognitive scientist and experimental psychologist Albert S. Bregman, 'the auditory world is like the visual world be if all objects were very, very transparent and glowed in sputters and starts by their own light, as well as reflecting the light of their neighbours' (Bregman 1990, p. 37). All auditory phenomena interact with their respective environments in multiple ways; reflections, echoes, masking, and interferences all influence human perception. Soundings are as fragile as living entities: they constantly communicate with each other and with their surroundings.

⁶ This term was introduced by Pauline Oliveros (2011).

Mapping fragile terrains: literacy in art and research

Music theatre and composition, artistic research, and science are all dimensions within the common cultural space. The fragile terrains of their interactions and interrelations provide attractive material for investigation. It is the editors' wish to cultivate present-day *literacy* in these fragile terrains. The idea of literacy, as an inclusive concept within an epistemological dimension and as an ability that integrates *practical* knowledge, is especially helpful in the context of music theatre, composition, performing arts, and artistic research. It integrates cultural dimensions such as text formats, skills and experiences, music and oral communications, techniques and technologies, artistic forms of notation such as scores and storyboards, and historical and scientific fields of knowledge. The musicologist Per Dahl proposes that 'written' materials, together with their various contexts and associated fields of experience, help to stimulate literacy (Dahl 2021, p.2). Drawing on the UNESCO definition, he uses the concept of literacy in the area of music as the ability to identify, understand, interpret, create, communicate and compute in 'an increasingly digital, text-mediated, information-rich and fast-changing world.'

Artistic research has only recently been institutionalised; academically, it is an emergent field. Its relationships and interactions with the more established disciplines of composition and music, research and science, are still under discussion—a discussion which addresses fundamental aspects of research and art and thus has the potential to stimulate a profound dialogue inside and outside academia (Klein 2010; Crispin 2019; Peters 2017; Huurdemann 2018).

Certain aspects of this debate, situated at the intersection with notation, language, and literacy, are important for the anthology. To illustrate these aspects, consider, for example, a composer involved in the production of music theatre. Composers use an elaborate system of musical notation, graphics, written, digital and oral instructions, to communicate their conceptions and plans or to refer to the interpretation and content of their music. During their compositional process, they routinely interact with artists, cultural workers and technicians, they participate in staging and rehearsing, and sometimes talk about their ideas to the audience prior to a performance. Together with their colleagues they have developed a language and relevant terminology for their exchanges; much of it happens verbally and is not written down, including sign language and gestures. This kind of 'language' differs from the linguistic world of research and science in academia (Crispin 2019). In the words of the music journalist and critic Tim Rutherford-Johnson, artistic interactions represent 'another kind of knowledge

⁷ Found under https://en.unesco.org/themes/literacy (accessed 9 December 2021).

⁸ In the following argumentation, the position of the composer functions as an example for artists in a more general sense. Similar arguments can be formulated for performers, dancers, musicians, etc.

formation: knowledge as a distributed practice, compiled between and amongst people, through attentiveness and experience." Furthermore, most composers would probably agree that a certain kind of research is part of their work—this kind of research is neither 'scientific' nor 'artistic research' in the academic sense. Regarding the score used in a music theatre production: it is the same for the composer, conductor, performer, dramaturge, musicologist, theatre scholar, or critic, yet the environment in which the score is used is different, and the background knowledge related to the score differs with context. The different mindsets involved therefore result in different vocabularies and languages (Dahl 2021).

In the context of this book, the following questions are relevant: What kind of language and vocabulary would be useful for artists writing about their own process? If an artist also practices artistic research, what kind of literacy is expected from them in academic contexts? How can scientists and scholars benefit from these explorations? In composition and music theatre, artistic research certainly has the potential to encourage empowerment and diversity. It provides means and methodologies to systematically explore, chart, and contextualise the compositional process from within; it also generates and innovates forms of literacy. For composers, this implies a significant shift: in growing numbers, they are writing their identities as researchers into existence. From being an object of analysis and investigation, composition is evolving into a method of research. In the composer's experience, the 'subjective perspective is constitutively included, because experience cannot be delegated and only be negotiated intersubjectively in second order' (Klein 2010). The level of involvement with the research 'object' is an important one and brings up questions of ethics and caring (Hannula, Suoranta & Vadén 2014). Rather than exploring an external materiality, every artist-as-researcher reaches into a personal process of knowledge production that closely interacts with their own thoughts and emotions, with their perceptional experience, with their body and life—with their essential fragilities.

How much does the composer *care* about their process, music, and work? How does the composer's personal experience of fragility influence their conceptions of space and distance, sound and body in music theatre? Listening perception—one of the core faculties employed by composers in their practice—borders on touch; we cannot close off our ears from sound. Working with sound is such an intimate procedure, yet it is the composer's métier to deal with that intimacy in a professional way. The composer and researcher Dylan Robinson, known for indigenous sound studies, explains how his intense relationship with music brings him to think of certain works as friends, lovers, and kin, and asks: 'How do we get at the sense of touch in writing, or convey being touched by sound?' (Robinson

⁹ In Rutherford-Johnson's booklet text for Lim's *Extinction Events and Dawn Chorus* (2018), available at https://www.kairos-music.com/sites/default/files/downloads/0015020KAI_lim_iTunesBooklet_FIN.pdf (accessed 20 November 2021).

2020, p. 95). What is the contribution of intense emotions in a research process? It has been noticed that artistic research and indigenous research methodology both discuss the insider/outsider alternation (Hannula, Suoranta & Vadén 2014).

The intimate physical experience of touch—of perceiving sound through vibrations—brings composers to identify sound with space (or volume) and with the body. In the programme notes for his string quartet *your body is a volume* (2016–19), the composer and artistic researcher Timothy McCormack writes about the relationship between the performer's body and the performance space: 'This body does not move through a space—it becomes the space; the body as the site of kinesthetic inscription. We hear the body in its sound, and the sound subsumes us.'¹⁰ The nexus of space/body/sound is further addressed by the composer Chaya Czernowin, who introduces her opera *The infinite now* (Czernowin 2017) with the following passage:

Imagine that the hall, the whole space of the hall, is the inside of a head/heart/body. The audience is immersed in the working of the head/heart/body of a person who finds themselves in a difficult or hopeless situation, a person who is struggling to find their footing. The hall becomes an acoustic space where the outside is reacted upon, digested, dreamt, in an attempt to figure it out, and to survive.¹¹

The arguments used by McCormack and Czernowin concentrate on certain characteristics of hearing perception. Their conceptions draw on experiences which are familiar to almost every human being: sound is described as penetrating the body, crossing the border between one's 'outside' and 'inside'. Another compositional perspective on staging and spatiality is described by the composer Liza Lim in an interview in 2019:

I suppose spatial things have different roles. Sometimes it's very much a sonic thing, it's about shifting sound around a space. Sometimes it's about a kind of politics which is about dissolving a kind of stage setup or tension or power relation. [...] These things are not so much about theatre or acting, they're more techniques or tools to shift a state within the feeling of the work. So yes, I think power relations are something which one can address, via spatialisation and movement. I find that quite interesting, and it's not like I do incredibly extreme things either. I just make usually quite small interventions and test them.¹²

Lim speaks about sound, moving or shifting in space. Using instrumental or electronic means, these movements can be performed in flexible and fluid ways. The

¹⁰ See https://www.timothy-mccormack.com/yourbodyisavolume?mc_cid=4dd0a9290e&mc_eid=a1c325b245 (accessed 18 November 2021).

¹¹ Retrieved from http://chayaczernowin.com/infinite-now (accessed 21 November 2021).

¹² The entire interview between Martina Seeber and Liza Lim is published under http://divergencepress.net/2019/11/28/farewell-to-humans-an-interview-with-liza-lim/(accessed 21 November 2021).

composer notices how subtle shifts can influence the experience of perception and the emotional response of the listener.

Drawing on practices in electronic music and on research into composing and listening, a more fluid conception of music theatre was explored by Palme in the research project *On the fragility of sounds*:

Music theatre in the widest sense can be understood as sound moving *with* space, or space moving *with* sound—live performed and presented to a community, the audience. Sound, space, and the body are inseparable from the position of listening and composing. They completely interrelate. Space contains/encompasses living and non-living entities, and entities contain space.¹³

With similar observations of perceptional processes, Robinson describes how indigenous people understand listening as the main faculty for exploring spaces: listening becomes witnessing. The ear is not isolated from other sensory experience in this process. According to indigenous ways of thinking, total listening incorporates 'the fullest range of sensory experience that connects us to place.' (Robinson 2020, p. 73). The term 'fullest range' calls to mind the 'whole' as experienced in polyphonic music: listening acts as container and agency for all other perceptions. These ideas connect to the *Deep Listening* practice developed by the composer and expert in listening Pauline Oliveros (Oliveros 2005).

Opening yet another dimension of space and listening, Robinson reflects on the (concert) space as spatial subjectivity:

To acknowledge spatial subjectivity means addressing the ways by which space exerts agency, affect, and character beyond the realm of the striking aesthetic impact. In certain cases, it may mean experiencing it as a partner, interlocutor, or kin (Robinson 2020, p. 97).

At this point, space is an active subject in itself.

Interestingly, Robinson expands his investigations of spaces towards the written pages of a book. For him, formats of writing change when there is more awareness of the page as spatial subjectivity. Performative modes of writing have the power to destabilise and unsettle, he argues. In writing, we share our co-fragility as human beings. In sharing multiple subjective experiences of fragility with a community of writers, readers, and listeners, literacy is brought forward.

¹³ Between 2011 and 2020, Palme developed this concept during her research and practice in the field of music theatre. See also in chapter 2.3.2 *Scenic spaces* of her doctoral thesis *The noise of mind. A feminist practice in composition* (Palme 2017).

On the fragility of sounds: research in music theatre

The idea for this anthology came in the spring of 2021 when the weekly Fragility of Sounds Lecture Series (FoS) was held online during the third pandemic lockdown period in Austria.¹⁴ Within the framework of the programme of artistic research *On the fragility of sounds*, Palme, Fischer-Lessiak, and Lehmann decided to offer an intellectual and welcoming space for debates and dialogues concerning art, artistic research, science, feminisms, and political awareness for an international audience, at a time when public performances were forbidden, travel was obstructed, universities were closed, and professional work was severely restricted. People everywhere were suffering from the effects of the crisis.

A collection of seventeen lectures, accompanied by premieres of electronic music and ensemble works, was organised—at a time when such a series of public events in digital space seemed to be an experiment with an uncertain outcome. Presenters included Georgina Born, Darla Crispin, Sarah Weiss, Germán Toro Pérez, Malik Sharif, Chikako Morishita, Veza Fernandez, and Aistè Vaitkevičiūtè. The concerts featured the Austrian ensembles PHACE¹⁵ and Schallfeld, ¹⁶ the artists Electric Indigo, Elaine Mitchener, Elisabeth Schimana, Molly McDolan, Sonja Leipold, the dancer Paola Bianchi, and soprano Juliet Fraser, among others.

The series became an instant success, attracting a large audience worldwide from January to March. Discussions repeatedly circled topics such as the social and cultural importance of live communication and performance as well as the influence of digital media on music and performing arts; adaptions in the artistic process and in aesthetics were investigated.

As early as 2018, Palme had conceived the project *On the fragility of sounds* to continue on from her previous body of work,¹⁷ planning to explore terrains of composition and contemporary music theatre at the intersection with feminist practices. In order to realise this vision, Palme cooperated with Christina Fischer-Lessiak, a musicologist, pop-musician, songwriter, event engineer, and cultural worker with a strong background in feminist studies.¹⁸ It was their intention to facilitate the creation and production of scenic works as part of a wide-ranging artistic research enquiry. With her broad knowledge and expertise, Fischer-Lessiak contributed to the systematic analysis of a composer's artistic process, as well as

¹⁴ The entire programme of the series and abstracts of the presentations can be found under https://www.fragilityofsounds.org/fragility-of-sounds-lecture-series/ (accessed 20 November 2021).

¹⁵ See under https://phace.at.

¹⁶ Schallfeld ensemble is based in Graz. See under https://www.schallfeldensemble.com.

Within the framework of her doctoral research at the University of Huddersfield (UK) and as independent composer-researcher.

¹⁸ In addition, the musicologists Lena Hengl and Johannes Kainz acted as part time student researchers.

to coordination and curating. Her own research centred on listening perception and aspects of composition, feminism, and autoethnography. Using her organisational and technical experience, she facilitated presentations, rehearsals, recordings, concerts, and music theatre productions. This was particularly important because the project involved ensembles, soloists, venues, radio stations, cultural institutions, and festivals—as well as academic cooperations.

In the framework of her research on the influence of gender in connection with practices of composing-performing and their reception, Irene Lehmann collaborated on staging several music theatre productions, in curating, and conducting interviews since 2020. After their joint panel presentation for the symposium Performing, Engaging, Knowing at the Lucerne School of Music, Switzerland, the team of researchers engaged in regular in-depth discussions that have also shaped the outcome of this book.¹⁹

As case studies, several new works were composed and produced within the framework of the research programme. Palme composed and realised five scenic works, among them the music theatre piece *WECHSELWIRKUNG*.²⁰ This experimental work was composed and assembled in a collaborative process with the dancer and choreographer Paola Bianchi, the soprano Juliet Fraser, Lehmann, and Fischer-Lessiak. Co-produced with the festival Wien Modern 2020 and ensemble PHACE, the premiere coincided with a lockdown period. The piece was performed and filmed without an audience, thus missing an important counterpart in the artistic process.

Palme and Fischer-Lessiak initially planned for the Fragility of Sounds Festival and Symposium to be held at the University of Music and Performing Arts Graz. Apart from issuing an open call for contributions, they commissioned four new works—a spatial electronic composition by Susanne Kirchmayr a.k.a. Electric Indigo, and pieces by the composers Elisabeth Schimana, Séverine Ballon, and Elaine Mitchener for the ensemble Schallfeld. The composers were selected because they consistently integrate space, movement, body, and performance in their music; furthermore, they regularly perform on stage themselves.²¹ Schimana and Kirchmayr are also known for their long-time cultural work and feminist

¹⁹ Palme P, Lehmann, I., Fischer-Lessiak, Ch. (2020). Interferences of Writing, Researching, and Composing. Themed Panel and Performance, Symposium Performing Engaging, Knowing, Lucerne School of Music, Luzern (Online-Symposium). Two publications, by Lehmann and by Palme, are forthcoming.

²⁰ See under https://www.fragilityofsounds.org/wechselwirkung/ (accessed 22 November 2021).

²¹ Composer-performers play a prominent role in this publication. Often, female* composers appear as performers as well, or the other way round: female* performers work as composers. In contemporary music, it is often women* who begin their career as performers, and from there gradually move into the profession of a composer.

engagement.²² The Fragility of Sounds Festival and Symposium was ready to be staged in the spring of 2020; with the first wave of the COVID-19 pandemic, all preparations abruptly came to a halt. The symposium was postponed to January 2021 but once again the pandemic prevented its realisation.

At this point, the organising team, now consisting of Palme, Fischer-Lessiak, and Lehmann decided to stage the festival online. They introduced a series of events—the Fragility of Sounds Lecture Series—instead of presenting all concerts and lectures at once in a festival format; at the same time, the idea for a book publication emerged among the three collaborators. The commissioned works could be rehearsed and recorded, albeit without their spatial and scenic settings, and all tracks were produced in stereo format only, which considerably reduced the original intention. Planning for an anthology, Palme and Lehmann continued to communicate with all presenters and artists. Lehmann's expertise as theatre scholar essentially contributed to intensifying the discourse on the interrelations between artistic and scientific research.

The unfolding sequence of events demonstrates the amount of decision-making, courage, patience, and creativity that was necessary to bring the research programme to its conclusion. Carefully navigating the pandemic crisis, and steering around political decisions connected with it, the project team and the contributors continued to work while re-orienting their respective goals and processes. The making of the anthology led to yet another important development in a process of research that evolved in unpremeditated directions. During this phase, the focus of research activity was placed on writing and notating—on *sounding fragilities*. In the fields of music theatre and composition, the systematic development of literacy is of importance as a means of empowerment, stimulating communication across disciplines. For many investigators and artists, the theme 'fragility of sounds' became more urgent and meaningful during this process.²³

²² Kirchmayr is the founder of the international female:pressure network (https://female pressure.net). Schimana is the founder of the art institution IMA Institut für Medienarchäologie (https://ima.or.at/en/).

²³ As these lines are written, Vienna, Austria is under the fourth lockdown period, in the winter of 2021/22. The Omicron variant of the COVID-19 virus has just been identified, named, and is rapidly spreading all over the globe.

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An anthology as polyphony An introduction

Pia Palme

Sounding Fragilities invites the reader to submerge themselves in a polyphony of articulations and findings as it reviews interactions surrounding present-day composition and music theatre.¹ With the intention of cultivating literacy, the anthology brings together authors from a wide range of disciplines and different cultural backgrounds. As artists or researchers in art or science, some work independently, others are employed in various institutional contexts. Occasionally, they oscillate between disciplines and are familiar with mixed working situations. The artists among them mainly practice disciplines that are in some way connected to contemporary music theatre or opera.² These disciplines include composition and/ or performance of new, experimental, improvised, or electronic music, sound art, performative arts, dance and choreography, dramaturgy, performance art, and, last but not least, literature and writing. Some artists work in multidisciplinary ways, and the same unprejudiced approach can be found with the scientific researchers in this book: their contributions cross boundaries between disciplines. Some researchers are also artists, and vice versa.

The writing formats mirror the authors' diversity, ranging from essays, research studies, experimental reflections, poetic or artistic presentations and personal scribblings, to conversations and interviews. The themes and questions that arise from the composition, performance, staging, and reception of music theatre today are manifold; the contributions look further into the way the core terrains interact with the current political and cultural contexts, taking into consideration aspects of feminism and diversity, economic and ecological discussions, digitalisation and the pandemic crisis. What draws these various positions and practices together into an anthology is the common theme of articulation through soundings and voicings in word-based formats.

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¹ The pronouns they/them are used when referring to people.

² In the following, the terms *opera* and *music theatre* are used as synonyms.

productions and premieres of musical (theatre) pieces within the framework of this unique programme provided case studies and opportunities for investigation and experimentation.³

In 2021, the theatre and performance researcher Irene Lehmann joined the team with the aim of shifting a focus of research towards the processes of writing. articulating, and contextualising knowledge—and to publish this book. Already in 2019, Lehmann had started an association with On the fragility of sounds as researcher and advisor, mainly on questions related to theatre practices and theatre studies. Aiming at a wider audience, the two editors guided their book project Sounding Fragilities in several directions. First and foremost, the artistic process is given ample recognition and space; in particular, the composers' practices, foregrounding their ideas and activities. Secondly, the editors found it important to nourish a vibrant mycelium of knowledge by encouraging interactions between practices and disciplines. Furthermore, a significant number of female* contributors was invited to participate, as well as diverse artists from different cultures. Palme and Lehmann believe these works and visions are urgently needed to advance development as without them, the fields of art and research around music theatre would suffer from 'a lack of intellect, a lack of vision, and a lack of imagination,' instead of 'being informed by the world.¹⁴ Finally, the relatively young discipline of artistic research takes a fundamental position in the overall conception of the anthology project.

Let us return to the idea of the book as polyphony: as a composition technique, polyphony is much valued in musical cultures across the world. Polyphony combines parts of equal compositional importance, which move independently and often follow their own timing—one might say, they operate in a 'democratic' and non-hierarchical way. Sounding together, the parts become a 'whole'. The auditory experience of the 'whole' is *solely* available through *listening*. It is a narrative that happens in dimensions beyond the visual and cannot be seen in the score.

To be more precise, every listener (re-)composes unique versions of 'whole', in their individual processes of perception.⁵ It is our intention as editors of this anthology that the reader's journey through the book becomes a journey of listen-

³ The website www.fragilityofsounds.org gives a comprehensive documentation and overview of the activities, presentations, publications, music contributions, collaborations and partners.

⁴ These words were used by the artists Mendi and Keith Obadike in November 2021, when they declined an honorary mention for the Giga-Hertz Award for Electronic Music of the ZKM Zentrum für Kunst und Medien Karlsruhe because of what they saw as grave issues regarding diversity among the jury. Read about the incident and find their statements under https://www.facebook.com/permalink.php?story_fbid=1022656213489726 0&id=1162860843 (accessed 1 December 2021).

⁵ This is the perspective of neuroscience and recent research in cognitive science (Kandel 2012; Varela, Thompson & Rosch, 2016).

ing, and that individual readings will contribute to a multi-voiced literacy around music theatre.

Sounding fragilities

Pairing *fragilities* with *sounding*, the book's title traces essential lines of a complex discourse. Living beings are open and permeable as they constantly interact with their surroundings: the term *fragility* resonates with interdependence and interactivity. We are intrinsically vulnerable and fragile, yet this is also how we can communicate, live, reproduce, or decompose: nothing on earth exists in isolation. (Odum 1971; Keller & Golley, 2000; Capra & Luisi 2014). On such a fundamental level, *fragilities* refer to our co-dependent biological and ecological situation. This situation influences composition and theatre production: we inter-relate as human beings in art making. *Fragility* characterises communities and cultures—and that includes various conceptions of identity or gender. In the plural *fragilities*, aspects of feminism, inclusion, diversity, and political practices converge, reaching into the artistic process and music theatre.

Sounding addresses the totality of acoustic phenomena—the sonosphere. Sounding relates to the production and propagation of sound waves and to those who actively produce sound or perform music. It refers to the many instruments and technologies which humans can use in their musical practices. Sounding evokes hearing, perception and touch. It refers to the body resonating and sounding, to our voices and to language sounding out towards others. It relates to the editors' intention to facilitate the articulation of ideas and discourse around music theatre. Sounding also refers to the inner dimensions: to the 'inner' voices that sound within the spaces of our minds, and further to human activities such as writing, reading, thinking, and reflecting. The auditory quality of these processes has been described by linguists and phenomenologists alike (Ihde 2007). In this way, sounding is about literacy, music, theatre, and culture—and that includes our personal, intimate inner spaces as individuals.

According to the cognitive scientist and experimental psychologist Albert S. Bregman, 'the auditory world is like the visual world be if all objects were very, very transparent and glowed in sputters and starts by their own light, as well as reflecting the light of their neighbours' (Bregman 1990, p. 37). All auditory phenomena interact with their respective environments in multiple ways; reflections, echoes, masking, and interferences all influence human perception. Soundings are as fragile as living entities: they constantly communicate with each other and with their surroundings.

⁶ This term was introduced by Pauline Oliveros (2011).

Mapping fragile terrains: literacy in art and research

Music theatre and composition, artistic research, and science are all dimensions within the common cultural space. The fragile terrains of their interactions and interrelations provide attractive material for investigation. It is the editors' wish to cultivate present-day *literacy* in these fragile terrains. The idea of literacy, as an inclusive concept within an epistemological dimension and as an ability that integrates *practical* knowledge, is especially helpful in the context of music theatre, composition, performing arts, and artistic research. It integrates cultural dimensions such as text formats, skills and experiences, music and oral communications, techniques and technologies, artistic forms of notation such as scores and storyboards, and historical and scientific fields of knowledge. The musicologist Per Dahl proposes that 'written' materials, together with their various contexts and associated fields of experience, help to stimulate literacy (Dahl 2021, p.2). Drawing on the UNESCO definition, he uses the concept of literacy in the area of music as the ability to identify, understand, interpret, create, communicate and compute in 'an increasingly digital, text-mediated, information-rich and fast-changing world.'

Artistic research has only recently been institutionalised; academically, it is an emergent field. Its relationships and interactions with the more established disciplines of composition and music, research and science, are still under discussion—a discussion which addresses fundamental aspects of research and art and thus has the potential to stimulate a profound dialogue inside and outside academia (Klein 2010; Crispin 2019; Peters 2017; Huurdemann 2018).

Certain aspects of this debate, situated at the intersection with notation, language, and literacy, are important for the anthology. To illustrate these aspects, consider, for example, a composer involved in the production of music theatre. Composers use an elaborate system of musical notation, graphics, written, digital and oral instructions, to communicate their conceptions and plans or to refer to the interpretation and content of their music. During their compositional process, they routinely interact with artists, cultural workers and technicians, they participate in staging and rehearsing, and sometimes talk about their ideas to the audience prior to a performance. Together with their colleagues they have developed a language and relevant terminology for their exchanges; much of it happens verbally and is not written down, including sign language and gestures. This kind of 'language' differs from the linguistic world of research and science in academia (Crispin 2019). In the words of the music journalist and critic Tim Rutherford-Johnson, artistic interactions represent 'another kind of knowledge

⁷ Found under https://en.unesco.org/themes/literacy (accessed 9 December 2021).

⁸ In the following argumentation, the position of the composer functions as an example for artists in a more general sense. Similar arguments can be formulated for performers, dancers, musicians, etc.

formation: knowledge as a distributed practice, compiled between and amongst people, through attentiveness and experience." Furthermore, most composers would probably agree that a certain kind of research is part of their work—this kind of research is neither 'scientific' nor 'artistic research' in the academic sense. Regarding the score used in a music theatre production: it is the same for the composer, conductor, performer, dramaturge, musicologist, theatre scholar, or critic, yet the environment in which the score is used is different, and the background knowledge related to the score differs with context. The different mindsets involved therefore result in different vocabularies and languages (Dahl 2021).

In the context of this book, the following questions are relevant: What kind of language and vocabulary would be useful for artists writing about their own process? If an artist also practices artistic research, what kind of literacy is expected from them in academic contexts? How can scientists and scholars benefit from these explorations? In composition and music theatre, artistic research certainly has the potential to encourage empowerment and diversity. It provides means and methodologies to systematically explore, chart, and contextualise the compositional process from within; it also generates and innovates forms of literacy. For composers, this implies a significant shift: in growing numbers, they are writing their identities as researchers into existence. From being an object of analysis and investigation, composition is evolving into a method of research. In the composer's experience, the 'subjective perspective is constitutively included, because experience cannot be delegated and only be negotiated intersubjectively in second order' (Klein 2010). The level of involvement with the research 'object' is an important one and brings up questions of ethics and caring (Hannula, Suoranta & Vadén 2014). Rather than exploring an external materiality, every artist-as-researcher reaches into a personal process of knowledge production that closely interacts with their own thoughts and emotions, with their perceptional experience, with their body and life—with their essential fragilities.

How much does the composer *care* about their process, music, and work? How does the composer's personal experience of fragility influence their conceptions of space and distance, sound and body in music theatre? Listening perception—one of the core faculties employed by composers in their practice—borders on touch; we cannot close off our ears from sound. Working with sound is such an intimate procedure, yet it is the composer's métier to deal with that intimacy in a professional way. The composer and researcher Dylan Robinson, known for indigenous sound studies, explains how his intense relationship with music brings him to think of certain works as friends, lovers, and kin, and asks: 'How do we get at the sense of touch in writing, or convey being touched by sound?' (Robinson

⁹ In Rutherford-Johnson's booklet text for Lim's *Extinction Events and Dawn Chorus* (2018), available at https://www.kairos-music.com/sites/default/files/downloads/0015020KAI_lim_iTunesBooklet_FIN.pdf (accessed 20 November 2021).

2020, p. 95). What is the contribution of intense emotions in a research process? It has been noticed that artistic research and indigenous research methodology both discuss the insider/outsider alternation (Hannula, Suoranta & Vadén 2014).

The intimate physical experience of touch—of perceiving sound through vibrations—brings composers to identify sound with space (or volume) and with the body. In the programme notes for his string quartet *your body is a volume* (2016–19), the composer and artistic researcher Timothy McCormack writes about the relationship between the performer's body and the performance space: 'This body does not move through a space—it becomes the space; the body as the site of kinesthetic inscription. We hear the body in its sound, and the sound subsumes us.'¹¹¹ The nexus of space/body/sound is further addressed by the composer Chaya Czernowin, who introduces her opera *The infinite now* (Czernowin 2017) with the following passage:

Imagine that the hall, the whole space of the hall, is the inside of a head/heart/body. The audience is immersed in the working of the head/heart/body of a person who finds themselves in a difficult or hopeless situation, a person who is struggling to find their footing. The hall becomes an acoustic space where the outside is reacted upon, digested, dreamt, in an attempt to figure it out, and to survive.¹¹

The arguments used by McCormack and Czernowin concentrate on certain characteristics of hearing perception. Their conceptions draw on experiences which are familiar to almost every human being: sound is described as penetrating the body, crossing the border between one's 'outside' and 'inside'. Another compositional perspective on staging and spatiality is described by the composer Liza Lim in an interview in 2019:

I suppose spatial things have different roles. Sometimes it's very much a sonic thing, it's about shifting sound around a space. Sometimes it's about a kind of politics which is about dissolving a kind of stage setup or tension or power relation. [...] These things are not so much about theatre or acting, they're more techniques or tools to shift a state within the feeling of the work. So yes, I think power relations are something which one can address, via spatialisation and movement. I find that quite interesting, and it's not like I do incredibly extreme things either. I just make usually quite small interventions and test them.¹²

Lim speaks about sound, moving or shifting in space. Using instrumental or electronic means, these movements can be performed in flexible and fluid ways. The

¹⁰ See https://www.timothy-mccormack.com/yourbodyisavolume?mc_cid=4dd0a9290e&mc_eid=a1c325b245 (accessed 18 November 2021).

¹¹ Retrieved from http://chayaczernowin.com/infinite-now (accessed 21 November 2021).

¹² The entire interview between Martina Seeber and Liza Lim is published under http://divergencepress.net/2019/11/28/farewell-to-humans-an-interview-with-liza-lim/(accessed 21 November 2021).

composer notices how subtle shifts can influence the experience of perception and the emotional response of the listener.

Drawing on practices in electronic music and on research into composing and listening, a more fluid conception of music theatre was explored by Palme in the research project *On the fragility of sounds*:

Music theatre in the widest sense can be understood as sound moving *with* space, or space moving *with* sound—live performed and presented to a community, the audience. Sound, space, and the body are inseparable from the position of listening and composing. They completely interrelate. Space contains/encompasses living and non-living entities, and entities contain space.¹³

With similar observations of perceptional processes, Robinson describes how indigenous people understand listening as the main faculty for exploring spaces: listening becomes witnessing. The ear is not isolated from other sensory experience in this process. According to indigenous ways of thinking, total listening incorporates 'the fullest range of sensory experience that connects us to place.' (Robinson 2020, p. 73). The term 'fullest range' calls to mind the 'whole' as experienced in polyphonic music: listening acts as container and agency for all other perceptions. These ideas connect to the *Deep Listening* practice developed by the composer and expert in listening Pauline Oliveros (Oliveros 2005).

Opening yet another dimension of space and listening, Robinson reflects on the (concert) space as spatial subjectivity:

To acknowledge spatial subjectivity means addressing the ways by which space exerts agency, affect, and character beyond the realm of the striking aesthetic impact. In certain cases, it may mean experiencing it as a partner, interlocutor, or kin (Robinson 2020, p. 97).

At this point, space is an active subject in itself.

Interestingly, Robinson expands his investigations of spaces towards the written pages of a book. For him, formats of writing change when there is more awareness of the page as spatial subjectivity. Performative modes of writing have the power to destabilise and unsettle, he argues. In writing, we share our co-fragility as human beings. In sharing multiple subjective experiences of fragility with a community of writers, readers, and listeners, literacy is brought forward.

¹³ Between 2011 and 2020, Palme developed this concept during her research and practice in the field of music theatre. See also in chapter 2.3.2 *Scenic spaces* of her doctoral thesis *The noise of mind. A feminist practice in composition* (Palme 2017).

On the fragility of sounds: research in music theatre

The idea for this anthology came in the spring of 2021 when the weekly Fragility of Sounds Lecture Series (FoS) was held online during the third pandemic lockdown period in Austria.¹⁴ Within the framework of the programme of artistic research *On the fragility of sounds*, Palme, Fischer-Lessiak, and Lehmann decided to offer an intellectual and welcoming space for debates and dialogues concerning art, artistic research, science, feminisms, and political awareness for an international audience, at a time when public performances were forbidden, travel was obstructed, universities were closed, and professional work was severely restricted. People everywhere were suffering from the effects of the crisis.

A collection of seventeen lectures, accompanied by premieres of electronic music and ensemble works, was organised—at a time when such a series of public events in digital space seemed to be an experiment with an uncertain outcome. Presenters included Georgina Born, Darla Crispin, Sarah Weiss, Germán Toro Pérez, Malik Sharif, Chikako Morishita, Veza Fernandez, and Aistè Vaitkevičiūtè. The concerts featured the Austrian ensembles PHACE¹⁵ and Schallfeld, ¹⁶ the artists Electric Indigo, Elaine Mitchener, Elisabeth Schimana, Molly McDolan, Sonja Leipold, the dancer Paola Bianchi, and soprano Juliet Fraser, among others.

The series became an instant success, attracting a large audience worldwide from January to March. Discussions repeatedly circled topics such as the social and cultural importance of live communication and performance as well as the influence of digital media on music and performing arts; adaptions in the artistic process and in aesthetics were investigated.

As early as 2018, Palme had conceived the project *On the fragility of sounds* to continue on from her previous body of work,¹⁷ planning to explore terrains of composition and contemporary music theatre at the intersection with feminist practices. In order to realise this vision, Palme cooperated with Christina Fischer-Lessiak, a musicologist, pop-musician, songwriter, event engineer, and cultural worker with a strong background in feminist studies.¹⁸ It was their intention to facilitate the creation and production of scenic works as part of a wide-ranging artistic research enquiry. With her broad knowledge and expertise, Fischer-Lessiak contributed to the systematic analysis of a composer's artistic process, as well as

¹⁴ The entire programme of the series and abstracts of the presentations can be found under https://www.fragilityofsounds.org/fragility-of-sounds-lecture-series/ (accessed 20 November 2021).

¹⁵ See under https://phace.at.

¹⁶ Schallfeld ensemble is based in Graz. See under https://www.schallfeldensemble.com.

Within the framework of her doctoral research at the University of Huddersfield (UK) and as independent composer-researcher.

¹⁸ In addition, the musicologists Lena Hengl and Johannes Kainz acted as part time student researchers.

to coordination and curating. Her own research centred on listening perception and aspects of composition, feminism, and autoethnography. Using her organisational and technical experience, she facilitated presentations, rehearsals, recordings, concerts, and music theatre productions. This was particularly important because the project involved ensembles, soloists, venues, radio stations, cultural institutions, and festivals—as well as academic cooperations.

In the framework of her research on the influence of gender in connection with practices of composing-performing and their reception, Irene Lehmann collaborated on staging several music theatre productions, in curating, and conducting interviews since 2020. After their joint panel presentation for the symposium Performing, Engaging, Knowing at the Lucerne School of Music, Switzerland, the team of researchers engaged in regular in-depth discussions that have also shaped the outcome of this book.¹⁹

As case studies, several new works were composed and produced within the framework of the research programme. Palme composed and realised five scenic works, among them the music theatre piece *WECHSELWIRKUNG*.²⁰ This experimental work was composed and assembled in a collaborative process with the dancer and choreographer Paola Bianchi, the soprano Juliet Fraser, Lehmann, and Fischer-Lessiak. Co-produced with the festival Wien Modern 2020 and ensemble PHACE, the premiere coincided with a lockdown period. The piece was performed and filmed without an audience, thus missing an important counterpart in the artistic process.

Palme and Fischer-Lessiak initially planned for the Fragility of Sounds Festival and Symposium to be held at the University of Music and Performing Arts Graz. Apart from issuing an open call for contributions, they commissioned four new works—a spatial electronic composition by Susanne Kirchmayr a.k.a. Electric Indigo, and pieces by the composers Elisabeth Schimana, Séverine Ballon, and Elaine Mitchener for the ensemble Schallfeld. The composers were selected because they consistently integrate space, movement, body, and performance in their music; furthermore, they regularly perform on stage themselves.²¹ Schimana and Kirchmayr are also known for their long-time cultural work and feminist

¹⁹ Palme P, Lehmann, I., Fischer-Lessiak, Ch. (2020). Interferences of Writing, Researching, and Composing. Themed Panel and Performance, Symposium Performing Engaging, Knowing, Lucerne School of Music, Luzern (Online-Symposium). Two publications, by Lehmann and by Palme, are forthcoming.

²⁰ See under https://www.fragilityofsounds.org/wechselwirkung/ (accessed 22 November 2021).

²¹ Composer-performers play a prominent role in this publication. Often, female* composers appear as performers as well, or the other way round: female* performers work as composers. In contemporary music, it is often women* who begin their career as performers, and from there gradually move into the profession of a composer.

engagement.²² The Fragility of Sounds Festival and Symposium was ready to be staged in the spring of 2020; with the first wave of the COVID-19 pandemic, all preparations abruptly came to a halt. The symposium was postponed to January 2021 but once again the pandemic prevented its realisation.

At this point, the organising team, now consisting of Palme, Fischer-Lessiak, and Lehmann decided to stage the festival online. They introduced a series of events—the Fragility of Sounds Lecture Series—instead of presenting all concerts and lectures at once in a festival format; at the same time, the idea for a book publication emerged among the three collaborators. The commissioned works could be rehearsed and recorded, albeit without their spatial and scenic settings, and all tracks were produced in stereo format only, which considerably reduced the original intention. Planning for an anthology, Palme and Lehmann continued to communicate with all presenters and artists. Lehmann's expertise as theatre scholar essentially contributed to intensifying the discourse on the interrelations between artistic and scientific research.

The unfolding sequence of events demonstrates the amount of decision-making, courage, patience, and creativity that was necessary to bring the research programme to its conclusion. Carefully navigating the pandemic crisis, and steering around political decisions connected with it, the project team and the contributors continued to work while re-orienting their respective goals and processes. The making of the anthology led to yet another important development in a process of research that evolved in unpremeditated directions. During this phase, the focus of research activity was placed on writing and notating—on *sounding fragilities*. In the fields of music theatre and composition, the systematic development of literacy is of importance as a means of empowerment, stimulating communication across disciplines. For many investigators and artists, the theme 'fragility of sounds' became more urgent and meaningful during this process.²³

²² Kirchmayr is the founder of the international female:pressure network (https://female pressure.net). Schimana is the founder of the art institution IMA Institut für Medienarchäologie (https://ima.or.at/en/).

²³ As these lines are written, Vienna, Austria is under the fourth lockdown period, in the winter of 2021/22. The Omicron variant of the COVID-19 virus has just been identified, named, and is rapidly spreading all over the globe.

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Fragile soundings A collection of compositions as case studies

Pia Palme

Several contributions in this book draw on musical works and performances which were commissioned, composed, produced, and recorded as case studies within the framework of the research program *On the fragility of sounds*.

As artists, what are we exploring when we approach sounds as fragile? Alongside the main researcher Pia Palme, the artists Electric Indigo a.k.a. Susanne Kirchmayr, Elaine Mitchener, Elisabeth Schimana, and Séverine Ballon were invited to compose music around the 'fragility of sounds' and asked to observe their own process. Possible themes for compositional explorations were, for example, interactions, relation-ships, and interferences between sounds and space, movement, bodies, materials, cultures, and politics. The composers were free to decide the format, instrumentation, and duration of their pieces. Due to the pan-demic crisis, the artists often had to communicate with ensembles and performers online, and some of their works could not be performed in public. In this singular research setting, the artistic process of the com-poser/performer themselves was at the core of the exploration; in particular, the composers were encouraged to reflect on their own practice. One could say, the processes of the artists Palme, Schimana, Mitchener, Kirchmayr, and Ballon provided live 'case studies' for On the fragility of sounds. Interviews, panel discussions, lectures, and concert talks offered platforms for communication and discourse about the composers' findings and observations.

The main music theatre work WECHSELWIRKUNG was realized, filmed, and recorded in cooperation with the festival Wien Modern 2020. It was an experiment in collaborative and multidisciplinary composing, performing, and staging initiated by Pia Palme. A focus of the work and research around WECHSEL-WIRKUNG was the study of interactions and interferences between singing and dancing, between space-as-movement, space-as-sound, and space-as-body. The program booklet for the piece contains essays by Irene Lehmann, Paola Bianchi, and a short introduction by Pia Palme, as well as the libretto for both vocal parts (soprano and spoken voice); it can be downloaded at the website. Christina Fischer-Lessiak published her essay 'Arbeiten in Wechselwirkung—Die kollaborative Entstehung eines Musiktheaterprojekts' exploring the collaborative process around this music theatre in the journal Positionen. Texte zur aktuellen Musik #126

¹ Under https://www.fragilityofsounds.org/wp-content/uploads/2020/11/Programmheft_ Wechselwirkung.pdf (accessed 20 January 2022).

(01/2021).² In connection with the piece and its conception, Pia Palme was invited to publish her text 'Komponieren im Anthropozän' in Wien Modern's book of essays *Stimmung*.³

In cooperation with Ventil Records Vienna, the album collection *FRAGILI-TY OF SOUNDS* is released via Bandcamp. Further works, artistic experimentation, and materials are documented on the website of the research program.

All compositions were commissioned, produced, and recorded by *On the fragility of sounds* PEEK AR537 with funding from the FWF Austrian Science Fund, Mariann Steegmann Foundation, Land Steiermark, the City of Vienna, SKE austro mechana, and the BMKOES Austria.

WECHSELWIRKUNG—a montage for the Anthropocene (2020)

Music theatre (duration 60')

Collaborative artistic research team: Pia Palme, conception, composition, text; Paola Bianchi, choreography, dance; Juliet Fraser, soprano, dance; Irene Lehmann, research; Christina Fischer-Lessiak, research.

Performers: Lars Mlekusch, conductor; Juliet Fraser, soprano; Paola Bianchi, dance; Pia Palme, elec, brec, spoken voice; Molly McDolan, oboe da caccia; Sonja Leipold, hpd

PHACE Ensemble: Doris Nicoletti, afl, bfl, picc; Reinhold Brunner, bcl, dbcl; Daniele Brekyte, vln; Rafał Zalech, vla; Barbara Riccabona, vlc; Alexandra Dienz, db; Berndt Thurner, perc

Christina Bauer, sound design, electronics; Veronika Mayerböck, lighting; Christina Fischer-Lessiak, assistance, production; Irene Lehmann, dramaturge, programme, production; Peter Palme, graphic design; Michalea Schwentner, filming; Martin Putz, camera; Christian Sundl, venue manager

[Premiered 13 November 2020 without audience at Wien Modern, WUK Vienna]

Live recording: Christina Bauer 2020

Mixing and mastering: Martin Siewert 2021

Websites: https://www.fragilityofsounds.org/wechselwirkung/

The premiere was filmed and recorded, available at https://vimeo.com/497323866/bafbe93990

² Available at https://www.positionen.berlin/vorherige-ausgaben/126 (accessed 20 January 2022).

³ Available at https://www.fragilityofsounds.org/wp-content/uploads/2020/11/Palme_Essay_Komponieren_im_Anthropozaen.pdf (accessed 20 January 2022). See also in the catalogue of Wien Modern 33 (2020), *Stimmung*, pp. 211–215.

Ventil Records album FRAGILITY OF SOUNDS collection

All tracks are available at https://ventil-records.bandcamp.com/album/fragility-of-sounds

Ventil Records Website http://ventil-records.com/fragility-of-sounds

Elisabeth Schimana Virus #3.5 Schatten (2020/2021)

for bcl, db, pft, elec (duration 21')

Performers: Elisabeth Schimana, elec

Schallfeld Ensemble

Szilárd Benes, bcl; Margarethe Maierhofer-Lischka, db; Maria Flavia

Cerrato, pft

[Premiered 26 February 2021 online at the Fragility of Sounds Concert Night]

Recording, mixing and mastering: Stefan Warum 2021

Electric Indigo Brittle (2021) for electronics (duration 30')

Performed and recorded: Electric Indigo

[Premiered 11 February 2021 online at the Fragility of Sounds Lecture

Series]

Mastering: Martin Siewert 2021

Séverine Ballon Au travers des paupières closes (2020/2021)

for vcl solo, vln, vla, vcl, db (duration 14')

Performers: Séverine Ballon, vlc solo

Schallfeld Ensemble

Lorenzo Derinni, vln; Francesca Piccioni, vla; Myriam Garcia Fidalgo, vlc; Margarethe Maierhofer-Lischka, db

[Premiered 30 June 2021 at Schaumbad - Freies Atelierhaus Graz]

Live recording and mastering: Stefan Warum 2021

Elaine Mitchener Owner's Manual (2020/2021)

for ensemble, realized by Schallfeld in two versions #1 Form & #2 Free (duration 12' & 12')

Leonhard Garms, conduction

Performers: Schallfeld Ensemble

Szilárd Benes, cl; Lorenzo Derinni, vln; Francesca Piccioni, vla; Myriam Garcia Fidalgo, vlc; Margarethe Maierhofer-Lischka, db; Maria Flavia Cerrato, pft

[Premiered 26 February 2021 online at the Fragility of Sounds Concert Night]

Recording, mixing and mastering: Stefan Warum 2021

Pia Palme Kreidebleich (2019-2021)

for harpsichord with optional video (duration 14')

Performer: Sonja Leipold, hpd

[Premiered 19 January 2021 online at echoraum and echoraeume Vienna] Recording, mixing and mastering: Lukas Turnovsky, Treehouse Studios

Vienna 2020

Website: https://www.fragilityofsounds.org/kreidebleich-4/

Pia Palme MORE RADICALLY (2019)

for mezzo, bass recorder and spoken voice (duration 12') with optional video

Text and concept: Pia Palme

Realization: Rosie Middleton, mezzo; Pia Palme, bass recorder & voice [Premiered 4 October 2019 Rolston Hall, The Banff Centre of the Arts] Recording, mixing and mastering: Banff Centre of the Arts Studios 2019

Pia Palme Eins & Doppelt (2019/2020)

for two oboe da caccia instruments (duration 8')

Performers: Molly McDolan, Ana Inés Feola, oboe da caccia

[Premiered January 2019 Theater im Palais, Graz]

Recording, mixing and mastering: Amann Studios Vienna 2020

Pia Palme WEITERUNG (2021)

for ensemble, with solo bass recorder with spoken voice (duration 14')

Text: Pia Palme

Performers: Pia Palme, bass recorder & spoken voice; Séverine Ballon, vlc

Schallfeld Ensemble

Lorenzo Derinni, vln; Francesca Piccioni, vla; Myriam Garcia Fidalgo, vlc;

Margarethe Maierhofer-Lischka, db

[Premiered 30 June 2021 at Schaumbad – Freies Atelierhaus Graz]

Live recording and mastering: Stefan Warum 2021

Fragmented fragilities An introduction

Irene Lehmann

In my associative mind, fragilities are connected closely with fragments. This draws on a concept which has been present in thinking about the relation of philosophy and art since the 18th century where it is prominently linked with authors like Friedrich Schlegel, who explores certain artworks as 'fragments of the future.'1 Walter Benjamin ties in with this strain of philosophy and critical hermeneutics in his writings on art criticism or the art of translation (Benjamin 1972, 2008) and further develops it in connection with Jewish thought.² In his study of sound and 'listening images' in Benjamin's writings, Martin Mettin also investigates these relationships. He points out that in Kabbalah, truth is described as a light that was filled into vessels, of which some were unfortunately not strong enough and burst into fragments. However, some of the light clings like oil to the fragments which are scattered all over the world. Mettin (2019, p. 33) compares this image with ideas on the broken and shattered parts of history in Benjamin's philosophy of history and the construction of the dialectical 'thought image' (Benjamin 1961). Benjamin entertains the idea that there are fortuitous moments in history, when humans are able to discover ways to recombine some of these fragments, thereby discovering forgotten layers and experiencing sudden insights in unexpected connections. Although some fragments might be lost or have sharp contours, the effort of combining them bears the promise of allowing a light to shine through the intermediary rifts and spaces in between the fragments. This figure of thought may also offer a possibility to understand and shape the relations between artistic research and established disciplines of academic and scientific research, of practice-based and theoretical knowledges.

Since the Bologna accord from 1999, the system of academic research in Europe entails artistic research as a discipline, but there is still intense discussion into how to situate this area within the system of established academic fields. Today, research areas are divided into the natural and life sciences, social sciences, and humanities. A further distinction is made between fundamental research and applied sciences; within these systematic subdivisions a position for artistic research

¹ Schlegel introduces with this concept a positive notion of the fragment that was influential on modernist aesthetics and contradicted 'classical' representational aesthetics in his time. See Strack/Eicheldinger 2011.

² See on Benjamins position in the tradition of hermeneutics Regehly (1992). His relation to Jewish thought was strongly informed by discussions with Gershom Sholem.

is sought (Borgdorff 2007, Früchtl 2019, Henke et al. 2020). However, in more recently developed fields like gender or diversity studies, interdisciplinary transgressions between the different research fields are prominently at play. This quality of interrelatedness applies also for the arts. Beyond academic departments, art and philosophy have created systems of hierarchization for the different genres of the arts like music, theatre, architecture, etc. The contingency of these hierarchizations is revealed when comparing the disputes about which art should be located at the highest position. While G.W.F. Hegel sets drama at the top of his hierarchy, due to its structural qualities, Arthur Schopenhauer claims the highest position for music, since he considers music to have the greatest distance to language and takes this as a decisive quality (Ulrich 2001).

Although today we can look back on several waves of intrenchments or interweaving of the arts that have occurred throughout the 20th century, and an increasing amount of interdisciplinary studies at universities over the past thirty years, the effects and competitions from hierarchized systematizations are still palpable in today's encounters between different areas of study and research; sometimes more openly, sometimes as an undercurrent within discussions and co-operations. Since institutional competitions endanger the understanding of the subcutaneous effects of these historically established hierarchies, their reflection and consideration is necessary for envisioning and practicing interdisciplinary research. The hierarchizations and their effects are connected to what philosopher Jacques Rancière (1998) grasps with the 'division of the sensible,' when he traces the policing of listening and voicing protest or the social division of urban spaces throughout European history. The division and hierarchization of the arts and related departments of study have on the one hand enabled specializations, but on the other they have also shaped and controlled epistemic approaches and accessibilities.

These divisions can leave those researchers from different fields who are involved in interdisciplinary exchange sometimes just as puzzled as those humans carrying ancient fragments of truth in their hands. Yet there are also moments when difficulties and frictions can be set aside and fortuitous moments of recognition and cognizance occur: when the light shines through the rifts of a former whole or when a new whole begins to take shape. This sometimes occurs when an encounter uncovers common interests and the actual possibility of communication across the borders of disciplines and discourses.

Encounters

As a part of my research on *Resonating knowledges*, where I pursue interferential phenomena and fields where humanities and artistic research touch, I have conducted research in association with Pia Palme and Christina Fischer-Lessiak's project *On the fragility of sounds* (KUG Graz 2018–2021) and also with Heike Langsdorf's research project *Distraction as a discipline* (KASK Gent 2017–2019, see

Arteaga/Langsdorf 2018–2021; Lehmann 2021),³ In addition to tracing discourses on the connections between art, philosophy, and artistic research, within both projects I acted for limited periods not only as an associated but as an involved researcher. This research practice can be compared to ethnographic field research where the method of participatory observation is applied, yet in pursuit of a different objective. By leaving the position of a distanced researcher, I didn't 'join' the social group ('the artists') in order to study their social and cultural practices, as an ethnographer would have aimed at. I was rather interested in studying specific practices and processes of knowledge and art production. The projects I have been involved with were rooted in different art genres and research interests—composition, music theatre and listening in the one case, dance, choreography, and creating interactive research settings in the other case—and have thus allowed me to gain insight into various practices of artistic research.

In the *On the fragility of sounds* project, as well as in this book, the researchers focused their work on different practices of composing and performing. Through this, a particular genre of music theatre emerges, where performers, acoustic and electronic instruments, auditory and visual spatial arrangements shape the performance as a site of interaction. Regarding the capacity of music theatre to find new connections between music and theatre and leave hierarchies behind makes it a promising field for research into the connections between arts and knowledges.

Traditional hierarchical views tend to denounce music in the theatre often as 'stage music' or cast out theatrical elements of music that contradict an idea of the *musique pure*. A recent variation of these divisions is described by Jonathan Sterne (2003), a pioneer of sound studies, as 'audio-visual litanies.' They are often found, not only in western cultures, in strains of thought that are critical towards visual dominance. This tendency to ontologize and hierarchize human capacities of perception and senses not only contradicts psychological findings on synaesthetic phenomena. What is more, to attribute an emancipatory potential reductively to listening bears a tendency towards the re-hierarchization of the senses. 'Audio-visual litanies' contradict the principally open situation of music theatre, which yields new genres and thus new possibilities for sensual perception.

Throughout the history of music theatre and opera, the emergence of new genres has also had a strong effect on how gender and sexual identities are presented and negotiated on stage. The partly related codification of aesthetic practices, sounds, instruments, colours, and offstage practices such as light and stage design, direction and prompting has led to strong inequalities and toxic power relations in

³ This research project evolved from my studies on gender relations in artistic contexts that include practices of composing-performing. This latter (preliminary) project was funded by the Philosophic faculty and the Bureau for gender and diversity at Friedrich-Alexander-University Erlangen-Nuernberg, Germany. As a part of this research, a symposium was organized in 2018 and results published together with Katharina Rost and Rainer Simon (Lehmann, Rost, Simon 2019).

the arts (Schmidt 2019, Eckhard/De Graeve 2020), that must also be defied in the seemingly abstract realm of aesthetic categories and writing.⁴

Writing as a research practice

What is special about artistic research is that it offers certain possibilities which are sometimes difficult for 'normal' academics to access or which have been diminished in the process of aligning universities and higher education along economic values (Nussbaum 2010). On a general level, conducting research with open results or studying closely contemporary (and sometimes historic) artistic practices has become increasingly difficult in the context of project-based research schemes.

Within the framework of the On the fragilities of sound project and the lecture series, a dialogue was established between artists and scholars, which enabled experimentations on all sides. Inviting artists to reflect on their practices with regard to the project topics and combining this with experimental research by scholars was a great chance to open up a space for communication, interaction, and exchange. However, the transformation of talks and contributions into the format of a book, whereby some of these contributions had themselves already been transformed from live to online performances, was not without challenges. Nevertheless, it is not only the difficulties but also the opportunities of these encounters which can be assessed while reading this book. From each contributor's position, whether as an artist or a scholar, it is an immense challenge to write about the processes of the performing arts. Since they are often not language-based, the task is to communicate embodied practices. Richard Sennett's (2008) description of tacit knowledges can be applied to certain aspects of performing and compositional processes. As contemporary performance art and music theatre are often concerned with their own situatedness, it is not a surprise that by analyzing single performances, subterraneous situated knowledges can be unearthed.⁵ Especially the embodied practices of the performing arts are often overlooked or devalued in regard to their genuine knowledges. Their knowledges are particular, situated and mostly tacit, which is why the process of writing about them is affected by various moments of fragility.

The online lecture and performance series not only allowed to discover interconnections between the different areas of thought, practices, and experiences, but also generated uncommon genres of writing. In this book, artists and scholars alike have turned to more open textual forms like 'essays-in-progress.' For scholars, this form sheds light on a tacit understanding within the humanities that no text is ever finished and published versions are often preliminary. This points to

⁴ See for more texts https://diversity-arts-culture.berlin/magazin/arbeitskoffer (last access 18. November 2021).

⁵ See on situated knowledges Haraway 2016 and Helferich/Bollier 2019.

the potentially unlimited quality of thought processes and their inherent infiniteness. This fragile and transitory process is traced through writing, which is at the same time performative—in the sense that knowledge is generated, results are noted, and new questions arise.

Within the context of artistic research, conventions about how to write texts about the artists' own practices or their research are less established than in other fields of academia. It is even still highly debated if writing is a necessary ingredient of artistic research at all (Henke et al. 2020). Artistic research has many facets and there are great differences depending on the genre of art from which the research emerges. Therefore, there is not one single way of approaching the question of how to transfer knowledge gained in these research processes, but rather a great variety. For this book, we have decided to employ the practices and values of the humanities to create evidence, on the basis of transparency and the traceability of facts and theses. Although these values are of great importance in an era of fake news and populism, poetic ways of writing also have their legitimate place in this book. The essay, for instance, is a classic genre combining literary and philosophic investigations, which extends the possibilities of language and writing (Adorno 1984). With the special challenge of writing about performative processes and non-language-based processes of composition, a moment of translation or transferal always comes into play. The process of finding the right words to describe but also evoke processes that are rooted in the mind as well as in the body demands invention. This is even more the case in this book, as most contributions were conceived between English and other languages. Invention is also necessary to describe the interactions between composers, performers, and all the others on whose work the successful realization of a performance depends. Some practices commonly attributed to a receptive perception, such as listening or observing, are indeed highlighted in the book as activities which are decisive for any compositional process as well as for research into the performative arts. Combining different approaches to writing and research might be a way to gather and access the situated knowledge of artists that reaches beyond the divisions of foundational and applied knowledges and might be otherwise overlooked. Musicologists, for instance, have made it an essential research practice to interview artists about their practices. Since the area of New Music, it is no longer uncommon for composers to write about special characteristics of their own compositions. Based on these practices, artistic research provides more in-depth reflections on artistic processes or design setups to explore them.

Scholars from the humanities have different possibilities of dealing with this relatively new approach. There are new discourses on knowledge production to observe and in the best case, artists and scholars enter into a dialogue as equals, recognizing as an enrichment the particularities of other approaches and accesses to knowledge. This vision entails acknowledging the situatedness of each position, including their unique opportunities and limitations. It might be remembered that

Immanuel Kant (1787/1974, B XXIII-XXXVIII) stresses that one crucial condition for all cognizance is the acknowledgement of its limitations. Further possibilities for scholars are to include artists' findings into their own reflections or enter into cooperations in order to develop new terms and systematizations in a shared research process. Research associations also yield the possibility to interject the results gained from academic research on lesser-known models of theatre or music back into fields of practice, thus spurring new inspirations.

—Following the philosophic thought of Schlegel and Benjamin, art and philosophy can each be envisioned as particular modes of accessing the truth. While there are shared practices, methodologies, and areas of research for the humanities and the branches of artistic research, there are also differences, contradictions, or even rifts which have to be accepted. If researchers from all realms try to reassemble the fragments of the vessels and reanimate the diminished lights, there may not arise a new whole, but with a bit of luck some light will shine through the rifts.

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Three fragilities Introduction to the contributions

Irene Lehmann

The contributions in the book explore various modes of fragility in the context of music and music theatre making. Fragility refers in this context to the interrelatedness of production processes in the conception and realization of performances as well as on aesthetic formation processes that are explored in the realms of composition and performance. The contributions are divided into three sections, investigating the fields of fragile communities, fragile materialities, and fragile collaborative processes from different angles. In fact, most contributions touch on several dimensions of fragility and pursue their intersections. With different professional backgrounds in the performing arts that range from more scholarly to more artistic orientations, the authors investigate and reflect on experiences in the realm of music, dance, theatre, and music theatre; they develop different layers and positions surrounding the fragilities of sound. Sound is explored mainly as a perceptual phenomenon that is shaped through compositional processes as well as through the spatial, kinesthetic, and embodied actions of the performers. Moreover, from a phenomenological perspective underpinning a common view of the essays in this book, sound is understood as an intermediary phenomenon that establishes a relationship with the audience. The theatrical perspective focuses on visual phenomena as well as on the way that relations between the performers and the audience are designed and negotiated during each performance. Dance studies, whether from a theoretical or a practice-based perspective, turn their concentration towards the body as it moves in space and perceives through touching and kinesthetic cognition. Theatre studies as well as new musicology approaches turn to processes of perception which include listening, observation, and all other thoughts, affects, and imaginations which may cross spectator-listeners' minds during a performance. Composition and performance are therefore conceptualized as complex processes with manifold perspectives and experiences.

As music theatre and the connection with conceptual dance practices are one of the main research areas of the *On the fragility of sounds* project, all kinds of auditory and visual perceptions come into play in the authors' investigations. In reflections on artistic practices by scholars or artists, auditory perception is often interwoven with visual and visceral modes of perception, initiating thus a process that leads to a critical reflection of however organized hierarchized traditional systems of senses and sensitivities that still today inform the division of music, theatre, and dance institutions, faculties, and artistic practices.

Fragile communities

The first section of the book gathers contributions which examine the political dimension of communities and their fragilities. Regarding the political aspect of research questions within the *On the fragility of sounds* project, feminist activism and gender studies are two of the main points of departure, especially in relation to gender relations within the performing arts. Expanding from these considerations, more general dimensions of the political sphere are touched on in this section, including political theory, ecology, community and *polis* related theories, and the politically-influenced formation of perceptual habits. The politics of cooperation and power relations in the process of realizing a performance are further investigated in the third section of the book.

In her essay *Composing futures. Activism and ecology in contemporary music*, **Pia Palme** uses experimental writing to discuss systemic models of composition and music as ecologies. In a framework story, she explores the dynamics of a feminist campaign around the ZKM, an institution that can be considered as one of Germany's beacons of media art. Bringing together institutional critique and political activism, artistic research and personal observations, Palme investigates her ecological conceptions of music theatre as membrane organism.

In their conversation *On the fragilities of music theatre*, two composers and two scholars, **Elisabeth Schimana**, **Pia Palme**, **Susanne Kogler**, and **Irene Lehmann** discuss the possibilities and difficulties of experimental music theatre productions in today's Austrian and German cultural context. Taking examples from a series of compositions by Elisabeth Schimana as a starting point, *The virus series* and the music theater piece *Pricked and away*, as well as experiences from various artistic scenes, the participants discuss how non-conventional aesthetic and cooperative ways of making music theatre more often than not lead to frictions with institutions and cultural politics.

Christina Fischer-Lessiak, in her article *How feminism matters. An exploration of listening*, discusses how the social and feminist dimension of listening can be approached from different theoretic and methodological points of view in the realm of musicology, ranging from psychoacoustics to communication studies, from pedagogics to autoethnography. Drawing on her research as a co-researcher in the framework of the *On the fragility of sounds* project, she explores the idea of 'feminist listening' in connection with feminist standpoint theory and an awareness of power structures that challenges normative concepts of listening.

Margarethe Maierhofer-Lischka reflects in her essay *Listening is a browser*. On the fragility of listening online the modes of online and remote listening, focusing on the way that practices, politics, and poetics of listening have changed during processes of digitization and with pandemic circumstances. Maierhofer-Lischka draws from theories on live and digitally-mediated performances and discusses

views from feminist media art and technology studies while exploring listening in live-online music production and listening settings. Maierhofer-Lischka thereby explores the specific fragilities of 'telematic sonic empathy.'

Irene Lehmann investigates how experimental listening situations have been reshaped by pandemic measures in her essay *Regarding listening. On the theatricality of experimental listening situations.* She explores how these measures have also enforced the theatrical dimensions of experimental concert situations. This is exemplified by analyzing a listening project by Splitter Orchester, a self-organized orchestra of composer-performers. The situational analyses are further investigated by applying the concept of theatricality—which includes phases of non-theatricality, where all performances are banned from stage. Expanding on concepts from theatre and performance studies, she addresses the complex assemblage which emerges from observing, listening, and perceiving of experimental music.

Susanne Kogler, in her contribution *Hannah Arendt and the 'Fragility of sounds.' Aesthetics and politics in the 21st century*, investigates how concepts of contemporary music theatre, such as those proposed by Elisabeth Schimana, Pia Palme and Elisabeth Harnik, can be analyzed and interpreted in connection to Hannah Arendt's concepts of the political and the public sphere. She points out how fragility can be understood as a radical political concept that is linked not only to Arendt's but also to other outstanding philosophical thought on the political sphere from the 20th century, such as presented by Jean-François Lyotard, Theodor W. Adorno, or Julia Kristeva.

In her experimental essay *An infinite echo system on the fragility of sounds* **Suvani Suri** explores interconnections between the different talks of the *Fragility of Sounds* lecture series. From the position of a listener-spectator, she traces the aesthetic particularities of the digital lecture space and connects them to her own philosophical thought and aesthetic practices, creating thus an original view on the series. She describes this as cyclical process of recreation and synthesis, as a way to map the traces, resonances and echoes left behind from the series, which will continue to further inform her philosophical and artistic practice.

Fragile materialities

In the second part, we present contributions that deal with compositional processes—especially in regard to materialities ranging from textile—sound to image—body—sound constellations and evolving as co-agents in performative processes. The authors explore how multisensory perceptions emerge out of interactions with materials and how these interactions are shaped by live-online constellations. The focus on the specific role of certain materialities in compositional, performative, and perceptual processes is also relevant for some contributions in the third part of the book.

The section begins with an artistic contribution by **Flora Könemann** titled *The silent draw*. Here, she presents her explorations of the 'silent draw' in regard to material and space, to the inaudible, the void, or the fragility of textual materials. Könemann builds on her experiences working on a textile loom, exploring the visual and auditory impressions and reflections of its movements. She addresses questions of how to write about her synesthetic perception of texture—sound—movement.

Veza Fernández, in her practice-based essay *The voice that touches has also skin. Exploring the exercise of vocal touch*, explores a similar area, but with a focus on how the smallest changes within her body sometimes yield the greatest effects on her voice. By presenting short scores as exercises, she invites readers to engage in their own explorations of voices and sounds. Fernández' research on the voice combines dance and vocal performance and is interwoven with historic and philosophic reflections on theories of the voice. By reconnecting with material and bodily processes in the use of the voice, restraints that have historically been set especially on women's voices are countered with vocal outbreaks as well as with delicate perceptual awareness.

From an analysis of the restrictive modes of meetings during the pandemic period (online video-means of communication) and the extent to which they affect the way to think about our bodies, **Paola Bianchi** details her *choreographic research project ELP*—an acronym for *ethos, logos, pathos.* In her contribution, Bianchi reflects on her exploration of the relationship between descriptive words and dance via the audio transmission of various archives of postures, which are based on previous archives of images. She connects this with a critical reflection on cultural historic processes that have shaped movement and body images. The *ELP* project therefore emerges from, and contributes to, a broad research on bodies as archival deposits of cultural images.

In her essay *Rifts in time. Distortion, possession and ventriloquism in my operatic works*, **Liza Lim** reflects on processes of music-theatrical composition that revolve around questions of storytelling, on the role of voice, language, and embodiment in relation to the construction of stage figures. With distortion, possession and ventriloquism, she explores three aspects that allow the uncanny of these figures to appear onstage. Lim points out how the uncanny spills out and emerges from rifts in time and connects this to the topic of fragility.

In her essay *The development of* Brittle. *On the delicacies of minerals*, **Electric Indigo** reflects on her compositional process and the making of her piece *Brittle*. This work was commissioned by the *On the fragility of sounds* project; the composer describes her research into the meaning of fragility and sounds in materials and creative processes. She investigates delicate meanings and onomatopoetic associations of words that are connected to fragilities, as well as the digital tools and devices that she uses for her electronic compositions. Furthermore, the influences of inspirations, friends, colleagues, and obstacles are also explored.

Fragile collaborative processes

The third section of the book again turns to collaborative and cooperative processes and continues the investigation into fragile materialities as an active part of compositional and performative processes.

In his 'essay-in-progress' On the epistemic potential of (live) electronic music, Germán Toro Pérez investigates, from a theoretic and practical perspective, challenges inherent to current performances of live electronic music. To this end, he turns to the recurring question of how to realize certain aspects which remain undefined in the live electronic music repertoire in the last thirty years. The live-electronic practices of this period have simultaneously produced a so far not fully explored diversity of aesthetic and technical approaches. Furthermore, Toro Pérez considers the uncertainty, instability, and contingency of electronic instruments and systems that expose the limitations of notation and the accuracy of performances. Drawing on media philosophy, he discusses these observations along with systematic thoughts on live-electronic performances.

In her essay **复** (*Hair*) variations—variation of sensibility, **Chikako Morishita** reflects on compositional processes and interactions with performers from a composer's point of view. She presents insights into a project which is underpinned by inquiries into music's identity, as well as into compositional work's and performance's identities. She asks whether a composition/performance still can be recognized and sensed as the same work when the musical form or quality of energy of the music's form are transformed entirely. For her artistic investigations, Morishita takes Japanese concepts of the senses and spatial perception as starting points. Moreover, her compositional thought is further influenced by traditional Japanese symbolic meanings of woman's hair as a place where passion is stored, where invisible forces are enclosed and then disclosed in visible form.

In her essay *In the thick of it. Further reflections on the mess and the magic of collaborative partnerships*, **Juliet Fraser** investigates collaborations with the composers Rebecca Sounders, Cassandra Miller, Pia Palme, and choreographer Paola Bianchi, in which she was involved as a vocal artist and performer. She discusses her experiences in relation to current political thinking by Bruno Latour, Donna Haraway, and others in order to uncover a political dimension of collaborative partnerships within artistic productions.

A similar path is chosen by **Molly McDolan** in her essay *Undefined spaces. In pursuit of imprecision in instrumental technique* when describing her explorations as a musical performer of baroque oboes, especially the *oboe da caccia*. In this paper, she details the importance of unrefined sounds and fragile imprecision in the development of an innovative instrumental technique. Drawing on her experience as a pioneer of an instrument rarely used in contemporary music, she reflects on case studies from contemporary and baroque music in order to present approaches

to the spectrum of sounds and techniques beyond the intended use of baroque oboe instruments.

In his paper *On the interaction of composition and musicology*, **Malik Sharif** explores dynamics of co-operations between composers and musicologists. While these are observed sceptically from an established view of both side's roles, Sharif emphasizes their growing relevance in artistic research contexts. Against this backdrop, he investigates and compares the co-operation in the *On the fragility of sounds* project between composer Pia Palme and musicologist Christina Fischer-Lessiak with the coworking situation between Ruth Crawford (1901–1953) and Charles Seeger (1886–1979), who collaborated closely in the production of both musical compositions and theoretical texts.

The book closes with the conversation 'A dialogue between two fragilities' between Chaya Czernowin and Pia Palme that took place online in May 2020 during the first pandemic lockdown. The two composers were seated at their private working places, in their respective home studios in Boston, USA and Vienna, Austria. As they spoke in front of their computers, both had a view through their windows onto the trees in their backyards and bird sightings repeatedly attracted their attention. After an initial exchange about their current situation, the composers turn to a discourse on fragility and vulnerability, developing language images and reflections on their compositional processes.

II Fragile communities

Composing futures

Activism and ecology in contemporary music

Pia Palme

Three threads, woven in counterpoint...

In this text, three threads, or storylines, intersect each other. One storyline gives an account of a feministing campaign that arose in January 2021, directed towards the ZKM Zentrum für Kunst und Medien Karlsruhe. ¹ International online protest took action against a particular event, the project Einklang freier Wesen, which was announced as a 'showcase' symposium plus large scale streaming concert and featured a new work by the composer Georg Friedrich Haas in a complex technical setting, under the participation of several renowned music ensembles and venues. The featured composer, most of the performing musicians, and all the speakers on the panel were men, white men.² The ZKM is one of leading institutions in the field of music, art, and media. Therefore, feminist activists organised themselves in protest—I was one of them. Our campaign succeeded, the event was cancelled and we—the activists—initiated a critical dialogue with the curators. As a result, the symposium was re-planned and re-staged later that year. Furthermore, the ZKM created a position to address issues of diversity and gender in their institution. That is why the term *feministing* is used in the context of this campaign: a critical and creative action was initiated, resulting in a longer process and reflective discourse that brought about change.3

Another thread in this text explores musical role models, hierarchies, and canons from a personal standpoint and moves on to introduce ideas of ecology. Ecosystem ecology is a systemic tool that I find increasingly useful for my work within the wider field of music and composition. Over the last few years, my relationship with the environment has changed considerably and, in parallel, I have observed a change in my practice. When I refer to my practice, I am referring to composing, performing, and conducting artistic research, mainly in the field of experimental music theatre in the most inclusive sense. My interest is to compose music *with*

¹ The Center for Art and Media, see also https://zkm.de/en (accessed 9 November 2021); in the following I use the abbreviation ZKM.

² The website of the ZKM still shows the date and the original constellation of participants under this link https://zkm.de/de/media/video/symposium-showcase-einklang-freier-wesen (accessed 14 September 2021).

³ The term feministing was introduced by the British art historian, curator and activist Gill Park and describes a practice in which art, critical analysis, and political action converge (Park 2020, p. 290).

environments, or environments with music. In this context, music is to be understood as live performed music that includes the community of an audience. Music theatre involves multiple collaborations with other artists from a variety of disciplines. In essence, my practice is an activity: as an artist I do something—sometimes alone, often with others, or in public. For that reason, I prefer to use descriptive expressions such as interaction, interference, pollution, filter, collaboration, or cooperation in the context of my work; these words connote an active exchange of materials. On the other hand, I have always conceived my practice as situational, meaning that my work and process are grounded within a certain situation and context. However, my practice is not about/in/through an environment. The word with is most precise: examining the word com-posing, we find the term with (Latin com) right in the prefix. Therefore, I suggest the phrase 'my work and research emerge with an environment'.

The event at the ZKM was criticised for being undemocratic, patriarchal, sexist, racist, and white supremacist. Apparently, the curators and organisers, the ZKM and Ensemble Resonanz, relied on the musical canon in a rather conventional sense. Basically, a 'canon' establishes a model for interrelations. There is currently much discussion about transforming the conception of the musical canon, which dominates the academic discourse and regulates the contemporary music industry. It is a historical model that builds on the notion of power and favours a particular curatorial style and aesthetic manifestation, in the sense of a 'law', 'rule', or 'principle' by which something can be judged.

In the Anthropocene, we need a systemic model in resonance with the diversity and complexity of our current situation. *Ecosystem ecology* provides a conception that foregrounds equity and interdependence in relationships. I propose that a shift towards ecology not only affects the environment *around* music; it also changes the way we listen into music, it changes the compositional practice and the performance process.

This text also features a third voice relevant to this discourse, which sounds out intimate and poetic reflections that kept surfacing from deep within during my writing process. This exposes the activities that continue within my mind and imagination. My process of thinking is a constant and active participant in my everyday life, as an inner ecosystem.

⁴ For example, see the abstracts of papers presented at the isaScience 2021 Conference 'Heroes, Canons, Cults. Critical Inquiries' organised by the mdw University of Music and Performing Arts Vienna. At this conference, I presented a preliminary version of my essay and research under the title 'Feministing the ZKM or How to Establish a Musical Ecosystem Beyond the Canon' as a multimedia lecture. The abstract can be found at https://repo.mdw.ac.at/isascience/2021/texts/BoA.pdf (accessed 15 March 2022).

⁵ These nouns appear in the definition of a 'canon' in dictionaries online, such as at https://dictionary.cambridge.org/dictionary/english/canon (accessed 20 August 2021).

The different parts of this explorative essay unfold in counterpoint. Theoretical investigations punctuate first-hand narratives and meet poetic lines—the personal, the political, and the imaginative all converge in writing. In this way, counterpoint becomes a feminist practice in textual composition. All threads converge upon the topic of political thinking and acting, that is, building futures. Here, I am speaking about the essay, but the same is relevant in my everyday practice of composing: it paves the way for cultural productions such as music theatre pieces, which have not yet been realised. In this way, composing is a political activity. Feminist activisms aim at cultural change. Working at the intersections of composition and research, feminisms and ecology, I understand my practice as composing futures.

Composition and decomposition dance with each other in my practice.

Every sound—or noise—that I perceive/perform/imagine/notate/explore comes into being, grows, develops, and decays. Fragile sounds interweave and interfere with each other, with the environment, with myself.

A polyphony of coming and going.

I listen into, and belong with, an ecosystem.

Every one of my pieces surfaces, lives through a process of growth and maturation. And, finally, all my works decompose. Their afterlives continue—as memories in people's minds, in documentations, on websites, in financial calculations.

ZKM-thread

Friday, 22 January 2021

For days, I have been sitting at my desk in front of the computer, working towards deadlines. By mail I receive an invitation to an online event at ZKM Karlsruhe next week. A prestige event announced as *Einklang freier Wesen*. I scan the content. A big streaming thing and fat symposium. Good ensembles. Skimming through the names—oh no, it looks like only men! And this title! I don't want to look more closely and click it away; I want to stick to my own work.

Monday, 25 January 2021

I talk to Christina Fischer-Lessiak, my co-researcher and colleague at the Kunstuniversität. We are in lockdown, home-office. The university is closed. Christina also works remotely these days, in Graz, while I remain in Vienna. We coordinate our work plans for the upcoming week, and I mention ZKM's event and my discon-

⁶ To acknowledge the many different types of feminist and activist engagement, I use the plural forms *activisms* and *feminisms*.

⁷ The University of Music and Performing Arts Graz.

tent about it. Georg Friedrich Haas' composition gave its name to the symposium: *Einklang freier Wesen*—officially translated as 'free beings in harmony'. What an irony: freedom and harmony without female* beings!? Men among themselves!?

Tuesday, 26 January 2021

I prepare our online lecture series, the *Fragility of Sounds* lectures. The next lecture is coming up in two days, featuring Georgina Born and Juliet Fraser, and I want to present it properly. I update websites and add biographies.⁸ In the meantime, Christina had taken a closer look at the ZKM event. She concludes that it is indeed poorly conceived and must be called out for criticism. She is a member of the network GRiNM Gender Relations in New Music⁹ and proposes to inform them about the event; maybe they want to do something?

Wednesday, 27 January 2021

There it is again: the feeling of annoyance becoming stronger. A hot background noise on a gut level rising to my awareness. My fingers dance over the keyboard typing, I'm sending out invitations, writing and posting. I don't want to spend my energy fighting these patriarchs. But the anger keeps re-surfacing. Later that day, Christina forwards the replies she received from GRiNM. Her mail contains messages from the Archiv Frau und Musik Frankfurt¹⁰, also musica femina münchen¹¹ has become involved. Should we join forces in a potential initiative, she asks? I hesitate. Yes, I'm aware of my own growing anger. No, I'd rather not react this time, I'm so tired of this kind of activism. Does it change anything? I have work to do, deadlines are coming up, I need the time for myself. If someone else initiates something, okay, then I might join in. I read more emails with long discussions weighing possible modes of action. A lot of words tumble over my screen, yet nobody has become active, so far.

In my experience, this obstacle often occurs in non-hierarchical networks: intense discussions evolve and block activity. An initiative may die down because of that.

⁸ The Fragility of Sounds Lecture Series is documented under https://www.fragilityof-sounds.org/fragility-of-sounds-lecture-series/ (accessed 9 November 2021).

⁹ The network GRiNM was initiated during the Darmstadt International Summer Course 2016 to address issues of inclusion and gender. Their website is https://grinm.org (accessed 28 September 2021).

¹⁰ The Archiv Frau und Musik Frankfurt was founded in 1979 to collect and document works by female composers and conductors. It is the oldest and largest archive of its kind worldwide. See under https://www.archiv-frau-musik.de/en/ (accessed 28 September 2021).

¹¹ The organisation musica femina münchen promotes music from female composers through research and documentation, by staging concerts, lectures, and conferences. See under http://www.musica-femina-muenchen.de (accessed 30 September 2021).

Or is it the fact that, mostly, people are lazy by nature—like me—and prefer others to become active instead?

I notice that I'm already thinking about the possibility of doing something myself.

Another message arrives late that night from the composer, musician, and initiator Sylvia Hinz in Berlin, concerning the lecture series. I am tired, answer back, and on the side briefly mention the ZKM event. We talk—my energy again rises, and I decide to act.

Is it because of my growing anger?

Is it because I'm alone most of the time, staring at a computer screen for hours—because it is cold outside, and everything is closed down?

Is it because my bodily energy needs a vent to escape?

Is it the fact that I miss collaborative performances 'in real life'?

Well after midnight a letter is prepared—perky, radical, and a bit bold, it mirrors my overall mood. I only take the time to write a German version and don't think our activism will get much international attention, anyhow. I mail the sketch to possible supporters, friends and colleagues from the music scene, and ask for feedback.

Ecology-thread

I grew up with a local family canon of music. My parents cultivated their collection of records—symphonies by Beethoven, Mozart, Mahler, Brahms, Bruckner, Schubert, Tchaikovsky, Dvořák, and the like; this kind of classical collection was typical for the Austrian middle-class household of the time. In the evenings or on weekends, our living room would resonate with this music. In contrast, from early on my personal focus as a musician was on the recorder and oboe instruments. I loved Renaissance and Baroque music, which I practiced, studied, and performed from a young age as a student at the Conservatory of Vienna. By then, I had drifted away both from the taste of my family's canon as well as from the pop-culture appetite of my age group, adoring Bach and Händel, Telemann, Frescobaldi, Purcell, Jacob van Eyck, Orlando di Lasso. The personal ranking of composers whom I cherished didn't feel like a canon to me. Nor did I notice that there was not a single female* composer in my entire instrumental repertoire. However, the composer who changed my musical life was Hildegard von Bingen. Her Ordo Virtutum from 1151 just smashed me when it was introduced in a music history class at the Conservatory. I had never heard anything like that before. It did not even sound like *music* to me as it opened up secret dimensions of listening.

Years later, I went into free improvisation and electronic music, doing away with scores written by others to explore my own music: experiments with bass recorders, microphones, and analogue electronic assemblages. There, again, I discovered a canon of improvisers and experimentalists. Are musicians, festivals, and

audiences alike in their habits of establishing canonical orders? Hierarchies provide a grid to hang on to. By then, my own role models were the composers and performers whom I listened to and observed in live concerts, many of them local artists and women. With some of them I would eventually collaborate, such as with Elisabeth Flunger, Electric Indigo, Mia Zabelka, Jorge Sanchez-Chiong, Angélica Castelló, Thomas Grill, Matija Schellander. One could say, a personal canon of experimental and electronic music grew out of collaborative appreciation. Over the years, I developed into a composer/performer with my grid of reference widening once again. More women came into my focus. During my doctoral research in composition at the University of Huddersfield I was confronted with the 'official' canon of new music for the first time. For me, it was shock to find out how strictly guided the inner circles of contemporary music can be in academic institutions like a gated community. I felt I didn't belong there. At the same time, I met with a diverse cohort of like-minded musicians, researchers, artists, and composers from different cultural backgrounds around the world. In numerous discussions, we shared our visions and doubts while struggling to find our own voices. These people became my patchwork composer's family that I still like to connect with.

ZKM-thread

Thursday, 28 January 2021

By mail, Christina Fischer-Lessiak approaches our colleagues at the Kunstuniversität, Centre of Gender Studies. I connect to the female:pressure network of electronic musicians and to their founder, the composer, DJ, and activist Susanne Kirchmayr a.k.a. Electric Indigo. This community runs a highly active international mailing list. Also, I contact the mica – music austria platform for support. Positive reactions come in immediately from Susanne and other female:pressure members! Encouragement is signalled from mica and there has still been no reaction from the Centre of Gender Research.

So, the actual work is left to 'us'.

From Christina and from colleagues, feedback about the letter of protest comes in. I revise the letter until it seems to be ready for send-off. First, I post it to the female:pressure list and ask for signatures: Who is willing to sign their name? We need your names and professions, please, otherwise the signature doesn't count as much.

Immediately, replies with signatures and encouraging comments arrive.

¹² Founded in 1994 as an independent, non-profit association, mica – music austria provides information on the Austrian music scene, to support Austria-based musicians with advice and information, to promote local music at home and abroad, and to improve the conditions for music productions in Austria. See under https://www.musicaustria.at (accessed 28 September 2021).

GRiNM notifies us that the campaign was discussed by them at length. However, no collective statement will be issued. The women from the Archiv Frau und Musik Frankfurt have composed an official letter of protest for their institution and send it to me. We communicate via Zoom and decide to collaborate. The two letters complete each other: theirs is polite, while mine, for female:pressure, is provocative.

Discussions continue within the various groups: who can officially back both statements? Will my letter have the backing of a significant share of people from the female:pressure network? Finally, we, the activists, decide that our letters will include a statement of solidarity and mention GRiNM, the Archiv Frau und Musik Frankfurt, musica femina münchen and the international female:pressure network as the four collaborators.

Who are the people in charge of the ZKM event, anyhow?

Searching for names and mail addresses, I inspect the websites of every ensemble and venue that participates. There are only men occupying the leading positions, with one exception: Prof. Dr. Nike Wagner from Beethovenfest. Also, the co-director of the ensemble Musikfabrik is a woman. Otherwise, they are all men! These are the people who make decisions for and curate the most prominent contemporary music ensembles and influential institutions.

A group of men.

More and more signatures come in via female:pressure.

The echo is fantastic.

Ecology-thread

Early in 2020, Christina Fischer-Lessiak asked me about my relationship with the canon of composers that is central in European musicology. During our discussion, a dreamlike image came up in my mind: the canon appears as a massive tree in front of me. I perceive myself hovering around that tree, like a freeform flowing plant. Or a big insect. A bird? The canon is all roots, a huge darkish stem with fissured bark. I cannot see where the higher branches end. Where is the vision? No connection exists from my side except loose ties to some historic composers whose work I appreciate. Where are the female* composers?

For some reason, this image has stayed with me and keeps popping up in my thoughts. Where exactly is my place in this assemblage? During the pandemic, the image began to change. In Zoom conferences, I met many inspiring people from all over the world who are active in the various fields of music. I read inspiring biographies of women artists. In my mind, a community forms that stretches over continents and through time, a community I belong to. This group of brilliant people who are musicians, composers, scholars, educators, curators, performers—

do they establish a law, rule, or principle by which something is judged?¹³ This group in music has a different systemic structure, they are my chosen family—my *Wahlverwandschaften*.¹⁴

I know of so many important women—such as Francesca Caccini, Barbara Strozzi, Dame Ethel Mary Smyth, Clara Schumann—and the many female* identified contemporaries I have personally met with and whose work I appreciate: Éliane Radigue, Liza Lim, Katharina Klement, Eva Reiter, Pauline Oliveros, Chaya Czernowin, Elaine Mitchener, Ryoko Akama, Caro C, Olga Neuwirth, Nina Whiteman, Clara Ianotta, Jennifer Walshe, Laura Bowler, Elisabeth Schimana... Now, it feels great, there is company around. I locate these women in the space in between the tree and myself.

I hear a flock of birds flapping around me...
I turn around and my view expands.

I'm in a FOREST. There is more than one tree.

A FOREST instead of a canon.

A FOREST because it is alive.

Because it is complex and interdependent and nourishing and inclusive.

Because it expands and grows.

It smells of damp earth, mushrooms, and rotting leaves.

So much concentration is grafted towards a single tree, the canon. Turning away from it, I become aware of the forest around me, a dense forest that stretches far on all sides. Within this forest, 'the routes of art's canonical logic' are misleading (Deepwell 2020, p. 10). The situation reminds me of the German proverb *den Wald vor lauter Bäumen nicht sehen*—in English, this roughly translates into *not to see the forest for the trees*. I belong to the forest, I'm part of something bigger and much more connected than a canon, I'm part of something that is evolving towards the future, growing upward without hesitation. Something that accommodates all kinds of creatures and critters. Even the 'old canon' might survive—or decompose—in this forest.

More than one.

The forest is a place where all the living and nonliving interact and interfere and decompose with each other.

I'm part of an ecosystem of music.

Human beings assemble to collaborate for a music theatre production, they work together for some time. The community grows further as they are joined by an audience.

¹³ These nouns appear in the definition of a 'canon' in dictionaries online, such as at https://dictionary.cambridge.org/dictionary/english/canon (accessed 20 August 2021).

¹⁴ This German term, which was used by Johann Wolfgang Goethe as a book title, is sometimes translated as 'kin by choice'.

During the process, everybody is individually touched and changed. At some point, the community begins to disintegrate and shifts into a phase of decomposition. People leave the group—some earlier, some later. Artistic relationships form and dissolve. Technologies are gathered for a performance, they contribute to the work, they disintegrate. An empty listening space—a concert auditorium, a living room, a forest, an abandoned factory hall—fills with music and noise, reflecting the sound waves, reverberating and resonating, and becomes still again and silent.

ZKM-thread

Friday, 29 January 2021

I work until late again and sleep only a few hours. In the morning, I send personal mails to composer-colleagues asking for support for the campaign. Responses come in right away. By now, more than a hundred signatures have appeared and I add them to the letter. The activists meet online and we decide on a coordinated action around 11:00 am. In time, I begin to send off the signed letter to the complete list of people in charge of the ZKM event, one by one, starting off with ZKM's director Peter Weibel, personally from my mail account.

A message arrives from Franziska Gromann, the SWR-2 journalist for online culture news. She normally covers the ZKM and heard about the protest via the female:pressure member forum. She wants to publish something about the campaign and maybe conduct an interview. But she can only report about the actions, if our letters of protest reach the *public* in some way—for example via social media—and not only go to the decision-makers directly.

I notify the Archiv Frau und Musik and we discuss how to proceed. We had thought that direct mails would be enough; neither had we anticipated this kind of media attention, nor are we experienced in online activism. We decide that we will feed all our social media accounts, official and private ones. I use the hashtags #ZKMpolyphony #ZKMfreecritters. I work with concentration and in contact with Elisabeth Treydte in the Frankfurt Archiv. GRiNM has now decided to join in and publish a statement via social media, too. They post the f:p letter on their website—great!

Finally, our letters are published, posted on various platforms and on the media pages of the ZKM, too. Reactions come in. I send screenshots from our actions to Franziska Gromann. We talk on the phone. I say that I don't want to be personally interviewed. I find it risky, because I'm a composer and not a feminist activist. She understands and will publish her article, nevertheless, linking to our media statements. There, my name can be found all over the place, this cannot be avoided. My colleagues just laugh about my anxiety, the message 'Wieso *outen*?' comes in with a big Smiley attached.

¹⁵ German for 'why out yourself'.

At 3:30 I notice that the lineup of the symposium appears as changed on the ZKM website. Three women have been added to the panel: Christine Fischer, Eva Böcker, and Martina Seeber.

At 4:10 the SWR2 goes online with their article, and we share it, too. Immediately afterwards, more reactions pour in from the ZKM. The activists and the SWR post updates, protests continue.

At 4:30 pm I notice that the event is cancelled entirely. A statement appears on ZKM's site, a kind of excuse, to some extent, announcing that showcase will be postponed. The SWR updates their article at 16:34. The composer Haas publishes a statement saying that the symposium format never was his idea, he was just invited. He writes that he favours diversity and should have noticed.

Lots of congratulations come in via female:pressure. We celebrate—separately, at home. I raise a glass of wine toasting to friends online. I'm excited and very tired at the same time. Maybe the entire thing just happened because of the pandemic? Because we are all working at home, remotely? Because we miss the community spirit of art projects?

Ecology-thread

Ecology can take the form of a science, or a philosophy, or a worldview. In the context of music, all approaches hold great potential. Already in 1962, the musicologist William Kay Archer proposed an *ecology of music* (Archer 1964). Since then, the discussion continued at irregular intervals in the community. Mostly, it was the composers themselves who advocated ecological concepts, both in order to contextualise their music as well as in intrinsic connection with their compositional practice.

For instance, in 1976 John Cage stated in an interview 'Music, as I conceive it, is ecological. You could go further and say that *it IS ecology* [sic].'

He continued, pointing out that music

[...] has always opened onto nature, even when it was structured "in the opposite direction". The problem was that people paid all their attention to its construction. Today we can diversify our attention, and construction no longer hides ecology from us. (Gardner, Gora, Cage 1981, p. 229).

Further composers, who early on used the term ecology in connection with their practice, are for example R. Murray Schafer, Hilde Westerkamp, Annea Lockwood, David Dunn, or Pauline Oliveros with her *Deep Listening Practice* and the conception of the *sonosphere* (Oliveros 2011). More recently, we find John Luther

¹⁶ The article by Gromann in its final form is available under https://www.swr.de/swr2/musik-klassik/artikel-zkm-veranstaltung-ohne-frauen-100.html (accessed 10 November 2021).

Adams, Liza Lim, and Daniel Portelli who integrate composition with environmental awareness.

Increasingly, composers argue that ecology not only influences contextual parameters. It influences the content, structure, and form—the aesthetics—of composing as well. This is because composers are the ones who are experts in listening, as the sound artist, researcher into listening, and composer Hilde Westerkamp explains in her theoretical writing that is published on her extensive website. With their ears, they investigate their environments (Westerkamp 2002). It is significant that, among the artistic disciplines, it was music that prepared the way for ecological awareness in art.

I propose that this has to do with the unique capacity of listening perception to thoroughly connect to any environment, whether natural or manmade. Listening brings the inner and outer dimensions together and in this totality the entire ecosystem can be heard—the sonosphere, a polyphony of voices.

In his book *Hungry Listening*, the composer and Indigenous researcher in sound Dylan Robinson puts forth that a discussion must be held on a global level and from diverse perspectives, to disrupt the anthropocentrism of listening:

To wrest listening away from its standard conception as largely human- and animal-centered activity allows us to understand listening as an ecology in which we are not only listening, but listened to (Robinson 2020, p. 98).

The position of Indigenous people must be considered, there is much to learn from them, about their ways of life and their understanding of an intrinsic connection with an environment. Robinson explains that in Indigenous communities, a greater sense of interdependency and kinship is common understanding. Indigenous communities recognise trees, rivers, mountains, and the like as kin; for them, the idea of an 'ecology' is not new (Robinson 2020, p. 98). In 2017, four rivers worldwide were legally granted personhood through the intervention of Indigenous people: the Whanganui River in Aotearoa/New Zealand, the Ganges and Yamuna Rivers in India, and the Yarra River in Australia ¹⁷. Imagine this scene: a human being, perhaps a sound artist, stands on the shores of the Whanganui river, looking at the flow of the water and recording the sound—a person-to-person interaction is taking place, two persons listening to each other.

In the Indigenous world view, this is an 'ordinary' situation taking place.

In the post-anthropocentric age, in my practice, this is an 'ordinary' situation taking place.

¹⁷ See under https://sustainablemusic.blogspot.com/2021/07/environmental-sustainability-personhood.html (accessed 02 August 2021) and also in Adam Taylor's article *There are now 3 rivers that legally have the same rights as humans* that can be found under https://www.washingtonpost.com/news/worldviews/wp/2017/03/21/there-are-now-3-rivers-that-legally-have-the-same-rights-as-humans/ (accessed 30 July 2021).

In an ecosystem, ontological interconnectedness is a rule. All entities are conceived as permeable and open. An entity closed off from the environment cannot exist. Every organism constantly interacts with the surroundings; matter and energy are being exchanged (Keller & Golley 2000, p.23). This notion is a paradigmatic shift from conceiving any human being—an artist, or composer—as a singular, self-sufficient personality, let alone a so-called genius.

Along the same lines, from their standpoint as innovators of music and its interfaces, the composer Michael Gurevich and the musical data scientist Jeffrey Treviño search for an *ecology of musical creation*:

As an alternative to the traditional model of composer, performer and listener as monolithic individuals, each inhabiting a predefined context, an ecological approach to musical creation focuses on the relationships between composers, performers and listeners as a part of a system that includes external factors such as genre, historical reception, sonic context and performance scenario (Gurevich and Treviño 2007, p. 108).

Another example of how ecology changes not only the contextual framework of music, but the music itself, can be found in the ideas of Chaya Czernowin. In a recent interview, the composer talks about 'ecologies' when she describes how she assembles recorded sounds, instruments, and electronic means to build different musical environments. Working with multiple recordings of a single instrument, she collaborated with Lukas Nowok from the SWR Experimental studio to process the samples and create spatialised compositions. She found that 'the instrument could become its own ecology or its own solo'. Czernowin often uses recordings of natural sounds; in her 2019 opera *Heart Chamber*, the subtle sounds of a single leaf crackling were used to compose an electronic part. In this way, Czernowin not only brings the sounds of an environment into her music; she also develops compositional structures.

In her own way, the composer Liza Lim draws on ecological research and on her own observances of environments for her projects. Along with her wide ecological framework she transforms compositional structures and innovates instrumentations, such as the extension of a contraforte (a bassoon-type instrument) with a plastic tube in *Extinction Events and Dawn Chorus*.²⁰ In a recent interview, she answers the question of how she got involved with environmen-

¹⁸ Pia Palme in conversation with Chaya Czernowin online on 11 May 2020. The interview is published in this book.

¹⁹ Czernowin, Ch. (2019). Heart Chamber. An inquiry about love. Opera in four acts and eight close-ups, libretto by the composer. Mainz: Schott. Premiere 15. November 2019, Berlin, Deutsche Oper, conductor: Johannes Kalitzke, Orchester der Deutschen Oper Berlin. Available at https://en.schott-music.com/shop/heart-chamber-no374943.html (accessed 27 September 2021).

²⁰ See under https://lizalimcomposer.com/2017/12/19/extinction-events-dawn-chorus/ (accessed 28 September 2021). The piece was premiered in 2018.

tal topics: 'it's the other way around—"environmental topics" got involved with me. In the last years we've become so much more aware of how entangled we humans are with climate crisis.'²¹ Lim explores how temporal attention spans are transformed in the Anthropocene and how these 'ecological "time effects" generate new forms of musical thinking' in her compositions (Lim 2020).

It is worthy to note that ecology advocates human observation and perception. Ecologists have always encouraged personal investigations, asserting that any environment can be directly experienced and explored by any human being; machinery and technology can contribute to—but are not required to—carry out a scientific observation (Keller & Golley 2000, p. 10).

I find this very important; it puts ecology within reach of all human beings, regardless of their situation or access to technologies.

The river composes itself as it listens to me.

I compose myself as the river listens to me.

Whenever I listen, I am being listened to by my environment.

The theatre of listening is a theatre of being-with,
in which all elements perform in equity.

ZKM-thread

The ZKM story continues:

Peter Weibel sends out an extensive statement to the people who were involved.

In February, we, the activists, are invited to an online discussion about the campaign. Two curators from the ZKM and Ensemble Resonanz who were responsible for the event meet with Elisabeth Treydte, Christina Fischer-Lessiak, Meredith Nicoll, and myself. Our conversation is respectfully polite. We parry the arguments from the men using standard feminist reasoning. Elisabeth repeatedly draws attention to the fact that we, the activists, are working on behalf of the cause of women*, giving advice about diversity in music without being paid for our expertise—as we are doing during this meeting. I call the concert a 'Maskulinale' in reference to the 2020 ZKM festival 'Feminale' which showcased female composers. With that, I manage to catch the curators' attention. Something clicks in their minds, they laugh heartily. It appears that none of the men involved had considered diversity in the context of the event, although both are familiar with the discussion and are willing to improve the situation. We point out that work must begin by analysing the systemic networks that are in operation in music and that it is essential to rely on statistics and facts instead of feelings or instinct in

²¹ This can be read at the composer's website under https://lizalimcomposer.com/2020/09/17/more-than-human-songs/ (accessed 28 July 2021).

order to improve the structures. The ZKM announces that they will add a diversity-deputy to their staff. Until now, no one had specifically looked at this topic in their institution.

Is the conversation too polite?

Are we being too compliant?

We provide a lot of knowledge.

It is the same story, as usual: feminists give away their expertise, for free...

The new 'showcase' is staged in April 2021. This time, the ZKM curators inform us beforehand whom they plan to invite as speakers and specifically ask for the participation of someone from the activist groups; Gina Emerson from GRiNM is then included. The title is altered to '... aus freier Lust ... verbunden ... / Einklang freier Wesen'. The theme of the panel discussion is now more general, about the implications of the digital age. The history of the event is not mentioned at all during the entire symposium. The piece by Georg Friedrich Haas is once more in the centre. We move forward and yet—more than ever—I feel the urge to engage.

To feminist my environment.

To feminist composition.

To ecologist musical structures.

Within this context, ecological thinking 'naturally' expands feminist activisms towards the dimension of the nonhuman and anorganic.

Ecology-thread

Via ecological perception, I can define myself as a composer of disciplines, practices, activisms, and knowledges.

Historically, ecosystem ecology first emerged in the natural sciences and then expanded towards the human sciences; it became the study of total reality (Keller & Golley 2000, p. 15). Any ecology is informed by the 'aesthetic, spiritual, and social filters through which we all inevitably experience the world' (Keller & Golley 200, p. 14). I advocate for the term culture in connection with ecology: my quest is to establish ecology to conceive of a totality of nature and culture in music theatre. I prefer to conceive of a system that is alive and integrative, dissolving the rifts between nature and humanity, between art as a product or process, between performers and audiences—this list could be continued, and this is what I urgently need and what I search for. Many times, I have struggled to define my work towards the outside or the industry, because I tend to integrate multiple disciplines into my process. I have announced a project as 'music theatre' because it seemed to be the most appropriate term to acknowledge the complexity and the spatial dimensions of what I compose. Ecology transforms the manifold activities that make up my practice into a single compositional network. It is a science or philosophy that brings together disciplines, it is about synthesis. Literally, synthesis is the Ancient Greek translation of the Latin word *compositio*. I propose that ecological understanding acts in the same way as composition acts in music, on a larger scale: elements are brought together and connected in meaningful ways—in ways that are evident in the environment itself, in ways that extend beyond human decision-making and anthropocentric thinking.

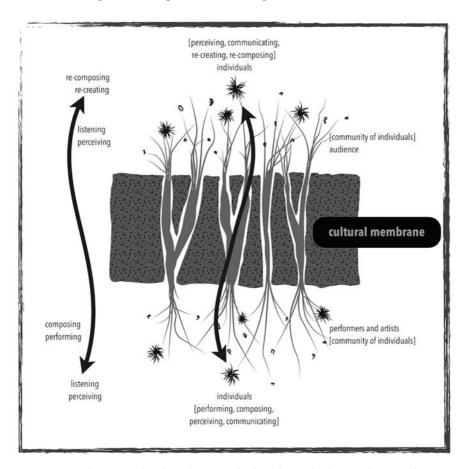


Figure 1 Music theatre as cultural membrane (graphic by Palme and Palme, Fischer-Lessiak)

I aim for a concept of music theatre that is founded on the overall fragility of existence. Such a model can be devised along the biological function of the cellular membrane. The membrane is a complex biological structure which not only constitutes the cell boundary. Participating in the cell metabolism, it actively controls the entire exchange between the inner space of the cell (the cell fluid) and its outer environment. It regulates the molecular identity of the cell and communication with neighbouring cells (Alberts et al 2008; Capra and Luisi 2014). Along this model, Figure 1 illustrates how a performance can direct the exchange between

a community of artists and performers—including the composer(s)—and their audience. The event of a music theatre performance (or more generally, any kind of live performance) functions as *cultural membrane*. It is a systemic entity that is alive and active. On the one side, the audience constitutes a community of individuals who listen or watch while communicating amongst themselves. On the other side, the community of artists builds their interactive network. Thus, we find communities who interrelate because of, and through, the regulating power of music theatre. The membrane generates a dense flow of exchange, as the individual members of the groups participate and share in performing, listening, watching, perceiving, communicating, and composing. Since perception is a creative activity, listening equals (re-)composing in this flow between communities.²² As this model shows, ecology is about a perceptional decision we make; it is about tracing the patterns and connections that already exist, rather than about intentionally inventing something.

Ecology investigates systems of all proportions—as small as a raindrop or as big as an ocean—in the end, they all interact with each other, within the planetary ecosystem. This is a relief for me, I have always understood my works as organic or alive—ongoing processes, in a certain sense. I feel 'at home' in the thick forest of disciplines and experiments which surround my compositional process. When working with musical instruments, electronic components, and other materials such as paper, stones, parts of plants, or bones, these materials become collaborative agencies in composition. With all cells and atoms, my *brainbody-in-culture* is part of an ecosystem while composing an ecosystem.²³

...and decomposed.

Decomposition is the most consequential factor that ecology brings to our awareness; in my experience, the process of decomposition is the essential property that distinguishes an ecosystem from any other system. Decomposition and disintegration affect the organic spectrum as well as the anorganic.

The music sociologist Kyle Devine innovates the idea of an ecological approach with his publication *Decomposed: a political ecology of music.* He investigates materials and sound technologies used in connection with recorded music from an ecological perspective. While 'political ecology is multifaceted and difficult to summarise', Devine suggests that 'a political ecology of music would study how the stuff of musical culture is made and possessed, dispossessed and unmade'

²² The equation listening=composing was introduced in my doctoral thesis *The noise of mind: a feminist practice in composition* (Palme 2017). It is based on research in neuroscience, such as Eric Kandel's findings.

²³ The term *brainbody-in-culture* was introduced by female* scientists into the neuro-feminist discourse, as is explained in the groundbreaking book *Gendered Neurocultures* by Sigrid Schmitz and Grit Höppner (Schmitz and Höppner 2014, p. 17).

(Devine 2015, p. 367). Devine provides a detailed analysis of the decomposition of materials such as shellac, plastic, and consumer electronics. In this context, I want to mention the artist and researcher Thomas Grill, who directed the artistic research project *Rotting Sounds: Embracing the temporal deterioration of digital audio* at the mdw University of Music and Performing Arts Vienna.²⁴

Taking yet another approach, the composer Daniel Portelli presents his ensemble work *Whale Fall* (Portelli 2021) on his website and explains how he conceived the music in relation to the decaying process of a whale carcass slowly sinking to the ocean floor.²⁵ He centres on the instability of the ecosystem and this idea is transferred to the music as 'decomposing sounds'. Falling pitches and distorted sound productions from instruments and electronics interact with recordings of whale songs. Portelli describes this as 'dark spiralling and destabilising granulations of sound' and notes that for him sound is inherently interwoven with ecology. The final section of the work is inspired by the chamber of the massive inner ear bone of a whale. Portelli imagines the bone resting on the ocean floor 'forever listening to the changing acoustic ecology of the ocean'.

The composer grows hair and skin, cells and nails, she eats—digests—discharges. Liquids drop to the earth.Compositions, sweat, blood, tears, waste, noises and sounds ooze from her brainbody-in-culture.

She is//part of//an ecosystem.

Decomposition disintegrates everything, physically and mentally. In my experience, even my ideas, my plans and memory, my works and texts disintegrate. Even the very ideas of control or beauty. Decomposition defies any conception of aesthetics.

In my practice, decomposition is a powerful contributor. It is my ever-present collaborator. Sounds decay. Materials decompose. Often, I use the disintegrating parts of already performed compositions in my practice, to nourish new works.

Again, works disintegrate.

My text disintegrates.

My brainbody-in-culture disintegrates.

In my music, composition and decomposition continuously sound in counterpoint.

I grow, age, and decompose. Slowly, dust settles to the floor. The afterglow of a piece lingers on while ideas for a new composition have already emerged in my imagination, from the many experiments and inspirations I found during the work. From the dirt, plans and plants shoot up and are being watered.

²⁴ Look at the comprehensive website of the project under https://rottingsounds.org (accessed 28 July 2021).

²⁵ Available at http://danielportelli.com.au/whale-fall/ (accessed 29 July 2021).

Ideas flow from my mind-space through my hands and into my fingertips, the keys on my recorder softly rattle while the clicks mingle with the echo of my rotting thoughts and my earlobes tingle with the faint whiff of things-to-come.

Gone is the first spark of inspiration while the work slowly and steadily progresses.

As I am writing, I decompose while my thoughts flourish. The past and future dance with each other in my practice.

This text is—was//part of//an ecosystem.

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On the fragilities of music theatre A conversation

Elisabeth Schimana, Pia Palme, Susanne Kogler, Irene Lehmann

Pia Palme: We are here today to discuss subjects relating to the field of music theater; the discussion is part of the research project *On the fragility of sounds* conducted at the University of Music and Performing Arts Graz. The project embarks on the search for expansions and new developments in music theater. In this case 'music theater' is understood in the broadest sense possible: as a composed musical space, or a space with music—not in the usual sense, but in the sense of sound, sounding bodies, performers and their relationship to the space.

I designed the title *On the fragility of sounds* to point to the fact that music and sound always take place in a specific situation; they are dependent on their surroundings and are always created *in connection with* their complete environment, regardless of where they are taking place. They are influenced by all the elements, living and non-living, that are present in each space. That not only includes people, animals, and plants, but also all inert materials, such as the media that carry music and sound, or the technologies in use, as well as stone, wood, construction elements, and architectural spaces. All these things influence the sound, and that is a part of music theater. It also has to do with the relationships between the involved parties—the people that work in music theater or listen to it. This involves aspects of feminism: in this project we're interested in how one can think 'feministically', whether it's possible to compose, produce and act in a feminist way—and whether this idea can give rise to new developments.

Susanne Kogler: First, a word on the term 'music theater': I do agree with Pia; of course, we aren't using the term in its usual sense, but in the sense of sounds in a space. On the other hand, I think music theater is more than sounds in a space—I can imagine 'sounds in a space' in a setting where the theatrical element doesn't necessarily play a role. And if we look at Elisabeth Schimana's works in this context, they're actually characterized by the fact that they're innovative and unconventional, beyond all traditional genres. However, there are still current projects—I'm thinking specifically of *Gestochen und weg* for Wien Modern 2018—where you were confronted with comparatively more traditional conditions. Looking at your entire body of work, I'd be interested to know what your approach was. What is music theater for you, Elisabeth?

Elisabeth Schimana: I never paid any attention to the term 'music theater' as such, although according to Helga de la Motte's definition, I was already doing it in the 1990's, in the project *Berührungen*. You've probably heard of Maryanne Amacher? She always concerned herself explicitly with the space; she went so far as to live in the performance space in order to prepare for the show. There's a very interesting comment on that by Helga de la Motte in IMAfiction's portrait of Maryanne Amacher, where de la Motte said that she actually sees it as a new form of music theater. That got my attention, because I didn't really think of Amacher when I thought of music theater. But I agree with de la Motte completely; that's really the new style of music theater, and Maryanne Amacher is certainly the absolute pioneer. This is exactly the working style that always interested me.

I come from vocal performance, and in the 1990's Christian Scheib wrote an article about me, *Bühnenkörper*.² The stage and the body were always very essential in my work—regardless of how reduced these parameters are. That's something I hear often as feedback: even if I'm sitting in front of my computer and performing on stage, people feel that the sound is physical, or that it has something to do with the body. Breaking out of the proscenium stage situation had already happened much earlier, in the 1950's. A lot of the ideas about dealing with space in a different way already existed, but they were constantly limited by the business. It's less about artists' ideas than it is about the music industry requiring certain things. It's unbelievably hard to get through to people with concepts that don't correspond to the proscenium principle, because a lot of performance spaces are designed so that they only function that way.

If you want to get out of that situation, you can't really work in traditional concert halls; you have to find your own spaces. That's the hardest thing of all, because these spaces—whether they're churches or industrial spaces, or other kinds of spaces—have no infrastructure per se. Whatever infrastructure you need you have to build yourself. I think the problem is more the business aspect than the artistic approach. Not many people go to the trouble of escaping the industry straitjacket and really looking for other spaces. So much for music theatre. Irene, what do you think?

Irene Lehmann: Inflexible architectural spaces are one of the problematic conditions for experimental music theater, but another one is the way the opera world works generally, or so I often hear. From a theater scholar's perspective, experimental music theater is even more diverse: the experimental thinking doesn't just take place at the musical level but in the handling of other theatrical elements as

De la Motte, H. (2013). Perceptual Geographies. IMAfiction portrait #06 Maryanne Amacher. Online: https://ima.or.at/en/projekt/imafiction_portrait06/ (accessed 03 December 2021).

² Scheib, Ch. (2001). Bühnenkörper. Zur darstellenden Kunst von Elisabeth Schimana. Online available at https://skug.at/elisabeth-schimana/ (accessed 03 December 2021).

well. That ranges from 'composed theater's to productions like those from groups from the Berlin scene like the Musiktheaterkollektiv Hauen und Stechen who experiment with acting styles and other theatrical elements. In the context of experimental music theater, I'm most interested in the relationships between music, stage, space, and audience. Differently than in opera, these relationships aren't structured in a specific way; they're far more open. That's why I find the matter of space and the stage so important—meaning the stage as a spatial concept. To me, that works differently than a spatialized composition using sounds in a room, a composition that can also contain theatrical elements or a staging concept. Elisabeth, how important is it to you that visual, or let's say 'object-like' presences exist in the space? Is that, perhaps, the function of the loudspeakers in your concerts?

Schimana: There are interesting insights on the subject from Margarethe Maierhofer-Lischka, for instance. She analyzes Luigi Nono's *Prometeo*, for example, and calls it 'listening theater'. So, to you, it's something different if there are spatialized sounds in the room, or if there are actual theatrical moments, in the sense of performers—is that what you mean by theatrical moments?

Lehmann: For me, the most important thing is that music theater is not understood as a result of the relationship between image and sound, because the visual aspect of theater cannot be reduced to two-dimensionality. Theatre is not pictorial—it's much more about bodies, three-dimensional objects that also, ideally, tell an individual, visual story. I'm thinking of the music theater of Christoph Marthaler, for instance, or of Heiner Goebbels, but also Anne Teresa De Keersmaeker's dance pieces with music by contemporary composers. In Marthaler for instance, the musical element detaches itself from the theatrical level and takes the performers into another mode that is different from the more acted parts of the pieces. That's a different form of theater than classical spoken theater, which puts the narrative element, the story, at the center.

Narrative relations and scenic objects

Kogler: Elisabeth, you've also had productions that took place on a stage and were 'theater'. To me, the visual is a part of it, but so is the story told—regardless of how the story is structured, whether it's linear, narrative, associative, or post-dramatic. It seems to me that you've allowed yourself to be drawn into more traditional

³ Rebstock, M., and Roesner, D. (eds) (2012). Composed theatre. Aesthetics, practices, processes. Bristol/Chicago: Intellect.

⁴ Maierhofer-Lischka, M. (2020). *Ich höre die Steine, sehe den Klang und lese das Wasser.* PhD-Thesis, University of Music and the Performing Arts, Graz. The term was used by Nono himself, when he defined the genre of Prometeo as *tragedia dell'ascolto*; a 'tragedy of listening'.

forms, at least to an extent. What was the difference for you in comparison to lots of other pieces?

Schimana: Do you mean the production *Gestochen und weg?*

Kogler: Yes. It was originally supposed to be for children and so it had a fairy-tale quality. It took place on a stage, didn't it?

Schimana: No, the audience was in the middle, sitting on the floor, and the narrator/performer walked around between them. Musicians were positioned on podiums, two to the audience's right and two to their left, inside transparent, layered projection surfaces. So, it wasn't a proscenium stage; the whole space was part of the piece, and it was a real battle to get it to that point.

Kogler: Then maybe the story was the more traditional part of it?

Schimana: The story—there's always a story. We can never escape stories, try as we might; we just work that way. Our brain works that way, we work that way, whatever. We always have some sort of narrative, some sequence of events or something like that in our heads. It can be as abstract as you like; even if 'story' means I move from sine wave A to sine wave B, I still have a progression, I've still told a story with it. There are just shallow and less shallow stories, but...

Kogler: Maybe we could find a more nuanced classification system for what we call relatable narratives: from a starting point where a fairy tale constitutes the background in some way—that would be one extreme—to the other extreme where the narrative is purely acoustic, as for instance the progression from tone to noise. You can't say that one is shallower than the other because I can tell a fairy tale beautifully. Success is always dependent on the specific situation. To my mind, those are fairly subtle differences, and they're medial differences as well. It may be pure storytelling one time, but another time perhaps more semantic elements are involved.

In this context, I would think—but maybe I'm mistaken—that for instance *Gestochen und weg* involves more narrative elements than other pieces, where the body and the staging definitely play a role.

Schimana: That's absolutely right; now we're talking specifically about text.

Lehmann: What kind of textual material do you use—do you write it yourself?

Schimana: No, I'm not a writer at all. What I wanted to say about texts: when it's about words, about text, there's no way to avoid dealing with context and mean-

ing. That's why I completely refused to work with text for many years, precisely because it's so determinative. If I work with a text, I want that text to be understood. I have no interest whatsoever in a singsong where the text can't be understood. Recitative is almost the only option. Now I seem to be in a phase where text plays a role in my work. With *Gestochen und weg*, the commission was to compose a piece of music theater for children, based on a Grimm fairy tale. I chose *Sleeping Beauty*, then started researching feminist perspectives and found out quite a bit. Finally, I commissioned Ann Cotten to write a new text—and it's great!

Kogler: So, would you say that this correspondence between text and visual production, which is much stronger when there is a stage—particularly in comparison with radio works, where there is no visual element at all—also affects sound, that something changes in the aural conception as a result? Or does it stay the same; does the acoustic element get integrated?

Schimana: Naturally I think about how the individual components work together. The interesting thing is that the music can function on its own, and so can the text—but what about the performative elements?

Kogler: It's interesting to me that these things can be considered in so many ways. In fact, I think that not only people have narratives: spaces have them as well. I used to produce a lot of works in empty factory buildings, simply because they were there and available for use. I liked those spaces because I'm very interested in deterioration and decomposition, in every sense. Things that decay make room for new things. Using empty factory halls means having to surmount unimaginable bureaucratic hurdles.

I find the narratives of the spaces intriguing, and I also find that language itself, as a tool for communication, has a narrative, a story. I'm even fascinated by language when I don't understand it. I like listening to foreign languages I don't speak at all, just for their aural characteristics and their timing. I find written characters interesting; I like looking at cuneiform writing, for example, though I can't read or understand it. I'm fascinated by the structure of the writing and the patterns I can discern in it. Patterns: because there are patterns in language, patterns that have nothing to do with the understanding of text. I've always been interested in subtext as much as in language, for instance, the subtexts in silence, in things that aren't explicitly said. That's why, in my pieces, the understanding of text isn't important.

But language and writing are something else again: if I hand out a written text before—or during—a piece, it can be a sort of stage object and thus part of the piece. A page of text or a handwritten bit of text also has something of the character of an object.

Concerning narrative and story: a narrative is very often something story-like, that goes along with it. Loudspeakers have a story of their own, in music and in theater. You can't imagine the arguments I often get into just because I find loudspeakers beautiful—fundamentally so, because they're instruments and, as such, important to the music and to me as a composer. I'm aware that people can find loudspeakers ugly; some artists want to get all the loudspeakers offstage or hide them.

The objectness of musical instruments or loudspeakers is kind of a hybrid thing: is that scenery, or is it something else? Does that belong to the musician, or does the instrument or the loudspeaker belong more to the stage; does it have objectness? That, I think, is really the big thing, the dimension where the whole concept of 'stage' in music theater is fuzzy, and where a new dimension opens up for music: what is an instrument? What role does it play? That includes the technical instruments as well, of course—computers, loudspeakers, cables and so on, and microphones: what is that, exactly, in a theatrical sense?

Kogler: It is interesting that you both have a concept of narration and, if I've understood you correctly, they can be compared: Elisabeth Schimana with her story of sine wave to noise, and Pia Palme with her indecipherable language sounds in which one can decipher a sort of story—perhaps a narrative of decay. Is that the kind of story you were thinking about? In this context I'm also interested—if I've understood it correctly—that there is also such a thing as an aural or sound narrative, so to speak. Elisabeth said that words always become a story, which is why it's a bit difficult to work with text. That reminded me of John Cage, who spoke of the same problem with traditional, classical tones. He said that the most difficult thing is avoiding the creation of relationships between the individual tones, so that the listener then becomes able to perceive every sound as such, for itself, as a unique phenomenon.

But I ask myself: doesn't the audience have an easier time with stories constructed of words; isn't it perhaps more difficult to listen to stories in pure sound? That's my hypothesis anyway, maybe because our culture simply has less experience with sounds. If you listen to a lot of contemporary music, you are obviously used to that kind of experience, but this is not the case with an audience that isn't pre-educated. I notice, too, that the understanding of language is still very traditional—even in academia, and even when language is the subject under discussion. It's hard to get away from the idea that language communicates content. In contrast, I really like the idea of language as action. This idea that it's impossible to separate content from use and expression can be found, for instance, as early as Ludwig Wittgenstein's late work. I find—and this is where my hypothesis comes

⁵ See for instance Wittgenstein, L. (1985). *Philosophical Investigations*. Anscombe, G. E. M. (transl.) Oxford: Blackwell.

from—that this sort of non-verbal, purely aural story, is more difficult to communicate to an audience.

What have your experiences been in this respect?

Palme: Regarding John Cage and 'tone is a story': instrumental sounds have a cultural background. We already have them in our ear. Many people are probably capable of roughly identifying a flute or a violin simply because these sounds have a history in society and culture.

I'd like to address the next question to Elisabeth: how does that work, in the piece *Virus #3.5: Schatten*⁶ when you're working with both electronic sounds and instruments? What do you see as the specific difference between those two kinds of sounds? They actually have completely different narratives connected to them.

Schimana: I'd say that the sounds have different characteristics. In *Virus*, it's primarily about fusing these two very specific characteristics with one another. To me, electronic sounds have a certain fundamental rigidity; it's not a simple thing at all to create living electronic sounds. In my work, I'm always trying to make the electronic sounds dynamic, so that they aren't constantly freezing in place or getting stiff. Instrumental sounds, on the other hand, have this virtuosity of the fingers, the lips—you only need very tiny movements to change a sound. That's a big difference for me; that's why I refer to sounding bodies. I see them as two different kinds of sounding bodies, both fascinating in their way. In the Virus series, I developed a method of fusing these two sounding bodies together. For instance, sine waves have a constancy that I like. It's hard to establish their position, they resonate throughout the entire space. The low frequencies I like to work with are also interesting. For instance, I never hear the fundamental tone of a double bass, but when I play it through a subwoofer, suddenly it can be experienced. I find all those little events interesting. A lot of things that get lost on a recording can be experienced in a space.

Palme: When you design and compose these pieces, do you have the instrumental sound in your head already? In other words, do you compose the electronic part with regard to the fact that this part of the score will be played by the respective instrument? Do you compose a 'complete' sound?

Schimana: No, it is the other way around: I start with the ensemble, and then the first step is working with each individual musician. I explore the limits of the individual instruments. Of course, we can look at range charts for the instruments, but they aren't really correct. If you want to work at the boundaries of the instrument,

⁶ The composition *Virus #3.5: Schatten* was commissioned by the PEEK research project *On the fragility of sounds* for Ensemble Schallfeld.

you have to work individually with the player. When I've explored these boundaries and know where I have to go, then I start programming the electronics. The instrumentalists are the starting point.

Palme: When do you develop the spatial positioning?

Schimana: As soon as I know what space the performance is going to take place in. First, I have to find out: where am I?



Fugen fragmentarisch vernetzt in 13 Bildern. Music theatre and radio play by Elisabeth Schimana (composition), Nora Scheidl (stage design), Roland Quitt (dramaturge), Sigrid Reisenberger (direction).

Premiered 06. November 2021 at Soho Studios Vienna.

Lehmann: Elisabeth, I'd like to return to something from before. When you were talking about the piece where the listeners sat on the floor, I'd like to know how you consider them in your music. What is important to you about them? Or what kind of experiences do you want them to have with this kind of configuration?

Schimana: It's important that the audience have the opportunity to decide on a particular perspective. If it's not absolutely necessary, I prefer to have no orientation at all. For me, it's about the ability to decide: am I going to listen in this direction or that one? Do I look here or there? When a performer speaks a text, they are at the focus. And here we've returned to text, and how we prioritize everything that involves the spoken word—actually it's an evolutionary trait; our ear is shaped

so that we understand language. That influences everything, so it's important to be aware of it. We are also conditioned to react when a baby cries somewhere. Regardless of how loud our surroundings are, it penetrates. If you want to deactivate this focus, you have to avoid the human voice altogether—because the focus will always be on the human voice.

Kogler: I'd like to highlight two things. First, in this description, it occurred to me that we could perhaps define the theatrical, at least the important part of it, as 'living bodies relating to one another in a space'. That corresponds well to the central theme of your research project *On the fragility of sounds*, in my view, because that's where the fragility comes from. Because: keeping something alive—or being alive—isn't guaranteed per se when an object is present on stage. Second, I found Pia's comment interesting: that 'story' has a profound effect, in Walter Benjamin's sense—an 'aura' created by the fact that every object brings its own tacitly present story, its history, with it.⁷ That means we have two levels, two meanings for 'story'. As such, I'd like to ask the theater scholar if we shouldn't perhaps be speaking of dramaturgy, rather than of story. A scene without verbal language can be just as meaningful, in a dramaturgical sense. I'd be interested in exploring the term 'story' a little further.

Lehmann: I think the question at this point is, what notion of 'story' we are referring to? We've already discussed it on three levels—as narrative, where Elisabeth brought up the relationship between sounds and Pia commented on the historical dimension. The German language has only one word for history and story but English offers the possibility of distinguishing between the two. John Cage brings a third level to it, because he tries to see past these perceptual relationships and attributions, and that makes it even more complex.

I can actually say the same for dramaturgy and theatricality: they're complex concepts that supersede individual pieces. Dramaturgy isn't a characteristic of individual works; it's a part of the process of a production or the structure of a performance. It has to do with the creation of meaning and the shaping of dramatic arcs, but also with finding the connection between the various art forms that are effective in theater. To me, dramaturgy is also related to the channeling of the energies that are created during a performance—and there could absolutely be points of overlap with the work of composers.

The concept of theatricality as it's used in theater studies can be understood as an assemblage that juxtaposes the ordering of perception, particularly that of seeing, with other forms of societal organization. The word theater refers largely to spatial relations of seeing; the *theatron* as the space where the seeing takes place

⁷ Benjamin, W. [1936] (1969). 'The work of art in the age of its technological reproducibility.' In *Illuminations*. Arendt, H. (ed.); Zorn, H. (transl.) New York: Schocken.

is its primary characteristic. This is why the theatrical assemblage always contains its opposite, the invisible. As such, we can look at different forms of theater, dance, performance art, circus, etc. and consider how they organize the visible elements and regulate who is allowed to appear on stage and who isn't. These decisions are made for every piece; they structure the aspect of representation. In music theater and concerts, that can mean deciding whether musicians are sitting on the stage, whether the other performers make reference to them, or whether they're spatially separated, or hidden in the orchestra pit. The question of order also concerns dispositives of listening, which can sometimes render an adequate performance of electronic music in concert halls or opera houses difficult: are venues prepared to make a spatial sound possible, or do they want to retain the proscenium and the lowered orchestra pit as much as possible?

Schimana: I'm currently working on a fairly large music theater production, with everything that entails: dramaturgy, direction, performers, musicians... In the early months, I had a real problem with the terms. Music theater usually orients itself on the terminology and working conventions of theater. Often, a composer is asked to write music, and the director—it's always a question what the actual difference is between direction and dramaturgy—puts the piece together. It's exactly the same with classical radio plays. I think this terminology had already become rather confused in the 20th century, so that it's not entirely clear anymore who does what. I've noticed that the way the responsibilities within a production get described even depends on the respective context. In the 'free scene' it's particularly difficult to operate with these kinds of job descriptions or functionalities. If I'm coming from the music branch, I probably need something like a director for the performers—but I'd likely never call it that.

And then another term: what is 'staging', exactly?

Lehmann: To answer your questions: 'director' as an individual profession didn't emerge till the beginning of the 20th century. Before that, the actors and/or musicians in small ensembles 'directed' themselves. Directors normally make conceptual decisions about staging, and work on the details of the performance with the performers. A dramaturge often cooperates on the initial staging concept and serves as an 'outer eye' during rehearsals, someone who is present less often and thus able to understand the patterns of a performance better than the people working on the details for weeks on end. Moreover, the set designers and the ensemble can play important roles in decision-making processes; in the 1970's in German state and city theaters there was a strong trend toward democratizing these processes. Opera productions usually function a little differently, since the individual parts of the ensemble—chorus, orchestra, soloists—work differently. The term 'staging' includes the interpretation of the piece (as in music) and the process of bringing it to the stage; the French term *mise-en-scène* expresses it well.

It's certainly important to think about different models of assigning roles and functions in experimental music theatre productions. For instance, independent music theater ensembles in the Berlin scene, like DieOrdnungDerDinge and Hauen und Stechen, have a dramaturgical position, a person who performs the function of 'outer eye'. This person is chosen from the ensemble anew for each production.

Kogler: Can I say something blasphemous? On the one hand I completely agree with Irene—that for example the dramaturge, who watches everything from the audience's standpoint, has a legitimate function. On the other hand, I think it's easy to see that new art, which might not think in these established ways, challenges this reality very clearly, and in a way provocatively—and dangerously, for everyone still thinking in terms of established norms. It calls hierarchies into question. I see a political function here: that perhaps there's no dramaturge, or that the director doesn't have the last word about who stands where and whether the beautiful or ugly loudspeaker (depending on your opinion) can stand there or not.

In this struggle over terminology and the new forms, I absolutely think that the theater can be seen as a model of the world—in which art has the definite function of questioning established roles. That's exciting, but it may also make it particularly difficult if you're coming from outside, as a composer entering the relatively traditional theater branch.

Perhaps—and I don't mean this as a complaint at all—it's particularly difficult for female composers because it's generally harder to let a woman have the last word.

Spatial listening relations

Palme: I'd like to come back to the question of positioning: that question must be decided for every instrument. When I hear a violin over a loudspeaker, I can't immediately tell with ease where it's coming from—because there's no person there playing an instrument; there's a loudspeaker. As soon as someone enters the room with a violin, the sound of the violin will be connected with that person by a listener. They don't even have to be playing; it's enough if they just stand there quietly because that's where you expect the sound to come from. The violin and its sound have a history, a cultural knowledge that influences us.

It's often like that with instruments, that it's not possible to tell exactly where the sound is physically coming from. To an extent, you can place microphones appropriately, but there are instruments where it's difficult to locate the exact source, the 'origin' of the instrumental sound. For instance, where are the lowest frequencies from an instrument emitted, and where the highest? Usually, you find compromises that have been developed in the context of sound recording and cultural history, but you can reverse that! Recently, for instance, when I recorded my

harpsichord piece *Kreidebleich*⁸, I experimented with putting a large-membrane microphone directly under the soundboard of the instrument. The harpsichord emits interesting, noisy bass tones from underneath. You'd perceive them in a baroque room: they're transmitted down into the wooden floor and the whole room vibrates with them. The harpsichord sound that you hear on the radio these days is shaped by an aesthetic image of how we want the instrument to be now. But that's not the true room sound, it's only a distorted and limited version of it.

In this sense, sound is political: it is culturally formed and located. Essentially, neither voice nor instrument nor electronics can be easily located if you can't *see* them. It's more the case that we attempt to connect sounds to some culturally determined visual image.

One more comment on the theatrical aspect: for me, the question with music theater is, how do I orient myself? Do I orient myself as a musician and composer in the theater? When I make music theater, do I necessarily always have to work with this conglomerate, with theater culture? Do I have to orient myself on classical theater? That's really a very old form of performativity.

But there are also other approaches to performativity in music history, for example in Baroque music: when Georg Friedrich Händel wrote the music for the coronation of a king in London, orchestras traveled in boats along the Thames and thousands of people listened from the banks. Those were major events, they were staged, spatially, in urban surroundings. That's also a form of theater. Or Catholic processions, when people walk, playing and singing and 'brass-banding' their way through the countryside, when hardly a word is spoken because even the priests sing all the time. Everything sounds strange, because the acoustic qualities, the whole landscape influences it.

These are deeply operatic events; they're staged and connected to their respective surroundings. I could orient myself on that as a composer and say I want to bring exactly that into contemporary music theater.

Lehmann: According to the general understanding in theater studies, Baroque festival cultures are considered a natural part of theater. Modern spoken theater was a relatively late development; it arose together with the construction of state and city theaters—in Germany starting around 1750; in Italy a little earlier. There, theaters are still referred to as *teatro stabile*, 'standing theater', in contrast to itinerant theater companies. When we consider ancient Greek theater, we notice that the Dionysian festivals, which consisted of processions, dance, music and ritual, are often considered the source of European theater cultures.

⁸ Composed in 2019–2021 and developed with the performer Sonja Leipold. See in the music list in this book, and under https://www.fragilityofsounds.org/kreidebleich-4/ (accessed 10 January 2022).

I'm wondering, why this interest in these particular differentiations? Are you trying to distance your work from it? It seems clear to me that there are still enormous challenges for music theater in the conventional theater and opera structures. But that's just *one* part of theater, and the divisions of labor there have already been dissolved elsewhere. For instance, theater and dramaturgy have developed differently in Belgium and the Netherlands, because the fixed theater structures there were dissolved in the 1980's; both companies and venues are now independent entities. As a theater scholar and researcher, as far as I'm concerned, any composer can create their own music theater. Any parts of the tradition can be integrated and perpetuated, and any of them can be changed or rejected, according to the particular aesthetic concept.

Kogler: I think that audiences value very highly the kinds of performances that Pia described, with these totally diverse scenarios. It would be great if there was much, much more of that sort of thing. But I think the business is very rigid. That's why I found it interesting that just now, in the pandemic, forms like these have become much more important. It's amazing how little is happening in that respect! The system is extremely inflexible, and that's probably what composers are fighting against. That has nothing to do with whether individual companies, houses, dramaturges, or academics think differently. The whole machinery is extremely unwieldy. To my mind, there is a chance to get it moving—how much more exciting would an open-air opera be, on a river or wherever? But it often fails because of some minimal technical requirement, that the space lacks, or because the seats can't be moved—though alternative ideas and concepts have existed for decades, they just haven't prevailed.

Schimana: Which brings us back to the beginning, doesn't it? Back to the business. Again, regarding terminology: I think whether or not terms are necessary depends on the context you are working in. Probably there are similar procedures everywhere that are necessary to produce something like music theater at all. Marvanne Amacher worked mainly as a soloist; she had help, but she was the composer, dramaturge, and director—but she probably never used those terms. And Pia, when you do something you're probably everything in one because you like doing it yourself. I've gotten away from this one-person-company concept and I find this confrontation very interesting. Concerning dramaturgy, I kept asking: what do you actually do? I ended up with exactly the definition that you gave, Irene: the external viewpoint. I think that's very important in larger productions, this kind of corrective feedback. The dramaturge isn't always there; they just come once in a while to take a critical look at the whole thing. Except, I doubt that the dramaturges know exactly what they are themselves, and they tend to lose that distance. I can recommend that music take a lesson from theater here; we have no feedback culture at all. There's still this 'genius' concept of the composer who's supposed

to be able to do everything, from scenery to the complete work, like with Wagner. That doesn't really interest me.

Kogler: First, parenthetically: I see the audience and academia as an external corrective. But I sometimes miss the dialogue. For instance, you can see that music criticism is in decline, partially due to the media, because the media mostly just wants previews. The opera houses' advertising departments could write those, in theory, too; they're of no interest to a critic. But academia may also have ambitions to comment critically on the music scene.

I'd like to come back to space one more time, because it has to do with the production difference we talked about. Giordano Ferrari organized an interesting conference on music theater in France, at which I spoke on Pia's previous, major music theater work, ABSTRIAL.9 The theme of the conference was L'espace sensible, the 'sensitive space' or the 'sensory space'. ¹⁰ In French, sensible has a double meaning, which was of course chosen intentionally. Both aspects are present in the word: 'sensitive' and 'sensory'. I took ABSTRIAL as an example of a production that shapes a sensory space. My argumentation at the time was that, in my opinion, the dramaturgy, or staging, or concept—whatever you would want to call it—was guided by Pia, to be sure, but also allowed all of the participants their creative space. Not as much was prescribed as in a classical staging, I don't think even so much as when the dramaturges or director looks at the whole thing and gives it the finishing touches. There was much more space for everyone who was involved to develop something in the moment, individually and collectively. The collective confrontation with the various sensory levels makes them come together. Naturally there was a certain framework, but the performances were never identical because of it, and everyone became both a producer and a listener, a perceiver. That's the event, so to speak: a sensory space is created, where everyone works on it and the responsibilities are completely differently divided, where there's no boss anymore in charge of this and another in charge of that. That really impressed me. Amazingly, it would also work on a proscenium stage. The piece was performed at the Kosmos Theater in Vienna, which is a somewhat more creative, more flexible space with no classical stage. The audience sat to one side on risers; they were constrained to attend this experience, this event. I think that's due to the spatial design—electronics can be part of it, but they don't have to be. At the time, that seemed to me a model for a sensory space, and thus for

⁹ ABSTRIAL. A radical opera (2013), for a solo baritone, three singers, electronics, and bass recorder with a living installation was assembled in a cooperative process by the composers Pia Palme and Electric Indigo, dancer and choreographer Paola Bianchi, poet Anne Waldman, and installation artist Ivan Fantini. Premiered at Kosmos Theater Vienna. See under https://piapalme.at/works/abstrial/ (accessed 10 January 2022).

¹⁰ L'idee d'espace 'sensible' dans la dramaturgie musicale : vers le present. Colloque international. Organized by G. Ferrari. 07.–08.04.2016, Université Paris8.

a completely different way of thinking, a different concept of collective artistic creation—but also for a sociopolitical development. This also goes together with the concept of fragility, because something like that can only function if everyone gets involved. Elisabeth has done the same, in a way, with her *Virus* pieces.

Palme: It's true that I keep expanding into other artistic disciplines like an octopus. I love doing that, because I like the pollution and the interference, the dirtying that happens as a result—to me and to the entire working process. Richard Wagner, on the other hand, is an awful example! With larger projects it's impossible for one person to do everything—it's impractical and time doesn't allow it, not to mention that it would be boring. I challenge the traditional theater structures; whenever it's possible I try to break out of them. I prefer to work with people who see it the same way. Of course, there's a division of labor and responsibilities. There are authors and people who look at the piece from outside and people who design the space, etc.—only, who does it?

And then there are collaborations: I allow myself to be influenced as a composer, my music is influenced by the spatial design. Or when the singer says: I need different music, the vocal part doesn't work with the movement at all in this passage, then I'll change my music to match the situation. But that only works when the usual order of the production is interrupted—when it's not that the composer delivers the music first, and then everything else is layered on that. Then again, in the past, the composer did change things here and there when there was a problem somewhere. The question with collaborations is always: something specific has to be printed in the programs. The AKM¹¹ wants to know who did what. The press wants to know, the festivals. That's the point where I don't know how I should designate authorship. With the last piece, I registered all the authors as a collective, but that doesn't work perfectly either. Because when it comes to the music, I am in fact the composer. The assignment of rights is difficult from a legal standpoint. How do you register a collective? Often the original idea is mine and then I produce the piece. I look for people to collaborate with, I start talking to artists and musicians—but the original conception was mine. Is that important, or isn't it? What role does that play in the whole thing?

Lehmann: The question of attribution and the legal aspect is certainly an interesting one. In Germany, questions like that have arisen with the state-run artists' social security system (KSK), which has a difficult time quantifying the work of independent theater companies. So there are aspects of cultural policy where changes need to be made.

Austrian organization to guard the copyrights of authors, composers, and music publishers.

Palme: I ask myself, half-consciously, why shouldn't there be women who work and appear like Richard Wagner? Is that forbidden? Do I, as a woman, automatically have to fit my work into that of a collective? What authorship can I claim as a woman, or as a queer person? Can I take on a role like Wagner did? Am I allowed to? I pose the question: does the collective dissolve individual responsibility? Where is the individual responsibility in the collective? Or: what name am I making for myself as an artist? In what way am I present? What role do I play in the music business?

Kogler: Though it's definitely an important thought in this context that the roles are always changing, I think probably we no longer act as Richard Wagner did, not because we are women but because we are intelligent people—to put it a little polemically. I think a composer who is up to date (it's polemic, but I'd let it stand) can't act the way Richard Wagner did—maybe consciously, to prove a point, but not as a composer per se. I'd be very critical of that. I think that you change the roles with your pieces, that everyone changes them in the way they perform their function. That's Judith Butler's idea, that roles are performed over and over again and are either strengthened or changed thereby. There's no way to avoid playing a role.

Palme: Does that change get recognized?

Kogler: I think it does. Because what defines a role? It's always the present. Of course, it's important to make oneself visible as an artist. Thus, I think that's always the question, certainly a personal question as well: how far do I cooperate in order to change something from within, or how far outside do I remain? But I think essentially, the roles can definitely be changed. Elisabeth, can you say something about the performative organization of *Virus*?

Schimana: *Virus* has a strict assignment for the musicians: to play what they hear, as precisely as possible. And not with one another but following the score from the loudspeaker. There's no room for improvisation. It's not about playing together—although that does happen because we're human beings. Basically, every musician forms a unit with their loudspeaker. At the beginning, it's really difficult for the musicians to commit to it.

Kogler: That they have to listen—that this change in attitude creates a special moment. That's exactly what constitutes a sensitive, sensory space.

¹² See for instance in Butler, J. (1988). 'Performative acts and gender constitution. An essay in phenomenology and feminist theory.' In *Theatre Journal*, Vol. 40, No. 4 (Dec. 1988), pp. 519–531.

Schimana: Definitely, because it requires such intense concentration. If you take the instruction seriously, you end up in a completely different state, like a trance state. Because you have to be so focused—you can't stray for a millisecond. That was important to me. I had that idea because I kept observing how bored the musicians were at orchestra concerts. I thought: that's not right. I require absolute concentration; you can't require more. This method contains exactly that.

Kogler: I assume that prevents any kind of self-presentation. You probably have to concentrate so hard to match the tone.

Palme: Do you specifically tell the musicians not to listen to one another?

Schimana: I don't give any instructions, except that they are to play, to imitate what they hear as precisely as possible. Nothing else is necessary, that makes everything clear. Everything else happens anyway.

Palme: The musicians must ask themselves whether to listen to what's coming out of the loudspeaker or to what they hear in space. Hasn't anyone ever asked that?

Schimana: Never. The question of whether to listen here or there has never arisen. It's totally obvious that you're supposed to listen to the score coming out of the loudspeaker. And then, amazingly beautiful things happen! Because all of a sudden, for a moment, one musician is interpreting someone else's audio score. That can happen! That's all. And the rest is just listening and committing to it. Of course, I react to the musicians, because I'm generating the score live and I can change it!

Palme: You can influence what's happening?

Schimana: Yes, influenced by the feedback loop in the performance, because I react to what I hear. Everything happens via hearing. That means I'm in a feedback loop with the musicians.

Palme: There is the question of what to focus on. You, Elisabeth, hear the whole sound production from outside—you can probably decide whether to concentrate more on the electronics or on the instruments? But if I'm a musician sitting in the ensemble, I don't have much of a choice.

Schimana: As a musician, you focus primarily on the score, but you still hear everything. The first and only question that gets asked is: can I use headphones? And I say no. Because it's about you hearing everything. And they hear everything, and they feel everything, and even so there's this special focus.

Palme: That reminds me of my time as an orchestra oboist. In an orchestra, you never hear the whole sound; instead, you can—and should—always listen only to yourself and your immediate neighbors. Because otherwise I'd play five times as loud as soon I heard the brass behind me! I hear the whole sound from my own aural perspective, but it's incredibly limited. It's actually not a whole sound at all.

Schimana: In the orchestra everyone sits very close together, but in *Virus* the musicians are three to five meters apart. That means you have a completely different space. When you're sitting close together among the instruments, your aural space is much smaller. If you're further apart in the room it's something totally different.

The politics of music and theatre, of listening and performing

Kogler: Interestingly, what we have here is a specialist discussion, but it is really also a metaphor for society. To get back to theater: in theater, it's much clearer that everything will immediately be seen as political and social. I think in music a lot more conscious interpretation is necessary or could be communicated more directly. In current discussions about the closing of cultural institutions during the pandemic, everyone who complains that there's too little culture argues that people need art. However, the fact that art provides important ideas and stimulation for political debate is recognized far too little. I think that should be integrated more into the theoretical discourse. I believe it's significant that it was one of John Cage's intentions to view the orchestra model as a model for society. Till now, that's only gotten through to a handful of Cage specialists; many, many people including musicians—haven't grasped it. In this context, I think that musicologists and the music scene might be able to learn something from the theater and theater studies. Here I'd like to ask Irene: why do you think identifying something as social criticism works so much better in the theater? Why is it that, when it comes to music, musicians and composers often go so far as to actively avoid being evaluated as political?

Lehmann: That's a very good question. It is connected to what you focus on in your research on Hannah Arendt. I developed a similar perspective in my study on Luigi Nono, so we're thinking in the same direction there.¹³ To me, it's important to reconcile processes of composition and performing with the political dimension of the interaction of ensembles, orchestras, and the audience. It is true that theater has a stronger tendency to think about spectators and listeners; there's a lot of

¹³ See Kogler, S. 'Hannah Arendt and the "fragility of sounds." Aesthetics and politics in the 21st century' in this volume; Lehmann, I. (2019). *Auf der Suche nach einem neuen Musiktheater. Politik und Ästhetik in Luigi Nonos musiktheatralen Arbeiten zwischen 1960 und 1975.* Hofheim: Wolke.

interest in not simply presenting an event in a theater space, but to consider its relational qualities.

There's no simple explanation for how the differences between music and theater arise. For Germany, the events surrounding Wagner's music are surely significant: the weapons for the First World War were blessed at a performance of *Parsifal* in Bayreuth, and then later, signs were hung up forbidding people from discussing politics during rehearsal. In 20th century theater there was certainly a stronger connection with leftist thinking; Bertolt Brecht was a major point of reference in Europe and beyond, with at least a double reception in the 1920's and 1960's. Theater studies has concerned itself with the audience's perspective in the last 20 to 30 years which has brought the relationships in the theater space to the fore. Additionally, there has been a paradigm shift away from the sender/receiver model to an idea of autonomous reception that Jacques Rancière has called the 'emancipation of the spectator'.'4

Kogler: Theater was always more political; you need only compare Beaumarchais' pieces with Mozart and da Ponte's *Figaro* in the 18th century. Maybe sometimes it's the dramaturgy that's lacking—people who really create a relationship with the audience by highlighting relevant issues. Maybe dissolving all the forms and roles isn't necessarily always a positive thing? Maybe there is a point where you could say, we can allow more dramaturgy in this passage, so that other issues can be brought up, besides the ones that immediately occur to the artists.

Lehmann: At the same time, I wonder—maybe you can say something from the contemporary music perspective about this: there were composers in the 1950's and 1960's, like Luigi Nono, Iannis Xenakis, and John Cage, who had very clear—and certainly very diverse—political views. As such, there is already a tradition; why has none of that survived in the present? Cage, at least, is a standard point of reference today.

Kogler: In the 1960's, that kind of thing was widespread but then the mainstream, at least, depoliticized itself. There are various reasons for that, such as the 1968 protest generation, which, then more radically understood, failed, and then we find—as with Nono—arguments for being politically effective in another way. This raises the question of how, or whether, it is publicly received and whether one is forced to argue this 'being political in another way' even more, in other contexts that are less overtly political.

Lehmann: Another aspect is that theaters have a stronger sense of themselves as belonging to the urban public sphere. In addition to their artistic program, they

¹⁴ See Rancière, J. (2011). The emancipated spectator. Elliott, G. (transl.) London: Verso.

organize debate evenings, both about their pieces and about other socially relevant issues. That's rare in concert halls.

Kogler: And if concert halls do offer them, it is usually as an introduction to a work, not as a social debate. I'd say there is room for improvement.

Palme: Definitely. In the 19th century, composers were often accused of stirring up emotions. Music was sometimes officially banned because it was lascivious, particularly dance music—waltzes, for example. Musical events were occasionally forbidden because they were considered dangerous to society—because they channeled collective emotions in a way that the state wanted to avoid. And they did so more directly than in the theater: without words, purely physically. But there wasn't really a discourse about it: music was either allowed or forbidden.

Kogler: For instance, if we look at the composer Hans Werner Henze and his connection to Bert Brecht, whom Henze appreciated a lot, Henze's operas were accepted by the music business and were performed in well-known opera houses, but there was never a political debate about the pieces' political content, as there might have been with a theater work by Brecht. I think that has to do with the understanding of musicology and the public institutions, and also with the image of music outreach. I'm a bit critical on this point; academic music outreach education, from my point of view, too often aims—I'm going to say something cruel—at the integration of artists into the market. They are meant to learn how to sell themselves. There is certainly a reason for that; of course, institutions have to ensure that their students find work after they graduate. But that's maybe not the only thing. Here, the engagement is a little lacking with everyone—the engagement beyond career planning. We're probably not living in a particularly political time generally, although I do think that may might be changing right now.

Lehmann: I definitely think so too—I'd say that the 'post-political' era is over. I notice that compositions that could well be understood politically—for instance, works by Mauricio Kagel that are based on a playful, Dadaist concept—are always performed very abstractly, concertized. On the one hand, the view of experimental music from the 1960's has become very analytical, and on the other, an important part of it isn't being passed down. You hear similar reports from theater; a great deal of the historical avant-garde isn't maintained as part of a living tradition. Certain aesthetics rarely appear on stage, much like works by women and marginalized groups that were rarely performed for a long time.

Kogler: Perhaps we could take the idea of fragility a little further. Composers are more fragile in that they are much more dependent on their works being performed. It is more difficult to openly rebel against the system when you finally

have the chance to get into the club. As a novelist or dramatist, I can at least be present—my works might at least be published and read, but if music isn't performed it cannot be heard; it basically doesn't exist. What do we do with *Virus* when it's not performed?

Schimana: There are a lot of different media; you can't just toss them all into a single pot. Again: language is something unique, as is theater—if we are talking about spoken theater. There are other forms of theater—if it's theater without any speaking, for example, it's probably not political theater. Although perhaps it could be very political. I think you need to make a distinction. Language is one thing; it communicates something specific. There are specific texts that are political, or at least they're so called. I think the political element can also lie somewhere else. It doesn't necessarily have to be someone saying: the world is like this. Instead, turning to Hannah Arendt, it can be what she primarily means in her book Vita activa: an aesthetic of doing or acting.¹⁵ The question is, how do I do something? When I ask this question, then a particular setting, for instance, becomes highly political! Simply because I'm doing it completely differently, relating to things completely differently, dealing with the people and the musicians with whom I'm involved completely differently. This aesthetic of doing is almost the only thing that interests me anymore. In the 1950's and 1960's, in the postwar generation, it was incredibly important to break things up—but the hierarchies in the music business stayed exactly the same! To me, music puts forth a totally different kind of politics—we don't just yell slogans. That's not what music does. Naturally there are highly political elements, for instance in rap. But there we're back to text. If I just go with sound, if there's no text, then I think the political aspect lies somewhere else.

Kogler: With Hannah Arendt, you could say yes: specifically, when the 'doing' and the musical action is observed and discussed—in other words, exactly when there is a discussion like the one which we're having now. That would be the condition for allowing the political forum to be opened up, so that the discussion and debate can be extended further. Both aspects are necessary; the 'doing', the action, and the discussion and debate. That gets everyone involved: audience, commentators, critics, and musicologists. Then it is not just the composer, the genius, who is doing something: it is not just about the great act. A space for discussion is created, that brings ideas and different perspectives into the game and allows actions to have an effect beyond the point in time at which they take place.

Palme: Discussing and debating, as well as listening and observing, are actually forms of activities, too. Talking, thinking, looking and listening connect to percep-

¹⁵ Arendt, H. (1958). The human condition. Chicago: University of Chicago Press.

tion and consciousness and are physical processes, from the perspective of neurobiology. I fully agree here, there is no need to see these activities as fundamentally different. The community of artists 'does' the artistic practice, the audience as a community 'does' their perceptional practice, and the people who debate 'do' their activity of debating. We are looking at equally physical activities here. This is what I like about music theatre: different communities can interact at an equal level.

Can the political aspect express itself in more diverse ways? Not only through confronting something directly? Maybe more 'quietly'—but that would be another stereotype. For me, the special fragility of music is in the instruments and musicians. Learning an instrument is the most absurd thing a human being can do—to devote yourself to a whole-body fine motor activity for hours upon hours upon hours. Practicing is a daily activity and requires continuity. While you're practicing you withdraw, you shut yourself off from the outside world. In this sense, the activity of practicing is almost a kind of retreat. To pursue instrumental practice for one's entire life: that is a special decision. That kind of practice is losing its place in society. I taught music for a long time and know how difficult it's become to find time and space for practice. Even if you really, deeply want it—aside from the fact that a lot of people don't really know whether they should make the commitment or not. If I want to work with musicians as a composer, it is important for me to recognize their process and individual commitment. Musicians often start practicing very early and continue until, at some point, they give it up forever. That is something precious. Can we keep these cultural processes alive, worldwide? Is it important to us, as a society, that something like that exists? I think people aren't very conscious of that when they listen to music. I don't even know how many composers are conscious of it. That, to me, is a highly political issue and a fragile aspect of culture.

Lehmann: Surveys of musicians in Germany, for instance, indicate that a great many people gave up due to the pandemic, lack of financial support and societal devaluation. Again, I want to address what you mentioned, Elisabeth: I don't understand politics as shouting slogans or as something that's strictly text-based either. Jacques Rancière's texts make a lot of sense to me in this context. His concept of the 'distribution of the sensible' makes it possible to understand how the political comes into action within the aesthetic sphere, and the different constellations in politics and art that we experience.¹⁶

Schimana: In that sense, when we can get people into a state where they are ready to simply listen, that's a political act in itself. That's the greatest political act of all.

¹⁶ Rancière, J. (2010). Dissensus: On politics and aesthetics. Corcoran, C. (transl.) London: Continuum.

Because we're constantly dealing with talking, and a lot of people aren't able to listen to one another anymore. To just be silent for once and listen to something—I find the simple sensitization of this ability very political.

Kogler: In this context, you can define art as a kind of behavior. Precisely in the Critical Theory [of the 'Frankfurt School'], whose materialism has been so vehemently contested in terms of all kinds of possible and impossible details, there's the basic idea that art is a particular behavior, an attitude toward the material. In this context, the understanding of material is particularly broad, comprising also traditions and institutions, as with Helmut Lachenmann, for instance. That would include the audience, and then it gets highly political and highly uncomfortable. Much more uncomfortable than if you just discuss the material in music theory terms: whether this or that tradition is still valid, and whether I can still allow something like a triad to sound, or whether I can use antiquated forms or not.

The conversation took place online on 20 April 2021.

Translation: Philip Yaeger

How feminism matters An exploration of listening

Christina Fischer-Lessiak

After all, how is a women listener supposed to respond to a tradition in which she has had little visibility? In which she has been outsider?

Marcia J. Citron, Gender & the Musical Canon

Autoethnographic vignette I

While staying at home during the lockdown in March and April 2020, the sentence 'I am sitting in *MY* room... all the time' constantly echoed in my head. This made me think about Alvin Lucier's well-known sound art piece *I am sitting in a room* (1969) a lot. Having time on my hands, I started to wonder how my room would sound, how my voice would disappear more with every repeated echo, and what I would have to say, right now, in this situation. So, I sat down and wrote a few simple sentences to capture my momentary thoughts:

'Right now, like most of the time, I am sitting in my room at home. I am safe and financially secure. But I am one of the lucky few. Sitting here, I think of all those without a home, those facing domestic violence, those who have lost their jobs, those who carry the triple burden of wage earning, care work, and housework. Not everyone is safe, and this pandemic unravels the real crisis.'

As I set up microphones, I got really excited about this experiment. I wondered how Alvin Lucier must have felt trying this for the first time. Every time I replayed the spoken words back into my home, my living room, I asked myself how the sound would develop differently without the laundry rack full of clothes, without the massive couch, without me sitting here. I also started to think about the sounds of all those rooms I am not in right now, the rooms I cannot listen to, because they are closed. The abandoned places, like my office, my rehearsal room, the fitness studio. How do they sound right now?

During lockdown I started to listen more closely. I have never noticed that the birds are chirping constantly. Now the sound is like a background buzz, reminding me of nature's presence and closeness. And now that everything starts to change again, I listen to the cars approaching, sirens blaring, children playing. Listening is indeed not hearing, the lockdown taught me that well.

Intro

This autoethnographic vignette reflects one moment last year, in 2020, when thinking about listening became very prominent to me. I started to investigate how my positionality and emotional states have altered my listening experiences and how thinking about listening has changed my listening practice. This was not

only due to the lockdown, but also due to my research activities in the project On the fragility of sounds that offered me new theoretical and practical approaches, like autoethnography.1 I joined the artistic research project in 2019 as a musicologist and project assistant, collaborating with the composer, performer, and theorist Pia Palme; together, we explored feminism in experimental music theatre. This project was designed in continuity with Palme's doctoral thesis *The noise of* mind: A feminist practice in composition (2017). Her idea of a 'feminist practice in composition' sparked my curiosity and led me to investigate aspects of gender and feminism in the field of contemporary classical music and experimental music. My research is concerned with the question of how feminism and gender are significant—or made significant—in these fields of music. Looking at feminism and gender in music requires caution, as philosopher Carolyn Korsemeyer reminds us; neither is there one female perspective, nor is there one feminist perspective in art (2004, p. 5). Rather, there is a multitude of ideas and perspectives. The overlapping factors that render them feminist emerge during the research and are not conclusively defined at the beginning of any exploration. I am interested in how artists conceptualize feminism and how they deliberately apply feminist thinking in their art practice. For this purpose, I explored the music practice of Pia Palme as a case study, because she proclaimed her practice in composition as feminist. In a recent exchange of ideas with Irene Lehmann and myself, Palme agrees that in the beginning of her exploration there was a vague idea of 'otherness' beforehand. In her own words:

As a composer, I felt I did not belong to the usual 'canon'. My practice, my interests, and my career diverge from those of my mostly male colleagues. I began to investigate statements by feminist/female artists of various disciplines and found much that resonated with my own experiences and explorations. At the same time, I continue to precisely observe my own process. In this way, certain patterns and structures become visible and a deeper understanding evolves about what could be a 'feminist' practice in composition. It is something that I discover in the process of doing my practice.

Palme's practice served as my starting point from which I looked in every direction, into collaborations, networks, texts, music, and so on. This paper focuses on the idea of a feminist listening practice that is articulated by Palme (2016, 2017a, 2017b). Her concept is complemented with reflections of other authors in order to

¹ The autoethnographic approach encourages the researcher to experiment with creative forms of writing and to integrate the author's experiences into his*her outputs and thus positioning the author in the text (Adams and Jones 2019). The autoethnographic vignettes serve this purpose (Humphreys 2005, p. 840). By writing about moments that seem important in my thinking about listening, readers can gain insights into my thought process and learn something about myself as the author. Further, autoethnographic vignettes open the possibility to incorporate emotions into the text and thereby engage the reader (Humphreys 2005, p. 842). For the researcher, autoethnography enables self-reflection (Humphreys 2005, p. 841).

approach an understanding of feminist listening. In this essay, I will show how listening can be considered a political act, that is, a powerful act that can effect social change, as well as how it can be a feminist practice, by challenging and subverting gendered norms, not only in a musical sense, but in everyday listening.

Listening

How one approaches listening can vary fundamentally: psychoacoustics can tell us something about listening, as well as psychology, communication studies, philosophy, history, and of course musicology. For a musicologist, listening is evidently an important issue. After all, one is dealing with an auditory art form. While early musicological writings discuss analytical and structural questions as to how music should be listened to (see p.e. Riemann 1888), the study of listening has been given new impetus, especially in sound studies and new musicology (see p.e. Born 2010; Sterne 2012). Other branches of science, such as the historical sciences, have also discovered the topic for themselves (Morat, Tkaczyk and Ziemer 2017). These diverse approaches will enable an extensive multidisciplinary perspective on the subject matter in the future.

Listening is not a neutral physiological act at all; rather it is influenced by different forces, such as cultural training. Consider musical tuning systems: what sounds familiar and 'natural' to me, might sound odd and even wrong to someone else. My musical ear is shaped by my specific cultural training.

Eric Clarke shows, in his book *Ways of listening* (2005), that listening is an active engagement with our environment. While many sounds are present all the time, we filter and focus on specific sounds actively (Clarke 2005, p. 19). We can also relisten to songs, sounds, and conversations in our own heads (Morat, Tk-aczyk and Ziemer 2017, p. 10). One can imagine, or compose, sounds in one's own mind and listen to them; this is how listening can be understood as creative. Listening is determined historically, meaning that knowledge through and about listening changes over time (Morat, Tkaczyk and Ziemer 2017, p. 4). Listening is also a question of matter. Objects and bodies transmit, reflect, and absorb sound. The properties of the space a listener is in, for example, shape the listening experience drastically—so does the position of the listener in this space. Also, one's body is involved: it resonates and senses sound waves. Listening is not only auditive, but tactile. The composer Pauline Oliveros takes this notion further and even integrates sound-production, like vocalizing, into her definition of listening (Tinkle 2015, p. 229).

Listening can also be considered a political act; it denotes a form of participation. While speaking up is generally understood as political, listening is often framed as its passive receiving counterpart. To 'raise the voice' or 'to have a voice' equates political agency. By using the voice, we express identity and exercise political power (Weidmann 2015, p. 233). But what about the required counterpart

of speech: listening? There are indeed many thinkers who argue for the active and political qualities of listening. Musicologist Nina Eidsheim offers the following explanation on how listening might be a political act:

Because listening is never neutral, but rather always actively produces meaning, it is a political act. Through listening, we name and define. We get to say, "This is the voice of a black man." We get to say, "That singer doesn't sound sincere." And we get to say, "This singer doesn't sound like herself." (Eidsheim 2019, p. 14).

Listening, as much as speaking, is part of political action, as Susan Bickford, professor of political science, illustrates when talking about democratic theory. Referring to Aristotle, Hannah Arendt, and feminist theory, she states that listening is a practice of citizenship, and 'contend[s] that what makes politics possible, and what democratic politics requires, is a kind of listening attention to one another' (Bickford 1996, p. 2). In her book *The dissonance of democracy*, she describes the possible political power of listening and links it to feminist theory:

Just as speakers must reflect on how to speak (and what to say), listeners must be self-conscious about how they listen (and what they hear). Taking responsibility for listening, as an active and creative process, might serve to undermine certain hierarchies of language and voice. If feminist theorists are right that [...] oppression happens partly through not hearing certain kinds of expressions from certain kinds of people-then perhaps the reverse is true as well: a particular kind of listening can serve to break up linguistic conventions and create a public realm where a plurality of voices, faces, and languages can be heard and seen and spoken (Bickford 1996, p.129).

In this paragraph, Bickford points to the notion that listening is an individual act and that in a political context it makes sense to become more self-aware of one's individual way of listening. After all, one acquires knowledge and interprets the world by listening; thus, listening is an interpretative act (Stoever 2016, p. 54). Knowledge (and here I concur with feminist standpoint theory) is socially situated; therefore, one must consider the social position of a listener (Harding 2004, p. 7). Knowledge derives from lived (bodily) experience, as Harding argues, and hence 'different experiences should enable different perceptions of ourselves and our environments' (2004a, p. 7; see also Hirschmann 2004, p. 320). According to feminist standpoint theory, groups who experience oppression, domination, or marginalization hold an 'epistemic advantage', because they not only have experiential knowledge of their own reality, but they must also understand the reality of mainstream society or privileged groups (Harding 2004, p. 7).

A feminist standpoint should not be mistaken as a female or women*'s perspective (Hirschmann 2004, p. 318). First, a standpoint also builds on political struggle and theoretical knowledge, as Harding explains:

The struggles to end discrimination against women in the sciences enabled people to see that formal discrimination was only the front line of defense against women's equity in scientific fields. [...] This need for struggle emphasizes the fact that a feminist standpoint is not something that anyone can have simply by claiming it. It is an achievement. A standpoint differs in this respect from a perspective, which anyone can have simply by "opening one's eyes" (Harding 1991, p. 127).

Second, feminist standpoint theory does not claim a universal or essentialist women*'s perspective or standpoint (Harding 2004, p. 8), rather a plurality of standpoints:

[...] "feminism" is the product of ongoing political negotiation within and among various groups of women who theorize from the standpoint of their experience of gender, race, class, and other oppressions. The materialist basis of feminist standpoint theory leads logically to the conclusion that differences in experience produce differences in standpoints; the pluralization of feminist standpoints recognizes differences among material experiences of women across history, race, class, and culture (Hirschmann 2004, p. 320).

Taking this further, the category 'women' should not be understood as a fixed, biologically determined identity category, but as a fluid, historically, and socially-shaped construct. The so-called gender star (*) is used in this text to indicate this assumption. Listening from a feminist standpoint, I conclude, can be considered a political listening practice, a listening with experiential knowledge of oppression and a feminist mind. By listening from a feminist standpoint, one can critically investigate one's listening practice and explore mechanisms of oppression and structures of power. Can men* listen from a feminist standpoint? Because 'a standpoint is an achievement, not an ascription' (Harding 2009, p. 195), I assume that it is possible for 'outsiders' to gain knowledge from a certain group, but it takes effort and willingness to learn and experience their reality firsthand. Harding (2004b, p. 135) writes that '[m]en, too, must contribute distinctive forms of specifically feminist knowledge from their particular social situation [or standpoint]. Men's thought, too, will begin first from women's lives [...].'

Art & Listening

Musicologist Marcia Citron recognizes that listening is shaped by socio-cultural factors such as gender, race, class, and age, arguing that 'there is no unitary model of a listener but rather a multiplicity of listeners' (Citron 1993, p. 174). Like standpoint theory, she emphasizes the social situatedness of experience and perception, respectively. Still, structural listening remains dominant in the study of contemporary classical music and traditional music pedagogy is still mainly concerned with teaching aural skills like identifying chords, intervals, rhythms, and so on. Experimental music composers and sound artists challenge these traditional lis-

tening practices and listening pedagogies associated with Western art music by promoting new ways of listening.

In his article *Sound Pedagogy: Teaching listening since Cage* (2015), Adam Tinkle argues that the composers Pauline Oliveros, John Cage, R. Murray Schafer, and Max Neuhaus teach a new way of listening through their works. Their 'sound pedagogies', as Tinkle terms it, are geared towards a more open listening practice. Here, every sound and day-to-day sonic experiences are worthy of aesthetic attention, not only arranged sounds defined as music (Tinkle 2015, p. 223; see also Voegelin 2010, p. 8). In his infamous piece 4'33" Cage 'articulated a redefinition of music,' Tinkle claims:

[A]ny sound you hear can be aestheticised and subjectively reframed as music. In one reading, this means that 4'33" changes not only the acceptable content but also the very ontology of music, positing that the listeners' own perception, not the composer's design, is the locus of musical aesthesis (Tinkle 2015, p. 222).

For Cage, everything can be music—we just have to listen in a certain way. As Tinkle writes, 'For Cage, sounds need not be organised by a musician; they need only be organised perceptually through intentional listening' (2015, pp. 222-223). Hereby, the notion of the composer's authority over a musical piece is challenged; the reception by the audience itself becomes an active creative process.

Listening, as a performance or creative process in itself, cannot only be found in the works of music composers but also in other art forms. Take Yoko Ono's conceptual art piece *Grapefruit* from 1964: an artist's book full of instructions for the reader to perform (or not). In *Grapefruit*, we find several listening pieces, for example the *Snoring piece*, *Pulse piece*, and *Beat piece*.

Tinkle observes that the premise of the listening practices of Cage, Schafer, and Oliveros is that there is an 'universally shared listening faculty buried underneath enculturation' that can be discovered through their sound pedagogies (2015, p. 229). They each come to different conclusions, but the interesting part is how they share the idea of a 'primal' listening that can be accessed by 'cultural deprogramming' (Tinkle 2015, p. 225). While I remain skeptical that people can strip away their cultural training, their concepts offer an accessible way of listening to any form of sound and music. I would argue that their ideas on listening and explorations of musical listening are political, because they challenge normative listening practices in the music sphere.

Pia Palme on listening

While the considerations of Schafer, Oliveros, Cage, and others echo in Palme's writing on listening, she is not as interested in developing a sound pedagogy. She rather examines her own listening practice and broadens her perception from

there. Her thinking on listening extends past the musical realm and pervades into everyday listening.

When Palme explained to me her path of becoming a musician, and later a composer, gender and feminist issues arose on various points. First, she herself feels marginalized as a woman composer and composer of experimental music.² This is not by chance; despite the growing interest in women* composers, they still lack representation in history books and their works are performed significantly less frequently compared to their male counterparts (Treydte 2016, p. 279).³ Second, political and feminist activities are important parts of her identity, which is reflected in her work as a curator and composer. She co-organized, for example, a women*'s music festival for experimental music in Vienna called e_may from 2007 to 2014 together with the voice-performer Gina Mattiello.⁴ Considering herself a female composer, or at least not a male composer, is also an important reference for her. She situates herself in a female tradition and feels connected to other woman composers like Pauline Oliveros, Éliane Radigue, or Francesca Caccini. This is not surprising, Marcia Citron argues, because women* had a hard time feeling like they belonged to a tradition, due to a lack of role models (1993, p. 67). These observations lead me to conclude that Palme listens from a feminist standpoint; it is from there she explores listening.

Palme sets listening at the center of her composition practice. In her doctoral thesis, she develops a concept of the 'feminist ear' and 'feminist listening' that denotes 'listening from a feminist position' (Palme 2017a, p. 19, 22). For her, feminist listening is an 'active process of exploration by ear' (2017a, p. 26). She conceptualizes feminist listening by investigating her own listening practice in a self-reflexive manner and by researching into the fields of feminist theory, sound art, cognitive science, and experimental music discourses on listening.

The research project *On the fragility of sounds* continues her investigation and is guided by the idea that taking a feminist position impacts one's listening perception. Her interest, she explains, lies in political 'composing-as-listening', meaning to compose in a political way, rather than producing political works (Palme 2017a, p. 21). She states:

[...] I concur with composer Helmut Lachenmann, who marked out perception as the intrinsically subversive and political element in composing, rather than a political intention of the composer. [...] In my case, the noise I encounter in the coffee house is not only the noise of 'life itself' [...] but the noise belonging to my own life, to my personal terrain, as a woman and composer (Palme 2017a, p. 61).

² In the discussion of this text, Palme pointed out that she also feels marginalized because she started working in composition without previous academic training.

³ See also https://www.theguardian.com/music/2018/jun/13/female-composers-largely-ig-nored-by-concert-line-ups (accessed 8 June 2021).

⁴ https://db.musicaustria.at/node/46492 (accessed 8 June 2021).

Acknowledging the influence of socio-cultural context on human perception, Palme formulates the idea of a normative (male) ear in opposition to an 'other' (female) ear. Or to put it in another way: she assumes that listening is gendered. Her interest lies not in exploring these 'ears', but in redefining listening from a feminist position (Palme 2017b, p. 36; Palme 2017a, pp. 25–26). This listening position is political and flexible. She defines this feminist position as a 'practice made up of many parts, decisions, and actions in everyday life (which includes my artistic work)' (Palme 2017b, 35; transl. CL). In her writing, the composer argues that taking a feminist position of listening means a shift in perspective, hereby 'widening [...] the perceptional field towards a contextual and cultural approach' (Palme 2017a, p. 25). The process of listening then becomes more inclusive (Palme 2017b, p. 35).

Here Palme draws on Pauline Oliveros' Deep Listening practice. Oliveros explains that, '[i]nclusive listening is impartial, open and receiving and employs global attention' (2005, p. 15). Palme defines her personal mode of deep listening (or the listening into phenomena) as listening *vertically*—inward and outward—to 'one's human and non-human environment', be it the sound of birds, the sound of the city, or the sound of her own thinking mind (Palme 2017a, p. 23; Palme and Fischer-Lessiak 2019). Referring to Oliveros' term 'sonosphere', which denotes 'the sonorous or sonic envelope of the earth' (Oliveros 2011, p. 162; Palme 2017b, p. 35), Palme conceptualizes her thinking or consciousness as an audible sonorous space (2017a, p. 24). Drawing on her meditation practice, Palme understands listening not only as a tool to explore the world, but also her mind, or 'mental sonosphere' (2017a, p. 33). 'It is precisely this practice as a listener,' she writes, 'listening inward and outward in the same way and involving one's own mind in the process, that I define as feminist' (Palme 2017b, 35; transl. CL). Inclusive means also to listen closely to silences, background noises, the concealed and unsaid (Palme 2016; 2017b, p. 35; 2017a, p. 23).

Feminist listening, Palme argues, is creative and active. In her thesis, she stresses the point of the perceptional creativity of the audience. Listening, she speculates in reference to Eric Kandel's work on the reception of visual art, is as creative and active as composing; listening mirrors composition. 'The artistic process corresponds to the process of perception. Both processes operate according to similar structures of brain activity to (re-)create a mental imagination of "reality".' (Palme 2017a, p. 26). She further proposes that '[the audiences'] perceptional process is as personal and creative as mine; their listening perception re-composes the work. In this sense, my "ownership" of a work ends at this point; the composition is handed over to the performers and the audience.' (Palme 2017a, p. 115). In this context, the musicologist Marcia Citron speaks of a 'dual ontology':

This creating by the listener does not usually negate or supplant the creativity of the composer who wrote the piece. Instead, it creates another ontology of the work—a real-

ized version, replete with meaning for that listener, as distinct from the notated version that the composer created (Citron 1993, pp. 172–173).

Citron also addresses the listening of performers, the 'presence between maker and listener' (1993, p. 173). Their former listening experience shapes their performance of musical works; performances they listened to influence their own musical practice.

Palme also highlights the importance of the body in listening processes. Feminist listening means to experience the sonosphere with the whole body (Palme 2017a, p. 23). In her theoretical thinking, listening becomes something sensuous and tactile as Oliveros, Cage, and Schafer also suggested in their work (Tinkle 2015, p. 229). The drummer Evelyn Glennie, who is almost completely deaf, illustrates this vividly when talking about how she listens with her body instead of listening with her ears, describing her body as 'a resonating chamber'. Listening to music is highly influenced by rational and analytical listening practices like structural listening (Dell'Antonio 2004, p. 1); by focusing on the mental capacity, the body as sensory factor is ignored and the hierarchical binary of body-mind reproduced. Thus, I understand Palme's emphasis on the body in her listening practice as feminist.

I started wondering why examining listening in this way might be important for a composer and her composition practice. I found some answers in Palme's writing. First, listening is seen as a tool. She writes: 'For me as a composer, a new form of listening is the tool I use to explore the world in order to recompose it from my point of view' (Palme 2017b, 36; transl. CL). Also, in her essays she reports that this feminist listening (perspective) shifted her compositional focus from time to space (Palme 2017a, p. 113). Time becomes a more flexible parameter in her pieces, allowing vertical listening to unfold (Palme 2017a, p. 23). At the same time, spatial considerations become more important: 'When listening is re-oriented along the vertical direction, linear time becomes less prominent, while, as perceived in my compositions, spatial considerations come to the foreground.' (Palme and Fischer-Lessiak 2019). I was able to observe this in our interactions throughout our project. Palme pays great attention to the directions given to performers and the positioning of performers and loudspeakers; the performance space and materiality itself are understood as vital factors in composing and listening.

Listening & Feminism

Palme's exploration of listening is one way of applying feminism to aural perception. I began a search for traces of the 'feminist ear' and 'feminist listening', not only in regard to music. I found texts in which authors use the term 'feminist ear'

⁵ https://www.evelyn.co.uk/about (accessed 20 April 2021).

to describe a listening that interprets communication content in a feminist way. For example, if someone would say 'women* cannot be composers', listening with a feminist ear would mean to challenge that statement based on feminist thought (see for the use of 'feminist ear' for example Ware 2006, pp. 548–549). However, there is no formal theorization or closer examination of a feminist ear.

Kassia Waggoner explores the idea of feminist listeners in her analysis of socalled listening characters in English novels. Drawing on rhetoric, she claims that feminist listening is active and engaging: '[It] exhibits feminist principles of egalitarianism, parity, and equality throughout the conversation rather than creating a hierarchy of power between speaker and listener in which the speaker retains the authority.' (Waggoner 2017, p. 62). Another trace of the 'feminist ear' appears in Sara Ahmed's book *Living a Feminist Life* (2017):

A feminist ear picks up on what is being said, a message that is blocked by how what is being said is heard as interference. The sounds of no, the complaints about violence, the refusals to laugh at sexist jokes; the refusals to comply with unreasonable demands [...] (Ahmed 2017, pp. 202–203).

Ahmed points to the fact that stories do not only need to be vocalized, but that there must be a listener who is willing to listen to the experiences of discrimination, thereby providing an open—feminist—ear by taking women*'s demands and experiences seriously, rather than listening to them as interferences or complaints (Ahmed 2017, p. 202).

What we have seen from these examples so far is that the feminist ear and feminist listening is active and challenges an imagined normative or patriarchal listening. Jennifer Stoever's concept of the 'listening ear' that she formulates in her book *The sonic color line: Race and the cultural politics of listening* (2016) provides a theorization of normative listening. According to the author, the 'listening ear' is 'a socially constructed ideological system producing but also regulating cultural ideas about sound' (Stoever 2016, p. 13). Thus, how we should listen to sounds, what is deemed 'normal', appropriate, and good, Stoever writes, is shaped by the 'listening ear' which 'normalizes the aural tastes and standards of white elite masculinity as the singular way to interpret sonic information' (2016, p. 13).

While Stoever analyzed how 'one's ideas about race shape what and how one hears and vice versa' (2016, p. 21), this concept can also be applied to gender. We have an idea of what men* or women* should sound like; therefore, we distinguish between female and male voices. This distinction is very powerful and meaningful in our society. Consider, for example, the *Fach* system for singers (a system of voice types). Here, singing voices are gendered, meaning that they are divided into male and female voice types. Looking into the history of singing voices, we find that this is not at all a natural differentiation, but a development of the 19th century. Before

this, there was a more flexible approach to voice type (Charton 2021, p. 108). In relation to gender, Stoever remarks:

As with race, the sound of the voice does not cause sexism, but rather sexism disciplines the cultural meanings attached to perceive gendered differences in the voice, impacting expressions of race and sexuality as well as assumptions of class. [...] loudness remains a male privilege in American culture, so women* who wield loud voices are dubbed lower class and "noisy, rude, unapologetic, unbridled" (Stoever 2016, pp. 22–23).

Autoethnographic Vignette II

Pia and I talked about singing. She told me that she stopped singing when she was a child because people told her she sang 'too loud'. I remember myself being told very often as a little girl to keep my voice down. The voice of Paulene Styrene comes to my mind, reciting 'Some people say little girls should be seen but not heard', just before shouting 'Oh Bondage! Up Yours!'

I just recently thought about this song while rehearsing with my band Circle A for an upcoming show in Salzburg. On that day I had a lot on my mind because I was struggling with a submission for a call for papers. The paper dealt with listening, soundscapes, and gender issues. I just wrote a draft but was not happy with it. And while singing our song 'F-E-M-I-N-I-S-M,' it came to me that this song actually deals with the very same topic as the draft I was just writing. The lyrics are a duet with my bandmate Malik and go like this:

Me: Don't raise your voice
Malik: Be ladylike
Me: Don't act emotional
Malik: Just be nice
Me: Be quiet
Malik: But not in bed
Me: Educate yourself but don't forget to look good
And smile
get a husband, you'll be fine.
Be grateful for what you've got
and just shut up!

And I smiled, because I realized how gendered ideas about sound and listening are present in the lyrics.

I remembered how the female voice was historically banned or excluded from public life, and that we can still find traces of that. This exclusion was justified by the sound quality of female voices. The real reason for this discrimination, however, is not in the sound of the voice, but in the way we ought to listen to female voices.

Interestingly, some instruments that are perceived as loud are considered male and are generally played by men*—just think about brass instruments like the

trumpet.⁶ Women* who play the trumpet are still clearly in the minority. This is also reflected in the gender relations at the University of Music and Performing Arts Graz (KUG): In 2015, 88% of trumpet students were men*, in 2018, 91% (KUG 2015, p. 19; KUG 2018, p. 14). I assume that one listens differently to female trumpet players because the instrument is considered male. Following this logic, women*'s bodies cannot play the trumpet as it should be played according to aesthetic standards: 'loud, fast, and high'. The gendering of trumpets, and instruments in general, once more illustrates how the 'listening ear' attributes meanings to sounds.

I agree with Stoever that listening is influenced by a 'historically contingent and culturally specific value systems riven with power relations' (Stoever 2016, p. 14). We listen to music and sounds with the 'power of the cultured ear' (Sterne 2012, p. 7). Our own musical experience and knowledge come into effect, as well as cultural discourses and notions of good/bad music. Unconscious biases influence our evaluation of artists and music. One becomes critically aware of this by considering the practice of 'blind auditions' in the music sphere. Here, musicians are put behind a curtain to minimize (gender) bias effects when assessing the most qualified player for a music group, orchestra, or performance. This happens on the assumption that the awareness of the musician's gender, race, or age would render it impossible for professional listeners to come to a fair decision based on musical ability and quality. This practice indicates that listening is not neutral but shaped by the listener's value systems. In this case, the musical value system is activated by the eyes, but judged through the 'listening ear'. This example illustrates the gendered norm of listening against which another mode of listening should be set. Can a political (feminist) listening challenge or subvert the normative 'listening ear'? I propose that by listening from a feminist standpoint, we challenge normative listening and allow a multitude of listenings.

Final thoughts

In reviewing literature and Palme's idea of a feminist practice, it became clear to me that there is not one single definition of feminist listening. Also, some aspects of Palme's listening practice could be understood as not strictly feminist. For now, this flexibility in defining the concept leaves us with the basic notion that feminist listening can (but must not) start from a feminist standpoint. Feminist listening allows awareness of power structures by being reflexive of one's own listening practice. Taking this further, listening might also be thought of as performative. Relating to speech act theory (Austin 1962), Doyle Srader, a professor of Speech and Communication, argues that we do things by listening. Both listener

⁶ On the issue of gender and instruments see for example Hoffmann (1991), Wych (2012), and Stronsick, Tuft, Incera and McLennan (2018).

and speaker, he claims, 'change the world through their communicative behaviors' (Srader 2015, p. 100). Through listening, he explains, we do not only receive content, but engage with our surroundings: 'there is an inherent commitment and vulnerability' (Srader 2015, p. 97). Without anyone *really* listening, communication fails. Could feminist listening or queer listening constitute a listening that purposely fails to perform normative gendered listening? Doing so by intentionally not listening, misunderstanding, or disrupting conventional listening practices, or listening in a different way?

I claim that these ways of listening challenge the normative 'listening ear' and influence how we experience the world and ourselves in a different manner. Feminist listening can infiltrate compositional practices and impact creative choices. Perhaps a part of feminist listening is simply listening to music composed by women* more often. Because the music of women* should be heard.

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Listening is a browser On the fragility of listening online

Margarethe Maierhofer-Lischka

Not only the ways of music-making but also the practices, politics, and poetics of listening and listeners have changed during what we call the digital age. This development has been given a new and unpredictable momentum by the pandemic which has caused a rapid expansion of digitally mediated formats that permeate our daily lives as well as our appreciation, creation, and consumption of art. With new forms of online networked (telematic) music performance¹ emerging, the relation between musicians/performers and their audience, their possibilities of interaction and contact in the realm of technologically mediated cyberspace, is constantly being redefined. In this essay, I want to examine forms of remote listening and digitally mediated auditory co-presence in the realm of online real-time performance. I have drawn from current theories and artists' positions on listening, media theory and cyberfeminism to outline how listening is being (re-)shaped in current live-online music production and consumption. My aim is to develop ideas and concepts that can help grasp and redefine the position, meaning, and possibilities of listening and listeners. What are the vulnerabilities and strengths of listening as a relational tool to connect over distance? How can we redefine empathy in cyberspace as a process that connects the realm of the telematic (as in remote digital communication in real-time) and the telepathic (as in intuitive understanding and feeling) by means of listening? My essay takes the form of an open think-piece that unfolds in several sections that are moments of exploration, trying to catch any questions that arise and examine them through the act of writing, thinking and narrating situations.

Coming to terms: listening as/is a system

Listening is, as on its own, a part of how we as living beings get in touch with each other and make sense of the world. There are as many ways, modes, and functions of listening in existence across all species as there are ears, since not only humans

¹ The term *telematic* refers to the process of sending, receiving, and storing information using telecommunication technologies, and subsequently got used to describe the setting of an online music performance regarding the digital transmission between performers and listeners and/or performers. I am using the term here to refer to the situation of transmission between performance/performers and listeners. The writings of Roger Mills (2019) and Pauline Oliveros (2010, pp. 252–254) give a more detailed overview on the history and aesthetics of telematic music performances.

and animals but also plants have auditory perceptions. To listen in this way is essentially to participate in the creation and the eternal processing of moving matter since all sound as a physical phenomenon starts from motion in space traversing the air and meeting resonant surfaces. Listening, as defined by its physical basics, is thus an ecological act. As we listen, we participate in and create resonance. We are part of a larger system in which each resonant body is a system of its own. Even as we try to isolate processes and phenomena of what we want to be special ways of listening—such as listening to music—we can never escape that resonant ecology.

To extend the range and possibilities of one's own body has always been one aim of human activity, and the creation of tools not only facilitated the extended reach of our hands, eyes, and minds, but also our ears. Since the invention of electronic technologies for audio recording and transmission, bespoke technical devices have become part of the resonant ecosystem, extending and modifying the way we perceive, produce, and transmit sound. Such devices can not only be external mediators between us and the original sound source—the gramophone or radio, for example—but they can also be attached or even integrated into bodies, as in the case of headphones, airpods, or hearing aid implants. Looking at this entanglement of technology and the body, we should not forget that listening remotely was happening well before the digital age and was already a first dip into experiencing a cyborg-like entity. The people who experienced the first live transmission of sound across a telephone at the end of the 19th century may have experienced with their own ears, minds, and bodies what science fiction writer and philosopher Donna Haraway (1985) much later described as a state of being or becoming a technologically enhanced being. In contrast to this embodied idea of technology as a step towards the future of human being, early testimonials of technologically mediated remote listening attribute a ghost-like presence to the sounds heard; the technical apparatus enabling the listeners to communicate with spirits of the dead. Media theorist Friedrich Kittler (1995) pointed this out by describing the gramophone as a psychical apparatus, focusing on a psychoanalytical interpretation of the listening act, rather than the relation between the machine and the listening subject as body.2

Both concepts—the idea of the cyborg as a fusion of human and machine, and the idea of technology as a psychic apparatus—can contribute to the development of an understanding of what happens when we are listening online in cyberspace. When I practice remote listening with and through digital technologies, I am well aware that the sounds flowing into my ears are not ghosts or creations of my subconscious. However, I also know that Haraway's hopeful projection of the cyborg, written in 1985, has to be confronted with the reality of globalized digital capital-

² Even though Kittler's widely quoted arguments seem compelling at first sight, it has to be noted that his ideas also receive critical assessment today, as Christoph Weinberger (2012) has pointed out.

ism in 2021. The implementation and presence of technologies to enhance human everyday experience through the use of 'smart' connective devices such as mobile phones, smartwatches, and assistive systems for home use, has become ubiquitous. Following Felix Stalder (2018), these tools have become a mostly unquestioned part of a machinery that feeds into a post-democratic economy. Instead of fostering individual empowerment, generating, utilizing, and marketing attention has become a key feature of online interaction. In a fully networked society, personal freedom and the right to privacy is undermined by algorithms that control human action, and the values of freedom of will and the right to access unbiased, non-fake information are at stake. The closeness of technologies, their entanglement in daily life, makes it hard to step aside and take an unbiased look at how they modulate and determine human experience.

In the beginning, the internet was sound

The 1990's saw the rise of the internet as a global infrastructure which was quickly shifting from being the world's biggest information source towards becoming a huge environment for entertainment—adherent to the development of internet-based audio and video sharing and streaming—as well as for individual representation, expression, and communication. When Golo Föllmer published his book on *Netzmusik*,³ the paradigms and examples that he referred to were mostly taken from the lively net art scene of the 1990's, and *Netzmusik* was a new, growing genre of art playing around with and exploring the techno-social possibilities of the internet both as a technology and as a medium of communication and social interaction. Yet the internet at that time followed a different paradigm than today. Until the rise of what became the big social media platforms, the internet was imagined as a universal infrastructure promising worldwide access to information, culture, and education, in much a similar way as the radio was projected in its beginnings as an utopian infrastructure, as writer Velimir Chlebnikov (1987, pp. 392-295) says in his seminal essay 'The Radio of the Future'. Like the radio, the internet, in its early days, held a sonic presence as information got encoded and transmitted acoustically via modems. The bleeps and blings of their sonic signature remain engrained in the cultural memory of the 1990's, an acoustic icon still

³ The German term *Netzmusik* does not really have an English analogy. Netzmusik proper means not only the dissemination of any kind of music through the means of the internet, but more prominently refers to forms of music, sound art, and practices of creating and listening to music that are specific to the internet as a medium, exploring its technological, social, and aesthetical potential (see Föllmer 2005, pp. 1–3). The term got widely used in relation to net-based art forms that work with sound generated and disseminated in web browsers but encompasses also the dissemination of preproduced music via netlabels, which are internet-based independent music labels that create their own artists' and listeners' communities.

called up today whenever the act of 'doing internet' gets represented acoustically in a movie or a radio play. An online connection via modem was something that could be, essentially, listened to.

beep—beep... drrringdingding....chrrrrrrshh.... bling bling..... pa-ding pa—ding....

Physically distant, temporally close

The introduction of sound reproduction and sound transmission through devices like the gramophone and radio introduced a new category of simultaneous perception into everyday life. While we are constantly dealing with multiple things happening at the same time, the presence of electronic media for sound transmission has brought another emphasis: reproduced sounds can be transferred across distance and time and suddenly we are able to hear the sounds of things, events, and people that are not physically present in the very moment. The fascination, horror, and bewilderment expressed by many who are mourning the fatigue of digital remote listening reminds us of the reactions of people more than a hundred years ago, when in Paris, for the first time, people could listen to recordings or transmissions of opera performances. Transmitted by telephone, one had to go to what was called a listening booth, pick up the phone and sharpen the ears to receive scattered impressions of the music, cast across space and ether, infused with crackles, hisses, and silences. Let us re-imagine this situation and its impact on the listeners as they crouched inside one of many telephone booths that were set up beside each other in a public location. This first experience of what could be called *telematic listening* introduced a split, a gap in the senses, a state of being in between. This situation can still be experienced today when listening to online music performances.

The telephone, radio, and internet as means of sound transmission and reproduction share the aspect of simultaneity, yet in different ways. While the radio as technology contains an inherent division between the roles and technical situations of the sender and the receiver—a hierarchy that radio pioneers like Bertolt Brecht long envisioned as breaking up—the internet as technology allows for transmission and communication in both directions simultaneously. Yet, they all share the quality of temporal proximity or what is called its 'liveness' (Auslander 2008), meaning that listeners can participate in events that get transmitted 'in real time'. When we use a computer to watch a live-stream music performance, we create and facilitate situations of listening across physical distance, but in temporal proximity. The contradiction inherent in this situation is apparent: the term remote listening in itself poses a tautology, for listening is already an activity happening across distance, connecting a listening subject with objects and events in other places. It highlights the distance that exists both in time and space between the listener and the listened and it makes us aware of the mechanisms necessary to

cross that distance. While the word *distance* calls up a sense of stance or stillness, remoteness is related to motion. There is a dynamic in this which seems more suitable to describe a phenomenon related to digital technologies, as such technologies develop rapidly. To use a popular metaphor, we could observe that the coldness of physical distance in an online live music performance is weighed up against the heat of fast-paced digital transmission. The situation of listening to a music performance online leads us to expect a sense of being in close temporal proximity to the real event. Even though we know that the algorithms of digital encoding and transmission of sound and image do create temporal delays, the time distance still seems so minimal that we are ready enough to follow that make-believe of shared reality across time and space. Listening remotely in a digital setting thus exposes the internal dynamics of perception: human beings strive for a comprehensive sensory experience, and our senses are ready enough to make up for what is missing in order to create coherence. Even though I know that the situation I am attending to in an online music performance is removed from the site of the actual performance, and I can never verify whether the event I am attending to is really happening or is just a recorded file being replayed, I know I want to tap into this fullness of experience.

Listening is a browser

Listening is a constant process of browsing, filtering, and shifting across consciousness. I can never perceive everything that surrounds me. I go out on the street and follow my own thoughts while crossing a road and a car suddenly comes to a halt in front of me with screaming tyres. I did not see it; it had not been present in my range of attention, thus it didn't exist for me before the moment it appears right in front of me and an angry driver lowers the windowpane, yelling at me: 'Hey girl, you're walking around without your head??' Ignoring the subtle sexist tone lurking in his voice, I answer, 'Sorry, I didn't see you,' silently adding in my mind '…and didn't hear you either.'

Listening in the digital realm exposes the precarity and situatedness of my own senses, my *sensituation*. The obvious glitches and breaks in the audiovisual stream make me aware of the instability of my own internal engagement with the music in its interplay with everything else that surrounds me. We all have mechanisms that help us to structure our engagement with the world, without them we would be engulfed in an endless flow of input rushing at us. We all need to shut down sometimes when things get too much. But our physical situation, the context and place in which we are embedded, also helps or interferes with creating listening experiences. The situation of a concert performance taking place in real life, in the physical co-presence of audience and performers, offers a context directed at reinforcing auditory experience, not only by the design of the concert space but also by supporting our listening with the deliberate actions of the performers and

the conscious layout of the space regarding the placement of listeners and performers. When listening to a digital performance, we can be anywhere: at home in front of the computer, in a park, on the street... any of these situations brings its own implications of attention, focus, concentration, and intersensory relation—whether we are more focused on hearing, seeing, or feeling, on reception of input, or whether we are busier with actively moving in our environment. Sitting at a computer, opening a browser window to listen to a concert tacitly places my listening in the context of human-computer interaction. Even my knowing about online performance as an act of art cannot fully outweigh the impact my physical position in front of the laptop has on my listening.

The web browser, a tool used to search and access multiple sources of information across the internet, becomes the main interface to engage with online music performance. To browse the net is an exercise in attentional economy. It is both focused and distracted, attuned and nonlinear, creating and following links or jumping around, sometimes digesting bigger chunks of information, sometimes just zapping across the informational overload the World Wide Web holds. When I listen to a performance online I notice that my listening gets attuned to the act of browsing. I find myself scanning, spreading out my attention, moving around in an attitude of surfing through the event rather than completely focusing on it. This can be a disturbing experience if I expect listening to be an exclusive, full-on concentrated process. Framing music listening as an idealistic act of concentration and understanding, a highly specialized act possibly requiring professional training and aiming to provide a possibly perfect rendering of the musical works heard, has long been a central part of the politics and aesthetics of listening in musicology and music theory. Remote listening in the digital age challenges these political and aesthetical premises. Are we ready to accept new listenings as much as we are ready to watch the creation of new music and art forms?

Listening in a digital setting exposes the conservatism inherent in the pre-coded formats through which we receive and consume music and art. Instead of conceiving online music performances as a digital rendering of physical events, how would public perception of online music-making change if it was conceived as a genuine form of net-based art? Net art has been, from the beginning, a field where discourses on networked technologies, society, and art interweave. One central focus of net art was and is to explore and expose the technical infrastructure of the internet, to use its constraints and possibilities as a playground for creating art that exists only in and through the net. A core aspect of net art was also to open a space for criticism towards technologies and their role in society. From the 1990's on, groups of feminist artists like VNS Matrix, subROSA or FACES held an important voice in this critical discourse. They 'saw the virtual world as an opportunity to abandon the sexist social conditions of meatspace and rebuild equitable social

relations in cyberspace,' as Loney Abrams (2019) puts it.⁴ By working in collectives and creating ephemeral, fluid works which only existed in cyberspace through online interaction, they did not only question the nature of artworks. They also re-envisioned the process of art making, the role of the artist as a singular (often male-coded) creator, and played an important role in bringing up digital net-based art as a new art form which engaged critically with the relation between the spectator, the creators and the technologies involved. The *Cyberfeminist manifesto for the 21st century* (1991) of the Australian artist group VNS Matrix took the form of a poetical prophecy. Both drastic and ironical, they claimed that technology should be understandable and accessible to everyone. The creation of technologies and related artworks should reflect on social values, subverting gendered hierarchies and mechanisms of exclusion which often prevent women and other marginalized groups from actively engaging with technologies. VNS Matrix state in their Manifesto:

We are the modern cunt positive anti reason unbounded unleashed unforgiving we see art with our cunt we make art with our cunt we believe in jouissance madness holiness and poetry we are the virus of the new world disorder rupturing the symbolic from within saboteurs of big daddy mainframe the clitoris is a direct line to the matrix the VNS MATRIX terminators of the moral codes mercenaries of slime go down on the altar of abjection probing the visceral temple we speak in tongues infiltrating disrupting disseminating corrupting the discourse we are the future cunt (VNS Matrix, 1991).

Cyberfeminism quickly became a worldwide multi-faceted movement which continues to result in manifestos, conventions, and diverse practices of art creation in which the boundaries between physical persons and virtual personae, the role of the individual artist and the idea of the autonomous artwork are questioned and subverted through collective interventions. One recent example is both an artwork as much as it is an attempt to describe cyberfeminist ideas, their related practices and communities: Charlotte Eifler's *Feminism Is A Browser* (2020) is a film interweaving storytelling about feminist media art pioneers and the creation of a fictional persona Yeva. Yeva was originally created in the 1990's by FACES,

⁴ According to Abrams, the term 'cyberfeminism' was coined first in 1991, appearing simultaneously in a text by philosopher Sadie Plant and in a work by VNS Matrix.

a network of female media artists. She is shown as being born online and then getting bored of living in the cyberspace, attempting to reach out to meet her creators. Through the title of this film, Eifler brings to mind the web browser as paradigmatic interface for human-machine and interpersonal interaction in regard to the technosocial structure of the internet. She describes the browser as a metaphor for cyberfeminism—like a piece of software, the cyberfeminist community is the product of collective efforts, a tool which gets constantly developed for the search and exploration of new identities and utopias, fostering the acquisition of knowledge and agency both in the physical world as well as in cyberspace. Following Eifler's idea, the use of a web browser to listen to performances online also renders listening a browser if we accept the fundamental entanglement of listening with the technosocial framework and context in which it is happening. Rather than mourning the loss of any musical and artistic quality, we could instead see the browser as a powerful metaphor and tool to re-frame listening inside a techno-aesthetic setting.

Let's follow this line of thought a bit more. The complaints about the loss of sound quality, disruption of connection, and the loss of immediacy of human contact or physical co-presence only address, on the surface, the technical apparatus necessarily involved in creating, disseminating, and receiving music and sound online. Technical challenges and complexities are known and obvious. What is audible in these complaints is the underlying undertone of another strand of cultural critique lingering in statements of musicians and music critics ranting about online listening situations emerging throughout the pandemic. Such statements often imply a critique of the visual in favor of a privilege of the ear, intertwined with a critique of audio transmission technologies as deficient ways of music-making and music listening. Thus, they are, overall, assuming a privilege of physical co-presence over mediated co-presence experienced in cyberspace, tapping into an techno-critical, anthropocentric rhetoric of cultural conservatism. Just one recent example is Salomé Voegelin (2021), philosopher of sound and listening, who chimes into that chorus. In an essay dealing with the alleged loss of mutual contact in cyberspace she reflects on listening in online conferences, calling with Roland Barthes on the 'grain of the voice as an irreducible trace of human contact' which is arguably 'endangered by AI cleaning language'. Listening online in this perspective is rendered an impossible act, because true contact and empathy is defined by (mutual) touch through the clarity of sonic detail in 'direct' unmediated hearing. In cyberspace, listening gets obstructed by technological barriers, rendering the 'AI' (a.k.a. the sound encoding algorithm) a central enemy in this battle. ⁵ Voegelin

⁵ It seems strangely reductive that conflating the 'grain of sound' with an idea of clarity and detail is considered by Voegelin a privilege of unmediatized listening, as this would also render listening over the telephone and radio a challenge, maybe the only difference being the technology used. Comparing an 'AI' with an analog apparatus, the former is maybe easier to declare an enemy, following current popular discourses. Yet I would ar-

does not touch on the question of whether seeing the image of another person possibly improves or influences her hearing. The central argument underlying this critique is presented as a battle of the 'real' versus the 'virtual'—a fight which the 'virtual' has, allegedly, already lost in advance, because cyberspace does not own the domain of physical touch and bodily contact:

Sound is a trace of transfer. It is a contingent moment of contact friction. Thus, I listen and hope that a sonic sensibility that embraces this friction, and hears also what might appear semantically irrelevant to our exchange, might compensate for the loss of a physical trace online. And that it might reconfirm our existence to each other, generated in moments of coincidence, rather than by a pre-given name, indifferent to circumstance and a contingent vis-à-vis. However, most online platforms reject sound's diffuse materiality, and opt for semantic clarity instead (Voegelin 2021).

As much as Voegelin's critique of algorithms may seem to link in with arguments that media scholars like Stalder pose, her arguments fall short in some ways of recognizing the digital condition of listening online. When online listening is portrayed as a fight between the good human ears and the bad algorithms, it seems to claim authority for an essentialist view in which the physical domain is portrayed as irreconcilable with cyberspace and its modes of worldmaking, rather than recognizing both domains as mutually entangled. Instead of amplifying reactionary struggles about the relations of humans and technology that got highlighted not only by the recent pandemic, I propose to rethink the agency of sound or listening from inside the current digital condition.

Repositioning listening and the listener

The often-expressed aversion towards listening to live-streamed online concerts and performances is not so much, I would presume, related to the quality of the auditory experience itself but to the perceptual split we experience through the context surrounding us and the events happening online, which call for a completely different context and setting in themselves. I can overcome this dissonance, at least partially, by creating my own little ritual for preparing to attend a live-streamed performance. If I stay in my room, I close the windows and door, switch the phone to silent, and put on either headphones or listen via loudspeakers. Listening to online performances is an exercise in creating, and accepting, hybrid situations and situatedness at the intersections of cyberspace and physical space.

The position of listening in and across the internet is situating listeners in front of computers or other networked devices. No matter what the device used

gue that it can also be possible to find that graininess in the digital glitch, a phenomenon which lies at the heart of Legacy Russell's idea of Glitch Feminism (Russell 2006; see footnote 6 for a detailed explanation of the concept).

for connection may be, the situation of an online music performance most likely places me in front of a screen and some kind of keyboard; basic interfaces that allow me to establish connection with the sonic events streaming in from the outside. The screen is like a white cube, providing a space that always remains opaque to some extent, because it can work only in the way it has been designed. Like the white cube of the gallery, the screen attempts to create a neutral frame for the objects and events appearing in it, while evidently loaded with the technical, functional, and social paradigms of its construction. A screen is a device constructed for display, for exposure, or—synonymously—a device intended for monitoring processes that happen behind it. In short, it employs the paradigm of surveillance. Listening in front of my computer's screen puts me into this hierarchical position of being the one that is watching over certain events. While the persons involved in the creation of these events may not even be aware of my presence, neither are they able to look back at me, at least in most cases. Even if I close my eyes, this situation of listening remains active as a part of what Judith Butler (2017, pp. 171–191) called the *infrastructure* of a performance, its context carrying its own connotations, functions and meanings which may interfere with, amplify, or contradict the intentions of the performance. And infrastructure gets a double meaning here, since it does not only mean the direct context that I am situated in as a listener—my room, my desk, the space I stay in—but it also includes the technical infrastructure needed to participate in the online event. While infrastructure sometimes is a structure which is designed to disappear, to exist below our radar of perception, the infrastructure of online music performance helps to constantly highlight itself: The screen appears to create transparency, to let me look through into something else, but in the end, I can't circumvent its materiality. It always looks back, and, fitting whatever comes in via the stream into its rectangle shape, it also acts as a volumatic device, transforming the voluminosity, the three-dimensional haptics of a live performance into the ratio of image compression which is part of all video streaming. We can all feel this contrast of our own volume weighing against the flatness of the screen. In fact, the nostalgia and incompleteness that many people express regarding online real-time listening situations may refer to this imbalance.

Being exposed in front of the screen, trying to follow what is happening outside my direct surroundings, it becomes harder for me to fully tune into empathy with the performers whom I usually perceive strongly in a live concert. In a live concert, I get to perceive much more of my own volume and heaviness as the somatic *cantus firmus* grounding my listening experience, while in turn the sleekness of the screen embodies the thin line, the fragility of online sound performance exposed to the glitches of digital data transmission. I have to recreate empathy as a telepathic procedure in this setting of telematic performance, imagining and recreating the physicality of movements, postures, bodies, from the sonic and visual information I get from the online stream.

Listening into the glitch

Listening in the realm of digital transmission is also a constant reminder that disconnection and instability are not flaws; fragilities and failures of transmission are part of digital communication. Certain procedures to deal with connection failures are embedded within every communication technology. Before the automatization of telephone connections, the telephonist, who was often if not mostly a woman, guaranteed telephone connections by manually connecting the caller and the called. Dialing in on an analog landline, the female voice asking the caller to be patient until the connection was established was part of the experience of phone-calling for a long time, and this gendered role of being-of-service is resonant in the design of today's 'smart' devices that mostly feature female voices by default. I invite you to an exercise or experiment. Next time you are listening across the internet, be it a music performance or video conference, remember that in each act of listening digitally, remotely, you are quietly, unconsciously tapping again into such gendered roles when you expect technology to be fully at your service, as you curse and shout impatiently at the screen once the connection drops. To adopt a feminist ear when listening online could mean to keep patience and awareness for the failures, the gaps and sonic glitches⁶ that happen during transmission; to remain aware of the mechanisms at work here, both on the technical side as well as inside the personal web of expectations, pre-learned experiences, and desires.

Listening online is part of the mechanisms of desire that come into play whenever we create and use media. Technologies not only fulfill pragmatic functions or do tasks that we as humans couldn't otherwise do, they also serve as an extension or projection space of our interior: our dreams, ideas, hopes, and desires. Desire creates attention, and by laying out attention as a key factor for social relations in the internet, philosopher Felix Stalder shares the psychoanalytical view on desire offered by Deleuze and Guattari (2004), meaning that the creation of desires is part of the capitalist machinery manipulating and utilizing human behavior. While being aware of these mechanics, to think about desire further in the realm of a technologically extended body can offer a space to invent and project new identities and create spaces of action in digital art, as art critic Joanna Zylinska (2002) points out. Instead of suppressing or functionalizing desire it can be allowed to create its own poetics, sensual and sensational qualities. With Rebecca

Here, I am adding to what the art critic Legacy Russell (2020) named *Glitch Feminism*. Glitch Feminism is a queer-feminist, decolonial perspective on the relation between technology, art, and the individual, taking further on cyberfeminist ideas that originated in the 1990's, trying to address what has been criticized as the whiteness and dominance of Western voices in cyberfeminism. I do not want to go further into this discourse here, but instead suggest a compared reading of Russell against Cornelia Sollfrank (2019) for further understanding.

Solnit I would argue that re-assessing one's own desire every time is crucial for each act of listening online across cyberspace:

We treat desire as a problem to be solved, address what desire is for and focus on that something and how to acquire it rather than on the nature and the sensation of desire that fills the space in between with the blue of longing. I wonder sometimes whether with a slight adjustment of perspective it could be cherished as a sensation in its own terms, since it is as inherent to the human condition as blue is to distance? [...] For something of this longing will, like the blue of distance, only be relocated, not assuaged, by acquisition and arrival, just as the mountains cease to be blue when you arrive among them and the blue instead tints the next beyond. [...] The far seeps in even to the nearest. After all we hardly know our own depths (Solnit 2010, p. 30).

Listening remotely, listening digitally tells, speaks, cries, and whispers: there is, was, and always will be something that is far away, both spatially and temporally. Yet there is also something within reach, which is my own physical situation and sensations. Both keep resonating, moving, touching, intermingling with each other. Listening online, I find myself in the here and now which also embeds me in sounds, while reaching out with my other ear to catch something of what is going on beyond my own realm. I am in a volatile, unstable situation that can be influenced, disturbed, or overturned by events happening either in my direct environment or in the remote space I am tuning into, or in whatever is the space in between: the space of technology. There is always a moment of fragility inherent in the process and presence of online performance, an unstable precariousness related to the underlying mechanisms of networked data transmission where packets of information can get lost, delayed, or delivered in another order. I feel the folding of different times and spaces into the simultaneity of this very moment as the physical situation of the performed events and my own situation collide, the technical apparatus becoming the tightrope I am walking on in this moment of suspension.

Since the pandemic forced people to stay distanced or confined to certain places, listening has obviously become a fashionable topic in public discussion and research, with studies on urban soundscapes rising in number, and radio stations and podcasts recording a growth in audience. The act of trying to understand listening in the realm of the internet urges us to rethink it as an act of empathy inside the framework of technically mediatized experience. Listening with a cyberfeminist ear can help to amplify empathy, encompassing both the telematic as awareness of the digital condition and the telepathic as an act of feeling into and connecting with the presence of others.

A query on research papers that have been published since spring 2020 related to the topic of the 'pandemic soundscape' shows at least 900 entries in Google Scholar (as of 15 September 2021). Even considering that this is just a rough count, the number speaks for the high attention this topic holds in the research community. The DRG Global group conducted a study in 2021 to assess the amount of radio usage amongst people working from home, and recorded rising numbers in radio listeners compared to pre-pandemic audience numbers. The report and the full study can be accessed here: https://www.radiocentre.org/radio-listening-surges-among-working-from-home-audiences/ (accessed 15 September 2021).

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Regarding listening On the theatricality of experimental listening situations

Irene Lehmann

It is certainly not surprising to begin a text in times like these with the note that plans for the talk on which this paper is based had to be considerably changed in the course of anti-pandemic-measures. The altered conditions for attending live performances have been more than circumstantial since this activity constitutes a vital part of my research practices as a theatre and performance scholar. In my native Germany, live performances were almost completely banned between November 2020 and May 2021. As a consequence, my object of thought was suspended, leaving me without a flow of experiences on the theatricality of listening situations.

My talk in the *Fragility of sounds lecture series* was planned for late February 2021, but in January I noticed that my plan B to attend at least a rehearsal and a recording session of a concert by the experimental Splitter Orchestra had also collapsed due to tightened regulations. Thus, it might seem rather superfluous to mention the fragility of experimental live listening situations; the vulnerability of independent productions and venues is rather obvious. Yet it had such an impact on my research and writing that I'll take the suspension of live performance situations as a starting point for this inquiry. Thus, in the first part of this paper, I will take a closer look at the term 'theatricality' and consider the current situation from a point of negativity. In the second part, I will examine exemplary listening situations from 2020 regarding their inherent theatricality and the performativity of listening, with a special focus on Splitter Orchestra's project *Code of silence*.

Negation and negativity as starting points

In the early days of November 2020, when the cultural lockdown was set in motion, music practice lessons were still allowed, and, while doing errands, I suddenly found myself eavesdropping at a music school window. Normally, I would walk by such early trial-and-error sounds of playing together but the general suspension of live music changed my attentiveness. While passing this practicing of Christmas carols as well as saz lessions, I discovered a hidden connection with the listening and performance practices of Berlin's experimental composer-improvisor's scene, of which the self-organized Splitter Orchestra is a vital part. This is the sensitivity of listening and being aware of each other while performing together that includes every musician, technician, and member of the audience. With the suspension of live concert and theatre situations, some of the fundamental as-

pects of performance as an artform or genre, as discussed by performance studies since the 1980s, were severely interrupted. According to Erika Fischer-Lichte and others, performance as an artform depends largely on the performers' and audience's co-presence and their relation. With regard to these truly performative aspects, Fischer-Lichte focused on the temporal and spatial simultaneity of (certain aspects) of production and reception which can only take place in a temporally and spatially shared situation (Fischer-Lichte 2004). During the pandemic, experiments in producing theatre or concerts online spread widely, yet these experiments rather stress that the specific qualities of a performance resist reproduction—as had been discussed in the theories of performance for a long time (Phelan 1993, Auslander 2008). Regarding the performing arts, the pandemic situation offered the possibility to observe how the effects of switching media are so strong that as a result, new artforms are generated by these experiments: film, media art or online theatre formats operating within the conditions of the cyberspace in genuine ways. This is why I will take the current situation seriously from a philosophical point of view and approach the object of my musings from the point of negativity. It might be counter-intuitive and surprising at first glance, but it will aid understanding of the theatrical dimension of experimental listening situations, which is the main focus of this paper.

The regulations that had to be observed during concerts in summer 2020 included a gradual negation of the typical concert situation, as described by musicologists like Julia H. Schröder (2014), Christa Brüstle (2013) and others. However, it seemed to me that the experimental music scene had already collected so much experience in experimenting with the concert situation out of curiosity and aiming at enhancing possibilities, that the regulations sometimes seemed just like another performative score¹ to follow: requiring the audience to be seated separately, to regularly go outside, to go on audio walks, and attend performances outside. Despite the economic difficulties for musicians and organizers as a consequence of the pandemic, I would expect that some of these aesthetic explorations and experiences will remain and be explored further. One outcome of last year was a heightened attention most of the time to situational aspects since the scores of hygienic measures had to be interpreted meticulously. This awareness feeds into my thinking about the theatrical dimension of listening situations, which starts from the notion that one latent aspect of theatricality, the moment of distance, has been put center stage. This distance can appear in quite different ways: Hans Blumenberg's idea of the spatially distanced spectator witnessing a shipwreckage as a model for philosophic thinking (Blumenberg 1997), as well as theatre scholar Freddie Rokem's notion that 'theatre begins, when a stranger enters the room' which shed light on a special mode of encounter at the core of the artform called

The notion of 'scores' is used here as in the context of the Fluxus movement and Judson Dance Theatre. See Dumett 2017, Janevski/Lax 2018.

theatre (Rokem 2019). Peter Szondi (1969) points out how the aspect of distance, of strangeness, had become a crucial point of the early 20th century avant-garde. Expanding from Rokem's notion to the general dimension of aesthetic perception, I'd like to suggest that theatricality includes the possibility of shifting from an object's quality to a certain mode of perception. To think of any performance as a situation of co-presence and co-creativity by performers and audiences emphasizes this view. Taking the point of negativity as a starting point makes me notice that, with the suspension of the 'normal' concert and theatre situation, the fringes of the art forms come more into focus, and the questions, What is music?, What is theatre?, arise anew, and maybe provoke new answers.

While experimental listening situations can certainly be explored from different angles, I will refrain from trying to lay out a taxonomy or from suggesting a systematic approach. Theatre taken as a mode of thinking, and theatricality as a phenomenal quality of a situation, have no clear boundaries, as Samuel Weber (2019) shows from a psychoanalytical perspective. Instead, they indicate a way of thinking spatially and analyzing encounters, tensions and tangencies, as well as the energies that are generated in the process. Since a systematic approach to possible theatrical listening situations seems unpromising, I am taking up a method from performance analyses which concentrates on moments in performances that are, in whatever way, remarkable and distinctive (Roselt 2008). Since the philosophic concept of phenomenology employs an extreme closeness and co-constitutive relation of the subject and object in the process of perception, it will be interesting to see how this approach unfolds together with Rokem's idea of the stranger as an initial motivator of any succession of actions. Particular about the stranger is that they can be-simultaneously or alternately-a distanced observer as well as an involved participant in a situation. I would suggest that both modes of perception and involvement are always present in a theatrical situation and are sometimes dictated by the particular framework of each performance; as much as they are moderated by the listener-spectator.

With this performance based approach, my aim is to investigate the inherent theatricality of experimental listening situations which I will take from the Berlin and Brandenburg experimental composer-performer's scene—my main environment as a researcher in 2020. This is for different reasons a delicate enterprise since music and theatre have a long history of concurrence, hierarchy or even excluding effects on each other (Morelli 2003). Regarding the relation of the art genres, the 20th century has seen striving for autonomy as well as new junctions and mixing: opposing energies which continue to recent days. These processes haven't left the categories and terms unaffected, and some of the effects have yet to be assessed in an analytical manner, beyond enthusiasm or abhorrence. But if it is possible to get to this point, doors open to new and enriching possibilities of understanding and imagining what theatre and music theatre might be—and what the rather specific term 'theatricality' refers to.

Theatricality is a much richer concept than just describing any theatre-related aspect, and, to complicate matters, theatre scholars agree broadly on the fact that theatre is by no means a stable object (Lazardzig, Warstat, Tkacyk 2010). On the contrary, what has been referred to by this term has changed considerably in the last few hundred years. This is why it is not completely surprising that the term 'theatricality' derives from the context of methodological discussions on theatre historiography—the writing of theatre histories. Again, we encounter the strange effect of a negative starting point: theatre historians have been aware of the transient quality of their almost non-existent object of interest for some hundred years now. The questions about what to include and what not have haunted encyclopaedic attempts from the beginning, as theatre historian Stefan Hulfeld observes. As a consequence, every theatre-historiographic study begins by proving its sheer impossibility (Hulfeld 2007).

In spite of the fascination with the difficult and fleeting character of theatre, there is of course no doubt that an artistic and cultural practice has existed for thousands of years in most parts of the world that people from different cultures are used to calling theatre. But the question of how the substance of the term and practice of theatre can be defined remains, and this regards the related term 'theatricality' as well.

Theatrical assemblage

Some theatre historians have come to agreement on the idea that every society and culture produces a kind of theatrical assemblage (*Theatralitätsgefüge*), a network of social and cultural practices that is layered by different types of theatre. This term has been coined and elaborated by theatre scholars like Rudolf Münz, Gerda Baumbach, Andreas Kotte and Stefan Hulfeld. According to this concept, the layers of the theatrical assemblage are:

Non-Theatre Theatre Other Theatre 'Theatre'

I'm afraid this is as complicated as it gets. And anyone who has conducted a study on theatre understands, when glancing at this list, why their own enterprise has become such a struggle. Please also note that this list starts with a negation.

The layer of *Non-Theatre* describes the state of theatre as we experience it in current (pandemic) times: as a period with an official ban on theatres. It also includes all sorts of regulations on who might appear how on stage (e.g. men in women's clothes or not), that are connected to censorship and further anti-theatrical effects. This also indicates a layer of ideologically based attitude against theatre

that sprang up in (early) modern societies, from 16th century Britain to Japan in the 19th century (Schumacher 2017). Following on from that, it is not too far-fetched to view the strivings for pure music in the 19th and 20th century not only as an effort to enhance listening capacities but also as a form of censorship towards visual aspects and bodily involvement in music making. This explains why this striving led to a broad banning of certain genders from certain instruments in the 19th century (Hoffmann 1991).

When looking back to the list, we envisage *Theatre* as the art theatre most people first think of when the word is mentioned; that which usually takes place in buildings designed for the very purpose (a theatre), and in many cultures is entrenched in high-brow culture and the idea of national theatre cultures. As a part of the theatrical assemblage, this and the other layers influence each other, and, furthermore, this layer of the term also sheds a light on how theatres and concert halls are embedded in city spaces and audio-visual cultures.

The aspect of *Other Theatre* points to practices of folk theatre like the Commedia dell'arte, varietés, circus etc., that were excluded from the main stage in order to develop the bourgeois art theatre of the 18th century. German theatre makers and bourgeois audiences, for instance, banned all Harlequin figures from the stage while building up their national theatre, an act from which a tradition of disdain for comical genres and entertainment derives.²

But what is the 'Theatre' in quote marks? This refers to the metaphoric part that depends on an established art form stable enough to offer a model which can be transferred to other situations of everyday life. It will be relevant when regarding the theatricality of listening situations. When taking borderlines into account, like those between 'art' and 'life', it becomes clear that theatre is no simple art form and, so much more than some glitter and a dramatic gesture, deals with the border between fictitious and 'real' actions that are present on stage simultaneously.' The Harlequin is traditionally a figure to mediate this border, and embodies, along with the comic, a ritualistic moment. Although the Harlequin has been largely banned from art theatre, it lingers in the wings and is sometimes explicitly activated in performance art. In fact, it has also been reactivated in the early avant-gardes (ca. 1900 –1940), even in the realms of New Music, where it is present in Arnold Schoenberg's *Pierrot Lunaire*, and also in the post-war avantgarde with György Ligeti's *Aventures* and works by performers like John Cage or Cathy Berberian.

Despite these fascinating entrenchments between New Music and performance art, I would like to shed another light on the interconnection between theatre and culture. Apart from ritualistic speculations, the art and meaning of theatre

² See on the complex process entangling gender exclusion and building of national identities in Germany and Austria Hochholdinger-Reiterer 2014.

³ To give an example: when an actress is standing on a chair and makes movements and gestures as if she was on a small ship in high seas, spectators perceive both the chair and the ship.

is, historically, deeply connected to city cultures which explains why the poly-city structure of ancient Greece and the Renaissance culture of Italy have such great significance within European theatre cultures. In fact, there are musings on the shared linguistic root of theatre and theory that argue that early theorists travelled between cities, attended spectacles of all sorts and reported back on the experience to their fellow citizens (Foster 2013). In this way, theatre is connected to watching and listening attentively and, again, to visiting strangers.

From a distance

Within city cultures, spectating is linked to a further aspect; to distance. This seems to be one of the most delicate aspects of theatre: Greek philosopher Lucretius mentions the distanced spectator who watches a sinking ship from a safe point, without being in the position to help.

Paradoxically, this distance creates an aesthetic enjoyment, not through 'regarding the pain of others,' as Susan Sontag puts it, but in the safety of the spectator's position on shore. As Hans Blumenberg rightly notes, the relation between those involved in a situation and a (distanced) spectator has a troubling ethical dimension (Blumenberg 1997, p. 31, Sontag 2003). On the other hand, the dynamics of proximity and familiarity also have their methodological pitfalls, as Phillips, Caine and Thomas (2013) discuss on the behalf of historiography. Distance certainly carries with it the problems of estrangement and alienation which are connected to the heavy impact of automated production processes on our everyday perception, as pointed out by Bertold Brecht (see Benjamin 1967) and Viktor Šklovskij (1916), who have both established aesthetic counter-strategies. Yet distance is also connected to satirical moments, and, since Greek satirist Lucian of Samosata's writings, has been a point to introduce the perspective of an outsider or foreigner (xenos). From here, there are several connections to the early theatrical avant-gardes (Burke 2013, p. 21). As this short look into the history of distance shows, it is not solely linked to questions of mastery. The strain of power relations connected to vision and hierarchy is mostly connected to military contexts from the early 19th century, a time when the hierarchization of the senses also evolved. When encircling the topic and perspective of theatricality, it is important to keep in mind the complex meanings and historical layers. For instance, Italian theatre historian Ferdinando Taviani points out that spectatorship is embedded in Renaissance city cultures. According to him, the division of labor as a typical trait of the Renaissance city feeds into theatricality since it liberates moments of free time for spectating, admiring the craftmanship of others, thereby enabling the development of an autonomous aesthetic quality in the perception of everyday life, which is later developed by the figure of the flaneur at the end of the 19th century (Hulfeld 2007, Benjamin 1982). Taviani's observations are in accordance with a well-known, emblematic definition of theatre by theatre maker Peter Brook who states that theatre emerges from the situation where one person is performing an action, which can be as simple as crossing a room, yet which needs another person co-present who is watching (Brook 1968). Thus, theatre is an artform which is highly relational, and takes place as much on stage, in the minds, hearts and bodies of the spectators, as in all the spaces in-between.

After having considered some aspects of spectating, which are no more than some glimmering lights in the history of spectating, it should become clear that I'm not looking for any 'primal scene' but am directing the attention towards the diversity of spectating and listening situations and practices rather than striving for one single definition when taking a closer look at the theatricality of experimental listening situations.

In general, I can state that my own spectatorship is certainly built from the Renaissance type: I enjoy watching the virtuosity of musicians producing sounds and feel particularly invited to do so in experimental listening situations, where special playing techniques and all kinds of materials are explored along with their capacities to produce new and previously unheard sounds. This interest is architectonically met in smaller venues, or those that are constructed in reverence to the spatial concept of Greek theatre's arena stage model, like the Berlin Philharmonie. A smaller version is at play in the venue 'Wabe' (transl: honeycomb), a self-organized cultural space in Berlin where Splitter Orchestra often performs.⁴

Situations

When I look to remarkable moments that highlight the theatricality of listening situations, I notice that this layer is dependent on my perception, or on external circumstances, or embedded within the composition. When concentrating on one specific performance, these layers may of course resonate and interfere with each other. These interlacings might be the actual aim of the performance-composition,⁵ for example in audio walks when the environment becomes a part of the score. I assume that these traits feed into the theatrical layer of experimental listening situations, but always in relation to the music or soundscape.

According to R. Murray Schafers each city has its own remarkable, unique soundscape and recognizable key sounds (Schafer 1994), and I propose to extend this observation to other modes of perceptions and their interlacings. This means that each city has historically and culturally situated key sounds and key 'sights,' distinctive smells and even key kinesthetic modes that determine how people perceive their own bodies and move in relation to each other in the streets, alleyways

⁴ The venue had originally been a gasometer which was turned into an independent culture venue after 1990. This historic trace resonates with the rotund concept of the space.

⁵ With this term I think along Roesner/Rebstock's (2012) analyses of *Composed Theatre* as a genre and a practice.

and gardens of a city. This multimodal quotidian perception is the basis for music theatre performances, and is reflected by them and can be altered by them. When looking at a photograph I took at a sound walk in Potsdam in 2020, I notice how the group of attendees also became a spectacle—the concentrated listening into noises, into more quiet or questionable architectonical spaces (like a shopping mall or a parking garage) exposed this act of listening, of being an audience.⁶

Listening fragments and splinters

It seems that the anti-pandemic measures made a lot of people think about Alvin Lucier's *I am sitting in a room* (1969).⁷ The set-up of the piece consists of a loop, thus playing and recording the same passage over and over again, while the frequencies change and are enhanced in the reverberations between voice, recording device, and the characteristics of the room. The visual and performance artist Mary Lucier made a visual interpretation of that concept and re-photographed a polaroid of an arm-chair and a lamp from their living room again and again. The photographic loop enhances the shadow of the furniture, that took up ever more space in the image.



Listening to Alvin Lucier. Festival Intersonanzen, August 2020, Kunsthaus sans titre, Potsdam. Photo by Irene Lehmann.

⁶ The sound walk was designed by Michael Schenk.

⁷ See also Christina Fischer-Lessiak's contribution in this book; Tadday 2018.

At a small festival in August 2020 in Potsdam, we listened—actually in one shared space—to a taped version of the piece. For different reasons it was extremely interesting to me. I knew the piece well from its conceptual perspective and had listened to some interpretations on YouTube, albeit in the usual perceptional mode of the internet: with skimming through and jumping forward. While in the shared listening situation, I noticed that I had never listened to the whole piece before. This situation offered linearity and a different mode of concentration, allowing the necessary patience for grasping the small shifts in frequency, which are in Lucier's focus (Lucier 1995). Furthermore, at the beginning of the concert I was occupied with reflections on loud-speaker-concerts articulated in the 1970s. For instance, as composer Dieter Schnebel noted, a great problem for electronic music is that an audience wouldn't want to sit in a room listening without being able to see the music making (Schnebel 1993) and yet, there we were on a hot day in August, some with masks on, listening very concentratedly for more than forty minutes to Lucier's piece.

With Schnebel's observations in mind, it seems that while audiences from the 1970s were lacking the theatrical aspect of music making, in the 2020 situation the sense of communality that emerged from listening together was more important than visual points of attraction. I suppose this quality of live listening situations is enhanced by having experienced the sudden negation during the first lockdown.⁸

For me as a curious spectator of music making, observing the audience is always a part of my interest. Also, in this situation I shifted my perception to the listeners and wondered how the concentration or also the *rêveries* which occur while listening would shape the individual body's expression. Following a question which I have pursued in a different context, (Lehmann 2020/2022), I also wonder how these expressions of concentration—which are voluntary and involuntary, following cultural patterns of habitus, or relaxing away from decorum—are captured in photographs, and if they can be transmitted to the gaze of a person who has not been a part of the performance. This is, of course, thinking along an old question of theatre historiography about how the performative qualities of a spectacle can be captured, and how it transmits its aura via its documents (Borggren/Gade 2013). This question has been given a new twist by performances in the pandemic contexts, which often had to be captured very rapidly by video and streamed, or were turned into hybrid performances (with one part of the audience co-present and the other part online).

In connection with these thoughts, I wonder, while regarding and taking photographs of musicians, if there can be actual visual evidence of intense sound events and listening? In order to pursue this question, I will discuss the project

⁸ Yet in other situations the problem for electronic music remains and can be more complicated with computers on stage.

⁹ See on the broadness of the concept Sparrow 2013.

Code of silence by the experimental Berlin-based Splitter orchestra that I accompanied as an 'embedded journalist.' The project consisted of a series of three rehearsals and three concerts, aiming to include listening both in the practices of improvising and in the concert situation.¹⁰

Splitter Orchestra is a self-organized orchestra consisting of 24 composer-performer-improvisors and was founded in 2010 by Clare Cooper, Clayton Thomas, and Gregor Hotz. ¹¹

Most of the musicians belong to the so-called *Echtzeitmusikszene* (real time music scene), which emphasizes experimenting and improvising with acoustic as well as electronic instruments and devices, and developed 'Berlin reductionism' as a style. In their early days, the formation of a great part of the Berlin subcultural scenes was linked to a vivid house squatting scene from the early 1990s (Beins 2011). After the unification of east and west Germany, and the economic transformations in its trail, Berlin was a rather poor city until the early 2000s. This time was defined by severe social and infrastructural problems, yet there was also the feeling of an open situation with available spaces and houses, that spurred, particularly within the creative community, a sense of freedom and communality. Low living and rental costs made it possible to concentrate on independent cultural production. These layers of the city are still present, as well as the struggles to defend those independent structures, venues and projects. However, as in all cities under the pressure of gentrification, this situation is very fragile since open spaces are not valued enough by city officials who like to sell this very cultural vibrancy to tourists but scarcely understand how to maintain it. I mention this cultural background since it feeds into the quality of sounds and music making, into ways of listening, and into a consciousness of fragilities, conditions and interdependencies in the scene. Also, if we think about theatricality as a cultural layer which is connected to city living, it becomes obvious how important it is to have open spaces within the city. 12 Small venues, that are connected culturally and socially to their environment, sometimes have the power to lower the cultural threshold for those who feel alienated by high-brow-cultural spaces, and have inclusive effects, especially through projects with young people.

¹⁰ The project was accompanied by three journalists/writers, Anneliese Ostertag, Friederike Kenneweg and me. see *Positionen. Texte zur aktuellen Musik*, Nr. 129 (11/2021).

¹¹ https://www.splitter.berlin/, last access 17.6.2021.

¹² Open doesn't mean without regulation, but, rather, in the sense of a situation where not every part is predefined, determined and controlled. Openness means that something has yet to be invented, including the regulations a venue or a group or a project wants to follow. Openness like this can also become a mode of negativity.

Durational listening

In a lecture, this would be a good moment to listen to some of Splitter's music.¹³ In a written paper I need to describe the music, which is composed mainly of noiselike sounds, with intermittent melodic fragments that often slide into gloomy atmospheres, and are grounded in rough energies. To pursue this process of an emerging atmosphere requires some patience as more abstract processes like the building of tensions and energies, the collective forging and shifting of sound masses and emerging melodic figures, need longer periods of listening to unfold. The quality of durational listening might have been one of the starting points of Splitter Orchestra's Code of silence project. Experimenting with listening situations is an ongoing concern of the Berlin scene (Schröder 2011), yet I think Code of silence takes this a step further. The project, which admittedly has been hindered by different waves of anti-pandemic-measures, nonetheless gives insight into some of Splitter's musicking practices (on musicking: Cook 2013). As the orchestra is self-organized and consists of all kinds of instrumentalists, each concert and rehearsal situation is different and is dependent on who is present and where in the room musicians take up their seats. As improvisational practices depend on listening and reacting to each other, the spatial positioning of the musicians influences the individual level—what each musician can actually hear. The kinesthetic layer that describes the awareness of the bodily position in the space influences the character of each concert. Each of the 24 musicians shape, in this setup, their own listening center and react to louder and lower musical impulses from other closer or more distanced musicians. Also, they are not positioned unidirectionally but in different directions, which affects the possibility and quality of listening and seeing each other.

According to several musicians I talked to, this complex shaping of the set-up in each concert space has been subject to endless discussions, so that at one point, two members of the ensemble, Mike Majkowski (electronics) and Sabine Vogel (flute) invented *Code of silence*.¹⁴ The key point of the concept is to remain verbally silent during the setup and throughout the whole concert situation. Moreover, in

¹³ Splitter Orchester, *Code of Silence II*, https://vimeo.com/524561155, last access 18.10.2021 and Splitter Orchester, *Code of Silence III*, https://vimeo.com/544206161, last access 18.10.2021.

¹⁴ While attending concerts and rehearsals from September 2020 to March 2021 as a part of my research, I entertained conversations with different musicians and asked them about their experiences and views on the project. I also shared and discussed some of my observations, and tested one or the other hypothesis, in order to generate a feedback process. In the first conversations, I was very hesitant since the medium of speech (banned by 'code of silence') was thus reintroduced. After the long lockdown, in February the musicians also discussed how the pandemic had countered the original idea of retreat that underpins this concept, and the need for exchange in the intermissions (according to the 'pandemic score', every 25 min) was rather strong.

rehearsals, the processes of playing together are not discussed which is very different to usual procedures. To intensify this process, during rehearsals and concerts a recording of each set is made. After ending the set, the musicians listen to the recording and then, silently and individually, decide on how to proceed in the following set. Blocking the verbal exchange certainly has different consequences. Firstly, the non-verbal modes of communication, which are active in every process of music making and improvisation are even more refined. Secondly, as some musicians told me, it also changes the evaluation of the particular set. Usually, everybody would make suggestions to others about what to change, but without speaking they can only think about what they might change or develop for themselves. Also, in regard to the kinesthetic aspect, a number of musicians told me how interesting it is to hear everything from a different angle, since, especially if they are playing loud instruments, they can only imagine what the others are doing and how the whole would sound.

Listening gestures

While this is interesting enough regarding the rehearsal and music making perspective, a whole new plane unfolds in relation to the audience. While listening together, the relation between production and reception changes, the act of listening stays not only with one part of the present actors but becomes a distributed agency (Barad 2012). In this way, a concert assemblage in the sense of the new materialism evolves. Moreover, to get back to my focus of research, at this point a theatrical situation evolves from a procedural score. Listening, gazing at each other, being related in the performance and being aware of one another are the processes that take place in this music-theatrical assemblage.

These photographs (see p. 127) show listening situations from the first concert in September, the only one that was attended by a co-present audience. The listener-spectators are seated nearly in a circle around the group of musicians, taking up again the ancient Greek stage model, which enabled the audience to see the performance as well as each other, thus amplifying the processes of reception and reactions, feeding back into the performers' actions.

It is not completely surprising that theatrical moments evolve from such spatial designs – even more so if we take into account Rokem's notion of the stranger as a strong motivator of the emergence of theatre. Yet, the emergence of theatrical moments also took place when I was present as a field researcher in rehearsals. It could be argued that I would then be the stranger par excellence—and this is certainly true regarding my perceptional habits, and how I aim to share and discuss my experience through writing this text, tying in with Susan Leigh Foster's description of the sharing of performance experiences in ancient Greece.

Yet, I'd like to highlight a different aspect that came to mind while regarding the photographs of the first concert. My gaze is attracted by the bodily positions



Splitter Orchester, *Code of Silence I*, September 2020, Wabe, Berlin. Photos by Uta Neumann.



of the listening musicians that I recognize in rehearsals and later in (filmed) concerts, and that I find astonishing. The photographs were taken in the listening phases and I wonder: Are these typical human listening poses? Did the musicians somehow stay in performance mode although they relaxed into listening? Did they produce these gestural signs of listening as a professional actor/actress* would do? Or, is it maybe, that the *Code of silence* plus the anti-pandemic-measures had an alienating effect, that transforms into theatricality?

The communality which emerges in rehearsals is of course different from the concert situation—more familiar, more private. Yet the gestures of listening in these situations are also clear-cut, and significant for me, with some seeming as if they had been staged on purpose (which is certainly not the case).

While some musicians told me that the character of listening changes depending on whether it is separated from or embedded within the performance, this applies, even for me, during the rehearsal. During the part of the performance where the music making takes place, I experience a 'normal' listening-spectating situation: I am curiously looking for expected and unexpected sounds from instruments and objects, anticipating, connecting layers, being surprised, and so on. The same applies for the musicians: they seem to be perfectly involved in what they are doing, in the mode between acting and reacting, with the intensive attentiveness which is typical for improvisation. But in the relistening phase the situation changes: everybody in the room listens together to the recorded sound—the difference between audience and musicians is suspended, when judging by outward appearances.

With these questions in mind, I notice that in such a big ensemble of improvising musicians there are often situations where only some are playing, and the others are listening.

Some might also choose to answer with silence to the musical actions of others. In this way, what evolves could be described as an assemblage where different actions of listening and playing are at play all the time. They occur as separated acts as well as simultaneously. *Code of silence* is, in this regard, a mode of highlighting this layer. It operates in the line of performative scores that were developed in the 1960s experimental music and dance context. Similar to conceptual art, they aim to construct and deconstruct ways of perceiving.

This aspect ties the different aspects and situations together, like the shared listening to Alvin Lucier's piece. According to my observations, I would propose that through the phase of collective listening, listening itself is exposed and can be perceived *as* a situation.¹⁵ This shift in perception and interpreting the world was explored in another art and political context from the 1960s, the Situationist

¹⁵ Situation as a term and a performative practice was formulated prominently by Brecht and the Situationist International, who explored the aesthetic-political meaning of 'constructing a situation' in everyday life (Zacarias 2020, p.183–200).

International. 'Constructing a situation' was an aesthetic means to shift the alienation of quotidian life. Performative scores were used to produce moments of distance and enable a different relation and positioning in a given situation. Aesthetic perception and playfulness are a means to invent new ways of interaction. This is why the autonomy of the listener-spectator position creates ever new readings and interactions between artists and their audiences. And, as Jacques Rancière (2011, p. 22) points out, this is why everybody experiences their own adventure in a performance: musicians and listeners, performers and spectators alike.

The moment of distancing, of deliberate or involuntary alienation enhances but also produces one layer of theatricality. In quotidian situations, most of the time it is hard to tell if anyone is listening, while in the framework of Code of silence, gestures and bodily poses of listening are quite clear. I even wonder if their theatricality is derived paradoxically, again, from negation? In common understanding, music is not visible, and the same applies to the act of listening. Yet music has visible aspects like the preparations, the playing of instruments, the gestures of 'attack' that, in the very next instant, produce sound. And as much as concentrating on listening is often connected to closed eyes and inwardly directed attention, there is a visible gestural repertoire which is displayed and performed by the body. This repertoire is impregnated socially and culturally; inviting others to listen, or distancing and warning them against disturbing the listening person. The visual and auditory levels create a specific theatricality, but while gestures and positions from music making or listening are sometimes developed as choreographic material (for example by the ensemble Maulwerker, also composer-performers from the Berlin experimental scene), in the case of Splitter Orchestra's project this is not the direction. On the contrary, the focus of attention is re-directed towards the importance of listening as an inherent part of music making, of being in tune or reacting to each other. To make it a phase of the concert enhances and diminishes the difference between musicians and audience, the specialized and non-specialized listeners, who have developed different, more individual ways and habits of listening. Some are rather huddled up, elbows on knees, sometimes face covered in their hands, sometimes with the gaze directed towards a distant point; while others are stretched out, with hands crossed behind their head, as if building additional listening fields (like elephant ears) with their arms. Others are completely stretched out on the ground.

The theatricality of experimental listening situations is composed of so many layers that it would need more case studies to develop surveys and taxonomies. When tying together my observations on historical resonances and specific theatricalities, I would like finally to highlight the significance of cultural and historical rifts. There is the broad rift around the 1960s to mention, when the relationship between the performative arts changed, alongside the impact of technological developments on the performative arts (Dumett 2017). A further strong, disruptive rift has occurred with the pandemic, that has, to a certain extent, enforced ongo-

ing transformations and raised topics of vulnerability and care, connectedness and isolation (to name just a few). More locally, historic rifts can be observed in Berlin and Potsdam since the 1990s. Until today, post-socialist cultural traditions are present, and have not yet found a clear place in common cultural historical awareness (in the sense of *Geschichtsbewusstsein*, which is an active, situated awareness of oneself and ongoing cultural practices).

Admitting that all this would need a deeper investigation, a clear observation has emerged: these kinds of cultural rifts influence the relation of the arts, and lead to an openness and strangeness in a positive way, towards something not yet determined; an open chapter, which produces a kind of theatricality, where it becomes possible to gaze at a situation from a distance and to dive into ecstatic aesthetic states with the question still in mind of what this all really means.

When leaving an intensive listening situation, perception of the world has often changed, and you may have changed a little as well, at least temporarily. This seems to be the transformative potential inherent in each performance. During the first lockdown, the soundscape of many cities changed, and some have become astonishingly quiet. Other sounds and perspectives emerged. It would not be surprising if music and theatre are also changing in reaction to this. About the outcome of this, we can, at this point, only speculate.

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Hannah Arendt and the 'Fragility of sounds' Aesthetics and politics in the 21st century

Susanne Kogler

In the artistic research project *On the fragility of sounds,* Pia Palme, Christina Fischer-Lessiak, and Irene Lehmann explored 'terrains of composition and contemporary music theatre as they are interwoven with feminist practice'. In trying 'to understand how the process of composing is affected by (feminist) listening', terms such as fragility, vulnerability, precariousness as well as skin, physicality, body, and identity were at the center of the investigators' interest. 'Can music theatre be conceived with "another ear" rather than from the perspective of the "male gaze"?' was one of their leading questions.¹

After the Second World War, the question of how politics should be dealt with adequately, was a main concern of many philosophers. Hannah Arendt explored this topic, a line of enquiry also pursued by Theodor W. Adorno, in the context of her personal experiences as an exiled Jew in post-war Germany. Both considered that, despite all efforts to begin anew, remains of totalitarian views and attitudes still characterized large parts of society (Jeffries 2017, pp. 261–279; Rensmann 2003). For Arendt as for Adorno, art is an important means of helping the understanding of society's condition and the social backgrounds of past and present political developments. Like Adorno, Arendt understands the political as a sphere of interaction and public debate where relevant social concerns are negotiated. For her, too, art plays an important role in this. However, whereas Adorno's views have been broadly discussed by theorists and musicians since the 1950's, Arendt's thoughts have not yet been taken into sufficient consideration as far as music aesthetic is concerned.

In the following, in order to explore the ways in which Arendt's thoughts offer novel perspectives for a better understanding of music's political potential today, I will first explain the importance of art in her political thinking. In doing so, I will highlight her ideas of the political space's fragility, and critical thinking's tonal quality, that seem particularly interesting to me in this respect. Secondly, in order to discuss how art might be political today, I will intertwine her ideas with thoughts provoked by recent works written by three Austrian women composers.²

¹ Cf. the Call for Proposals for Fragility of Sounds Lecture Series (Palme/Fischer-Lessiak 2019) and the project's website (Palme/Fischer-Lessiak/Lehmann 2019–22).

² This text has been written for the Fragility of Sounds Lecture Series in order to outline the ways in which we might relate art and politics in a positive manner theoretically today. The thoughts presented are inspired by the mentioned artworks. Currently planning a

Arendt's conception of the political as a public space

There are many aspects in Hannah Arendt's thought which seem highly relevant today. Richard J. Bernstein, for example, gathered a list of topics to show why we should read Hannah Arendt right now. Included in this list, amongst others, are migration, the right to have rights, racism, her deliberations on truth and lie in politics and, last but not least, her concerns about personal and political responsibility (Bernstein 2020, pp. 5–15). Formed by her experiences during and after the Second World War, Arendt's concerns about a society that could not prevent barbarism and was not able to cope with its long-lasting effects constitute the point of departure for her political philosophy. Her conception of politics is centered on the vision of a political space that is able to guarantee freedom for all and, therefore, comprises a plurality of voices. This vision, which will serve as a leitmotif for the following deliberations, is related to her theory of action. In the following, this vision will be outlined and further developed with the help of a network of important philosophical and artistic conceptions such as natality, novelty, freedom, plurality, narration, fragility, performance, judgement, and listening. Ultimately, these concepts will bridge the gap between philosophy and art.

Action, natality, freedom, and novelty

In his recently published introduction to Arendt's thought, Kemal Yildirim writes, 'Arendt's theory of action is regarded as one of the most interesting parts of her political philosophy' (Yildirim 2020, p. 13). Engaged with ancient philosophy, Arendt distinguishes action from fabrication and links action to freedom and plurality. By doing so, she develops 'a conception of participatory democracy which stands in direct contrast to the bureaucratized and elitist forms of politics so characteristic of the modern epoch' (Yildirim 2020, p. 13). For Arendt, it is important that action discloses the identity of the agent and actualizes the human capacity for freedom. When individuals act politically, as conceived by Arendt, they re-enact the miracle inherent in their birth, explains Yildirim. Freedom for her is:

the capacity to begin, to start something new, to do the unexpected, with which all human beings are endowed by virtue of being born. Action as the realization of freedom is therefore rooted in natality, in the fact that each birth represents a new beginning and the introduction of novelty in the world (Yildirim 2020, p. 14).

Each time we start an activity, when we begin something new, we actualize the beginning that is connected to our birth. Arendt stresses our capacity to do some-

bigger research project that aims at reconsidering Hannah Arendt's thought with respect to music aesthetics, I consider the text as a work in progress and not as a presentation of results.

thing totally unexpected, something that has never happened before. In *The Human Condition* she writes: 'The fact that man is capable of action means the unexpected can be expected from him, that he is able to perform what is infinitely improbable. And this again is possible only because each man is unique, so that with each birth something uniquely new comes into the world.' (Arendt 1958, pp. 177–178, in Yildirim 2020, p. 14).

It is exactly this connection between action and natality that Julia Kristeva stressed when she provocatively characterized Arendt as a 'female genius' (Kristeva 2003, pp. 65–86). The individual's birth is, at the same time, a promise of a new beginning. This new beginning can also be regarded as an act of disclosure: the individual discloses him- or herself in their uniqueness. In this respect, natality can be understood as a second 'principium individuationis' which is connected to public appearance, as Ole Meinefeld commented on Arendt's continuation of Heidegger's thought (Meinefeld 2014, p. 124). Action in this understanding gives sense to the individual's life.

Plurality, narration and the fragility of the human

Plurality is a precondition of Arendt's understanding of action. If acting 'means to take the initiative, to introduce the novum and the unexpected into the world', as Yildirim writes, 'it is not something that can be done in isolation from others' (Yildirim 2020, p. 15). On the contrary, for Arendt it is crucial that a person's action is judged from different perspectives by a plurality of actors. Only when judged by others, may the individual's uniqueness be disclosed. Action thus needs plurality, as performers are dependent on their audience; without the presence and the acknowledgement of others, our actions would ultimately lack sense and meaning.

For Arendt, action 'requires appearing in public, making oneself known through words and deeds, and eliciting the consent of others' (Yildirim 2020, p. 15). Therefore, for her, a person's capacity to act is based on language. Only through language are we able to communicate our aims and the meaning of our deeds. It is the capacity of speech that discloses realities and coordinates actions. For her, power emerges when people relate themselves to others, when they interact and act in concert.

According to Arendt, political action provokes narratives that contribute to a better understanding of the world as it really is and, furthermore, inspire future actions (Morgenstern 2014, p. 136). But politics for her is not a means to achieve instrumental goals. Rather, like art, it is an end in itself. With this conception of action, the narrator or, as with Walter Benjamin, the storyteller becomes important. For he or she reports on actions and, by doing so, discloses the actor's identity. As a result, the meaning of the action is ultimately dependent upon him or her. Storytellers are responsible for the significance of political actions. In order

to be rescued for future generations, deeds have to be remembered. The memory of the past becomes an instruction for future generations, as ancient historians like Thucydides believed. 'Through their narrative the fragility and perishability of human action was overcome and made to outlast the lives of their doers and the limited life-span of their contemporaries,' explains Yildirim (2020, pp. 21–22). But the narrative also needs an audience, a community of listeners. With Sheldon Wolin we can understand 'audience' in Arendt as 'a metaphor for the political community', which can be seen as a 'community of remembrance' (Wolin qu. in Yildirim 2020, p. 22). For her, the Greek Polis established a political space where 'the mortality of actors and the fragility of human deeds could be partially overcome' (Wolin qu. in Yildirim 2020, p. 22). In other words, political action provides people with the possibility to become immortal in a non-metaphysical way. By continuously constructing and reconstructing the public space, each generation contributes to a memorial culture that exceeds individual life (Meinefeld 2014, pp. 128–129).

The political space as a space of performance

The political space in Arendt's sense is not dependent on an institutional infrastructure. Therefore, feminist readers consider her thought particularly interesting as far as art is concerned, for artists, and in particular female artists, often create their works beyond the framework of institutionalized forms and genres (Scherl 2014, S. 99). Conceived as a 'space of appearances', Arendt's political space resembles art (Yildirim 2020, p. 19). For her, 'politics is the art of freedom', as Ned O'Gorman stressed (2020, p. 137). According to Arendt, political action can be understood as an inspiring performance that establishes principles and sets examples, which might include 'honor, glory, equality, and excellence, but also hatred, fear, and distrust', as she writes in her book On Revolution (1965, p. 29). Consequently, the most important faculty, as far as the audience is concerned, is the faculty of judgment as found in Immanuel Kant's third Critique (Kant 1790), which, for Arendt, is a political work. O'Gorman (2020, pp. 55-75) spoke of Arendt's 'judging politics' in this respect. As, according to Arendt, the public space is dependent on individual judgments and a plurality of perspectives, both the public realm itself and the freedom it provides are ephemeral. They have to be constantly renewed by actions that take place in it and judgments that are made concerning these actions. Therefore, in Arendt's understanding, the political space as the space of appearance is 'highly fragile':

[...] it does not survive the actuality of the movement which brought it into being, but disappears not only with the dispersal of men [...] but with the disappearance or arrest of the activities themselves. Wherever people gather together, it is potentially there, but

only potentially, not necessarily and not forever (Arendt 1958, p. 199 qu. in Yildirim 2020, p. 23).

Individual action has to be continued constantly in order to prevent the disappearance of the political space. For Arendt, the artist is also fragile and can be described as a pariah who is independent from normative rules and categories.³ Living at the margins of society and often suffering from adverse circumstances, he or she, as an outcast, is able to keep the distance necessary for an impartial view. In order to understand the past in an era of lost tradition, he or she applies the method of 'diving for pearls' as Arendt, inspired by Walter Benjamin, named it, where fragments of the past are collected and explored with respect to their meaning for the present (Weisspflug 2019, p. 29). It is by a fragmented view on history that Arendt intends to correct and replace traditional philosophical approaches (Morgenstern 2014, p. 140).

Judgement and the sensus communis

As Yildirim explains, Arendt's work combines two different models of judgement. Departing from her reading of Kant's political philosophy, as she names it, Arendt considers judgement as the basis for both the actor's and the spectator's stand-point. On the one hand, judgement 'is the faculty of political actors acting in the public realm'; on the other hand, it is 'the privilege of non-participating spectators, primarily poets and historians, who seek to understand the meaning of the past and to reconcile us to what has happened.' (Yildirim 2020, p. 27). It is the idea of humanity that unites these divergent views: 'Present in every single man', the idea that all people are human enables them to act accordingly: respecting the shared idea of humanity (Yildirim 2020, p. 28).

Although judgement for Arendt is a political skill, it is nevertheless imagination that guarantees the distance as well as the closeness that understanding and impartial judgement necessarily need (Yildirim 2020, pp. 28–29). By referring to Arendt's *Crisis of the Republic*, O'Gorman stressed that for Arendt, imagination and the capacity of beginning anew are inseparably bound together:

Politics, she argued, is among other things an art of renewed beginnings. Every time we speak and act in public, we have the potential to start something new, and even to introduce something altogether new into the world. But to act anew, Arendt noted, we have to be able to "mentally remove ourselves from where we are physically located and imagine that things might as well be different from what they actually are" (O'Gorman 2020, p. 116).

³ For Arendt's concept of the pariah see also Cendon (2005). She combines the concept of the pariah with the feminist concept of a 'nomadic existence'.

In her description, the political space resembles a theatrical space where the spectator and the actor represent two different modes of relating to the world. Their judgements are complementary. As a consequence, they preserve plurality in the public sphere.

Arendt's philosophy tries to overcome the traumata of 20th century totalitarianism that have led to a crisis of understanding and a loss of traditional rules and categories. For her, as every human being has the capacity to begin anew, he or she should be able to formulate new standards. The faculty of judgement is based on the faculty of thinking. Thinking, for Arendt, means to establish an inner dialogue which calls into question fixed habits and accepted rules. In doing so, thinking enables 'the individual to judge for himself or herself instead of being carried away by the actions and opinions of the majority' (Yildirim 2020, p. 30). With Arendt, thinking can also be understood as 'the actualization of the difference given in consciousness' (Yildirim 2020, p. 30). Politics, she wrote, takes place in a 'chaos of differences', as Linda Anna Sauer notes (2014, p. 184).

In moments of crisis, individuals have to judge according to their own standards and autonomous values. Nevertheless, judgments are representative, because they are the results of an 'enlarged mentality' (*erweiterte Denkungsart*), as Arendt writes, using a Kantian term (Yildirim 2020, p. 31; Sauer 2014, pp. 186–187). Aesthetic judgments reflect on particularities and relate them to the universal. In order to overcome their idiosyncrasies, spectators have to rely on the *sensus communis*, common sense. A valid judgement appeals to the *sensus communis* and has to be communicable. By judging aesthetically, individuals enlarge their views and become capable of incorporating the views of others, even if they speak only silently with themselves (Sauer 2014, p. 186).

The aesthetic judgement allows us to share an aesthetic feeling with others even if we experience it in individual situations. Thus, it exceeds the subject's separation and enables us to build up a common world, however fragile and ephemeral this world might be. Arendt's interest in aesthetic judgement goes hand in hand with her warning that 'rational truth when applied to the sphere of politics and collective deliberation' would lead to negative consequences. For her, 'the only "true" or "authentic" judgements are those that cannot be articulated with rational rules', as O'Gorman explains (2020, p. 73). Facts and opinions have to be strictly distinguished, for 'facts themselves are not in dispute' (Yildirim 2020, p. 35). Arendt pleads for a plurality of opinions and, therefore, for a flourishing political debate.

Listening to the inner voice

As Sauer argued (2014, p. 194), for Arendt, thinking is always critical thinking. Cecilia Sjöholm explained how we can understand Arendt's conception of critical thought by using the idea of an inner voice that becomes relevant when we engage

with art. Even if we don't share Sjöholm's opinion that this concentration on the inner voice might function as an alternative to the public sphere, focusing on the inner voice helps us better understand Arendt's conception of plurality, which is related to the importance she attaches to aesthetic judgment. In the face of plurality, qualitative judgment—or judging the particular—is an essentially political skill for Arendt.

Sjöholm relates the inner voice to a sense of listening. As she explains, 18th century authors, such as Johann Gottfried Herder, Gotthold Ephraim Lessing, and Georg Wilhelm Friedrich Hegel, understood poetry more as a tone than a text. In modernity, with James Joyce or Virginia Woolf, it is consciousness that is explored as an inner voice (Sjöholm 2020, p. 22). In any case, the language of thought which is perceived as an inner voice is bound to a certain tonality: as a 'musical score cannot be conceived beyond the aesthetic experience it offers in tonality, thought cannot be conceived beyond the meaning attached to it through a language which always appears as embodied' (Sjöholm 2020, p. 50). With Maurice Merleau-Ponty, we can talk of 'an intrinsic poetic quality of thought and language', and art itself can also be considered as a type of thought. 'It is the very encroachment of the body, through the senses, that gives meaning to language, whether it is spoken, thought, or intertwined in various forms of aesthetic expression' (Sjöholm 2020, p. 51).

For Sjöholm, expanding on Arendt, 'the inner voice may testify to the encroachment of plurality': 'Literature expresses this encroachment in terms of tonality, capturing the plural aspect of thought processes' (Sjöholm 2020, p. 24). The inner voice is connected to the world, to the body, and to the other people we 'let in' through it (Sjöholm 2020, p. 25). By engaging with the world in this way, we can discover unexpected dimensions of thought. Thus, we can conclude with Sjöholm that 'the critical potential of the inner speech lies in the blowing open of the unexpected' (Sjöholm 2020, p. 25).

Arendt connects the silent inner dialogue with man's striving for sense. For her, the inner speech is based on the capacity of questioning the I's aspirations towards absoluteness (Sauer 2014, p. 186). In philosophy, the inner voice often appears in the form of a dialogue which sometimes performs a daimonic function. With Kant we can also define the inner voice as a sort of 'inner tonality': 'To think is to listen to oneself' (Sjöholm 2020, p. 42). Jean-Luc Nancy stresses that the inner voice we listen to opens up a negative space: at the same time as the 'I' perceives the voice, he or she feels that it exceeds him or herself. Consequently, we can understand the voice first of all as a presence, as a state of being—not as an appearance or a form of representation (Sjöholm 2020, p. 42). As Sjöholm explains, for Giorgio Agamben the voice is the metaphysical foundation of language. With Jacques Derrida, we can further define it as a trace of alterity (Sjöholm 2020, p. 44–46). Jean-François Lyotard, Merleau-Ponty and Emmanuel Levinas relate the inner voice to ethics: we are called upon without knowing who is calling us. When,

with Arendt, we relate this feeling, this strange presence, to public life, we don't have to annihilate this metaphysical or existential dimension of the voice. It is, rather, one of the characteristic features inherent in aesthetic judgment, its ethical quality. For Arendt, the inner tone of thought is at the same time intimate and intense. She criticizes Western philosophy for never having listened to the tonality of thought (Sjöholm 2020, p. 48).

Considering this understanding of aesthetic judgement, we can conclude that it is art that points to the fact that 'thinking is difference', as Sjöholm argues. What is communicated, according to Arendt, is a certain 'mood': serenity when we think, melancholy when we remember. 'The voice through which we think, the mood that accompanies thought, impinges upon us, as being both on the outside and on the inside, transcending the division between private and public, intimate and collective' (Sjöholm 2020, pp. 52–53). Ultimately, the internal voice expands the ego's limits. When hearing our own thoughts, we experience ourselves as integrated in the world, capable of reflecting, and, although we may be alone, capable of engaging in vivid internal reasoning with ourselves, and with the world (Sjöholm 2020, p. 60).

However, when listening to the inner voice, we evaluate not only views and opinions, but also other forms of consciousness that emerge through 'echoes, sounding, and tonality' (Sjöholm 2020, p. 55). Therefore, critical thought is related to art. Listening is the main capacity involved. Described as a form of artistic experience, listening to the inner voice is more connected to imagination than to reason. The inner voice is quasi 'haunted', comprises traces of 'beings that are the after-life' (Sjöholm 2020, p. 56). Its 'critical potentiality lies rather in the way in which we use our imagination to explore other points of view, other modalities of thinking, and other voices' (Sjöholm 2020, p. 59). With Arendt, we can understand the aesthetical dimension of morality: 'The inner voice is not the voice of moral law, but this being-with the world of inner communication, in which we are seized by language, a tone and a voice that moves the way we think' (Sjöholm 2020, p. 62). For Arendt, thinking is a plural condition that is engaged with 'the in-between' of the artwork, as Sjöholm explains:

The inner voice is never only an abstract thought; it engages my sense of listening, my imagination, my corporeal situatedness, my relation to the plural context of society. [...] The uncanny status of the in-between of the artwork gives witness to the encroachment of the world of the many (Sjöholm 2020, p. 62).

In Arendt's view, the artwork relates directly to the field of human affairs, which she characterizes as a 'space of in-between' (*Zwischenraum*), too (Scherl 2014, p. 99).

How can art be political?

First, as an action performed in public space. As O'Gorman explained, for Arendt, politics is not a means to gain freedom but, rather, freedom and politics are one and the same thing. Freedom exists only in the in-between of the political realm (O'Gorman 2020, p. 115). As the beautiful appears in the world as a sign of freedom, we can conclude that art may be considered a political action. For art permits us to experience freedom and beauty, and testifies to the mighty potential inherent in them. Understood as a political action, art participates in establishing the political space.

In the interactive media installation AGORA Or an Artistic Assembly (2015), the composer Elisabeth Schimana constructs and provides a public space where artistic actions can take place in front of an audience and provoke aesthetic judgments. In doing so, she performs an action that keeps the political space alive by creating new channels for even further actions. The artist describes it as follows:

A place to meet, a place to exchange, a place to offer. A place where artistic ideas will start to communicate with each other. A place where history and future bump into each other, creating presence. A place where five artists, coming from different fields like music, media art, architecture and textile art, will show their very individual approaches of artistic expression, but at the same time will spin threads to create a common ground. How will it be possible to find and express this common ground? That's the process. That's the challenge (Schimana 2015).

With *Humming Room*, created together with Milena Stavric and Jamilla Balint in 2020, composer Elisabeth Harnik also establishes a space where artistic actions and aesthetic experiences can emerge in the public sphere. She wrote the performance *Feed the Bees* for this space (see Harnik/astrimage Film 2020). Harnik writes that the exploration of our perception is at the center of this space. The point of departure for the performance was an experience the composer had on a walking tour: the humming of bees reflected by the ruins of a wall caused a deeply inspiring listening situation (Harnik 2020).

It is remarkable that both examples can be understood as political in a twofold manner. In both cases the given settings motivate and enable appearances in public and hence, political action. Thus, both pieces can be related to natality: they make individual appearances possible. But in doing so, Schimana's and Harnik's artistic actions can be understood as political actions themselves that disclose the individuality of their creators, given that we consider and discuss them.

Second, as a narration. For Lyotard, who took up Arendt's thoughts on natality, the postmodern plurality of small narrations, in which art participates, is anarchic and destabilizes the grand narration constituting modernity (Lyotard 1995, pp. 89–100; Kogler 2014, pp. 84–88). In Arendt's view, by telling stories based on the actions of others and judging them aesthetically, art lends these actions con-

tinuity beyond the lifespan of the actor. Thereby, as Meinefeld put it, history becomes politics (Meinefeld 2014, p. 111). It is the glance of the other that is brought to bear here. But in art today, is narration important at all?

As Harnik's performance *clear the air* [to Yoko Ono] for piano and speaker (2019) is overtly dedicated to another artist, namely Yoko Ono, it can be regarded as a certain type of narration because it provides a novel glance on Ono's oeuvre and lends her past actions continuity by remembering them. So, the performance can be understood as a form of narration or storytelling involving remembrance and, at the same time, as a creative exploration of the past for the sake of the future (Harnik 2021).

In Elisabeth Schimana's *Vast Territory* (*Weites Land*), produced by Ö1 Kunstradio in 2017, a personal, sensual experience serves as a point of departure, too. 'There is a certain memory of a bus ride in 2011 from Vilnius to Druskininkai and the experienced landscape—the vast territory', explained the artist regarding *Episode 2 Forest Murmurs*, which she describes as follows: 'In *Episode 2* binaural recordings in the woods around Druskininkai are used—a journey with my artificial ears into the living silence of the woods. These sounds ask for devotion, for the willingness to listen *into* and to enjoy this animate silence thereby' (Schimana 2017). For Arendt, in the face of the world's and man's fragility, sensual perception, seeing and listening, being seen and being listened to, is important (Morgenstern 2014, p. 138).

In *Vast Territory* Schimana lends nature a voice. Again, perception is at the center of interest. Perceiving this work, we listen to a fragile narration that the artist has discovered merely by chance as a listener and, in a second step, put into the public space in order to make similar individual experiences possible. The plurality of external voices heard intermingle with our inner voices and it is exactly through this intermixing that the artistic community, sharing and discussing this experience, becomes a political one.

In Harnik's *Humming Room*, too, it is nature that is given a voice. By opening the room for the unexpected, novel unheard voices may emerge and be listened to in their fragility. What combines these two positions further is the two-fold aesthetical judgement inherent in both: as a precondition of the aesthetic experience, both the artists and their audience have to listen impartially, have to open themselves to fragile unpredictable sounds. Moreover, there is in each of them an element of improvisation that distinguishes them from more traditional compositions by radicalizing the sound's unpredictability. Furthermore, both settings combine remembrance and promise, the look back and the look forward: from a bygone past that has to be remembered, through an endangered present, to a hopefully better future to come. 'Rare it has become to get to experience an acoustic landscape without aircraft noise at minute intervals. Rare it has become that people take their time to perceive small changes,' comments Elisabeth Schimana (2017) on her piece.

Another characteristic feature is the theatrical quality of all four examples. Even if it is nature that is brought forward to speak, there is a tangible scene that is set for the emergence of so far unheard or neglected voices. All artistic actions are highly sensual, and the sounds in each of them, however fragile they may be, are visually located and sensually embodied. In Arendt's understanding, politics is theatrical. O'Gorman (2020, p. 64) argues that as far as the quality of political judgements is concerned, the spaces we create for it are crucial.

In Pia Palme's music theater pieces such as *ABSTRIAL*. A radical contemporary opera, a collaborative work premiered in 2013, or the most recent one *WECHSELWIRKUNG*. A Montage for the Anthropocene, a music theatre piece for singer, dancer, electronics and instrumental ensemble created in 2020, Palme also provides settings in which individuals are allowed to appear in their individuality, thereby disclosing themselves as unique human beings.⁴ In doing so, they transcend theatrical traditions that are based on fixed characters, plot, and normative rules. In the dancing scenes, the association with natality seems to be particularly present and, as with Schimana and Harnik, it is not the artist alone but all the collaborators that are disclosed in their individuality.

In conclusion we might say that music theatre, understood in its broadest sense, provides a stage essential for artistic actions that aspire to be political today. The theatrical scene that is created offers a space in-between, combining a plurality of voices that are echoed by the inner voices of the listeners. As a result, audience and creators are constantly 'diving for pearls'; by using their imagination, they relate fragments of inner and outer voices with one another and, in doing so, discover and establish novel sense. In this way, the past is rescued for the future. This process is, at the same time, infinitely open and fragile because it has to be renewed and repeated again and again to be kept alive. Each time individuals get involved and react to these settings—in some cases even independently of the artist's presence—they re-constitute and re-animate the public sphere, thereby enhancing art's political relevance which, highly fragile itself, relies on the condition that the actions and re-actions never end.

⁴ For further information as well as photographs and premiere excerpts see https://piapalme.at/works/abstrial/ (accessed 19 July 2021). An excerpt of WECHSELWIRKUNG is available at https://vimeo.com/483582243 (accessed 19 July 2021).

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An infinite echo-system on the fragility of sounds

Suvani Suri

I think to make art is to make a break. And to make a cut.

Mladen Dolar

To begin with, I would like to reflect upon the montage of this text. This writing is a listener's score, a personal response in syncopation, a nebulous cloud of thoughts, notes, memories, and hyperlinked readings—partly a collage, or a remix, but not quite. In the spring of 2021, I participated in the *Fragility of Sounds (FoS) online lecture series* from my home in Delhi, India.¹ In this text, I record my observations on listening to the presentations, and of a process that was initiated through listening perception. Perhaps it could be thought of as a synthesis-in-the-making that begins with the question: what did the lecture series produce in me, as a listener and student of the series, in the remote audience scattered across the world and across time-zones?

The series gave me a strong desire to engage with the concept of thresholds and limits in relation to the 'fragility of sound' and to listening; this is what I am attempting to begin with this text. In the form of its loose connections, unformed formulations, and as-yet unsynthesised propositions, I want to transmit the churning produced in me by listening to the series, to the speakers, to the discussions, reading and posting the chats, engaging in the discourse, exchanging emails with the curators. A churning of ideas that further scatter into manifold readings and re-readings, and that could be picked apart, rearranged, reorganised, and expanded upon, by the reader-listener.

For a long time now, I have been circling the *thought-image* of 'a break': a break as in 'a breaking point' but also the discontinuation of that which has been broken. I find myself drawn to the *sensorium*—I use the term *sensorium* to pack up the ecosystem of sensing and the sensory apparatus that is involved—to the *sensorium* that foresees, compels, introduces, and inhabits this 'break in the continuity of being' (Habbel/Dolar 2016).

A cut.

A break.

A split.

A crack.

A fracture.

A thinking around limits and thresholds, edges and liminalities that are not at the periphery of a situation, but at the very heart of it—at the void of it. Listening to these edges,

¹ Here, I refer to the Fragility of Sounds Lecture Series held in January to March 2021. For the schedule and all themes, see under https://www.fragilityofsounds.org/fragility-of-sounds-lecture-series/ (accessed 3 December 2021).

breaks, and void centres, teasing them apart and keeping them open for truths to appear and meanings to unfold.

The synonyms of the word 'fragile' assemble a rich set of images, sounds, feelings, and textures, leading me to reflect upon my own relationship with the conceptual implications and myriad openings that 'fragile' renders possible. The question that the lecture series has left me with and that I will carry with me through this text, and beyond, is this: How does the notion of fragility tie into a sustained preoccupation with limits and thresholds? I propose that fragility is more than a mere quality, a substance, an attribute, or a hallmark. I propose it to be an operation on, off, and through *limits*—a process of relentlessly teasing out the topological entity that lies at the edge of sound, of being, and meaning. The vocabulary, materiality, and sensorium of the fragile is significant as a potential condition for 'a break': a break that opens up the possibility of a point of contact between entities which have thus far been held separate. At the very point of closure, there is an opening.

In the light of this reading of 'fragile', the FoS Lecture Series inaugurates a break in the thinking of thresholds. Scratching, eking out a crack, a fracture. Approaching a delimiting procedure for the limits that are relevant, in the here and now. Throughout the discursive project, there has been a continuous discussion about—and intervention into—the continuum of limits framing the thinking surrounding sound, listening, artistic research, and its political implications. The provocations transmitted in the various expositions, lectures, performances, and interventions have activated certain short-circuits for me, bypassing or leaking into the spaces that might appear to be kept apart, but in fact are paradoxically interlinked at their very edges, limits, or break points.

In the following sections, I share a montage of images, screenshots, and transcribed quotations, along with the meandering notes, scattered sketches, and frantic jottings that I have made and worked through as I was listening to the series, mapping it onto my own curiosities and questions around thresholds. Each lecture was about experiencing edges and breaks, teasing them apart and keeping them open for truths to appear and for meanings to unfold, beyond the limits of the senses and the sensible. The words traverse the various limits relevant to sonic thinking vis-à-vis these leaks, spills, short-circuits, and cross-connections that occurred. These spillages, for me, surfaced in the form of specific keywords that I gleaned from the series and that pour into the various paradoxes, dichotomies, dispositions, and intensities of the limits inherent to the tenuous ideas of fragility or fragilities. In reference to Pia Palme, I am thinking 'with' these generative vocabularies (Palme 2021); I will proceed to lay them out as markers in order to collate some of my reflections and *syntheses-in-formation*.

Let me unpack 'fragility' as a concept that is constituted of the following limits: *delay, precision, perception, materiality, movement, resistance, sense and signification.*

#1 (limits of) Delay

The starting point of the piece was to ask: how long can a delay be so that you lose the sense of repetition? (Toro Pérez, FoS lecture #1, 2021).

The composer and researcher Germán Toro Pérez, in the post-lecture discussion, referred to Luigi Nono's *A Pierre. Dell'azzurro Silenzio, Inquietum* and explained how Nono puts together his generative systems on the basis of experiments, around the limits of delay as well as around the question of the dependency of delay on the acoustic properties of the materials and spaces used for the performance (Toro Pérez, FoS lecture #1, 2021).

How does the limit of delay—or delay as a limit—offer a way to think through, and expand upon, the notion of fragility? What is delay, if not the stretching of limits, until a fragile break occurs—an elastic anticipation that lengthens a sense of time, induces conviction, and facilitates a reorientation.

Delay as the time of fermentation for thought to convert into a decision. Delay as the limit at which presentiment becomes conviction.

Somehow real attentive listening also allows us to postpone those moments of decision in which judgements are hardened. It enables us to remain just ahead, even if only for a moment, and in the space created by this, communication is optimised (Crispin, FoS lecture #6, 2021).



Figure 1 Screenshot of Google search 'Prateeksha'

Pratiksha is a Hindi word for the verb 'to wait'.

I encountered this familiar word during the lecture of the composer and researcher Aistè Vaitkevičiūtė: *Pratiksha* is the title of a work by the Lithuanian composer Egidija Medekšaitė (Vaitkevičiūtė, FoS lecture #7, 2021). Another commonly used word for 'to wait' in Urdu is *Intezaar*. A key ingredient of many song and dance routines in cinema, the meaning of *Intezaar* also includes hints of longing and desire.

Delay as desire. Delay as longing. The topic of decision-making during composition and in everyday life brings me back to the concept of an ecosystem (Palme, FoS lecture #9, 2021).



Figure 2 Screenshot taken during Aistè Vaitkevičiūtė's lecture as she spoke of the work *Pratiksha* of the Lithuanian composer Egidija Medekšaitė.

Can delay be thought of as a desire for the ecosystem that Pia Palme speaks of, in the practice of artistic production and research? And in this time of desire and perpetual postponement, there is another form that delay can mutate into, which the artist-researcher is all too familiar with.

Delay as doubt. Doubt as home.

I am in the midst of continuous feedback systems, constituted of various registers of doubt and delay, eventually shaping *thought-action* into the form of the artistic production. I combine thought and action into a singular entity, to assert their inextricable, mutually codependent subsistence that exudes a force, a velocity, eventually taking the shape of ideas. Doubt, as an extended feeling of ambivalence, often came up throughout the course of the conversations with the various artists and scholars in the series. A sense of inadequacy, of the need to wait, of the desire to improve—to *better*—what has already been composed, of the urge to revisit, remake, redo, of the time of labor, and the labor of time. The composer and performer Electric Indigo a.k.a. Susanne Kirchmayr, when asked about the doubts she faces in her artistic process, answers,

I have a lot of doubts about the outcome of my artistic process—all the time. I had to record *Brittle* lots of times because there are a lot of probability features that are implemented. I kept on re-recording it, because I could not just easily assemble all the different takes, I recorded it over and over and over again and heard it so many times and of course I started to develop ambivalent feelings [...]. I am always doubting the quality of what I do, thankfully not endlessly. I never meet anybody who is super convinced about their own work or a hundred percent happy with what they do, at least not all the time (Kirchmayr, FoS lecture series #4, 2021).

Right in front of my work desk, there is a bookmark staring back at me: DOUBT EVERYTHING. I think of artistic research as a time of waiting, of delays. A space of renewed urgency for protracted delays as one waits, doubts, calibrates, and reorients, engaged in the framework of *thought-action*. In the ecosystem of the fragile, delay is that defiant entity that challenges and renews thought, pushing the limits and *break*-points of thought. Delay and doubt can be imagined as forming dialectical limits that are integral to the constitution of the space of ideas, as well as the decision to commit to them and actualize them. The fragile limits of delay can only be met with the velocity of thought that withstands the passing of time and shapes both itself and the material that it encounters.

This brings me to the second point: *materiality* and its limits as a way to think of fragility.

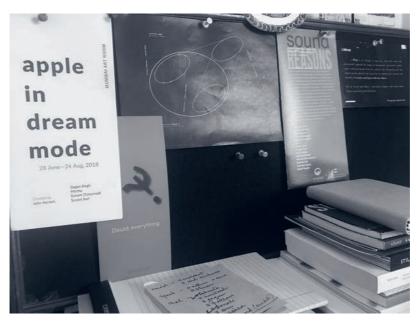


Figure 3 Photograph of personal work desk by Suvani Suri.

#2 (limits of) Materiality

I rather think about fragility of sounds sometimes here, sometimes there. It works in my subconscious mind, and then things start to materialise[...]so I go and do things, like going to the museum to look at minerals with Pia, and there I start to associate fragility with minerals (Kirchmayr, FoS lecture #4, 2021)

Through the course of the lecture series, I have noticed how sound itself has mutated infinitely and relentlessly across the bounds of space and time from the brittle to the dislocated, from the ubiquitous to the absent, from the tender to the firm, from the erratic to the elusive, from the shadows in Chikako Morishita's performances to the Viruses in Elise Schimana's; it elicits a range of responses as it materialises, dissolves, leaks, and spills over into any preconceptions of the limits of its materiality. The anthropologist, musicologist, and musician Georgina Born, in her lecture, advances her definition of sound 'as an assemblage, a fluxus, a temporalised relay of nonhuman and human mediations' (Born, FoS lecture #2, 2021). Sound carries the profundity of this dialogic relation that she urges us to think through. This is a relation that exceeds materiality and points to the emergence of a relational infrastructure that is rendered into form.

The composer and performer Electric Indigo a.k.a. Susanne Kirchmayr mentioned two kinds of associations, when speaking of the artistic process she used to arrive at her piece *Brittle* and explained how she maps out the associations with the word 'fragile'. One was of materials and the other adjectives and characteristics. This is her list of materials:

Glass, paper, edges of a sheet of paper, objects from folded paper—stable but also fragile and not long lasting, sandpaper, thin pieces of wood, light wood that can break easily, glass fibre—minerals that are thin and fibrous that look super delicate—like snow-flakes—needles of trees, dried leaves, snowflakes, drops of water, dust. [...] *Spröde* or brittle, as in indicating something that breaks easily: dried, ephemeral, delicate, unstable, more like ashes to ashes, and dust to dust (Kirchmayr, FoS lecture #4, 2021).

The mutations testify to the reorientation towards thinking of sound as the field of emergent perception, as explained by Born. She proposes to abandon the concept of a *sound-object*, because it narrows down the idea of sound and neglects relational processes in connection with sound perception. Sound is not an object, she insists, and thus it imminently resists OOO (Object Oriented Ontology) universalism and essentialism of the object, just as it resists anthropomorphism and anthropocentrism. As a counterpoint to the essentialism of the status attributed to sound as an object, she summons the profound thought-image of the *sonic-touch* with its potential for the emergence of a trans-individual subject. Within the perception of sound, subjectivity emerges. As the potentiality for perceiving sound is emerging, the potentiality for emergent subjectivity is being born.

However, can perception be foreclosed within its own limits? Moving on to the next section, I pick apart the case of *perception* as a limit that constitutes 'fragility'.

#3 (limits of) Perception

In practice, we have two dichotomies: that between fragile sound and robust text, and its counterpart between listening, however attentive, and reading. But as I have already suggested, these intersect in the concept of strong listening, applied to *fragile* sounds (Crispin, FoS lecture #6, 2021).

The tensions inherent in the dichotomies of the material and immaterial, as well as production and perception, reflect a preoccupation that I have had with the audible and inaudible. Meanwhile, I listen to Chikako Morishita speaking of *silence* as a state, rather than a phenomenon (Morishita, FoS lecture #8, 2021). What comes to my mind here is a set of three fictional moments—or instances, examples—that stir up and unsettle the limits of *thinking-perceiving*. The first is found in *The Burrow*, a short story by Franz Kafka about a creature, most likely a mole or a badger, that is obsessed with keeping its underground burrow secure from any intrusion and spends its days doing all it can to fortify it. But one day, the creature wakes up to a sound, a sound it cannot hear and which infiltrates the comfort of its secure home. It is an acousmatic sound, for its source cannot be located, and induces anxiety and paranoia of a kind that leads the creature to eventually destroy its own home:

I don't seem to be getting any nearer to the place where the noise is, it goes on always on the same thin note, with regular pauses, now a sort of whistling, but again like a kind of piping. [...] But whether trifling or important, I can find nothing, no matter how hard I search, or it may be that I find too much. [...] Sometimes I think that nobody but myself would hear it; it is true, I hear it now more and more distinctly, for my ear has grown keener through practice; though in reality it is exactly the same noise wherever I may hear it, as I have convinced myself by comparing my impressions (Kafka 2019, p. 183).

The second moment, or instance, occurs in a short story by Octavia Butler, *Speech Sounds*. Published in 1983, it tells the tale of a mysterious pandemic that leaves a world in its wake where most survivors have been deprived of their ability to read or write, while others have lost the ability to speak. With a limited ability to communicate, people identify themselves by carrying objects or symbols as a substitute for names. Consequently, uncontrollable feelings of resentment, envy, frustration, and fury arise and rage in the population, due to their own impairments and the residual abilities in others. The third instance is a passage taken from *Sound Sweep*, a short story by James Graham Ballard, first published in 1960. It tells of a world where sound is an 'out of place' material waste that must be disposed of. A world

where all forms of audible music have been rendered obsolete and have given way to the atmospherically charged and inaudible field of ultrasonic music:

Since the introduction a few years earlier of ultrasonic music, the human voice indeed, audible music of any type—had gone completely out of fashion. Ultrasonic music, employing a vastly greater range of octaves, chords, and chromatic scales than are audible by the human ear, provided a direct neural link between the sound stream and the auditory lobes, generating an apparently sourceless sensation of harmony, rhythm, cadence, and melody uncontaminated by the noise and vibration of audible music (Ballard 2014, p. 142).

Amongst the advantages enlisted of this mode of listening, one of the primary ones that the text is centred on is related to concerns of 'aural sanitisation':

A second advantage of ultrasonic music was that its frequencies were so high they left no resonating residues in solid structures, and consequently there was no need to call in the sound-sweep. After an audible performance of most symphonic music, walls and furniture throbbed for days with disintegrating residues that made the air seem leaden and tumid, an entire room virtually uninhabitable (Ballard 2014, p. 142).

All these cases of fiction generate a speculative ontology of sound, of listening and of its affective worlds. They create worlds at the fringes of perception that provoke new connections and imaginations lying beyond the space of familiarity and comfort. Mark Fisher in *The Weird and the Eerie* asks:

Perhaps the most important difference between the *Unheimliches* on the one hand and the weird and the eerie on the other is their treatment of the strange. Freud's *Unheimliches* is about the strange within the familiar, the strangely familiar, the familiar as strange—about the way in which the domestic world does not coincide with itself. All of the ambivalences of Freud's psychoanalysis are caught up in this concept. Is it about making the familiar—and the familial—strange? Or is it about returning the strange to the familiar, the familial? (Fisher 2016, p. 10).

The world of the acousmatic and of unstable frequencies shifts my thinking towards precision, and/or the lack of it, the lack of precision in knowing what the source of a fugitive sound is, where it comes from, how it moves. As has been suggested by Dolar in his reading of *The Burrow*, affect has the potential to infect thinking (Dolar 2011, pp. 112–139). This underlies my interest in speculative research around sound, as a sensorial dimension but also one that is critical to the forms of production of truth, outside of audibility and the limits of that which is empirically verifiable. Or, with Electric Indigo,

These were the characteristics I had in mind when I started to create sounds and it led me to higher frequencies that are hard to recognise or even to hear—but also tones that do not last and certainly not pure sine waves (Kirchmayr, FoS lecture #4, 2021).

Sound hovers at the edge of precision, in the gap between cause and location, sound and source, propagation and reception, the disjointed link of the time of sound and the space of sound. This is the crack where the speculative sneaks in. The dream, the chimera, the invention, where perception and proprioception (see also section #6) moulds itself into meaning.

A construction takes place—of a vision and a fantasy, piecing together sense and reason.

This brings me to the next limit.

#4 (limits of) Precision

I would like to locate the core limit of precision in the idea of the collective or the collaborative, tracing it to a central concept in sound: the concept of frequency. The etymology of the term 'frequency' points to the earliest use of the word to describe the 'state of being crowded' or the 'fact of occurring often or in multitudes'. It later came to be applied in physics as the rate of recurrence. Staying with the erstwhile usage of the word provides clues into the networked totality of frequencies that we occupy, their interlinked histories and mutations in listening experiences which they have the ability to create and transform. Interestingly, the roots of the words 'precise' and 'precision' trace back to the Latin *praecisus* for 'abrupt', 'abridged', 'cut off'. In her lecture, the singer Juliet Fraser signals towards the ubiquity and imprecision of the word 'collaboration' and speaks of risk as an elemental part of the process of building each collaborative work (Fraser, FoS lecture #2, 2021).

Can precision be thought of as the act of cutting off and connecting? I propose:

Precision is to cut off and to connect.

This short-circuiting suggests the possibility of re-inventing collaboration as that which cuts one off from the expected, plunges one into the unknown or uncertain, and places a wager on a co-construction. This surrender to the imprecise and the unknowable allows space for new worlds to form. In this thought-space, I perceive collaboration as a concept that connects to listening, in a significant way. Listening is to be aware of precariousness, to take risks and to wager upon the unexpected. Palme speaks of desire for association, desire for reinvention, desire for connection, companionship, and sisterhood, of interdependencies and interferences, and of how composition, for her, means compassion:

² Found in the *Online Etymology Dictionary* under https://www.etymonline.com/word/frequency (accessed 3 December 2021).

[...] at this stage composition meets compassion. I experience both as activities guided by an awareness of others around me, of the entire environment and of the ecosystem that I'm a part of. The term feminism is a label for compassionate practice (Palme, FoS lecture #9, 2021).

The reference to 'gathering/collecting' by the composer and researcher Aistė Vait-kevičiūtė ties in with the conceptual potential of collaboration as the act of collecting frequencies: a multitude of dissonant, unstable, entropic yet networked frequencies from the midst of one's own environment, situation, or milieu (Vait-kevičiūtè, FoS lecture #7, 2021). In the liminal spaces that open up in between the sites of resistance to precision, a speculative gesture taken from the lecture by Christina Fischer-Lessiak enters the crack:

Could feminist or queer listening constitute a kind of listening that purposely fails to perform gendered listening—doing so by intentionally not listening, by misunderstanding, or disrupting conventional listening practices, or by listening in a different way? (Fischer-Lessiak, FoS lecture #5, 2021).

Collaborations foster listening as thought, listening as study, listening as research. In opposition to academic literature with its precise formats, predicative syntaxes, and insistence on strict adherence to synthesis, it is in the scattered and often dismissed notes, footnotes, squiggles, annotations of writings that new possibilities, connections, and reinventions start to appear in thought. The margins of text often hold me in rapt attention and make me feel like I am privy to the rigour, intensities, and processes of artistic research, and beyond. In his lecture expounding the work of Ruth Crawford and Charles Seeger, the musicologist Malik Sharif brings our attention to their concept of *neumes* or 'melodic fragments that are not in intervals and never clearly defined' (Sharif, FoS lecture #5, 2021). This image of *neumes* can be carried and situated alongside Moten and Harney's description of the act of study as 'what you do with other people. It's talking and walking around with other people, working, dancing, suffering, some irreducible convergence of all three, held under the name of speculative practice' (Moten and Harney 2013, p. 110).

Just like the nebulous world of *neumes* that defy restriction within the precise enclosures of musical vocabularies, that give way to newer forms of thinking and composing as demonstrated by Crawford and Seeger, the creative practice of study also unfolds in those moments, activities, and situations that cannot be defined or circumscribed within the limits of disciplines and routines. In the imprecision of these boundaries of experience and in the undefined and unanticipated encounters, research transpires and transforms into possibilities. The limits of precision, as a way to reflect on the lecture series, also open up into the anti-disciplinarity of sound.

What is a discipline, if not the imposition of boundaries on movement? I argue that the Fragility of Sounds lectures signal towards a movement of sound

across spatial and temporal bounds, across taxonomies, unrestricted by disciplines yet dedicated to the work of thinking.

Taking off from this idea, I will now extend a reading of fragility vis-à-vis movement.

#5 (limits of) Movement

At various junctures throughout the lecture series, limits of movement have been revisited, scrutinised, challenged, and reinvented. At the beginning of every meeting, Pia Palme briefly introduced her research as a project considering sound moving in space, and space moving with sound. Moving sound, she said, can relate to singers performing on stage, as well as to spatialisation in electronic music. After having listened to the series and joined the discussions, I now find myself thinking about three vantage points from which to read movement—the *body*, the *space* that holds a listening situation at a given moment, and movement in *time*.

I am in a sea of sound, submerged in sound, moving in sound. *Proprioception* is the term assigned to the perception or awareness of the position and movement of the body. How does this awareness modulate over time with the sonorous body? The dancer and choreographer Paola Bianchi, in her lecture-performance, spoke of the body being generated by movement, rather than the other way round. This leads to the intriguing idea that the body is also the site of the image. The process of recreating, mapping, and translating from written description to image to body to movement to photograph to aural descriptors to an archive can be witnessed as an act of transmission. It testifies to one's own relationship with sound (Bianchi 2021, FoS, Lecture #1). The performer Veza Fernández offered this statement in her exercise-lecture:

I started working with voice while dancing, as I wished to have something that exceeds my body and that listens outside of me and creates a state. For me this interest in creating states that surround me and my audience from within is about understanding: what are the potentialities of the states that happen through movement but that can be intensified through sound so that I can activate my listening and that of the audience? (Fernández, FoS lecture #8, 2021).

Veza Fernández' embodied way of sounding and her performative exposition of the tactile perception of voice stood as an interesting counterpart to the powerful and poetic image of a resonating body and resonating skin invoked by the composer and artist Elise Schimana, within the context of contagion. In her *Virus* series of compositions, movement in frequencies offers a way to sense mutations in the listening body, a sonic body (Schimana, FoS lecture #3, 2021). The movement and moment of listening and the sonorous body are inextricably linked to urban spaces, personal states, and historical situations. This interlocking is highlighted by the theatre and performance scholar Irene Lehmann:

When I look at moments that highlight the moments of theatricality in experimental listening situations, the layers depend on my perception, external circumstances, or are embedded within the composition. In the actual performance, the layers can resonate and interfere with each other (Lehmann, FoS lecture #4, 2021).

Here, I am reminded of another short story by Franz Kafka, *The Neighbour*, a tale of anxiety, apprehension, and wiretapping. Set in juxtaposition to the idea of the listening situation, it makes me wonder about eavesdropping as an act that permeates, or even punctures, the spatial and temporal context that one is present in, annexing the listening situation and the body to create a passage for a fluid and fragile movement between the two dislocated and disjointed entities. This is a movement that entails the possibility of an exchange of experiences, transposing one upon the other, as in the case of Kafka's story.

In many of the classes that I have been teaching online, I often begin with a listening session of Alvin Lucier's *I am Sitting in a Room*. With the pandemic and the lockdown shifting the classroom to the online and remote modes, it's always interesting for me to share my YouTube screen, playing a recording of *I am Sitting in a Room* and have that transmitted across the many different rooms and listening situations that the students are inhabiting. As I share the computer sound and click on *play*, I wonder what Lucier would make of this movement, of room-in-his-voice being heard across the many rooms. In a similar vein, the reenactment and re-staging of ideas, fictions, and events can be thought of as movements that unfold across temporal, spatial, and bodily contexts, transpiring as listening situations that pull events from the past and the future and fold them into the present. Germán Toro Pérez, referring to Agostina Di Scipio's *Modes of Interference*, mentions that 'there is the possibility of re-staging this idea in different settings. Every time it is different' (Toro Pérez, FoS lecture #1, 2021).

For the performers, to recite the fictional story is, in a sense, to become a medium or conduit and to channel and evoke something from a different world. In such a situation, the performers' presence becomes something like marionettes or ventriloquist's dolls, they discard their instrumentalist role and sense of self (Morishita, FoS lecture #8, 2021).

In this way, the composer Chikako Morishita talks on re-staging, re-telling, and re-enactment in her 2019 work *Doll Time* for string quartet.³ To continue, I revisit the proposition shared by Vaitkevičiūtė in her lecture: to sing a leading voice translates to collecting a textile pattern in the process of weaving. For the leading singer, it is the vocalisation of the collective exclamation at the end that creates a 'shared creative and reception space' in time, while also disrupting time (Vaitkevičiūtė, FoS lecture #7, 2021). The practices of collecting, of weaving in time, of first displacing, and then stitching vocal parts together also accesses the force

³ See under https://chikakomorishita.com/post/189720673025/doll-time-rainy-days-phil-harmonie-luxembourg (accessed 3 December 2021).

of thought surrounding movement and mobilities. An aural conception of the listening and sounding subject is conjured. These ideas share resonances with the creative processes and breakthrough experiments of the Egyptian composer and Musique Concrete pioneer Halim El-Dabh. In an interview in 2007, discussing his *Wire Recorder Piece*, he told the Egypt-based media organisation Mada Masr,

I wanted to find the inner sound, that vibration that's always necessary for transcendence. I eliminated the fundamental tones of the harmony by changing the voltage—it changes the quality of the music, it seeks another quality in the voice, the hidden material, the inner part of the voice. That's what the whole idea of electronic music is. You have a recording, and you go inside the recording to find the hidden meaning (EINabwi 2013).

The limits separating the materiality of recording from that of the event of sounding begin to collapse when the notion of movement is taken into account. The acts of recording, producing, and manipulating sound are processes of intervening in the duration of that specific sound. Sound gets materialised and then scattered, dispersed, and disseminated. The perception of sound and the politics of perception change. Recording media and technologies manufacture a break in the limit of liveness, folding sound into a portable entity—and as channel of the message across time, and of time itself.

As the experimental Afro-Futurist musician Sun Ra declared in the film *Space is the Place* (Dir. John Coney, USA 1974), 'The earth cannot move without music.' The potency of these performative mobilities, collective re-enactments, and voiced re-stagings as political spaces leads me to the next limit case: *resistance*.

#6 (limits of) Resistance

We can see resistance as the other face of immunisation. While proceeding from a similar defensive need, the paths are different. Those who immunise themselves, protecting themselves from the risk of contact, from exposure to the other, withdraw into themselves, within any known barrier as narrow as possible, held together by fear. [...] The resistant people lower their eyes but increase their vigilance. Their rebellious energy is contagious, their disposition shared. Their front unites different forces, experiences, and ideas, which however, once the adversity has been overcome, can disperse. This is both their strength and their limitation (Bianchi, FoS lecture #1, 2021).

In this quote from her lecture, Paola Bianchi is integrating an excerpt from *The time of revolt* by Donatella Di Cesare (2021). I often think about intuition as something that resistance emerges from and takes shape in. At what point, and how, does one separate the overlap of decision (making) with intuition? In research and musical production, in resistance and in active political life, intuition produces and thrives in a continuum rather than in pursuit of the boundaries of processes and directions. The question of organisation is linked to that of intuition. A

feeling, an inkling that is followed through and fleshed out, allows a decision to materialise and come into view.

I am on the side of the emergence of subjectivity, of a decision (Born, FoS lecture #2, 2021).

The musicologist, cultural worker, and pop-singer Christina Fischer-Lessiak directs our attention to the feminist ear, echoing ideas from Sara Ahmed's *Living a feminist life* (2017):

A feminist ear picks up on what is being said, a message that is blocked by how what is being said is heard as interference. The sounds of No, the complaints about violence, the refusals to laugh at sexist jokes, the refusals to comply with unreasonable demands—to acquire a feminist ear is to hear those sounds as speech. But it is not just that feminist ears can hear beyond the silence that functions as a wall. I referred earlier to how working on the problem of sexual harassment led me to my own act of feminist snap. Once it is heard that you are willing to hear, more people will speak to you. While a snap might seem to make the tongue the organ of feminist rebellion, perhaps snap is all about ears. A feminist ear can provide a release of a pressure valve. A feminist ear can be how you hear what is not being heard (Fischer-Lessiak, FoS lecture #5, 2021).

Fischer-Lessiak's invocation of the 'feminist ear' also makes me think of 'feminist frequencies' as coined by Nancy Hewitt in her essay *Feminist frequencies: Regenerating the wave metaphor* (2012), where she tries to offer a new conceptualisation of the history of feminist movements from the vantage point of listening and radio waves. The philosopher and psychoanalyst Alenka Zupančič proposes,

I would suggest that we should read the term 'unknown' not as referring to something 'unknown to us,' but in a stronger sense of the gap in knowledge coinciding with the gap in being. We do not know, because there is nothing to know. Yet this 'nothing' is inherent to being, and constitutes its irreducible crack; it registers as a peculiar ('negative') epistemological score, it registers as a peculiar form of knowledge: the unconscious. [...] women are *subjects who question* the symbolic, women are the ones who, by their very positioning, do not fully 'acknowledge' its order, who keep signalling its negative, notfully-there dimension (Zupančič 2019).

Resistance is also (in) the unknown. Resistance is also (in) a site of discomfort.

The ethnomusicologist Sarah Weiss read out her vignette *Graz bells heard from Schlossberg* during her lecture:

These bells serve as a time marker for some, a call to prayer for others. For some it is a confirming evidence of Graz's status as an old Austrian city. Even though we don't usually think about them in this way, these bells could also be heard to gender the land-scape of Graz male. They sound the order of hierarchies and, indeed, the male power of the Catholic church in the city. When they ring, almost everything else is inaudible.

One's freedom to voice opinions and ideas is rendered unheard, several times a day—a persistent reminder of the power of the church, its unarticulated connections to the rule of government, of our shopping habits. Even when we teach and take breaks, they make clear its background control of the order of our landscape and of the lives of Graz' citizens, whether one is Catholic or not (Weiss, FoS lecture #7, 2021).

A year back, with daily Covid-19 cases on the rise, before the declaration of the nationwide lockdown, the Indian Prime Minister Narendra Modi raised the call for what he called the *lanta Curfew*. Translating to People's Curfew, it was a daylong restriction on movement, seen as a way to prepare the citizens for a lockdown, in case one would be needed in future.⁴ In his address, the Prime Minister also urged people to come outside their homes at 5:00 p.m. and clang utensils for five minutes, as a gesture of solidarity with each other and to express gratitude for the frontline warriors. The cacophony that ensued on that evening, the incessant clanging, banging of pots and pans, of chants and temple bells, stood testament to the ongoing crisis of democracy that India is in the throes of—a crisis that has been shaped by the nationalist ideology of a communal majority.⁵ The ones who sought silence and withdrew from this obscene staging of a fabricated public spirit were the ones for whom the retreat marked the rejection of the majoritarian thinking of a fascist state. In India, the social system and the caste relations create an artificial majority among the democratic citizens, which is neither politically nor numerically justified.

Resistance to the collective ritual is an assertion of the principle of thinking itself.

The 'only' thought is the principle of thinking itself, which is neither a prescription of habit, nor an ordinance of law. Thinking is the same thing as responsibility—and it always precedes every institution of religion and law (Choudhury 2015).

^{4 &#}x27;What is Janta Curfew and how it will play out.' *Hindustan Times*, 20 March 2020 [online]. https://www.hindustantimes.com/india-news/what-is-janta-curfew-and-how-it-will-be-implemented/story-YI9fiXNtPpNpzoaXOAELhM.html (accessed 4 December 2021).

⁵ Sainath, P. (2020). 'India is witnessing the fastest dismantling of its democracy. Emergency was nothing in comparison.' *The Net Paper*. 8 June 2020 [online]. https://thenetpaper.substack.com/p/india-is-witnessing-the-fastest-dismantling (accessed 4 December 2021).

Kumar, A. (2021). 'Ambedkar's Thought and the Futures of Democracy: Interview with Huzaifa Omair Siddiqi.' In *The Wire*. 15 April 2021. Available at YouTube https://www.youtube.com/watch?v=TAKciRRb72w&t=875s (accessed 4 December 2021). Citing Ambedkar here, Aishwary Kumar explains the problem of the majority within the issue of social (caste and religious) relations. He says (at 00:14:30): 'The majority in India is not a political majority. This is not a majority that you can count. It's not a numerical majority, it's a majority that exceeds well beyond its mathematical power within the democratic system. This is a majority that is communal. It shares something, despite its political divisions, that allows it to pitch itself as a subterranean, pernicious, bulwark against minority rights. Thus, a minority comes into existence because of the nature of India's communal majority.'

At this point, I would like to re-read the title of Sarah Weiss' lecture, from my location and context in New Delhi, India, and turn to the Ambedarite thinker and philosopher Soumyabrata Choudhury. In his essay *Ritual transgression, historical intervention, ontological exit* (2015), he incisively explains how the ritual act itself, in the Hindu caste society, controls, prescribes, proscribes, and delimits the very idea and potential of transgression and turns the transgressive act into a mere 'ritual transgression' (Choudhury 2015). In her lecture, Weiss also discussed possible sites of transgressions and mentioned a specific ritual practice: the practice of lamentation during certain rites of passage, such as in cases of mourning rituals or wedding traditions. However, I argue that in the Hindu society—which is, in fact, a (non)society divided by caste lines—it is in the space and performance of the ritual, and in the name of custom and tradition, that the tyrannical mechanism of caste and patriarchy *persists* and *perpetuates* and where the violent divisions appear in far more pronounced ways.

As an example, let me mention that lamentation is an occupation for women belonging to certain oppressed castes in the graded hierarchy of the caste order. The practice can be observed in the case of the *Rudali* and *Oppari* singers in Tamil Nadu and Rajasthan, who are hired to perform mourning and grieving at funerals. Even though their laments, performances, and songs can contain various tones, shades, expressions, and voicings of protest and resistance, the ritual itself completely excludes any possibility of resistance that might lead to historical, radical, or real transformation in the singers' lives and livelihoods.

In Indian society, this kind of 'ritual logic' is found insistently, across the entire historical structure of class-society. Ritual logic is operationalised in caste, as Choudhury argues, and segments society in a much deeper, hidden way (Choudhury 2020, p. 104). In other words, transgression is structurally a part of the caste mechanism, taking the form of token acts that sustain the status quo. In a way, the title of Sarah Weiss' lecture *Precarious Resistance*—in my reading of it—is indicative of the complexity and instability of these limits of resistance embedded in the ritual context. In India, castes can never be equal in status, their order is based on inequality and gradation, which is continuously affirmed through rites and rules. As the philosopher, visionary, an chief architect of the Indian constitution Babasaheb Ambedkar explained, the site of the ritual is one of condemnation; it thus limits and restricts clear thinking and the perception of reality. In this context, the only form of resistance that is possible is to radically and fundamentally declare equality between all human beings (Ambedkar 2014).

We talk a lot about resistance at the moment, myself included. It would be great if we could overcome its limit (Bianchi, FoS lecture #1, 2021).

#7 (limits of) Sense and Signification

How do we listen? How should we listen? (Fischer-Lessiak, FoS lecture #5, 2021)

In his later writings on the Algerian revolution, Fanon stresses the place of listening in both colonial and anti-colonial strategy, from the use of radio for propaganda and counterpropaganda to police practices of interrogation and the variations on psycho-therapeutic dialogue applied by both the French and the Algerian liberation movement, which eventually included, of course, Fanon himself. These writings on listening practices can be read as a continuation of the theme

Fanon introduces in the above passage: the separation of signification from the evidence of the senses, for the purposes of 'correcting cultural errors' (Kahana 2005).

The act of listening is that which challenges the limits of knowing and intervenes in the gaps and thresholds of meaning.

Listening is the threshold of meaning.

To think is to listen to oneself.

The musicologist Susanne Kogler highlights that, for Jean-Luc Nancy, the inner voice opens up a negative space that exceeds the individual (Kogler, FoS lecture #3, 2021). There were various moments in the lecture series when the notion of 'fragility of sound' steered the discourse towards the negation—or the void—of listening and toward the voice as the void point, the site of resistance to the act of representation and meaning-making. Listening is not the threshold of meaning, but the opening of it. In particular, the composer Chikako Morishita foregrounded this notion of the negative in her lecture, in which she laid out how her interpretation of the Japanese aesthetics of *ma* contributes to her artistic research and process. She explains that:

This term consists of a multiplicity of meanings, [...] negative spaces experientially filled by imagination. [...] While sunshine presupposes something invisible and indefinable, it's somehow concrete. [...] The gate, a fixed object, functions as the framework to illustrate the existence of something unstable or undefinable (Morishita, FoS lecture #8, 2021).



Figure 4 Screenshot taken in Flora Könemann's lecture.

Irene Lehmann's examination of theatricality in the situation of the pandemic, from the viewpoint of negativity, opens up critical dimensions of experimental listening situations and performativity. 'Theatre begins when a stranger enters the room', she quotes from Freddie Rokem and continues that,

theatricality includes the possibility of shifting from an object's quality to a mode of perception. To think of any performance as a situation of co-presence and sometimes co-creativity by performers and audiences emphasises this view. Taking the point of negativity as a starting point causes me to notice that, with the suspension of the normal concert and theatre situation, the fringes of art forms come more into focus, and questions about what music and theatre is, arise anew, or provoke new answers (Lehmann, FoS lecture #4, 2021).

Reflecting on these ideas, let me turn to the lecture of Susanna Kogler:

Art itself can be considered as a sort of thought. [...] The inner voice is connected to thought, to the world and the body, and to the other people who relate to it. By engaging with the world in this way, we are able to discover unexpected dimensions of thought. The critical potential of inner voice lies in the blowing open of the unexpected (Kogler, FoS lecture #3, 2021).

Ereignis II event or *Ereignishaftigkeit II* eventness, or something arises that is unexpected and unforeseen (Toro Pérez, FoS lecture #1, 2021).

For the philosopher Alain Badiou, truth enters the world as an irreducible singularity, activated through an *event*. The *event* is an exceptional rupture in any given state or situation, a break that is caused by the appearance of a void inherent to that situation. For Badiou, truth is therefore a process or procedure that reveals the void within a particular situation. The *event* is the site of the encounter with a 'truth procedure' that brings a 'subject' into being. These 'truth procedures', as he names them, are love, politics, art, and science. For him, 'a truth procedure is the experience of thought, or thought as experience' (Badiou/Sedofsky, 1994).

The voice is also where the void of a situation emerges.

If there is an empty space in which the voice resonates, then it is only the void of the Other, the Other as a void. The voice comes back to us through the loop of the Other, and what comes back to us from the Other is the pure alterity of what is said, that is, the voice. This may be the original form of the famous formula that the subject always gets his own message back in an inverted form: the message that one gets back in response is the voice. Our speech resonates in the Other and is returned as the voice—something we did not reckon on: the inverted form of our message is its voice which was created from a pure void, ex nihilo, as an inaudible echo of pure resonance, and the non-sonorous resonance endows what is said with alterity. The void produces something out of nothing, albeit in the form of an inaudible echo (Dolar 2006, p. 160).

All in all, this sentient voice, as a vehicle and place of new ways of being together, with each other, and in intensity (Fernández, FoS Lecture #8, 2021).

The infinite echoes and the limits of listening. Conclusion.

The lecture series constitutes a break in the vocabulary that is conventionally used to describe and to construct the politics of sound and performance. I have witnessed this break in the form of active and sustained appearances and disappearances of the limits of listening, as well as in the limit cases by which one can inquire into the 'fragility of sounds'. My dear friend Vaibhav Abnave recently wrote, 'to repeat a thought is to think in one's voice what remains to be thought in any thought' (Abnave, 2020). While I continue to develop my own practice, approach, and sonic thinking, I am allowing my work to be guided by an intuition that has only grown throughout the duration of the project: the desire to listen. As a necessity and a force, a desire and a commitment to change, listening inscribes upon the listener the need to relentlessly fold inwards and reflexively re-calibrate to the task of thinking, each time renewing one's fidelity to the undertaking. For me, listening is not enough, unless it inspires a return to the echoes: a re-listening, resounding, and re(de)fining.

Listening is not enough, unless it is listening as thinking.

It is in the infinite echoes of this negation—which is simultaneously an assertion—that I traverse the splinters of thought that have been produced by listening in to the series. Among the traces and residue of the lecture series, I find a sustained agitation, which often transposes into an enduring desire to tease out the sounding and resounding edges, the cracks, the cuts and breaks. Susanne Kogler, in her lecture, emphasised the significance of the artistic action that facilitates the plurality of 'voices echoed by the inner voices of the listeners' as they respond to artistic work:

The artistic and participatory process is infinitely open and fragile, because it has to be renewed again and again to be kept alive. Each time the audience gets involved and reacts to the settings, they reconstitute and reanimate the public sphere, thus enhancing art's political relevance (Kogler, FoS lecture #3, 2021).

Thus, listening is the infinite echo-system. In a bid to resurrect the image of the echo from its contemporary reading as the echo-chamber within digital infrastructures, a space that produces a recirculation of the same opinions over and over again, I propose the contrary: a counterpoint reading of echoes as the resonances which produce new thought. New thought emerges from the unnoticed cut, the break, the infinitesimal interruption between every sound and its echo, and between every echo and the next one, and so on.

Over and over again, there is the potential for new thought to emerge.

Over and over again, there is the chance to listen to the cut, the break, the split, the crack, the fracture.

Reading as listening to the echo-systems of the fragile. Listening as reading beyond the limits of sound.

And it is at the threshold of this beginning that I pause, for now.

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All screenshots and photos taken by the author during the FoS lectures in 2021.

III Fragile materialities

The silent draw

Flora Könemann

the silent draw is a site of search and exploration. the silent draw is an exploration of the void. the void is created thru the relation of and to physicality.

all matter of the void is then physicality. even though it doesn't exist as an entity.

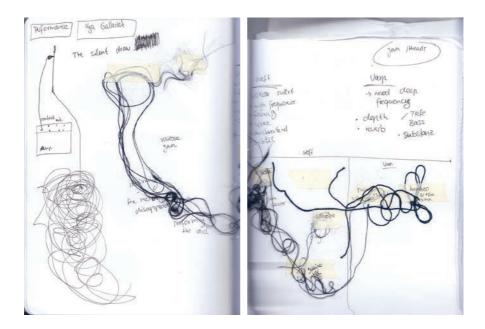
nothing is something. something is nothing.

we expand and contract in a pulse of inner movement.



the silent draw is a tactile and sounding experiment, working with threads and weaving, textile and sonic amplification. by voicing the physicality within, I am searching for the fragile, the unknown, the unseen, the unheard, the unfelt//the strong, the known, the seen, the heard, the felt; blurring the boundaries of binary structures. I am collecting pulses of movement, guided by tactility, tenderness,

fragility, sensing and collecting sequences that (un-)fold into the void within the process. frequencies become a shifting matter in its own dynamics.



the material be-comes the method.

aus dem tisch wachsend eine reihe von fäden in runder ordnung zur anordnung der scherben (Rahmengröße/Abstände) zerschnittene autoreifen ich lege ein blatt papier auf die wackelnden fäden hinunter rutscht die seite saitenweise seitenweise leise

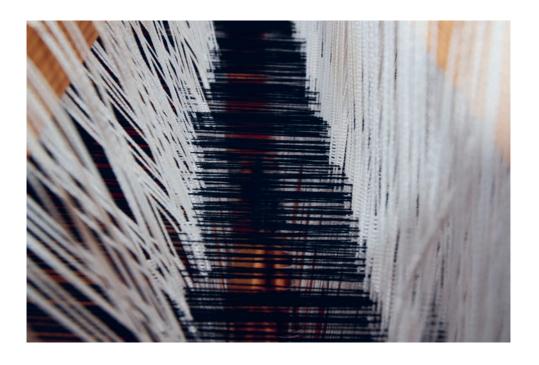
growing out of the table
a bunch of threads
in a circular order
about: arranging the broken pieces
slashed car tires
I put a sheet of paper
onto the wobbly threads
the side slips down

string-wise page-wise quietly











The voice that touches also has a skin Exploring the exercise of vocal touch

Veza Fernández

Preparation

You are about to dive into a hybrid text with multiple registers, rhythms and forms of approach. Through these, the text experiments with different ways to create textures by invoking a *tactile listening reading experience*. Its purpose is to move and to create a space where ideas, concepts and thoughts resonate within one's own body and one's own voice. This text offers the instructions to an exercise, a shared practice, a score, an attempt at an essay, a loose poem, an ever redirecting song, the leftovers of a lecture. So, dive into it with the logic of the ear, pronouncing it sensuously inside your mouths letting it resonate within.

The echo of touch

The verb 'to touch' finds its origins in the Latin word *toccare* which means to hit or to strike. As the onomatopoeia of 'toc toc', the word touch developed from a vocal emulation of the sound that is produced when things encounter each other with impetus—revealing that there is always a certain amount of force involved in the act of 'touching' and 'sounding'.

Even the softest touch is a force and the same goes for sound. Like sound, touch is made of pressure, a traveling vibration between surfaces that collide into the dense power of a texture. A texture could be conceived as a perpetual messenger of feeling forming between different amplitudes and volumes pouring from different surfaces colliding with each other, deeply longing to fathom how to be together. A texture is an elastic volume that voices the exploration of an encounter, converting the qualities that touch is trying to fathom into manifestation. All in movement.

So let us pronounce touch with its 't/t/t/t', with the tip of our tongues intermittently tapping our alveolar ridge until we have built up a voluminous texture of sound. A series of explosions emerge from this repeated encounter between our tongues and the cartilaginous arc separating our mouths from our throats. We glide vocally back to an 'AAAAaaaa', to where our vocal cords vibrate. We let our cords rub each other intermittently in this place. Opening and closing softly enough to form a stream of air exiting our mouths, opening the spaces from the back of our phonic apparatus to the front, and vice versa.

Now leave enough space for the vowel 'A' to exit your mouth. The 'AAAAA' becomes a stream of sound that will culminate in a fricative collision spitting the 'TZSCH'. And there you will feel the tongue pushing the back of you teeth, forming an arch, so a stream of sound can be contained under it. And then the back of your tongues will push the streams of air out, towards your teeth until they have to open a bit, as a consequence of being bounced open by the force of air pushing towards the solid osseous surface of the teeth.

Now pronounce the word 'touch' again carefully uttering all of its components, sounds and noises. You feel all those sensations resonating inside your mouth: on your throats, behind your teeth. Memories of all the previously executed sensual encounters between the touching of different surfaces begin to appear inside of you. Streams of air vibrating, intensities in impetus and texture forming between processes of articulation. This is the power of resonance: to feel inside the echo of an encounter.

Together is how we fathom touch

When, while pronouncing, we pay attention to all these places where the voice is articulated and produced by the encounter between two different surfaces, as we have just done, we start listening and producing sound simultaneously. The boundaries between what voices and what is voiced begin to blur into a polyphony made up of the sounds that listen, the sounds that support the listening, and the sounds that are shaped by what is being listened to. Together, these sounds simultaneously streaming from different sources of listening form a voluminous sonic membrane that materializes in the space, the different relations, qualities and textures composing a vocal act. Becoming both a skin that touches and a skin that explores, as well as the resonance surface that amplifies, brings to sound and supports the action. We could therefore consider this form of vocally-sounding-listening a form of touch, a form of vocal touch.

In order to explore vocal touch, I propose a series of exercises through sonic visualizations that allow us to pay attention to the different visible and invisible components involved in vocal production, while also finding a system that enables us to study the voice viscerally. The realms of sensation and relation that compose the voice hold such a richness in body, movement, knowledge and power that a merely unidirectional verbal exploration could never accurately express these in probing the essence of voicing or being voiced.

I have therefore decided against an essayistic analysis through an ordered set of arguments, observations and theoretical inquiries. I invite you instead to create a dense resonating skin together, one that unites the acts of writing and reading, voicing and listening. I do this by producing a text for you to engage with, by feeling it reverberate inside you. We are in this together, since together we are

co-authoring our reflections on what vocal touch is and what vocal touch can do, reflections that reverberate between my writing and your reading.

When you try out the exercises listed here, remember that in order to be able to examine the sounds you will be producing, you will need to utter quite extensive streams of sound. Hence I invite you to focus more on the exhalation than on the inhalation, breathing out in a never-ending, resounding flow. In the moment when you feel that you are emptied out, do not push the air into your lungs; instead, let the breath take over you in a release. Like an inverted sigh. Place your stream of sound in for you clear points inside and outside your body. Surrender to your sounding, allowing the articulation of your sound stream to occur through physical and visual placement rather than by actively modulating it.

Volume as a tool

Close your eyes now and visualize your tympanum. [The tympanum is your small eardrum. It is located behind your eye.]

Expel a little hum, gently, while you imagine filling your little drum with sound as if it were a balloon, until your eardrum begins to exit your body.

Continue to fill your eardrum with sound, until it becomes sonically replicated. Do you feel an increase in volume? Allow your replicated eardrum to exit your body into a stream of sound.

Imagine that a tube is growing out from behind your eye, through your inner ear, towards the room, towards the concrete wall. Go back and forth, filling it until it streams out, reaching the wall through your sonic tube. Your tympanum is now on a specific point on the wall. It is looking back at you.

Ask yourself: what is shaping my tympanic tube stream? What are its edges made of? How many different streams does the tube contain? What sounds are awakened when I am filling my tympanum with sound until the sound becomes the tympanum itself, transforming into a tube that transports itself to the wall as a messenger? Is the wall answering back?

What does this exchange of information do to you, to your voice, to your skin? Does it give you pleasure, strength, a release? Who is sounding now: you, your tympanum, or the wall?

To practice vocal touch is to materialize, both physically and sonically, the voice's multiple relationality in a total surrender of the skin, by tracing back and forth as many points of articulation and amplification as possible. The more connections that one can make perceptible vocally, the more encounters one learns to trace vocally and to give space to, the more voluminous, visible and forceful the ut-

tered voice will become. It is within these increases in volume and intensity while sounding that I propose to explore the voice and its powers, as these materialize the voice's relationality, tactility and complexity. These are qualities that cannot be fully understood if approached separately.

The voice touches because it seeks a relation: in its desire to be felt, in the amplification it experiences through the resonance surfaces, and the environments with which it interacts; in the channels it follows to arrive at its form, to reach its target, to awaken what remained unheard; in the force needed to make itself noticed, to hear itself resonate. And all of this happens simultaneously, allowing the complex to be manifested in an embrace between the different surfaces, their shared rhythms, and all the processes involved in their encounter.

Every opposite harbors a bridge. This is the irreverent disobedience of the voice: it takes in the whole, it transcends any form of binaries, reminding us that the abstract and the physical, the subject and the object are inseparable.

The voice takes in everything—the subject, the object, their interaction and their resonating environments—until it is full enough to transform. The voice is at its strongest when it is at its fullest and at its fullest when at its most voluminous. The voice is also a volume of abstract and carnal bodies and spaces interacting with each other. Its disobedience lies in its voluminosity of abstract material carnality. A volume that challenges binaries, such as concrete-abstract, emotional-rational, feminine-masculine. A volume which reveals that the realms of feeling, flesh and environment are never absent of knowledge.

After all these divagations on the tactility of the voice and the role that volume plays in it, we could define volume in a material sense as a sonic multidimensional textural space that emanates from the resonating carnal encounter between different acoustic and material elements, which are trying to make sense of each other. Volume could therefore be used as a space for experimentation and resistance, as well as a tool of bodily inquiry.

When I talk about volume within the practice presented here, I do not use this term to refer to the acoustic amplitude of a sound, such as loudness or quietness, but rather to refer to a material and spatial amplitude of sound. Of course, voluminous sonic spaces are louder than flat sonic expressions but loudness alone is not the only quality at stake in the tactility of voice.

Move your head away from this text and look for a window or a glass surface close by. When you have found it, fix your gaze on one spot on its surface. Imagine that this spot is a dot that is pulling sound out of your mouth. Shape a 'u' with your lips and let the dot pull a stream of sound out of your body.

The source of your stream is in the dot in front of you.

The dot in front of you is now your mouth, and your mouth is now the dot. How is this double mouth shaping your stream of sound?

Feel that place in your body where the sound is being produced. Focus on this place.

Create a deeper connection between the spot inside your body that is the source of your sound, and the spot on the window that is the source of your sound. How are these double beginnings shaping the texture of your stream and the texture of your body?

Observe now how your stream is gaining volume. How is this increase in volume translated into the sound and into the texture of the sound? Can you feel glass-like qualities within your stream? What differences are there between the textures of your body sounding, your stream streaming, and the window vibrating with your stream?

Observe the sound qualities transmitted between body, voice, and glass surface. How do each sound independently? How is each of them translating into your stream of sound?

STOP

Feel what is left behind, inside of you.

In order to use volume as an instrument to research the voice's tactility, one needs to inhabit it. And to research by inhabiting means to be part of a phenomenon by letting it reverberate within one's body. It means to experience, to live phenomena on a double and simultaneous course, inside the body and outside the body.

To make sense of something sonically, to touch something sonically, like the surface of the windowpane in the previous exercise, I have asked you to produce a sound in direct relationship to a surface, by inviting you to feel its textural, acoustic and material qualities inside of your body. That is, to produce sounds through the reverberation inside of your body, in a series of echoes bouncing information back and forward, to and from the stream of sound produced in relation to the wall. What reverberates inside, outside, and through you while executing the previous exercise creates a series of interconnected, voluminous spaces filled and contoured with reverberating material. Making you slip in and out of these spaces, by again feeling them reverberate inside our bodies. We consequently create enough space vocally for us to inhabit and for us to discern different acoustic qualities and modes of encounter.

Transverberation, or the skin I inhabit

I invite you to understand the practice of vocal touch as an act of *transverberation*. Transverberation, as defined by Suely Rolnik, is a form of intense resonance between affects through processes such as shining through, spreading and reverberating, generating knowledges that are not merely cognitive but from the body (*saber del cuerpo*), from the living (*saber viviente*), from the eco-ethological (Rolnik 2018, p.137–138). These are knowledges that do not form within a dialectic but



within the tension of a paradox (Rolnik 2018, p. 135). And it is in this tension that the knowledge generated in a physical relation takes place by implementing the different rhythms and forces touching, affecting and transforming each other simultaneously, and not separately. Embracing the common, the opposite, and all the specters in between; in relation to all the environments they resonate with, and also through.

The term transverberation is closely related to the Spanish saint Santa Teresa de Ávila (1515–1582) who, in a fervent vision, saw a cherub of fire thrusting into her a bow also made of fire, lighting such a fire within her, such a pain, that she had to leave her body in a total surrender that reverberated in a moan. What was left inside her body was an infinite feeling of love for God that filled her, vibrated within her, shook her.

Santa Teresa de Ávila experienced transverberation by entering deeply inside herself in order to listen, by being touched, moved until what she felt was so dense that she, her subject, had to come out of herself. In other words, she was so full of emotion that the self, or what she knew of the self, became irrelevant. The self she knew was destabilized by the intensity of her feeling. And the realization was born that in order to understand the unknown and the other, one needs to feel them deeply inside, strongly and openly enough for one to transform.

She called these experiences intellectual visions, visceral somatic visualizations that occurred through her inner eye—that is, the eye of sensation and feeling—and through persistent contemplation. These eyes are absent eyes, formed by the complex of all modes of sensation operating together in an attempt to grasp the almost ungraspable. These eyes see more in 'the how the what they see is re-

membered in the echoes of the skin' rather than in what they see immediately in a specific moment. They are always searching, tasting the present in a movement towards the future, in the reverberation of the past.

If we desacralize transverberation and apply it to a vocal sounding practice, we could define it as a form of intense listening through sounding, by permitting the textures, rhythms and forces of resonance to take over the body, until this form of intense listening exits the body through the mouth in a voice that both moves and is moved. In addition, we could define it as a sonic material volume of different temporalities, spatialities, textures and affects plus their effects on each other, which becomes an amorphous ear to explore the transformative power of relation in rhythms, drives, and intensities.

Let us go back to our spot on the glass of your windowpane.

Let this spot drag your sonic tube out of your mouth.

When you are ready, look for another spot opposite it. Let the new spot drag your tube out of you. What are the differences between your tubes? What are their similarities?

Continue to switch between the two tubes. And observe what is happening to your body, to your tube, to your voice, to the space, the consecutive dragging of your sonic stream out of you from the spot on the window.

Now try to allow both spots to drag two tubes out of you simultaneously. And visualize from where in your face each tube is emanating. From each of your eyes, from each of your cheekbones, from each side of your mouth.

Observe your two tubes exiting your face simultaneously and visualize the shape they make together. A fountain of two streams. Where and how are your streams moving? What shapes are created by their movement?

Can you feel an opening? A shifting back, down, up inside your skull, in your head, in your face, from the place where the tubes are streaming from?

Observe how many different qualities of sounds are manifested simultaneously. Overtones, noise, air, lower, higher frequencies bumping into each other, pushing simultaneously backwards and forwards in two different spaces.

Move your head softly and let both spots on the glass windowpane turn into two concavous traces trying to find each other.

Your mouth is opening now, like a wedge. And your tubes are turning into a trace. In this movement you are tracing a heart. Or a heart is being traced out of you, leaving the inside printed on the glass, the glass vibrating inside you.

What is the voice inhabiting such an opening? Is it a call? A scream? A moan? A cry?

The voice emanating from this exercise is extremely rich in volume and intensity. This richness in volume is due to an overlaying of many simultaneous processes and spaces, many different sonic spaces developing separately from each other and yet with each other through many simultaneous processes of production, resonation and reverberation inside, outside the body, between the body and the resonant environment. A wide range of strident sounds and noises start originating in the clashes between different sonic spaces. These are the glue of confluence, the sediments of density, the skin of voluminosity. The more noise, the more rich volume.

It is in these noises shaping and being shaped by the volume of sound, transverberating body and space, where the voice fills with power. These noises are a vehicle that releases the voice as a force while voicing those frequencies, textures and spaces that usually go unnoticed (or prefer to go unnoticed). They contour and drive a voice that is strident, because it reveals the deepest bearable edges of what is voicing in all its voluminous amplitude.

The strident voice

The strident voice is a provocation because it unveils what is hidden below the skin, reminding us humans, as the poet CA Conrad says, that 'we are all creatures of appetite'. The strident voice is the manifestation of our most primal drives. These are bodily, bloody and lustful. Naked and vulnerable, leaving all our bones and desires out in the open, bare and uncontrolled. There is no greater provocation to the holders of the hegemony of the only one norm, such as patriarchy, essentialism, capitalistic individualism, institutionality, and so on, than to reveal the inner drive and desire as an open source of power. A power generating in the forces of convocation and invocation.

The strident voice convokes simultaneously on different levels, becoming a space that viscerally conjuncts the subject, the object and their resonating environment with all those voices reverberating inside of them, while providing a space for more voices to become manifest and participate. We have all had the feeling of crying our bodies out of ourselves, until our cry stopped being our own cry and became instead the cry shared by every creature in deep pain, since the existence of pain. We have all been infected to join in with the cheers of the crowd at a sport event, to scream at a demonstration, to join a group rant against an injustice. We have all uttered a deep sigh on hearing a loved one cry, sometimes joining in a harmony of releasing lament.

In all these cases the voice serves as a unifying and sustaining power, a platform of participation and commemoration. In the moment we utter such a voice, we are allowing other voices to vibrate within our own voices, to inhabit us until we are completely filled with volume and power. This complex of voices filling your body, however, needs to exit. They cannot be contained in their full volume and power. Reaching out towards their target, they seek the object they yearn to move, taking with them all the echoes resonating in the environments and bodies they encounter in their trajectory. Invoking all the necessary forces needed to shift a paradigm.

The strident voice is the voice that touches us the most in all its voluminous, uniting and moving power. It teaches our ears that there is no beautiful note without a dissonant wedge pushing it into a form, exposing the tyranny of the single controlled form. If there is something the voice can teach us, it is to accept and understand complexity, providing us with different possibilities of being together without being the same. The voice also teaches us to take into consideration the environments, bodies and voices around and within us, providing us with different ways of listening that allow us to attune in a new way every time we encounter each other. All this makes the practicing of vocal touch using volume as a tool of investigation not simply a form of research but also a form of resistance. A form of resistance that questions and transgresses viscerally the regulations imposed by the structures and histories of the only one norm.

To conclude, a last exercise

Trace with your voice through your body each of the exercises outlined in this essay.

Let your voice sound out the space and the memory it is tracing through your body.

Start in your left ear, taking in the word touch. Sounding it. Passing it through your skull. Transforming into your tympanum, becoming a tube streaming into your throat. Your throat is your tympanum, shifting now into your window when it reaches your chest. In your chest there is the spot dragging your stream out of you and into your belly. Your trace keeps changing sound and texture while moving and remembering. Now you are in your pelvis, where your trace becomes two dots pouring two streams out of you, streaming separately through each leg. The two streams meet under the floor, pushing all of you out and upwards, towards your head, all of your inside pouring out of your head as if you were a fountain.

When you stop, what remains?

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ELP

A choreographic research project

Paola Bianchi

At the onset of the pandemic, I was involved in a series of meetings on digital platforms. Whenever I was invited to an online meeting, my first thoughts centred on the medium, its possibilities and impossibilities. Some words of Georg Wilhelm Friedrich Hegel came to mind that have always made me very nervous and that were, 15 years ago, the starting point for the performance Corpus Hominis: a work originating as a reflection on the body as a place where relationships of domination and subordination are recorded. In his Vorlesungen über die Ästhetik, Hegel ([1836–38]1963, p. 980–981) argues that clothes erase the indigence of animal life, hiding those organs that are superfluous for the expression of the spirit and, since they do not cover the head, it is because that is where the spiritual expression of the human figure takes place. I challenge this statement with all my strength and all my body! The half-bust mode of encounters on Zoom-type platforms has only rekindled my objection. An annoyance that is not only aesthetic but conceptual, real, has resurfaced: the elimination of the rest of the body in favour of the head. This is an entirely *Western* and cerebral concept that celebrates the passivity of the flesh in favour of the mind.1

As a choreographer and dancer, it is undeniable that my work is centred around the body. Already in 2014, I published an essay to this effect, in which I wrote:

The body is my specific language, it is my instrument, but it is also the area of investigation around which my research revolves; poetics of the body. Everything that happens to us every day, even the smallest event, returns to our body: digested, metabolised, vomited, it enters and leaves our body, leaving traces. The body is the map of our feelings, of our emotions, it is the writing of our experience—a scar, a wrinkle, a white hair, a disappointment, a mourning, a happy moment—we build it with 'our' actions, it undergoes 'our' induced and somehow imposed choices (I emphasise 'our' because we are the body; the separation between the body that acts and the mind that decides seems old and linked to a cerebro-centric vision so typical of the Western world—I should rather write 'I-body' or 'we-body'). The culture to which we belong, our upbringing, our genet-

In the context of this text, the term Western civilisation (also West, or Western society) refers, depending on the historical period, to a geographical and cultural area roughly including Europe and, in a wider sense, all those European and non-European countries that today have common cultural, economic, common political traits that can be traced back to the philosophical principles of the Greco-Roman-Christian-Enlightenment world.

ic inheritance, the places we inhabit and that inhabit us, the way we move, our postures, our food, our clothes, our repressed or expressed feelings, all of this and much more come together to construct the self-body, the personal and unique way we move, the way we perceive ourselves in the world, the way we transport ourselves on a daily basis. The body is the real object on which biopower acts, modifying it, while culture builds it, shaping it. The body is the surface on which the fundamental precepts, hierarchies and even metaphysical orientations of a culture are inscribed, which the very concrete language of the body reinforces. [...]

The dualism of soul/body, mind/matter, psyche/soma, person/organism, starting with Plato—the body as alien, as non-self, the cause of all evil, via Augustine—the body as enemy, heavy and grave, René Descartes—the body as brute matter, a body conceived by the intellect and not experienced by life, a body in idea and not in flesh and blood, an anatomical body and not a subject of life, and Christianity—controlling and curbing the body's natural impulses—were definitively formalised by Sigmund Freud. Being children of a culture that goes back thousands of years, we can hardly conceive of the body and mind as a unique living whole.

But the body has an intelligence, a memory that goes beyond verbalisation. Thinking also means having a body in a dynamic relationship with the environment, and many categories of thought are mental representations of states of corporeality. Reason is made possible by the body, that is, the core of our conceptual system originates in the structured nature of bodily experience. [...]

The Western body is dissected, divided into organs, musicalized, measured, educated, homologated, a 'docile body' to quote Michel Foucault, a body exalted and then emptied, praised and reduced to an object. Passivity of the flesh.

My theatre is made up of bodies and the body is a text of culture, a practical and immediate place of social control, the place where relationships of domination and subordination are inscribed. The scenic body is political, my theatre is certainly political (Bianchi 2014, pp. 16–17).

This explains my irritation at seeing our bodies represented by a half-bust in online meetings. In addition, due to my background I find it difficult to follow words and discussions if I cannot see the whole body, the way in which those on the other side move their hands, feet, cross their legs. Basically, I understand through the body and bodies speak to me more than words. I have never shown only my upper body in an online conference. Instead, I have exposed my hands, my feet, parts of the body which are generally erased from the screen and are not recognisable by everyone; they do not reveal identity except to a few intimates, they are a mask that hides the face.



Figure 1 Paola Bianchi, A meeting on a digital platform, 2020, self screenshot

My online presence is located in the space of protest, extending into the space of revolt, which is also the theme around which a new phase of the *ELP* project, entitled *NoPolis*, revolves: a performance installation, an affirmation of the essence of the bodies of protest, of the many bodies of revolt. Revolt is a search for a face-to-face with power. However, while fighting for the right to appear, one must hide one's face in order to break into public space —which therefore becomes a denied space. One of the paradoxes linked to the right to appear that I find the most stimulating is that turning one's face away from power calls identity into question and therefore also the concepts of borders, including borders between states and nations. The anonymity of this stance is not enacted out of fear or cowardice but to claim the wholeness of everything and everyone. The action of hiding my face behind my hair in my latest shows is therefore to be interpreted as a way of erasing my identity and equating my body with the body of every spectator, pushing their gaze right into my skin, past the expression on my face which is customarily the privileged focal point.



Figure 2 Paola Bianchi, EN-ERGHEIA, 2019, photo Valentina Bianchi

At the end of 2018, I launched *ELP*, an articulated research project revolving around an in-depth investigation of the body, the relationships between bodies and the cultural images of which bodies are repositories.² *ELP* is an acronym for *Ethos Logos Pathos*: the project investigates the *ethos* (intended as the individuality of the performers), through the *logos* (in this case the descriptive word) while taking *pathos* (the emotional force necessary for the scene) into account. *ELP* investigates the relationship between descriptive word and dance through the audio transmission of archives of bodily postures that were originally created from images. This process eliminates the body of the choreographer as a model to be followed and imitated. The project has so far seen the participation and contributions of about 450 people, including professionals, children, citizens, blind people, people suffering from Parkinson's disease, students, migrants, and refugees; it has been supported by the main Italian institutions dealing with contemporary dance and has seen the realisation of several performances.

Born out of the desire to bring dance to places it cannot normally inhabit, that is, the radio and blind audiences, the *ELP* project focuses on the double function of the word on the body of the listener: incorporation and embodiment. The discernment between incorporation (introjecting) and embodiment (becoming, turning into flesh) is that the first results from an imaginative process which does not call for actual movement in the body of the listener, whereas the other is the physical action of performing. The act of listening to the description of a movement can lead to envisioning your own body moving by way of a sort of muscular imagination (I become the body that is being depicted; through my imagination, the described movements become my own movements).

The process of embodying the description of a movement yields a unique interpretation, according to the listening abilities as well as the specifics and potentials of the body of the subject and triggers the creativity of the dividual to explore the characteristics of the movement, without having a physical template to emulate. By removing the model, the *body of the choreographer*, each individual body develops its own system.

The process underlying the *ELP* project involves several stages:

Establishment of a *retinal-mnemonic archive* by asking about 40 people to identify images fixed in their personal and collective visual memory, symbolic images that underline a change in the course of history, iconic images that are fixed in personal memory precisely because of their collective value. So far, three retinal-memory archives have been created: *WESTERN MEMORIES*, *OTHER MEMORIES*, and *BODIES OF PROTEST*.

Creation of my own solo dance through a long process of embodying a selection of the images received, a process that is not limited to copying/imitating the images themselves, but instead activates an in-depth analysis of the space, tension, forces, rhythm

² The website of the *ELP* project is available at https://elpdance.blogspot.com/ (accessed 24 January 2022).

generated by those immortalised actions, an investigation of the before and after, of what exists beyond the images.

Each image enters my body and deforms it, modifying its postures and tensions to generate new body states. The initial retinal-mnemonic archive enters my body and my body itself becomes the archive and repository of those images in a process of organic re-actualisation of history through an anachronic montage. So far, I have created three solo dances, one for each archive: *ENERGHEIA*, *O_N* and *NoPolis*.

Each solo is then dissected and the postures of which the solo is composed are verbally described and recorded as an audio file, contributing to an archive of postures.

The final step is the audio transmission of the postures. Through sequences of exercises, participants explore the resonance of their bodies, first for each posture and then in the construction of a score, a personal dance.

Each retinal-mnemonic archive of images becomes an archive of described postures to be transmitted.

ELP is an artistic creation project that, through a research process, has generated a method of transmitting dance—dance that only after a few phases of work becomes choreography. Dance is, in fact, the conscious or unconscious movement of the body in a space large enough to move. One can dance anywhere, and in any way, without having studied, without consciousness of what one is doing (in a disco or alone in one's room). Choreography (a word composed of the ancient Greek choreia—dance and graphia—writing) is the writing of dance. Choreography is the art of composing dance; it must consciously relate to space, time and the body, its internal forces and forms. Each of these elements is studied because only the union of all elements generates choreography and its meaning. For a dance to become a choreography, there are therefore steps involved in analysing its component elements.

The *ELP* method removes dance from any possible aesthetic judgement, while re-establishing its value as the bodily and expressive practice of every human being. From identical verbal indications, it enables cultural images to arise spontaneously within the unique interpretation of each individual body.

A few days before the 2020 lockdown, I launched a public call on social networks, asking people to support my research by participating in the *POSTURES ARCHIVES* project (an experiment that I was due to carry out during a series of workshops, which was interrupted by the closure of the theatres). Those who participated would receive an audio file with a description of a posture; they would listen to it, assume the described posture, photograph themselves in the posture and send me the picture. I made the invitation to everyone, professionals and non-professionals alike. It was like a group walk: whoever saw the group passing by would join in, whoever was tired would stop, whoever was running then had to

wait. Over 150 people between the ages of 5 and 90 answered the call. Although the descriptions of the postures are, as mentioned above, transmitted via audio file, since we are in a paper environment, I will transcribe one below as an example:

I am standing. My legs are slightly separated from each other, my feet are parallel. My left leg is stretched out, my right leg is slightly bent. My left arm is bent to my side with the elbow down, my wrist is flexed, my hand is relaxed. My right hand is resting on my left hand, my right shoulder is slightly raised. My head is turned to the right.

Each description is interpreted in as many ways as the people who embody it. At the same time, however, striking similarities of the various individual postures imply an interesting continuity between the transmission of the individual experiences of the bodies at play. Paradoxically, by removing the *choreographer body* as a template to be replicated, this method seems to reinforce the influence of the very physicality of the choreographer body. The inherent meaning of the movement itself becomes manifest. Here is how some of the people who participated in the project embodied the description above:



Figure 3 Paola Bianchi, A composition of still images taken from the video *POSTURES ARCHIVES* #1, 2020

What interests me, both as a spectator and as a dancer, is *being a choreographic action* as opposed to *doing a choreographic action*; the *ELP* method focuses on the research of *being. Being a choreographic action* means bringing attention and concentration into the body, feeling the points where movement is based and where it is born. The body reverberates in the form it takes, which is never a form, but

formless, and so it is a continuous transformation from form to form in the process of erasing form. This is all within the confines of a precise score and extreme external control, which then becomes the eye of the spectator. It is therefore a matter of becoming a spectator to oneself:

What happens inside the form when I am on stage, what moves the form, what acts as a motor for the action is the constant search for bestiality, for animal instinct, for transparency, for the truth of the movement, for its credibility. Truth and credibility are words that in the world of dance have a very precise meaning and are hardly misunderstood, but outside this small group they take on a different and certainly misleading meaning. Truth has to do with the inner meaning of each movement of a choreographic action, it has to do with the way of being inside that movement, with its being credible and therefore not false, stuck on a body that does not know that movement in its innermost part, in its nature. Truth and credibility have to do with the flesh, with the way in which the body embodies the movement, they have to do with the starting nucleus of the movement, a nucleus that cannot be found outside, that cannot be a model to follow, but that is inside every body. That nucleus is the motor, the activator of tensions and displacements, of unbalances, of balances, of relations with space. What am I then, body in movement, when I become a choreographic agent? Who am I? In the instant of action, I forget about my state, I forget that I belong to the female gender, I forget that I have two legs, two arms, a head, a pelvis, a back. I forget but I am exponentially conscious. The perception of my state becomes profound and therefore annuls itself. Annulment by excess without excess, this is, I think, the way of being a choreographic action (Bianchi 2018, p. 80).

As the art historian Hans Belting told me,³ the human body, with its, dreamlike and imaginative abilities, is the living medium of pictures; there is a strong interaction between external pictures and our body which absorbs and processes them. Memory is an experience of the body, and the body is the place of images.

The *ELP* project is not closed but develops in continuous evolution and as mentioned above, has thus far resulted in the realisation of three retinal-mnemonic archives that I termed *WESTERN MEMORIES*, *OTHER MEMORIES*, *BODIES OF PROTEST. WESTERN MEMORIES* is a retinal-mnemonic archive created with the contributions of forty Italian people. I contacted them by e-mail, rather than scheduling phone calls or meetings, as I didn't want to influence them with any visual or aural example. The images I have received range from icons of our time to still images of historical moments that have marked a change for life in the West. In this way, the bodily archiving of the *ELP* project began with an

Here, I use a formula proposed by the visual artist Riccardo Benassi in his book *Morestal-gia* (2020, Nero Editions). I believe that the act of reading is an intimate one, a face-to-face encounter with the author. The very same words can be perceived very differently by the readers. Our perception is filtered by our thoughts, our body, our capacities, and by the specific moment of the act of reading. Culture has a strong impact on each one of us. An intimate relationship with an author is born through the act of reading, even though the author's intentions are transformed by our interpretation.

embodiment of Western images and of icons which were familiar to me. This is a kind of imagery that belongs to me, that I recognise, that my body recognises and in which, even in the most horrific of embodied images, my body has found an ease in being, an ease emerging from a deep understanding of the horrors in those images. This archive has resulted in my solo *ENERGHEIA* which, through the audio transmission of the postures present in this solo, has in turn generated some choreographic actions. These include performances with professional and non-professional dancers, blind people and those with Parkinson's disease, as well as videos, and an audio file—that is, the detailed description of a choreography to be imagined and, if desired, to be performed.

During the first period of rehearsals for a performance with ten young professional dancers, the word 'consonance' began to appear. To explain the function of consonance, I will use an episode from my life as an example: in the 1980's I usually dressed in combat boots and jeans—in other words, I wasn't dressed like a perfect young lady. For a certain period, and some photos prove it, I used to sit not only with my legs crossed but crossed twice, with my foot behind the opposite ankle. This body posture shows that the model of the 'proper lady' which I was fighting against had finally entered my body. While my legs assumed a posture that conformed the model of the 'proper lady', the upper part of my body (and my mind) did not. This phenomenon does not correspond to imitation but to unconscious consonance.

As Belting told me, images enter the body through the eyes; the body is the place of images, they settle into the body and transform it. But this is not the end of the transformation. Through the phenomenon of consonance, postures and attitudes pass from one body to another, an unintentional phenomenon, hardly to be controlled by thought, an animal reaction of the body; it is the same reaction that imposes a common rhythm of march on a crowd of people in proximity, a strategy of the body linked to survival and coexistence. The exchange of postures, of bodily information via consonance always generates a third modality that is neither mine nor yours, but something new. Mixing and hybridisation thus become the strength behind a new community that does not intend to include, but to welcome and be welcomed.

The eye is in the world, the world is in the eye (Boehm 2009, p.48).

The word 'consonance' opened a new avenue of investigation to me, by pushing the focus beyond national borders without crossing them. This time, my search for images involved people with a migration background, that is, people living in Italy who come from other countries. They were no longer contacted by e-mail, but arrangements were made to meet in person. The need for personal meetings arose due to a question of language comprehension, and because the images imprinted on these people are often very strong personal images. The retinal-mne-

monic archive *OTHER MEMORIES* is made up of images from Egypt, Burkina Faso, China, Brazil, Libya, Afghanistan, Venezuela, Albania, Israel, Chile, Turkey, Bangladesh, Peru, Cuba, Gambia, Guinea Conakry, Senegal, Kosovo, Morocco, Argentina, Pakistan, Nigeria, and Mali. The images I received were often strictly personal images. For example, a young man from Senegal searched on the internet for a photo representing himself and his peers in the act of carrying firewood for cooking, an action he had to perform every day during his childhood, an image that is both interior and exterior at the same time.

While the WESTERN MEMORIES archive includes 350 images, the OTHER MEMORIES archive includes 65 images. Concerning images, we could say that Western bulimia is countered by anorexia in areas of the world which, for a long time and even today, have largely avoided being subjected to the continuous hammering of media images. In many parts of the world, television, newspapers, and the internet have only recently become available, if at all.

The OTHER MEMORIES archive has so far brought forth two performances: my solo dance O N and, through the audio transmission of the postures, a performance with a female young dancer on stage. During the process of embodying those images contributed by people with migration backgrounds, I confronted myself with the question of what their bodies mean for me and how to deal with those 'distant' images. I faced them no longer from the inside but from the outside to the outside, trying to overcome that particular kind of fear that the Italian philosopher Donatella Di Cesare calls exophobia, that is, the fear of looking at the outside from the outside (di Cesare 2021). I faced these questions from a place that, as I understand it, belongs neither to you nor to me. From the edges, from the margins, those images have attached themselves to my bones. Those bodies have shared with my body the fluidity of blood, the tension of muscles—those migrant bodies that, by the very act of moving from one country to another, challenge the borders of nation states and are therefore criminalised, they brought me to think about the closed concept of the nation state and about forms of protest. Protest is an act of uprising, rising up to the highest possible position in order to confront power face-to-face. In a further extension of the migrant bodies, I became interested in bodies of protest, bodies in uprising. The BODIES OF PROTEST archive has so far given rise to NoPolis, a two-hour performative installation during which spectators can enter and leave freely. The definition of performative installation already defines the state of the body, a friction between stillness and action. Considering that an installation is still, and a performance stimulates action, then the friction between the two states generates the dynamics of the body: a struggle and mediation between movement and stillness.

The description of some of the postures from the initial two archives led to my work with the singer Juliet Fraser in creating the choreography for the contemporary music theatre *WECHSELWIRKUNG*. In this case, the translation from body to word underwent a further step: the translation of the instructions for the

performer into English. The membrane thus doubled back on itself and became a vehicle for the exploration of fragility. The sense of the work was generated by crossing over fragility, that thin and dense line inherent in the method of transmission. Fragility became the vehicle for dealing with fragility. This was not the first time that I have collaborated with Pia Palme, just as *WECHSELWIRKUNG* did not evolve along a single, direct path, but rather developed over a period of about two years through a series of approaches to the theme. The 2019 music theatre performance *DUSK SONGS*, oder lieder im morgengrauen was the first approach and, in the winter of 2020, a few days before the beginning of the pandemic, we started along a path towards the final performance with a rehearsal period that should have culminated in a choreographic-musical action in May 2020.

Juliet Fraser and I investigated the possibility of creating the choreography using the ELP method. The ELP creation method, the audio transmission of postures and body volumes, always generates something that transcends my intentions, that lives a life of its own and possesses an autonomy of meaning that surprises me every time. It is as if every choreography emerging from the ELP method relies on a previously hidden meaning that manifests itself only when the work is finished. Far from my 'usual' way of approaching work on stage, which for many years has been linked to dramaturgical writing prior to work on the body (theme—theoretical investigation of the theme—dramaturgical writing—work on the body according to the theme), this method opens the door to new states of the body and new visions. A performance is always a work that is autonomous from its creator, because no matter how much it can be modified or directed, it has its own character that develops during the rehearsals and follows its own path. In the case of the ELP method, this process is even more evident and pronounced. I allow the body that embodies the instructions to create its own narrative, free from my own thinking. This is exactly what happened when I worked with Juliet on the creation of WECHSELWIRKUNG's choreography. From the embodiment of postures through listening to descriptions, both individual (Juliet and my versions) and collective choreographic structures were born, which developed between consonances and dissonances. The performance space was divided into three main areas: the musicians' space, and two red squares, in which Juliet and I were acting—a double stage. The ELP method, through the sharing of the same vocabulary, has allowed for the emergence of figures, recurring like a reverberating echo from one side of WECHSELWIRKUNG's double stage to another: figures marked by the dissonance that comes from the individuality inherent in each of us, a creation that allows the singularity of detail and the strength of the whole to breathe with an alternation of fullness and emptiness. We investigated the essence, the why of each instant, destroying the sequences that give security. We sought the narration of the body without imposing a narration, concentrating on every single movement. There is nothing more powerful and more fragile than the body, therein lies its humanity. The voice is the body, and expressively using voice and body

together is an act in which fragility and power continually challenge and alternate. It is precisely the fragility of the body subjected to its double stage concentration (movement and voice) that has opened the door to a profound sense of fragility. Juliet's marvelous and powerful soprano voice was measured against the fear of yielding space to the body, the difficulty of a high note in a prone position or while rolling on the ground, the opening of the body in a whisper of voice. These internal tensions served as a gateway to the vision of that inner space of the body, the exposure of being.

The relationship of the body on stage with sound is a fundamental part of my approach to choreography, even when the voice is not used. The body acts and reacts in sound; sound supports the body, deflects its trajectories, changes its state. The choreography of WECHSELWIRKUNG originated from postures investigated in the work process of the ELP project, choreographic blocks linked to my previously created dance solos. This was not a way of conserving creative effort, but a way of analysing even more deeply the substance of the body on stage, of getting inside the fragile folds of its essence. A choreographic ecology that does not aim at saving energy but at depth of investigation. The relationship of sound and music in the body takes place internally; the body's reactions are modified by this relationship. This was an important element of investigation that had been missing from my research in the field of choreography, an element that I had only experimented with at a workshop level and had never had the conviction to explore in depth on stage.

There is fragility in theatre itself, in live performance. We have seen it and experienced it during the periods of lockdown. The fragility of live performance lies in the difficulty it has in existing, in the ease with which it is treated as an object to be viewed through a screen—there, always ready to be switched on or off, paused. Its passage through the screen cools and immunises the vision. At the same time, however, it is extremely important to ready oneself to face the challenges and opportunities offered by different media. The camera is a non-democratic point of view that moves the action within an enclosure, the rectangle of a screen, reshaping the work around this point of view, and thus, in a way, reshaping the underlying concept of the filmed performance, especially if the performance was conceived for a live physical audience. The point of view is a fundamental and indispensable element of work on stage. The position of the audience, of those who, sitting or standing, near or far from the stage, look into the action is a dramaturgical element just like space, sound, light, and body. The point of view, which is never neutral, is a double position: there is my point of view, as dancer, in that I decide where to place the audience and choose which part of the body to expose to the gaze of the spectators, and the point of view of each spectator, who chooses where to sit and which detail of the action to watch at any given moment. In the framing of a video shot, the spectator's choice is eliminated. However, when faced with an impossibility (capturing the spectator's live experience), the only solution may be to look into impossibility itself: the camera can frame a point of view that would be impossible to a live spectator. An example that I have experimented with in this year of absence from the live stage is to place a camera high above the area of the choreographic action—an impossible point of view for anyone—while alternating close-up details of the body.

Setting the point of view in a position which would be impossible for the live audience inevitably generates a new gaze on the body and its action. While it is true that the rectangular area of the screen removes the audience's choice in where to direct their gaze, at the same time it impassions the gaze and can open up new visions, new sections of space. For me, the stage is always a white sheet of paper seen from above, a space enclosed by the structural boundaries of the hall, of the stage space. The choice of the position of the body in the space is then like that of painting on a canvas. What happens if *my* canvas is no longer the stage space but a screen? How can we affect that space, how can we scratch it, dirty it, unbalance it? The close look of the camera pushes the eye into the skin and at the same time encourages it to break through the rectangle imposed by the screen. The sections of body which are visible are grafted onto the invisibility of the rest of the body, making the entire body transparent.

I would like to conclude with some thoughts about the *ELP* project. To me, the word 'archive' connotes ideas of a static collection, of immobility, of dust. In the case of the *ELP* project, the archive becomes dynamic, alive, passing from body to body and transforming itself in the process. It is a project that has a strong connection with collective and individual memories. It is a project that eliminates my own body, the body of the choreographer, as a model to be imitated and followed, in order to allow space for other embodiments. And it is precisely by eliminating the model that judgement is eliminated: there is no right or wrong any more, what remains is the essence, the search for the essence.

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Rifts in time

Distortion, possession and ventriloquism in my operatic works

Liza Lim

It starts with distortion:

otototoi—Cassandra's lament against Apollo's curse—Popoi da!

Prophecy pushes against a silencing wall of rationality. The Greek chorus is deaf to Cassandra's words and can only hear the noise of something lost in translation. All they hear is distortion—the distortion created as her words cast from the future are squeezed through too small an aperture in the present.

My first opera *The Oresteia* (1993), performed by the ELISION Ensemble and Treason of Images in a production directed by Barrie Kosky, begins with a delicate meshwork of preverbal sounds from the singers who are instructed to make 'gasping cries of pleasure/pain', 'indecipherable sobbing/laughter'. Out of this realm of 'voice before language' comes further noise: Cassandra crying out to Apollo as the noise of portent. We the audience hear a kind of primordial world of voice—noise that holds a simultaneity of emotional possibilities and states before any kind of clear message is precipitated out. (See Fig. 1)

The opera is a 70-minute version of Aeschylus' trilogy in which fragments of story emerge through the performers in acts of possession. The floor of the stage is charged, barely separating the living from the dead. Any of the singers or musicians that step onto its surface can suddenly be caught up as channels to the unrequited voices of Cassandra, Clytemnestra, Agamemnon, Orestes, or The Furies. *The Oresteia*—a well-worn tale that has worked well for opera composers, a mythic story that doesn't need much re-telling because one already knows the outlines. The possibility of relying on a certain level of redundancy in the text and

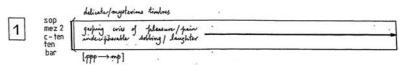
The libretto is based on Tony Harrison's version of *The Oresteia* produced for the National Theatre Company, UK with music by Harrison Birtwistle. In *Agamemnon*, the first play of the trilogy, the Trojan princess and prophetess Cassandra begins with an emotional outcry: 'otototoi popoi da! Apollo Apollo.' Apollo has given her the gift of prophecy and cursed her so that she would never be believed. The old men of the chorus reply 'Listen! Again. Apollo hates the sort of note / that comes strangled and anguished out of her throat.' The chorus teeter on the verge of comprehension faced with the brutal force of Cassandra's vision yet ultimately can 'make no sense / of these dense riddles that grow more dense', famously declaring: 'No oracle's clear though they all speak in Greek' (Harrison 1985, pp. 215–220).

'Liza Lim

THE ORESTEIA

Memory theatre (opera) in 7 parts based on Aeschylus' drama

> ε δουμόνων δέ πον χάρις βίαιος σέλμα σεμνόν ήμένων » ~Αίσχύλου



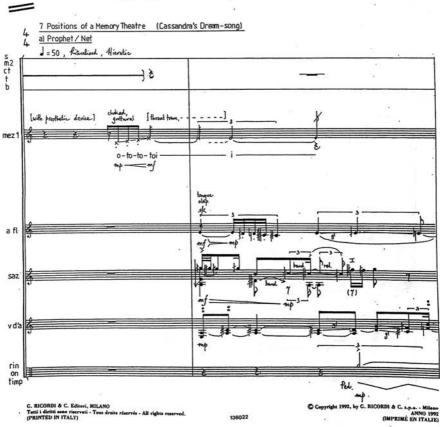


Figure 1 Score excerpt, opening of Lim, *The Oresteia* (1993), bars 1–3 (Ricordi Milano, used with permission).

its meanings allows me as a composer to occupy a more speculative space in which music's affective power can do most of the work of communication.

This early experience of making opera, in which a predilection for excess is sustained on stage by the thematic framework of performers who channel archaic forces, has shaped my dramaturgical choices in three subsequent operatic works. The ritual staging of presence itself has been at the forefront of my concerns. In these works, story usually exists as a mythic template for archetypal figures, for symbolic psychic manoeuvres and for projections of various kinds. Where story is foregrounded, it is deliberately about the re-telling of a story. In *Moon Spirit Feasting* (1999), the Monkey King and the Queen Mother of the West, a demon goddess, compete in a song competition to tell their versions of the tale of Chang-O, the Moon Goddess. In *The Navigator* (2008), the story that is retold is of a ship that flies a false flag, announcing the fake news of Isolde's death, as Tristan awaits her arrival. In my most recent opera *Tree of Codes* (2016), Adela sings: 'Let me tell you a story' before recounting a version of the fairy tale become horror-story, *Erlkönig*.

Each of these re-tellings is concerned with narrative slippage, where meanings are ambiguous and open up a rift. Something arises in that rift; it is there that we find extra presences that compete to be heard. What the hell is the story really about? This extra presence—the hidden voice, the story that lies beyond another story—is staged in my work through possession and ventriloquism. In both states we are dealing with a special kind of voicing, a voice that comes from pushing one identity aside making place for another to come forward.

Distortion is almost a default state in my music. It comes from a fascination with emergence, the sense of something arriving. I say 'pushing aside' because with distortion there is distension and compression. That deformation suggests to me a trace, the evidence of invisible presences squeezing through into our spacetime field. Distortion brings strangeness, alien-ness, divine or demonic energies, shock, repulsion, awe and other signs of the sublime into view.

In my opera *The Navigator*, there is an Angel of History character borrowed from Walter Benjamin's famous aphorism. The Angel is a figure 'moving with its back to the future', ² a paradoxical inertia-filled movement into the future whilst looking at the spillage of the past. The Angel for me is, like Cassandra, a figure possessed by a future-present state whilst also channelling the past. What would the voice of that conjugation of time sound like?

² 'This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing in from Paradise; it has got caught in his wings with such a violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.' (Benjamin 2019 [1968], p. 201).

The Angel of History channels multiple voices—there are human, demonic-angelic, bird-like and bestial voices that are trying to break through and they're all competing for space in the cavities of the singer's body. These voices possess the singer, moving her and jerking her around like a puppet. The distortion here is completely acoustic and analogue, without the use of any electronics. The soprano is singing and whistling through a little plastic membrane stuck to the top palette of her mouth resulting in distortion effects created by the interference patterns of the criss-crossing lines of sound. The singer is literally grappling with multiple fields of energy that transform her body as she gives in to these states of possession and pure presence.³

Here, story in the narrative sense of creating a sequence of causal events is veiled; one only captures a few bare threads of text retroactively out of the metamorphoses of language and sound; meanings are suspended during the performance and concepts overwhelmed by the intensity of those simultaneities of many voices.

A variation on the theme of a play of voices and identities can be found in my Chinese street opera *Moon Spirit Feasting* where *voice* might be understood as grammatical *person.*⁴ The opera deals with multiple versions of the story of Chang-O, the Moon Goddess who stole the elixir of immortality and flew to the moon—ask any two Chinese people to tell you the story and I can guarantee that they'll immediately get into an argument as to whose version is more authentic. This contestation of the story and who gets to tell it is one of the thematic throughlines of this opera.

Scene 6 of the opera is called *Chang-O Flies to the Moon*. The text by librettist Beth Yahp is structured around a set of grammatical translations in which the character, Chang-O, first tells her story in the third person, and then shifts to the first person before reaching out into the second person—from 'she', to 'I' and then to 'you', the 'shadow sister'.

³ See video: 'Angel of History' aria from *The Navigator* (2008), libretto by Patricia Sykes, performed by soprano Deborah Kayser, ELISION conductor Manuel Nawri, director Barrie Kosky. Available at https://www.youtube.com/watch?v=DvnAwCcDl6U (accessed 22 April 2021).

⁴ See Lydia Liu, 'The Question of Meaning-Value in the Political Economy of the Sign' (Liu 1999, pp. 28–29) on the translation of Chinese pronouns. The gendered 3rd person *ta* only came into use in written Chinese in the early 20th century when Chinese scholars 'invented' it to translate European texts. Originally, what is now the third pronoun 'it' also indicated 'he' and 'she' contextually.

Scene 6: Chang-O Flies to the Moon⁵

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Transformation Song
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She is the moon-heart's furnace, brooding.
Her Fortune's flown, arrows pursuing.
Mouthless, throatless, she gorges sun and moon.
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I take the Herb of Immortality I fly up to the moon.

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I, Chang-O, turn myself
into
my
self.
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Moon toad, moon shiver –unmanageable creature!

Before my blood and spirit fused, I was already burning. Womb ice wanting Pregnant with fire.

Restless ghost, I recognise you. Once we suckled like sisters. Your breath, my boldness. Your sting, my sinew.

I rise I ripple I reach

I resonate

I relinquish

I face

I embrace

you.

(Beth Yahp, 1999).

⁵ Libretto for Scene 6 of *Yuè Ling Jié—Moon Spirit Feasting* (1999), 'Transformation Song' by Beth Yahp (used with author's permission).

In the music, distortion is again the destabilising, liquidating energy that enables movements between states of being. The verse structure is matched by the looping of musical phrases that start with a high-pitched suspension on the third person pronoun, 'she', moving to distorted ululations that jolt things forward into a tracing and retracing of melodic contours. At the word 'I', there is a shift to the declarative spoken voice. The bondage of the musical circling is broken. The sound of the woman's speaking voice is an authoritative gesture before she goes on to sing her own name and claim her story.

From a kind of estrangement or dissociation of identity, the text traverses different facets of personhood—it moves from a distanced view of the subject being spoken about to a self-speaking subject that, in a twist at the end, brings in an extra layer of unification with a transpersonal self. Chang-O's scene ends with an embrace between 'I' and 'you' suggesting a new I—you pronoun. Rather than having a subject—object relationship, there is a sense that an ongoing and continuous passage of transformation between them is possible. I and you are zones of respiration in the singer's body, an inhalation and exhalation of identity figures. There I see something of the ventriloquist's subjection of and possession by another subject.

The woman's voice has been ventriloquized by men in operatic history as a damaged voice just as her body is there to be damaged. In so many operatic mad scenes, the female voice has been associated with emotional volatility and loss of control. Opera has often focused on the woman's voice as a siren call—seductive, sexualized and dangerous. And actually, all power to that! The gendered valuations and devaluations of things variously called shrill, volatile, hysterical—in other words, everything related to distortion—are for me a source of deep knowledge and beauty. For me, there's a basic truthfulness in noise, particularly the high intensity full spectrum kind, and the way it disrupts norms, the way it invades the body and blurs boundaries, the way ecstasy creates its own time and space and physicality. Noise creates force fields with which and within which one can conjure up presences.

In my most recent opera *Tree of Codes* (2016), premiered by Oper Köln with Ensemble Musikfabrik, the theme of ventriloquism as identity shift is attached not just to the female character Adela played by soprano Emily Hindrichs, but also to the figure of the Son played by the baritone Christian Miedl. The opera is based on Jonathan Safran Foer's cut-out book of the same title, which was made by filtering words and phrases out of existing stories in *Street of Crocodiles* (1943) by the Polish writer Bruno Schulz.⁷ With Safran Foer's book, one can read the

⁶ Or as put succinctly by Catherine Clément, 'Dead women, dead so often' (Clément 1988, p. 47).

⁷ Bruno Schulz was born in 1892 in Drohobycz, once part of the Austro-Hungarian empire and now part of the Ukraine. Schulz was killed in the street in 1942 by a Nazi Gestapo officer and much of his work is lost including the manuscript of a book called *Messiah*.

story of a man's last day of life (or extra day of life) by focusing on the surface of each page, but one also can literally see through the holes or slots cut out of each of the pages to glimpse multiple layers of the story to come. It's a perforated story marked by an existential riddle: how do we know we're alive and what would we do with one last day?

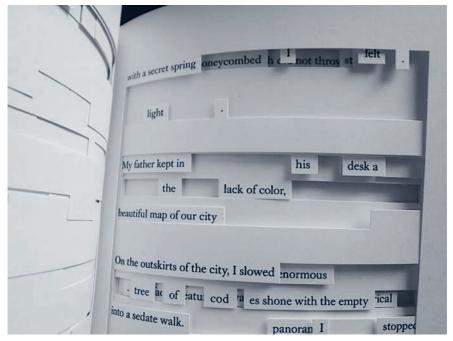


Figure 2 Page view, Jonathan Safran Foer's Tree of Codes (2010), photo: L. Lim.

The Son asks questions about the erosion of time and provides the answers: 'Is my father alive?'; 'No, he's dead'; 'Does he guess?'; 'No, he doesn't guess'; 'This is a secret operation'; 'Here we reactivate time past'.

The text of these riddles is drawn from Bruno Schulz's stories and is performed in both the original Polish and in English translation. Translation is also an activity of boundary crossing in which differences of context, nuance and meanings encoded in other tongues must be delivered into new mouths. There is the pull of the strange and the friction of inevitable discrepancies as one idiom turns into another. If one understands both languages, one might also experience a kind of magic trick that can emerge in a third space of meaning between the lan-

Safran Foer's work interacts with these layers of Jewish history evoking practices of Jewish sacred textual tradition and the 'trope of the transcendent book'. (Rody 2020, p. 353).

guages.⁸ If one comprehends just one of the languages, the traction of difference can take on a metaphysical foreign-ness. Incomprehensible words stand in for the animacy of the unknown, a world beyond one's reach.

The Polish–English dialogue is performed by the same character; the lines are first spoken and then sung. The questions and answers bounce around as if they were voices in the head of the Son as he hovers over the Father's body. The distortion of competing voices is not replicated in noises from within the body, as is the case with the Angel of History. The singers in this opera generally vocalize in a rather lyrical *bel canto* way and distortion is instead voiced in the instrumental accompaniment. In the section following the Polish-English dialogue, that quality of otherness that I seek to evoke through disturbances in sonic surfaces is grafted around the baritone voice by the accompanying solo bassoon. The Son, now turning into the Father, sings of death and madness, caught up in a rocking lullaby-boat song of bassoon multiphonics.⁹

Instruments are used as off-board components of the voices in various ways throughout the opera. This aspect of instruments as distributed components of voices was highlighted in the original production directed by Massimo Furlan where the instrumentalists appeared on stage as characters, moving and interacting with the singers and actors and at times also singing. Their presence on stage heightens the artifice of the theatrical situation—there's no backstage for costume changes or separate pit area for musicians—you can see the dress up, you know it's a drag show, the puppets and the masters are all in view.

Yet there is much that is hidden in plain sight. Though things may seem to be obvious, like all good magic tricks they also remain somewhat unaccountable. At the end of Act 3, Adela swaps roles with a plant–creature and relates a version of Goethe's *Erlkönig* as told by Bruno Schulz. What you hear is both her chanting whisper and the chanting of rasping woodblocks. Just as she moves into a more-than-human state as a plant-woman, the speech patterns of Goethe's poem are transferred into beyond-human, froggy, insectoid scraping sounds. The text is hidden but the meaning still comes across—the thread of the story is carried into an alien soundscape, yet we still understand what those blocks are saying in their secret woody tongue.¹⁰

⁸ The term 'third space' is drawn from and has resonance with Homi Bhaba's work on representation beyond or between binaries in postcolonial discourse though that context is not specifically invoked here. For more discussion, see (Wolf 2000, pp. 127–146).

⁹ See video, excerpt from Act 3, Tree of Codes, Baritone, Christian Miedl; doctor, Stéphane Vecchione; bassoon, Lorelei Dowling; Ensemble Musikfabrik conducted by Clement Power, directed by Massimo Furlan (Cologne dress rehearsal, 2016). Available at https://vimeo.com/224750006 (accessed 22 April 2021).

See video, end of Act 3, Tree of Codes, Adela, soprano Emily Hindrichs, Oper Köln, Ensemble MusikFabrik conducted by Clement Power, directed by Massimo Furlan (Cologne dress rehearsal, 2016). Available at https://vimeo.com/224750564 (accessed 22 April 2021).

Wer reitet so spät durch Nacht und Wind Es ist der Vater mit seinem Kind (Johann Wolfgang von Goethe, *Erlkönig* 1782).

These are words that tell a devastating story of delirium and death and I think they're made even more devastating when spoken by blocks of wood. In those scraping sounds something else beyond the words is coming through and coming to life. Like Bruno Schulz's stories in which mutant birds made of papier mâché fall from the sky, where people are turned into useless machines and the father turned into a cockroach, objects and life-forms become interchangeable. The semantic communication of the soprano's voice is replaced by percussive utterance, by sonorous gesture. We trick ourselves into hearing words where there are none. Inanimate wooden blocks take on an animistic power. In agreeing to the illusion—that woodblocks speak—we fall for the oldest ventriloquist's trick in the book: we ourselves recreate speech from less than clear enunciations and believe that the words emanate from the puppet. We put up with the poor sampling rate of the information and anthropomorphize the object. The retroactive meanings we put together after the fact, are the future collapsing back into the past so that we understand what is happening as if it were in the present. Ventriloquism is an act of shifting time-space, a shifty sleight of hand between meaning and voice.¹¹

Voice, mouth, mute. Plato 'used the word 'mouth' as an insult, to say it lies, and called poets muthologists' (Hua 2021). What is the lying, mouthing story that presses past insults and must be told? Cassandra's catastrophic prophecy? The Angel's disfiguring song, Chang-O's story of power, the Son's song of the dying father, Adela's haunted vision? What ties these together is the suppressed story and the sense of abrasion created as the story comes rushing forth. These kinds of hidden stories, often told of and as told by women, create contact noise. This is the noise of frictions as that which is muted meets the lines of power constructed in the world by those who cannot and will not hear the story. The rasp says 'listen': attend to the friction of difference; 'beware': heed the danger as the unvoiced passes across the rift into the voiced; 'yield': flex to the possessive expressivity of time's abrading passage.

In my operas, there are oblique relationships between story and sound, meaning and presence, where things may not be in the places where one might expect to find them.

Timothy Morton in his book Realist Magic says:

Time emerges from relations between things. The meaning of an object is in its future, in how it relates to other objects, including those objects that constitute its parts. Relations are hollowed out from the inside by the un-canniness of the objects between which

¹¹ See Connor (2000) for a virtuosic and comprehensive discussion of this fascinating subject.

they play. This hollowness just is time. To figure out what a relation is, means to build another relation. (Morton 2010, p. 93).

I use the word 'rift' to point to Morton's sense of the uncanny around the hollowness of time. Like uncanny time, the rift is relational. It is made up of precarious transformations in which one can never be quite sure who or what will arise to speak or whether anything at all will arrive to inhabit the eagerly prepared husk of the self. Too much static can easily get in the way of reception. But the allure of the rift's relationalities lies in the promise of intensities as things are uncovered and recovered. The ferocity of possession and the beauty of distortion as one moves between the hidden and the revealed can be approached via rituals that make rifts in time.

Time—the possible rifts of future-present-past—is like the ventriloquist's art, a hollow dummy perhaps, ready for the operatic stage and all its illusions.

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The development of Brittle On the delicacies of minerals

Electric Indigo

This is the revised transcript of an online lecture, presented in the Fragility of Sounds Lecture Series on 11 February 2021. It was followed by a listening session of Brittle, a composition commissioned by the On the fragility of sounds artistic research project.¹

Hi everyone. My name is Susanne Kirchmayr, also known as Electric Indigo.

What I'm going to talk about today is my approach to this commission and my observations during the process of working on *Brittle*, the piece that we are going to premiere immediately after the lecture. First, my deepest and heartfelt thanks to Pia for the invitation; the theme 'fragility of sounds' is something that is extremely inspiring to me. This was clear to me from the first moment. A lot of my work around the piece is directly inspired by the idea that sound can be fragile—and by my thoughts about what 'fragility of sounds' could mean. I found it very stimulating, Pia, when you asked me early on to also do an artist talk, or some sort of theoretical contribution, and mentioned that the research project is interested in my working process. I took this request quite literally and made it the theme for my artist talk today. In fact, it was only because you asked me to do a talk that I began to record my working process, keeping track of it over the course of the year or so that the project was in the making. I started to observe myself: how do I work, how do I create new sounds, why do I have which ideas, and all that stuff... I hadn't reflected much on that before, so you gave me a good reason to start.

For my talk today, I will be using a few technical aids: the normal camera view which shows my face, as well as another camera that will show some of the devices I work with and some notes I've made. The point is not to see what is written here, but to see the material: paper with some handwriting on it. I will also share my screen and show the software I work with, so that you can see for yourself what I did to compose *Brittle*.

Okay, let's start from the beginning. First of all, I noticed that I need deadlines. Without deadlines I probably would never finish anything. It seems that this is the most important thing for me and my working process.

¹ The composition is available from Ventil Records Vienna http://ventil-records.com. See also the list of commissioned compositions in this book.

Secondly, I love working on a new piece, let's say, in the back of my mind. It's not that I sit down and think about something for days and weeks and months, but rather that I think about the 'fragility of sounds' sometimes here, sometimes there; the process is running in the subconscious before things begin to materialize. While making *Brittle*, for example, I went out and did things like visiting minerals in the museum, coincidentally together with Pia, and began to associate these minerals with fragility. This association wouldn't have happened without the commission to compose this piece.

Finally, I sat down and started to make some notes. At first, I thought that I would write down much more, perhaps making drawings and sketches, collecting some nice notes and materials that I could use for this lecture, but that didn't happen. So, obviously, such sketches were not necessary for the process. There were two sorts of ideas or associations that I wanted to write down. One was for materials and the other one was about qualities: What type of characteristics would I associate with the fragility of sounds? Regarding material, there were some clear favorites: glass, for example, or paper—not like the flat paper, but rather the edges of a sheet of paper; objects from folded paper, which are kind of stable but also very fragile and not very durable; a kind of light wrapping tissue that is called Seidenpapier in German; very light wood like Balsa wood, thin pieces of wood that can break easily; glass fiber; and also Erionite, which is one of the minerals with exactly this kind of fiber structure. We saw this mineral in the Natural History Museum in Vienna, and I found it extremely fascinating. I would generally think of minerals as particularly solid and durable, but there are also minerals with very thin fibers. They look super-delicate and I thought this was fantastic. There's another mineral called Aragonite, Eisenblüte in German, which has an almost snowflake-like structure. Other materials on my list include: the needles of trees, dried leaves, snowflakes, and to a certain extent also drops of water—and certainly dust!

After compiling this list of materials, I looked into the characteristics I would correlate with the fragility of sound. One of the most important attributes, at the top of my list, is *spröde*. I don't find *spröde* easy to translate into English, but one possible word is 'brittle,' the title of the piece. Let me look for other translations: brash, thin, prim, anything that indicates that something can be broken easily: *splittrig* (a material that is prone to splintering), *zerbrechlich* (breakable), dried, ephemeral, *kerbempfindlich* (a very technical term for 'notch-sensitive', or prone to chipping), *zu Staub zerfallen* (disintegrate into dust, or more poetic: 'ashes to ashes'), delicate, instable. These are the qualities I had in mind when I started to create sounds, which naturally led me towards higher frequencies of sound. When I think about something that is unstable, long-waved bass sounds don't come to my mind, neither do pure sine waves, but rather non-periodic waveforms and high frequencies, in particular those that are maybe even hard to recognize or hard to hear because they are so high. I also think of short durations and transients.

The first recordings I made for *Brittle* were recorded here in Berlin at my partner's studio. I started by creating modulated noise-sounds from the modular synthesizer that is on my right-hand side, as a first step. I recorded a nice collection of these noises, which I named *Knister* (this German word roughly translates as crackle or rustle).

Audio example 1: https://soundcloud.com/indigo/knister-examples/s-1wGsg0FejNt

These are a few examples of the very first *Knister* sounds that I started to record. I think they already fit quite well with the idea of something that is harsh, but easily breakable.

I then collected ideas about how the piece should sound in general. I thought, okay, I do not want a regular, continuous flow of sound for this piece, I want sound to occur erratically, and I want it to crumble at times, or to break away; I want sound to be instable and unpredictable to a certain degree. In another step, even before creating any *Knister* sound, I had thought about the structure and duration and produced a plan for a 30-minute timeline for my composition. I was happy with this plan; it had a build-up with very sparse sound and then something really noisy, then, again, silence, followed by harmonies that only build up very slowly.

All this was just empty theory, though, because when I made the piece, it evolved in a completely different way. I have already noticed this in the past, many times. First of all, at least for me, it is necessary to develop a central idea about what a new work should revolve around and sketch a preliminary plan for the structure. This, then, is super helpful for the entire process of composing. It doesn't matter at all if the music turns out completely different later on, it's nevertheless a great starting point for the process.

In the past months, I have paid more attention to and reflected upon the importance of the tools that I work with. I became aware of how the machines and devices that I use inspire me. I also made a list of the methods and tools that I intended to use for this composition. The principal tool I use is the new version of Ableton Live, Live 11.² I was able to beta-test it and explore its magnificent features when composing *Brittle*. For example (this is quite important, so I will change the view to the overhead webcam), you see this cute little device here, and the similar one next to it, the colorful one. This is my latest MIDI controller. It's a Sensel Morph³ and you can use it with various overlays, for example with a keyboard emulation or with the Buchla overlay, where you can play chords and notes, or with drum pads like the one you see here with the cute yellow dots. Its main advantage is that it can be used to play with MIDI Polyphonic Expression (MPE). This feature is new in Live 11—it allows you to play MIDI instruments or devices

² https://www.ableton.com/en/live/ (accessed 22 October 2021).

³ https://morph.sensel.com/ (accessed 22 October 2021).

that you have in your DAW⁴ a bit more like, let's say, analog instruments. It's like when you play the guitar or the violin; the way you press and pluck the strings affects the resulting sounds. MPE enables you to control the sound in a very similar tactile way. You can map this MPE information to a variety of parameters, such as note-pitch bend or filter frequency. Of course, I had to use these new MPE tools and options for *Brittle*! I composed a lot of glissandi with note-pitch bend within single MIDI notes that you will hear later on.

I'm very much into granular synthesis⁵ which is a digital method to divide audio into tiny fractions (often 10 to 50 msec) and then reorganize and redistribute these 'grains' to create new sounds. So, I definitely wanted to use some devices that work with this method. In my notes, I wrote down a list of audio effects and synthesizers I planned to use for Brittle: the Granular Lab⁶ by Amazing Noises, which is a set of three so-called FSU⁷ [f**k s**t up] effects that destroy and mangle audio signals, as well as, of course, the Granulator II.8 This is my favorite synthesizer. I love to use it for experimentation, to find out how far I can move away from the original sound while processing a given audio sample. Then, there is a new set of tools that comes with Ableton Live 11 called Inspired by Nature.9 Like many of the Live 11 features, it brings in randomization and probabilities, which is why I work with these tools extensively in this piece. So, it turned out that that every time I recorded Brittle in order to finalize the audio for this premiere, it sounded a bit different and different sonic events happened. At some point, I rediscovered the Soundmagic Spectral devices, 10 an audio plug-in suite created by the composer Michael Norris, so I worked with spectral effects, too. I used the iPad app Borderlands Granular, 11 which is also one of my favorites. Let me show you the app, it's this sweet little thing right here. There are these blue circles with the red dots called grain clouds. You can use a probability factor to determine how often they play and how likely they are to play. It is possible to select the grain shape, add a filter and volume for each cloud, and program automatic movements of these clouds, as well as changes of the various parameters. Such a grain cloud is always granulating the audio waveform that is visually positioned underneath. In this screen view, we are looking at the waveforms of sounds from *Brittle* that I prerecorded. I first recorded an excerpt and then processed the audio even further, using Border-

⁴ Digital Audio Workstation, a software or device used for recording, editing, and producing music.

⁵ http://www.granularsynthesis.com/hthesis/contents.html and https://www.soundonsound.com/techniques/granular-synthesis (accessed 22 October 2021).

⁶ https://isotonikstudios.com/product/granular-lab/ (accessed 22 October 2021).

⁷ https://commons.wikimedia.org/wiki/Category:FSU_effects (accessed 22 October 2021).

⁸ https://www.ableton.com/en/packs/granulator-ii/ (accessed 22 October 2021).

⁹ https://www.ableton.com/en/packs/inspired-nature/ (accessed 22 October 2021).

¹⁰ https://www.michaelnorris.info/software/soundmagic-spectral (accessed 22 October 2021).

¹¹ http://www.borderlands-granular.com/app/ (accessed 22 October 2021).



Electric Indigo

lands Granular. I like to use this app for creating textures and atmospheric sounds, particularly in live sets, because the sonic output always changes a bit. It's not stable, it's never a loop, and it constantly varies to a certain degree. I can increase the level of variations by applying the so-called gravity function of the app, which I have turned on now. It makes perfect use of the accelerometer and the three-axis gyroscope in the iPad because the grain clouds slide over the screen according to the inclination and the movements of the iPad. When playing live, I usually keep one corner of the iPad slightly elevated, using the cable that connects it with my computer, so that I have my hands free for other tasks while the clouds slowly glide over the audio samples and thus the sound keeps evolving and transforming.

I would now like to show you how I worked with the MIDI Polyphonic Expression. I'm only beginning to explore this feature. In fact, *Brittle* is the very first piece where I have worked with this, so these are my first steps. Using the sampler in Ableton Live, I assigned the per-note pitch bend¹² values to affect both the loop length of the sample and the stereo panorama: the higher notes are more on the right side and the lower notes more on the left side of the stereo panorama. I combined this with a second track created from a very similar—but not identical—sample and reversed the assignment. This means that the higher notes here

¹² https://www.youtube.com/watch?v=x2QxFnsKWMQ (accessed 22 October 2021).

are more on the left side and lower pitches are more on the right side. You can listen to the results in this example:

Audio example 2: https://soundcloud.com/indigo/perc-pitchbend/s-8gMgNb5rxsL

So, what else can I say about my working process?

I wanted to do something special with the *Knister* noise collection. I did not want to play them back as they are, but instead, I placed two different Knister noises into one sampler. I did this by using the Zone feature of the Sampler device in Ableton Live. I placed one Knister noise into one zone and another Knister sample in the other zone. I panned each sample, one slightly to left and the other one slightly to the right, with the intention of producing a nice and somewhat unpredictable stereo noise. Additionally, I worked with granulated *Knister* sounds to produce, for example, this fundamental long chord, which lasts for nearly the entire duration of the first part of the piece. Also, I used a lot of drum sounds that I made with a very small modular rack that I have at home in Vienna. It was a more or less arbitrary idea I had had before, that I wanted to make music concentrating on drum sounds and then make harmonic and chordal sounds with it, not just percussive sounds. This is what I have tried to do here as well. To me, all of this together represents, in the best way, the kind of instability that I had in mind for my composition. I wanted to compose a feeling of uncertainty, with tonal qualities constantly slightly changing.

Audio example 3: https://soundcloud.com/indigo/knister-chord/s-gg1exvNiQQ0

As you can hear in this example, the chord has many more harmonic characteristics than the original, underlying sample. What else could I say about this? Another central idea of Brittle is that, despite all their fragility, instability, and uncertainty, these sounds and the piece persist. Consequently, the first idea I had for the title of the piece was *Perseverance*. But then I thought, well, that sounds so extremely serious and I'm not sure I want that. Then, something quite typical for my creative process happened: an exchange with friends and colleagues who also work with music. I had a really nice private online meeting with my friend, Jamaica Suk, who is a musician. She makes electronic music, comes from San Francisco, but lives in Berlin. We were discussing track titles and I mentioned the idea of Perseverance. She told me that what she usually does is to open the thesaurus and look up synonyms, in search for words that more or less have the same meaning or are within the same area of meaning. I told her that the working title was simply Fragile. She said, fragile, that's a beautiful word, and that she liked it really a lot. And I thought, okay, maybe I should just call it *Fragile*. Afterwards, I talked with Pia about the title and Pia said, yeah, fragile is nice, but there are so many things nowadays—projects, or work titles, or festivals—there are so many things coming up that have 'fragile' in their title. So, even while still on the phone with Pia, I was looking for synonyms in an online dictionary and saw the word 'brittle'. I thought, 'Brittle, should I call it *Brittle*, maybe?'—*Brittle* is somehow so fresh. It also has the meaning of *Krokant* in German; this word has to do with breaking and crispness. And I thought to myself, 'I like that.'

So, this is how the title came about and, well, I observe that a lot of the process of composing has actually been experimentation, by trial and error. I evaluate my experiments by closely listening to the music. Many initial decisions were made with the idea of a live set in mind, only later I began thinking about a recording, instead.

This is, of course, a situation that has repeated itself many times throughout the pandemic.

IV Fragile collaborative processes

On the epistemic potential (live) electronic music Essay-in-progress¹

Germán Toro Pérez

Introduction

The following text is intended as a reflection on the status of contemporary electronic music. The wider context is the research on the performance practice of electroacoustic music conducted at the Institute for Computer Music and Sound Technology at the Zurich University of the Arts (ICST) under my direction since 2012. This practice-based research is being realized along different projects and bodies of repertoire. It encompasses a wide diversity of aesthetic and technical approaches to composition, different practices such as the performance of historical tape pieces, works combining instruments and pre-produced electronic sounds, pieces for self-developed instruments, and recent works involving live electronic systems.

Throughout all its phases and projects, this research has been based on two methodological premises: exchange within a network of composers, performers, researchers, scholars, archives, and institutions, and the development of our own performance practice in the rehearsal space, concert hall, and recording studio. This has led so far to different output formats: a dedicated database containing articles about specific performance issues of individual works, essays and analytical texts, surround mixes of multi-channel works and, of course, live performances (see Bennett/Toro Pérez 2018; Toro Pérez 2016–2021, 2020). It is additionally informed by the ongoing composition and performance practice of the members of our team and by my continuous exchange with composition students over the past two decades.

In addition to its practical impact for performers, the currently ongoing research into *live electronic music*² initiated in 2018 was envisioned as a chance to offer an actualized view of the practice of composed electronic music requiring *interpretation*, of the conceptual approaches it is based on, the kind of aesthetic

¹ The present text is a first approach towards the definition of a theoretical framework for the review of the current repertoire of electronic music, which has emerged from research into its performance practice. It is based on the hypothesis formulated at the beginning of the ongoing research project (see footnote 2). Since the practice-based study of the selected repertoire has not yet been completed, it has a work-in-progress character.

² Performing Live Electronic Music 2018–2022, Funded by the Swiss National Science Foundation, https://www.zhdk.ch/forschungsprojekt/performing-live-electronic-music-558720 (accessed 02 November 2021).

experience it offers to musicians and audiences, and the impact it might have on the development of contemporary art, as related to the expectations, premises, and discourses which have emerged since the introduction of digital systems in the early 1980's.

These discourses are based on analysis of the potentialities of digital technology in relation to analogue electronic devices, as well as the extension of acoustic instruments, the voice and the body through electronic means. From its earliest beginnings, musicians envisioned the possibility of processing digital sound in real time as a way to expand the creative and performative limits of electronic means in terms of efficiency, agency, and expression. Liveness and interaction became key concepts to describe and qualify musical practice involving computers, interfaces, and electronic devices.³ Moreover, the impact of digital information, through new forms of storage and distribution, allowed sampling to emerge as a fundamental practice in electronic music at the turn of the millennium. Broad access to technology and computers drove hybridization and cultural pluralism among creators. Simon Water's (1997, p. 6) reflections⁴ on the transformation of electronic music in the digital age make clear that an understanding of live electronic music today asks for a multilayer view in which technique and technology are only two threads among many others, including: concepts, theories, traditions, performance attitudes, audience's behavior, institutional relations, and forms of access.

From its very beginning, electroacoustic music has been closely related to *research*, even if it was soon integrated in the traditions and rituals of modern music. Its close relation to natural sciences (for example, acoustics, physics, perception, computer science), its inherent *experimental* character, and the multiple forms of practical research, carried out by composers and performers in artistic contexts are unequivocal signs of the privileged *epistemic vocation* of electronic music as its ability to access knowledge through our senses. The debate about research in the arts in the new millennium—which coincides with a shift in the practice of new generations of composers and performers—has also awoken the interest of philosophers in respect to the epistemic entanglements of artistic practice.

These insights give us today, together with a wide corpus of cases and examples, the possibility of revisiting the practice of electronic music in general, and of live electronic music in particular, taking into account its specific relation to *knowledge*. Dieter Mersch's work constitutes therefore one fundamental reference for this text. While his book, *Epistemologies of Aesthetics* (Mersch 2015b), makes many references to contemporary arts and music, it is his specific studies of the

³ See Hagan (2016) for a critical and systematic review.

Waters argues that digital sampling techniques dramatically enhanced the impact of storage and recall, not only by being able to access any point in the disc in any order (random access instead of linear access by tapes) but through the amount of data being stored, leading to the emergence of large digital archives and their access through internet. He speaks of a digital 'sampling culture' after an analogue 'acousmatic culture'.

work of Alvin Lucier (Mersch 2019) that serve as a *prime example* of research through arts, providing additional elements for the investigation of the constitutive vocation of live electronic music for giving access to knowledge through aesthetic experience.

Expanding concepts of philosophy into the realm of the arts, from the perspective of a composer, bears the risk of misinterpretation. This text therefore has an experimental character. My main interest is to find an adequate framework to help us understand, discuss, and perform live electronic music today. I argue that the epistemic, *horizontal* dimension⁵ of electronic music is the place where new concepts, musical forms, representation systems, techniques, and practices have emerged, complementing and challenging approaches to composition in contemporary instrumental music. In fact, live electronic music brings together musical traditions that have been following parallel paths, such as electroacoustics, computer music, and contemporary instrumental composition. It is additionally informed by other artistic practices and by research in natural and social sciences. The intention is therefore to understand live electronic music as a network of discourses, theories, technologies and practices in which the sensory exploration of phenomena becomes as important as otherwise predominant aesthetical categories, such as artwork, material, form, and expression.

Nevertheless, the *vertical* dimension, where power relations manifest, must be equally examined, since *composing* entails the act of taking decisions, *disposing* means, and even *imposing* behavior patterns during the processes of performance and reception. This fact is not exclusive to artistic settings involving technology. It should therefore be asked how live electronic music as a social practice is able to redefine new attitudes, roles and identities of the artists and audiences involved through new forms of expertise, agency, and access. A further level of research in the context of performance practice would be to introduce these enquiries in the context of performative approach to specific works.

Aesthetic-explorative situations

The review of electronic music practice in relation to the production of and the access to knowledge builds the very core of this essay and leads to the main thesis: (live) electronic devices and setups⁶ have an inherent potential to generate aesthet-

⁵ The terms *borizontal* and *vertical* are borrowed from Jürgen Link's description of the interrelations between *knowledge* and *power* in regard to Michel Foucault's concept of *dispositive*, where Link mentions that the interdiscursive dimension of knowledge might be imagined topically as 'horizontal' and the socially stratificational dimension of power as 'vertical' (Link 2014, p. 239). See Mersch (2012) for a discussion of dispositives in relation to mediality and artistic practice.

⁶ See Toro Pérez (2018, pp. 10–11) for a differentiation between *instruments*, *instrumental devices* and *instrumental setups*.

ic-explorative situations and expose our senses to a multiplicity of phenomena. As such, their configurations vary according to various parameters and the current conditions; they must therefore be tuned and adapted, rendering different, perceivable results each time, for each situation. Electronic devices and setups are engaged in the generation of singularities.⁷ This is the sense in which the term experimental has been recurrently understood in electronic music. The phenomena addressed can be related to acoustics, signal processing, space, body, gesture, touch, spectrum, materiality, form, formalization, representation, perception, cognition, emotion, speech, communication, mediality, visuality, multimodality, social processes, among many others. In the end, this can extend to all aspects of music and musicality, to all possible relationships involving sound and music. This implies that aesthetic-explorative situations are not only able to access knowledge through musical experience but to *produce* it as well. They allow phenomena to emerge, reveal, and transform themselves before our eyes, to become audible, tangible, visible. They show what otherwise cannot be revealed.8 This epistemic potential gives liveness and interaction an additional sense: a specific condition for the emergence of insight here and now, as well as the agency to intervene in the process. Moreover, live electronic setups expose their own experimentality: they not only show, they show themselves.9

Of course, epistemic potentiality has been present in every kind of musical instrument since the monochord. However, electroacoustic devices and systems, as well as their proliferation in the digital domain, have a specific constitutive *predisposition* in this regard. Through repurposing of any kind of technology—simple or complex—they build multiple, dynamic and heterogenous instrumental constellations in networks of micro- and macro-temporal relationships. Coding and mapping permit transformative and systemic relations with any digitally represented object. Therefore, electroacoustic instrumental constellations radically open up the scope of musical thinking and practice. This predisposition can be described as their *instrument* character in the sense of *measurement devices*, of tools intended to access knowledge and expand human perception, which are different from the *instrumental* character of musical instruments understood in a general sense as *means of expression*. ¹⁰

⁷ See also 'singular paradigms' (Mersch 2012, pp. 33–8; 2015, pp. 157–8) and 'singularity' (Vaggione 2010, 55–56).

⁸ See Mersch (2015a, p. 131) for a discussion about different modes of relation to truth in philosophy and arts through the difference between *saying* and *showing* [*sagen/zeigen*].

^{9 &#}x27;At the same time, and this is a particularity of artistic epistēmai, they always also refer to their own mediality. [...] There is no work or conceptual statement that does not thematize itself' (Mersch 2015b, p. 144).

¹⁰ Any acoustic instrument is fundamentally a sensing device. The difference *instrument-in-strumental* is not intended here to the detriment of *expression* as aesthetic category.

Electronic devices and acoustic instruments

It is well known that electronic devices originally conceived and built as measurement tools were functionalized in the electronic studio as musical devices. The prototype is doubtless the sine wave generator. Bernd Alois Zimmermann's (1968, p. 56) characterization of the sine wave as 'pre-sounding' (*vorklanglich*) due to the absence of a spectrum and 'surprisingly reluctant to all differentiated transformation methods' is meaningful. On one hand, he acknowledges its different behavior as material, nevertheless he has no doubt about its instrumental character and is willing to manipulate it as a further musical instrument (Zimmermann 1968, p. 57).

For anyone working with sine waves in the studio or in the classroom, their function as tools for exploring, understanding and explaining phenomena of acoustics, psychoacoustics and signal processing is evident. Sound waves, as artificially generated ideal atoms of sound have an inherently epistemic character; as a tool of insight, they have the same analytical status as the ancient monochord. They also continue to serve as measurement tools for the calibration of electronic devices and systems. The same can be said, for instance, of noise generators and analytical devices such as envelope and pitch followers.

Of course, acoustic instruments also have the potential to activate epistemic insight. However, even if it has been re-activated in contemporary music—at least to a certain extent—these instruments are understood in the first place as means of expression. This reflects the discursive foundation of Western art music, in which speech articulated by way of instruments and voices has been predominant. In the German language, fundamental musical terms are homonyms used in grammar, revealing the impact of language on the very concept of music: for instance, *Stimme* (meaning inter alia *voice* and *musical part*), *Satz* (meaning inter alia *sentence* as well as *movement* and *musical text*), *Phrase* (meaning inter alia *expression* and *chunk* as well as *basic melodic unit*). These terms stress the model character of the voice as the carrier of expression and meaning, a character that afforded vocal music a predominance in western art music lasting until the late nineteenth century (Dahlhaus 1986, pp. 39–48).

Perhaps this explains why it was a matter of course, even for composers with established experience in the electronic studio like B.A. Zimmermann, to consider electronic instruments as an additional instrumental family, as a further class in the organological tableau. However, what applies to the ondes martenot and perhaps also to the theremin, cannot be extended as it is to a sine wave generator, a microphone, or an envelope follower. It is no longer necessary to *elevate* electronic devices to the category of musical instruments for the sake of dignity or in order to claim their artistic validity. Musical systems integrating electronic devices have a different genealogy. Edgar Varèse (1962, p. 23) was aware of this fact and of the

consequences this different nature of electronic devices—including the computer—would have on musical thought and practice.

The understanding of electronic instruments as a further extension of the hitherto available instruments is nevertheless a characteristic of modern European electronic music. Although for the post war European, avant-garde electronic music became a symbol for the renovation of modern music, its epistemic potential was neglected at first. The musical artwork and its constitutive elements such as musical language, material, formal disposition, composition technique, notation, and playing technique remained in the foreground, even if electronic music also served as a means for social critique and the representation of human utopias.

Pierre Schaeffer's understanding of electronic means was different. Although he was likewise interested in formal questions, such as the morphology of sound, he understood musical devices from the very beginning as part of experimental settings and used them to explore auditive phenomena within the context of an aesthetic practice intended as *recherche*. In North American computer and electronic music, this approach soon stood in the foreground, for instance in the work of such composers as Steve Reich, Terry Riley, Pauline Oliveiros, La Monte Young, Jean-Claude Risset, Éliane Radigue, and others. It constitutes the basis for an artistic practice that found its most distinctive expression in the work of Alvin Lucier, Maryanne Amacher and other composers of their generation. Live electronic systems and practices are here understood as experimental settings and used to create aesthetic-epistemic situations.

However, one must be wary of underestimating the epistemic aspect in early European electronic music. In the collaboration between Luciano Berio and Umberto Eco at the early days of the Studio di Fonologia, in Karlheinz Stockhausen's early live electronic music, or in the work of Iannis Xenakis, Bernard Parmeggiani and Luc Ferrari, we find examples of experimental projects in which phenomena have a fundamental form-building function, for example with language in Berio's Thema. Ommagio a Joyce, the behavior of acoustic instruments in Mikrophonie I, the exploration of the space between micro- and macro sound in Analogique B (see Di Scipio 1998, p. 219), the relation between sound morphology and hearing in De Natura Sonorum, or the exploration of everyday sounds in Presque Rien. Nevertheless, these phenomena remain side elements of a musical discourse—both in terms of the instrumental avant-garde and the electroacoustic—in which, in spite of experimental attitudes, traditional aesthetical values such as the artwork, musical language, and individual expression predominate. In fact, current electronic music practice today could be seen as an heterogenous field in which expression, representation, and experience coexist, even within individual works.

Network and system

In the digital age, two concepts have emerged in electroacoustic music that help us to further evaluate the concept of instrumental setups: *network* and *system*. Both have a remarkable impact on the disposition of technical means, sound material, formal concepts, composition processes, performative and reception modalities.

The concept of *network*, as introduced by Horacio Vaggione in the context of electroacoustic composition in the digital domain, is immediately related to *objects* in the sense of the elements of computer languages, which define a network's topology through their multiple interrelationships. Objects can include sounds, functions and methods as well as other objects at various levels. Different instances of objects can appear on different places in different timescales, including of course the micro-time level. Their transformations generate cascades of sub-classes.¹¹ This concept promotes a system of variations of materials and methods that yield figures and singularities. It enables composition processes where the elements proliferate simultaneously at different places, instead of being disposed along a linear causal logic. A further level of non-linearity is due to jumps in perception produced by changes in the time scale.

The concept of *systems* has been fundamental for the description of signal processing phenomena. Agostino di Scipio's interest in systems within the context of live electronic processes was motivated by a critical reflection on interaction forms limited to the action-reaction model. Inspired by the work of cybernetics researchers Heinz von Foerster, Humberto Maturana and Francisco Varela, Di Scipio proposes the *composition* of interaction modalities by defining interdependencies within the elements of the system. This led to the conception of complex systems as *ecosystems*, integrating the real acoustic space and eventually the audience (Di Scipio 2003).

Both *network* and *system* conceptualize manyfold approaches to electronic music composition and have several common features: first, the property of *emergence*, meaning that sound and musical relations result from the network relationships and the system behavior themselves, rather than from a teleological formal conception or intention. Secondly, and in consequence, they have an inherent formal *openness*, even if the result is a fixed electronic piece, as in the case of Vaggione's *24 Variations* (see Mouritzen, Toro Pérez 2017, pp. 222–224). Thirdly, their multiple and branched relations result *in non-linear processes*. Fourthly, they change the performer's function and agency, which are strongly determined by the behavior of the system, as in the case of Di Scipio's *Modes of Interference / 2* (see Bennett, Toro Pérez 2021 [online]). Finally, the composition of networks and systems entails the integration of iterative experimental processes, in which observing and understanding the relationships and behaviors between their ele-

¹¹ See encapsulation, inheritance and polymorphism in Vaggione (1991, p. 212).

ments play a fundamental role, before a work—understood as a specific aesthetic and performative situation—finds its final state. A work results not only (if at all) from sound images, representation models and expressive intentions, but also to a large extent the manifestation of the network and the system itself, as a constellation of acoustic and perceptual phenomena, musical materials, technologies, functions, methods and modes of representation. We see here several fundamental elements related to aesthetic epistemic processes: *visibility*, *self-referentiality* and the *emergence of singularities*. From a wider perspective, we also see their impact in the redefinition of composing processes, performing and hearing attitudes and the function of the real acoustic space. Different forms of curatorial practice and social interaction become visible on the horizon due to the integration of other—real and virtual—spaces, which opens up diverse forms of access, participation and institutional framing.

Analytical devices

A final remark on instrumental devices concerns a specific class of devices: those which are capable of sensing and measuring waves, movements and signals. In current live electronic practice, there are, in addition to all different kinds of microphones, devices used for instance to detect light and electromagnetic waves. There are also tools used to measure amplitude and pitch, as well as to extract and quantify other sonic features in the time and the spectral domain. Such analytical functionalities were foreign to composition and performance practice before electronic devices came into use, excepting the relevance of beats for interval estimation and the use of mechanical devices such as the metronome and the tuning fork. They are fundamental for the configuration of instrumental setups and systems, and exhibit the abovementioned *instrument* character, as a specific capability to give insight into sonic phenomena. These analytical devices opened up micro time and the spectral domain for composition and performance practice, bringing perception to the core of the artist's musical thinking and practice. Beyond their specific measuring functions, they act as interfaces between the material world and the world of signal and digital representation, reflecting our own ability to see, hear and touch.

¹² Representation is used here in the sense of a hybrid constellation of notation forms, including symbolic and graphic musical notation as well as different forms of digital representation of sounds, signals, processes, formal relations, performative actions and sonic results.

Provisory conclusions

Art is a different way of perceiving and experiencing the world, a 'different thinking, different-than-thinking' (Mersch 2015b, p. 53). In contrast to philosophy, art knows, 'not because it speaks but because it [...] shows;'13 it is 'thinking as practice, as performance' (Mersch 2015b, p. 11). But to *show* always means to *show itself*; it is a condition that implies that, through art, knowledge both *emerges* and is *self-re-flexive*. This applies to any artistic practice. The questions are therefore: What are the foundations of the specific epistemic force of (live) electronic music? How does it manifest itself in every singular work?

The origin of electronic devices in measurement tools reveals a predisposition: electronic music is based on experimentation through which the very nature of music and perception become visible, audible and tangible. Live processes allow the experimental settings to expose *themselves* as epistemic situations. This could be even said of purely generative situations—without human intervention—that produce singularities here and now, allowing us to perceive *difference*. Still, there must be a separate discussion of the recurrent topos of *otherness* in electronic music, alternately understood as a second dimension, shadow, immaterial presence or different nature. This could help to further differentiate the modes of epistemic experience inherent to (live) electronic music.

Although dichotomies such as expression/experience, instrumental/instrument, linearity/non-linearity, determination/emergence are useful, it must nevertheless be made clear that there is some degree of overlap among these categories. I therefore prefer to speak of *potentialities* that manifest in different proportions in every case and situation, defining how musical form is produced and perceived. They define a dynamic field of forces in which art in general and electronic music in particular appear. The foundational proximity of electronic music to interdisciplinary research, as well as the existence of sound as signal and digital code in systems and networks, define electronic music itself as an interface between modes of perception, artistic practices and genres, cultural phenomena, forms of representation and communication—between the material world and our senses. Practices in composition, performance and reception involving technology open up a field which is acted on by expressive and epistemic forces. Any precise estimation of their impact must be made through the analysis of specific works, while also taking into account their connection to other forces related to social interaction, identity and the construction of reality.

^{&#}x27;The parallelism of philosophy and art ends here, because art's sovereignty is something other than philosophy's insistence in the concept. Art does not know because it speaks, instead it makes recognizable by showing' (Mersch 2015b, p. 115).

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髪 (Hair) Variations Variation of sensibility

Chikako Morishita

Verily the roots of passion are deep, and remote its sources. Though the lusts and appetites of the six defilers (the mind and senses) are many, yet may they all be banished save this one alone [...] Therefore it is said that with a rope in which are twisted strands of a woman's hair the mighty elephant may be bound, and that the deer in autumn will fail to gather to the call of a pipe carved from the clogs a woman wears.

Kenko Yoshida, Essays in idleness1

髪 (hair) variations is a work for solo alto saxophone that was commissioned by hyb. project and premiered in Tokyo on 19 June 2010. This is a thirty minute long solo performance work on which I collaborated with Timothy O'Dwyer, the saxophonist of ELISION Ensemble.

My question underlying this project was the issue of musical identity: what defines the compositional work's and performance's identities? When the musical form or quality of energy enclosed by the form of the music are entirely transformed, can the composition/performance still be recognized and perceived as the same work? There is a traditional Japanese belief that hair is a symbol of longing and one's innermost memory is kept in it. In the Japanese classical text *Essays in idleness*, Kenko Yoshida describes woman's hair as a storage of passion. I find the idea of 'invisible forces enclosed/disclosed by visible form which never lose strength' very provocative and suggestive for my compositional thought.

Structure

The work consists of a stand-alone piece 复 (*hair*) and six variations. Each of the pieces, the original and the variations, correspond to six human sensations—Mind (Longing), Tongue, Nose, Eye, Ear, Body, and Mind (Will), which gradually transform into a composition that develops into improvisation from observations of instrumental practice.

The project explores the spectrum from notation to improvisation: *<variation.0>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while *<variation.6>* is a fully notated and practice-based piece while

¹ Yoshida, K. (2009). Essays in idleness. George, B. S. (transl.) New York: Cosimo Inc.

ly-improvised piece; the numbered pieces in between allow for greater or lesser proportions of the performer's creative input.

In the composition, scores and instructions are given to the performer as the 'input' devices, while the performer's creative output tool is improvisation. The three scores define the performer's dynamic activity and indicate their distance from the original piece: The score A (Figure 1) is the original work *<variation.0>* which is fully notated and practice-based; the score B is basically the same as the original score A but annotated with color indications; the score C (Figure 2) consists of only a few phrases selected from *<variation.0>*.



The instruction to each variation (Figure 3) provides performing information in association with the scores, which frames the composition's temporal direction and ways for the performer to structure the spaces—the spaces between *the performer and the original piece* (playing or improvising), *the performer and the scores* (alterations, numbers of repeats, area to be interpreted, whether or not the performer should have their eyes open to see the score), *the performer's language and composer's language* (allowing or requesting the materials to be put into a language of the performer's choice, presence or absence of the material, order of the material, tempi, and dynamics), *the performer's physical body and the instrument* (with or without reed), and between *the performer themselves and the stage material* (set or remove the score and music stands).

髮 (Hair) Variations - Instructions

||Setting||

The scores A&B (A3 size) are on (five) music stands and the score C (A3) is on a side desk.

Variation 0: Mind (longing) *score A

Play the piece **髪** (*Hair*) < variation 0>. After the performance, remove the score A from the music stands.

Variation 1: Tongue *score B

Play the piece 髪 (*Hair*) < variation 0> as followings:

Blue notes should be played without alterations; green sections should be replaced in the score with something new but that belongs to the same musical world as the original; sections without colour highlights are free spaces: it could be same as the original, something new or silence. The performing orders are free. After the performance, set the score C on the music stands.

Variation 2: Nose *score C

Play the phrases indicated on the score at least once in any tempi and dynamics. Phrases are repeatable and the performing orders are free. The performer is allowed to add his/her music. After the performance, remove *the score C* from the music stands.

Variation 3: Eye *without score

Close the eyes and play the radiance of the piece $\cancel{8}$ (*Hair*) < *variation*0> in your memory. The performer is required to add his/her music.

Variation 4: Ear *score B

Play the piece 髪 (*Hair*) < variation 0> without a reed. After the performance, remove the score B from the music stands and set the reed in the instrument again.

Variation 5: Body *without score

Play the piece **髪** (*Hair*) < *variation*0> with your own musical language. After the performance, remove all music stands.

Concept

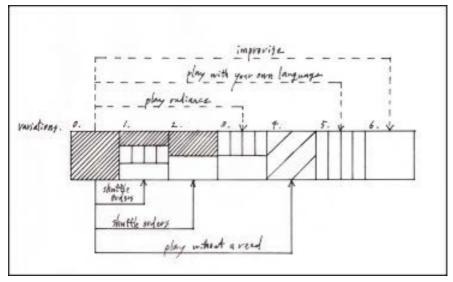


Figure 4 Links between the original piece and variations

My interests as a composer lie in investigating how the performer can be openly receptive to the flux of the moment in a continuous time-flow and how music can reflect the performer's sensibility. These are related to my explorations of the Japanese aesthetics of space & time, in particular the concept of 'ma'. One useful definition of the Japanese cultural pattern of ma is the quality of 'interpenetration', understood as an experiential space where ambivalent statuses and opposite worlds are crossed, merged, and interpenetrated.

In 'hair' variations, this idea of interpenetration pertains to the framing of musical situations, using improvisation and instructions for various alterations to a score to explore a sliding scale of determinacy—indeterminacy, thus allowing the performer's own creative sensibility to interact with the musical space.

Memory architecture

All pieces are derived from the original piece *<variation.0>* which defines the key dynamic activities of the composition in terms of gestural patterns and types of energies. Figure 4 shows how the original piece links with, transforms, and reverses each variation in time flow as follows: the sections of slanted lines are the

same as those of the original or slightly altered; the sections of vertical lines have indications which should be individually interpreted and then played; the sections without highlights are free spaces for the performer.

What such a structural pattern evokes are the inner acts of one's realization of spacing: the space presents itself not only at the moment, but also in the past and future. In 髮 variations, one uniqueness lies in the ending or the exit from the work, which is left fully open to the performer. While the opening is fixed with the composer's language during the course of the piece, space is given to open up the performer's own spatio-temporal construction. That is, the memory architecture or space linkage of this variation work is made up of both the composer's and the performer's creative constructions. It is an interpenetrated identity brought about by a dialogue of the performer's internal and external languages.

Fluctuating framework

The framework of this composition has a fluctuating quality. Through instructions, the performer is allowed/required to/not to entirely/partially insert their own language into the indeterminate spaces such as indicated in Figure 3. In a sense, the ratio between determinacy and indeterminacy can be changed by an individual interpretation of musical spaces and situations. In 'hair' variations, thus, determinacy and indeterminacy are not polarized around two clearly distinguished worlds; it can be understood as a more graduated area.

Presence

What this fluctuating framework alternatively reveals and conceals is the performer's presence. Each variation has a different proportion of the performer's creative input, given by the scores and the instructions, which involve the performer's dynamic activities and ways of encountering performing spaces. Greater and lesser degrees of alignments with otherness reveal the performer's different oscillations of presencing: various degrees of openness or closedness to the moments of change, the moments of transition. In a sense, the varying ratios between the composer's and the performer's control/input associated with the idea of memory architecture, enclosure and disclosure, are affected by the performer's dynamism in terms of diverse ranges of interactions with non-replicable factors, such as the musical situation in the moment and the quality of time and place. That is, the variations are about the changes of the performer's and perceiver's sensibilities and presence, rather than merely variable sound worlds.

Outcome

All variations were developed in a week-long workshop session with Timothy O'Dwyer, an improviser/interpreter/composer, and reflect his interpretation of the original piece.² That is, all phrases in *<variation.2>* are ones that he found specific meaning for through his practice performance of *<variation.0>*, which are the pulsing gestures functioning for him as reference points between unstable linear movements (Figure 2).

Through collaborative processes such as this, I began to develop my musical language so that I could reflect on variations of sensibility and energy—the energy of the performer and quality of place which is given a framework within varying degrees of improvisation or ratios of composer and performer control/input, through which I seek to give visible form to 'invisible' qualities. This structural pattern of 'fixed opening' and 'open ending' with the numbered pieces allows the performer to construct their own narrative contextualized with pre-determined materials and practice-based physical gestures. What I intend to evoke with such a fluctuating language are performer's/audience's realizations of the moment of transition, where I use improvisation as a tool, mechanism, or framework to elaborate indefinable aspects of musical performance.

² The collaboration with Timothy ODwyer was undertaken from 14–19 June 2010 as part of my research-in-residence at Tokyo Arts and Space (formerly Tokyo Wonder Site: www. tokyoartsandspace.jp/en/index.html).

In the thick of it Further reflections on the mess and the magic of collaborative partnerships

Juliet Fraser

In early 2019, full of excitement for various collaborative partnerships that were emerging but also frustrated with the ubiquity and imprecision of the word 'collaboration', I wrote a paper entitled *The voice that calls the hand to write: exploring the adventure of agency and authorship within collaborative partnerships* (Fraser 2019). Through writing that paper, I found clarity; however, my feelings about collaboration became more complex, and each time I came to present it that year, I felt I needed to amend certain points or distance myself from some of my ideas. So, when in 2020 I found myself embroiled again in several collaborative projects, I took a deep breath and decided it was time to write something new.

I am truly in the thick of it. Of the collaborative partnerships that inspired me to write the first paper, some continue to bear fruit whilst others have run their course and, meanwhile, new ones have emerged, each confounding expectations. This strikes me as appropriate, because the process of building each collaborative practice is risky and the results are unpredictable. I'm picking up here roughly where I left off in the final version, from December 2019, of my earlier paper. But if the first was a paper, this is an essay: where the first focused on composer-performer collaboration and was grounded in academic literature, this is coloured by a much more eccentric bibliography and gives vent to a more subjective approach. I decided to write primarily for myself, or perhaps for an audience of makers and creators who may well exist outside or at the fringes of academia, and to embrace the freedom of form and expression that an essay implies. Once again, though, case studies play a role because all this thinking and writing is fuelled by the need to understand the lived experience.

This essay was begun in August 2020, completed in January 2021 for the *Fragility of Sounds series*, and revised for this publication in June 2021. I will largely avoid talking about the pandemic but it is the undeniable backdrop. It is the reason that I have had the time to let my thoughts sprawl and my reading meander, and the precarity of the future has, I suspect, contributed to a certain degree of navel gazing and 'fuck-it-ness' when considering what I want for my own practice and from future collaborations. The result is both a sort of journal of my thinking and an offering to my community, a sort of 'salad' of ideas and propositions—some my own, some best shared in the words of others—and when I write 'we', I am inviting the reader into a collaborative space, a fractured but inclusive network unbound in place or space. I stopped short of concluding with a manifesto, that

level of assertion feeling counter to the spirit of the rest of the essay which seeks to rouse, yes, but rather gently—each sleeping lion has its own dream. I offer the earlier paper and this essay as a footnote to my creative practice and as a personal meditation on the inevitable mess and potential magic of collaboration.

Part I: Contaminated entanglements

Whilst I want to avoid covering old ground, it might be useful to recapitulate what we mean when we talk about 'collaboration' between a composer and a performer. In my earlier paper I proposed that collaboration was 'a shared practice that intentionally cultivates an intimate creative space (physical, intellectual and emotional) and produces a distinctive body of work.' (Fraser 2019, p. 4). I observed that: 'common features of a healthy collaboration are a shared aesthetic mission, a non-hierarchical structure, mutual dependence, a dialogue-rich process, [and a] shared vulnerability' (Fraser 2019, p. 4) and that these features have to be built up over time. I concluded that there was a sliding scale of creative engagement upon which 'participation' might represent the least enmeshed and 'collaboration' the most, and I advocated for its judicious use as a term.

It strikes me now that one crucial word is missing: transformation. Leaving aside the misguided fools who might pursue collaboration as a means of leveraging funding or gaining a status bump through association, the most common motivation for undertaking collaborative work is the desire to expand oneself, to transform and be transformed by the other. Furthermore, I would emphasise that collaboration is about process: for an endeavour to be truly collaborative, the partners must pay more attention to the *way* things are done than to *what* they are trying to make.

This time I find myself wandering like a true *flâneuse* along some unexpected avenues of thought. What might seem tangential is nearly always connected to two questions: firstly, with whom do I want to work and how; second, in what ways could a new attitude towards collaboration 'rewild' my new-music community? I have no map and no fixed destination. I have simply followed my nose, but along the way my thinking has been happily contaminated by the voices of Hélène Cixous, Donna Haraway, Eduardo Kohn, Bruno Latour, and Anna Lowenhaupt Tsing.

It was Tsing who got me excited about mess when she wrote that 'collaboration means working across difference, which leads to contamination' (Lowenhaupt Tsing 2015, p. 28). Where collaboration sounds sanitary, contamination is messy: it describes a two-way transformation, a risky infraction and a breaking through of walls. Collaboration, for me, is about the possibility to travel in new directions, to be contaminated and disrupted by other minds and other disciplines, other ways of thinking and doing. Tsing's image of contaminated entanglements

reinforces my view that mess *is* the magic of so much good work and that the process of building new ways of thinking and doing in one arena of our lives rarely stays sequestered there. It also provides a framework loose enough for me to revisit old ideas about agency and authorship whilst bringing in new ideas about habits, stories, and compost that explore the potential for anthropological, ecological, and feminist thinking to contaminate and reinvigorate our collaborative models.

The quest for agency

As a performer, one of the main reasons for investing in collaborative projects is because I want to be stretched. In my earlier paper I observed that, in collaborative work with specific composers, I felt I had shifted from being an interpreter to being an agent in the creative process (Fraser 2019, p. 11). Agency is associated with autonomy and with individual power, so how does this term come into play when discussing collaboration? Surely there is a conflict there? I would argue not: part of the magic of a true and successful collaboration is that both (or all) parties can increase their sense of individual agency without lessening the agency of the other(s). To borrow Donna Haraway's word, combined creative energies harnessed in sympoeisis, or 'making-with', are always more than the sum of their individual parts. However, it's worth noting that a misaligned or unhealthy collaboration is very likely to result in at least one party's agency being diminished. This is a risky business. Disentangling the self from the collective in collaboration is tricky, but my hunch is that it is each individual's responsibility to tend to their own needs and desires, and to communicate those effectively, within the common aims of the project.

Co-labour and authorship

Discussing authorship in the context of collaborative work is so important. In her characteristic way of messing around with language, Donna Haraway talks about the 'co-laborer' which suddenly, belatedly, had me reconsidering the etymology of the word 'collaborator'—this is, someone *with* whom (not *for* whom) I 'labour'. There is an implicit lack of hierarchy here, even if the precise nature of the labour may not be identical. Of course, it's not essential that every project redefine the roles completely or result in official co-authorship, but building a shared creative practice surely necessitates the navigation of some grey areas. And it does seem that many artists want a more inclusive, flexible model. In their book *The Second Sound: Conversations on Gender and Music*, Julia Eckhardt and Leen De Graeve observe that:

The whole line of testimonies shows a general wish for change in the paradigm, away from the author as a single genius, towards an approach of creation which includes art, the field, and personal life-reality (Eckhard/De Graeve 2017, p. 113).

To get practical for a moment, let us remember that the options for assigning and crediting authorship are many. At the personal level, it may be that a private acknowledgement of the co-labour, of the messy entanglements of ideas and inspiration, is adequate recognition. At the legal level, it is possible to set any ratio of authorship rights with national bodies such as PRS or SACEM without fanfare. Arguably, the most powerful assertion of a collaborative effort is in publicity materials, but for a composer and performer to be credited as co-authors or co-composers is, regrettably, still something of a radical move in classical music. In my experience, pursuing this requires a united front and constant vigilance because so many classical music organisations are not yet used to the co-authorship model. It still surprises me that, when our creative juices have flowed so well in the act of making, they all too often desert us when faced with difficult conversations or intransigent marketing departments. Don't we owe it to our future selves to teach the industry how to serve its artists?

We are still so attached to vertical structures in classical music: outmoded hierarchies abound, in authorship, in billings, in fees, in dressing-room size, in governmental rescue packages... As Hélène Cixous wrote in her call-to-arms, *The Laugh of the Medusa*, back in 1976:

The future must no longer be determined by the past. I do not deny that the effects of the past are still with us. But I refuse to strengthen them by repeating them, to confer upon them an irremovability the equivalent of destiny, to confuse the biological and the cultural. Anticipation is imperative (Cixious 1976, p. 875).

Habits to break; habits to build

Habit is a foundation of any practice. It is by embedding habits that we establish a technique; it is by embodying habits that I prepare material for performance. I have habits in the way that I practice, in the way that I plan my working time, in the way that I think about the voice or classical music or performance or art. Any two collaborators are unlikely to share the same habits and so it is that, through a close working partnership, fresh air can be blasted into their respective practices. Anthropologist Eduardo Kohn, who interrogates our understanding of semiosis and selves to propose an anthropology beyond the human, encapsulates this connection between habit and agency when he writes that:

Being alive—being in the flow of life—involves aligning ourselves with an ever-increasing array of emerging habits. The lively flourishing of that semiotic dynamic whose source and outcome is what I call self is also a product of disruption and shock (Kohn 2013, p. 62).

Within this disruption or shock, we may well find that a habitual 'something' is absent, but absence means space, and space means room for change. Giorgio Agamben explains the creative importance of absence in terms of the Aristotelian concept of non-exercise, or not-doing: 'The one who possesses—or has the habit of—a potential can both put it into action and not put it into action. Aristotle's brilliant, even if apparently obvious, thesis is that potential is essentially defined by the possibility of its non-exercise' (Agamben 2019, p. 16–17).

The word 'absence' all too often has negative connotations, but here it is offered as a creative tool, which may help us as individual and collaborative selves seeking agency. Eduardo Kohn expands our definition of 'selves' by exploring human interactions with nonhuman living beings: 'Selves are the products of a specific relational dynamic that involves absence, future, and growth, as well as the ability for confusion. And this emerges with and is unique to living thoughts' (Kohn 2013, p. 92). We humans believe ourselves to be selves but, in Kohn's view, we are not the only ones. Does this confound the possibilities of collaboration? As the product of a 'specific relational dynamic', might a shared, collaborative practice be considered a self in its own right? If so, it's worth paying attention to the habits we build *into* our collaborative practices. For example: How is labour shared? How are working sessions documented? Who controls the public dissemination of material? How do we deal with confusion? The answers will shape this 'self', for better or for worse.

Stories as bridges

A lot has been said and written about the importance of dialogue between collaborating human selves, but what about stories? Every time we say 'What if we...' we are starting to tell a new story which is, as psychoanalyst Clarissa Pinkola Estés affirms, a time-honoured and instinctual technique to overcome obstacles: 'Story greases the hoists and pulleys, it causes adrenaline to surge, shows us the way out, down, or up, and for our trouble, cuts for us fine wide doors in previously blank walls' (Pinkola Estés 1992, p. 19).

The transformative power of a story is now being recognised in many disciplines as we acknowledge that we are not as objective as we imagine ourselves to be and that we struggle to rationalise our way to new behaviour. George Monbiot asserts that we are 'creatures of narrative';¹ Kate Raworth's model of 'Doughnut Economics' (2017) employs storytelling to effect a paradigm shift. New stories emerge from fatigue and frustration, be it within our artistic practices or at societal systems, when we seek a way to bridge the gap between the present and the hoped-for future. Bruno Latour sees stories as harbingers of a new reality:

See https://www.ted.com/talks/george_monbiot_the_new_political_story_that_could_ change_everything (accessed 12 January 2021).

As for the loops that are beginning to be added to our existence, one after another, making us more aware every day of the reciprocal feedback among agents of the terrestrial world, we need to make models of them—fictions—long before they can be verified in reality. Fiction anticipates what we hope to observe soon (Latour 2017, p. 257).

The stories that we tell matter. There is much important work to do replacing the problematic legacy of tidy, hierarchical, 'vertical' stories (such as the canon) in classical music with the potential legacy of entangled, multifarious, 'horizontal' stories. This isn't a new challenge—I'm sure we've been trying to dismantle the inequalities in classical music for at least a hundred years—but hopefully it feels more urgent because of related societal shifts. The story concerning female composers, for example, has changed because we made the effort to reimagine it. If we accept the potency of a story, we must also accept the potency of words. Words reveal a great deal, which is why I believe it matters to distinguish 'co-creation' from 'commissioning', and which may explain why talking and writing are often given so much space in so many collaborative partnerships. If we're going to change the world with the collaborative work that we do or, better still, build new worlds, we must be precise and yet imaginative in the way we articulate our visions.

Hot compost piles

I'm drawn to the earthiness, the mess, and to the mystery of the mycelium—what pops up and where is always a surprise, just like so many of the fruits of our creative endeavours. All too often we tidy up before we've even started (ever had an idea killed by the process of writing a funding application?), or we can't make the time to sit in the squalor and actually digest the mayhem. This may be why Tsing's book, *The Mushroom at the End of the World*, has found widespread appeal, with many of us enjoying the poetry and possibility of the image of a mycorrhiza, the mutual symbiotic association between a fungus and a plant.

The natural world has forever been an inspiration to artists. But I'm not here to talk about gazing at clouds or valleys: what excites me is the potential for the huge wealth of new ideas in other fields, many prompted by the environmental crisis, to help us further our thinking and our making as musicians. It all connects—we are bodies in this time and place; we interact with other bodies, beings and matter—yet a musician's training is so narrow. Unlike those in the visual arts, we are not taught to engage with other disciplines or to integrate other areas of interest into our own practices. I worry that this isolation stultifies our capacity for transformation, which is precisely why our creative ecologies *need* messy, wild, tangential collaboration. If embarking upon collaboration, what can we, as musicians, learn from mycorrhizal symbiosis? If celebrating difference and diversity, what can we draw from an anthropology beyond the human?

It all connects, but it would be a mistake to think that we—whether musicians, artists, women, or living beings—are all the same. As Latour says: '[...] if we want to have a political ecology, we have to begin by acknowledging the *division* of a human species that has been prematurely unified. We have to make room for collectives in conflict with one another [...]' (Latour 2017, p. 247).

We should not conform; we must stop tidying and unifying. Messy times are upon us and we would do well to habituate ourselves to getting our hands dirty. It's not only in response to the crisis of the Anthropocene that we are tempted either to retort that 'technology will fix it' or concede that 'we're doomed anyway'; it's sound advice that 'staying with the trouble is both more serious and more lively' (Haraway 2016, p. 4) as a response to most challenges. To continue with Haraway's words:

Staying with the trouble requires making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all. That kind of material semiotics is always situated, someplace and not noplace, entangled and worldly. Alone, in our separate kinds of expertise and experience, we know both too much and too little, and so we succumb to despair or to hope, and neither is a sensible attitude (Haraway 2016, p. 4).

Women's work

I now call myself a feminist. I was late to this party, but I have joined the fight for equality. Whilst I still haven't read much literature about feminism, for the past few years I have been steeping myself in feminist literature, and the more I have listened to the voices of women such as Virginia Woolf, Deborah Levy, and Audre Lorde, the more I have questioned the purpose of my music-making. It was not by conscious design that all my collaborative projects, so far, have been with other women. I think it just happened that I started working towards gender parity in my commissioning at about the same time as I began craving a more meaningful experience when working with composers. I had grown tired of feeling like a vessel for other people's creative visions; I had grown especially tired of contorting my sound—my body—to conform to other people's expectations. As soprano Bethany Beardslee has said, 'That's the one thing that's so wonderful about the human voice. You have your own timbre, and it's uniquely yours'—why eliminate the most distinctive thing I can offer?² I realised that I wanted the process of developing and then performing a new work to be more personally embodied, so I set about making space for a different sort of performer-composer encounter.

Cixous throws down the gauntlet of an embodied revolution. Though she is describing the solitary act of 'women's writing' (écriture féminine), I have found

² Bruce Duffie, Soprano Bethany Beardslee: A conversation with Bruce Duffie, available at http://www.bruceduffie.com/beardslee.html (accessed 15 January 2021).

these words to resonate through my collaborative work: 'Women must write through their bodies, they must invent the impregnable language that will wreck partitions, classes, and rhetorics, regulations and codes [...]' (Cixous 1976, p. 886).

How to motivate the women of my generation to wreck and to write? How to learn from the long history of unhealthy collaboration, particularly between male composers and female performers in which the woman's creativity was appropriated and/or controlled by the patriarchal man? How now to move beyond gender in a wise way and harness the transformative potential of collaboration so that we can all flourish at no-one's expense?

As a woman, I continue to struggle to chart a wholesome route through the regular tiny instances of outright sexism or lazy gendered assumptions in my profession. As a new-music soprano, I have had to grapple with the legacies of the amazing women who have blazed the trail before me: Cathy Berberian, Bethany Beardslee, Joan La Barbara, Dawn Upshaw, Barbara Hannigan, for example. Surely each must have their own stories of stolen agency or overlooked contributions and must have battled the problematic roles of 'diva' or 'muse' to, in nearly all cases, male composers. But they do not represent one kind of woman, and I am not them. To quote Cixous again, 'Beware, my friend, of the signifier that would take you back to the authority of a signified! Beware of diagnoses that would reduce your generative powers' (Cixous 1976, p. 892). This is one reason why I have invested so much in building my own repertoire: to avoid the trap of aping someone else. It's also a strong motivator behind my work with eavesdropping,³ as I strive to provide a platform for other women to test their own risky endeavours and increase their sense of agency.

Entangled selves

Contaminated entanglements describe not only the way I view my collaborative partnerships and practices but also the way I would like my practice as a whole to connect to the rest of my life. I am a musician. I am an environmentalist. I am a woman. I am these things and more, alone and alongside others. Integrating and recalibrating my sense of selves is a work in progress—albeit foregrounded under current conditions—as is the act of navigating my collaborative practices. I find meaning in the grey areas, in the mess of the upheaval of the personal bleeding into the professional, the old me giving way to the new...

What I hope we can take from this essay is some encouragement to think outside the box when it comes to composer-performer collaboration in particular and collaboration in general. The imagery of stories, matsutake mushrooms or

³ More about the platform, series, and symposium eavesdropping dedicated to new music is available at https://www.eavesdropping.london (accessed 20 January 2022).

compost heaps should inspire us to risk more, whilst keeping our eyes open. Collaboration can be magical, it's just very important to acknowledge that you're likely to get bloodied and dirty along the way.

Part II: In the thick of it

In this part, I turn from theory to practice, presenting three case studies. As with the first part of this essay, this second part can be read as a follow-up to the equivalent section in my earlier paper, as I document my ongoing collaborative work with composers Rebecca Saunders and Cassandra Miller. Additionally, I reflect on a newer collaboration with composer Pia Palme and choreographer Paola Bianchi. While my perspective forms the basis of the case studies, this time I invited my collaborators to contribute. A lot is left unsaid. The perspectives are also not equivalent: where I focus on the project, I encourage my collaborators to share their more general thoughts on collaboration.

Working with Rebecca Saunders

I have been working with Rebecca since 2015. She has written two pieces for me: *Skin*, for soprano and 13 instruments, in 2016, and *The Mouth*, for soprano and tape, in 2020. I have also performed or premiered many of her other recent works for voice. Rebecca's scores are always extremely precise. What's immediately obvious (and rare) is that she really hears every sound that she has chosen, and that, as a result, her relationship with notation is very exacting—it truly is the medium through which her inner ear can speak to each performer. What I particularly appreciate about her vocal writing is that she is always embracing, emphasising even, the fact that the voice is *embodied*. She welcomes the grain of the instrument and the expressivity of a face working to produce her desired sounds. The voice, in her hands, is honest and imperfect, always seeking first and foremost to communicate rather than to beguile.

As I've acknowledged before, our projects may not strictly be defined as 'collaborations', since we do adhere to the traditional composer-performer roles and we have not built a shared process, but I would argue that our work together has collaborative elements and is often transformative. Rebecca always works very closely with her performers when preparing to write a new piece, searching particularly for unstable sounds and idiosyncratic techniques which contribute to the drama and viscerality that are characteristic of her music. What she describes as 'exploratory sessions' are a whirlwind of experimentation, free-flowing ideas, risk-taking and laughter. I perceive these sessions as the collaborative heart of the process, since they form the intimate creative space from which a bespoke and transformative body of work can emerge.

We began work on *The Mouth* in 2019, joined by sound engineer Alexis Baskind. This time, the exploratory sessions served two purposes: firstly, to explore sounds, starting with some motifs from earlier pieces but soon roving far beyond them to test more extreme possibilities; second, to record all these experiments, assembling a bank of sounds that could eventually be used in the tape part. If I compare my memories of our sessions in 2015 in preparation for *Skin* with the ones we had ahead of *The Mouth*, it's clear that I had grown considerably in confidence between the two. I felt able to contribute more. My knowledge of my own voice and my command over it has increased, as has my willingness to linger at the borders of what seems possible and to push past my own habits. We both acknowledge how lucky we were to find such a skilled and good-humoured colleague in Alexis: introducing a new collaborator to an established partnership can rock the boat but, partly because Rebecca is always firmly at the creative helm, in this instance we found only benefits.

The Mouth was premiered at IRCAM's rescheduled ManiFeste festival in Paris in September 2020.⁴ This project took us all into new territory. I know that working with recorded material (to form the tape part) prompted a new compositional process for Rebecca; she summoned a sound world in this piece that is strikingly different from her previous vocal works. The creative process emboldened me in many ways and I feel a strong sense of ownership over the piece: it feels made-to-measure, but with enough elastane that I can stretch to meet the extreme technical challenges, and is thrilling to perform.



image no.1: Juliet Fraser performing *The Mouth* by Rebecca Saunders © Herve-Veronese-Centre-Pompidou]

⁴ Binaural video of the first performance of *The Mouth* (ManiFeste 2020) available at: https://youtu.be/7XQh1XPl-7E (accessed 24 January 2021).

Rebecca's words on collaboration

Q. Do you consider your work(s) to be collaborative?

As a composer I always work closely with musicians. It feels essential. To understand how sounds are produced and absorb this information; to observe the bodily gesture making and containing the sounds, the physical limits and requirements of a sound, and also the blurred borders of a sound where, through research and experimentation, I can discover new (to me) means of expression and sound production.

Each performer has a particular personal approach to their instrument (or voice). There is the essentially personal and of course also the universal—what all violinists do/need/embody. This is fascinating and inspiring. The process [of writing a new piece] doesn't always involve working together as, if I have written much for the double bass, for example, then I don't always need to approach the instrument again as if for the first time. But with many musicians I have established long-term working relationships where we meet again and again, over many years, exploring particular facets of sound and sound production, [enabling me to discover] new sounds, and from these extremely inspirational collaborative sessions many pieces emerge. The actual sessions are mostly short and intense. This interdependence is very special. There isn't a hierarchy—it is very much that two musicians with different perspectives and skills join forces. But the actual creative process, the composing itself, is my responsibility, and I perceive this is a separate aspect.

Once my experimentation is done, I withdraw and write alone. I find this also essential. Without performers music has of course no meaning, and the score I write is merely an abstraction. So the notation, the writing, everything, must be minutely thought through, be exact, and serve to communicate directly with the performer. I am responsible for the music, the piece or project, and I also feel responsible towards a musician. So no, my works are not collaborative, but I collaborate and work closely, indeed intimately, with musicians and not only is it critical for my work, it is enormous fun.⁵

Q. Any further comments or observations?

Many pieces with a solo part, and really all pieces, are a kind of homage to performers. It is an honour and a privilege to work with performers. I don't think this is anything special—composers were in all ages themselves performers, leading the ensemble on the violin or the piano, whether performing in a royal court or house concerts—this close proximity to the performer and performance situation is organic and essential. Perhaps that's why my spatial collage pieces, which are mostly without a conductor, are so important to me: [in them] there is no go-between between myself and the musician—there is a collaborative, experimental, pro-active environment. Nevertheless, I carry the project and the responsibility for the artistic result. Where collaboration starts and stops, I don't know.

⁵ Email from Rebecca Saunders to Juliet Fraser, 24 February 2020; revised 24 January 2021.

⁶ Email from Rebecca Saunders to Juliet Fraser, 24 February 2020; revised 24 January 2021.

The Tracery project with Cassandra Miller

Stunned by the first performance of her *Duet for Cello and Orchestra*, I approached Cassandra about writing a piece for me in 2015 and we started work in October 2016. The result was—is—*Tracery*, a modular work for meditating singer and tape. Our process involves much sharing, as friends and as artists. We'd always begin with an update on our personal lives and on our current creative desires and frustrations. We'd also share ideas for possible source materials. Once we were working with material, my main task was to get into the meditative zone, feeding back to Cassandra the sensations or emotions that surfaced. Hers was to record each pass, to 'compose' each subsequent headphone track, and to 'hold' me, I suppose, in my unguarded and open state. It's worth restating here that intimacy and vulnerability were at the heart of what we were trying to create together. We wanted something truly collaborative, and a lot of risk comes with that. To date, we have made five modules. We were halfway through making an hour-long installation for the Aldeburgh Festival when lockdown descended in March 2020. In retrospect, this commission marked a new chapter for the project.

Until this point, our collaborative process had been marked by an unhurriedness. Though there were deadlines to meet, somehow we always felt we had time to experiment, to discard at least as many ideas as we might test. Right from the outset there was also a very lovely enmeshing of the personal and the professional in the way that Cassandra and I worked together. With the great gift of the installation commission came a particular set of conditions and a significant change in pressure; the process that had evolved so spontaneously faltered under these new conditions and, to our terror, the magic evaporated. During a week-long residency in March 2020 it became clear that unhurriedness was off the table and roles would have to be formalised. This eroded some of the space that we were used to giving over to the personal and introduced an imbalance into the time and creative energy we were each contributing and thus our sense of agency and authorship. This was a stark reminder to me that the central ingredients of collaboration—good communication, intimacy, and equality—demand time at every step along the way and cannot be taken for granted. Yes, it's laborious.

In fact, our process did prove resilient enough to generate some usable material. We made the *T. Rex* module⁷ during that residency, and there are a couple more contenders filed away. The future of this project is uncertain, like everything at the moment, but I can say that the *Tracery* journey has been beautiful and surprising and truly transformative.

⁷ Available at: https://youtu.be/pCmHDvChtJc (accessed 24 January 2021).

Cassandra's words on collaboration

Q. Do you consider your work(s) to be collaborative?

Yes, all of it, to differing degrees—or rather, in different ways. Some projects are properly collaborative in their workings, where another person and I work very closely together on the core aspects of the creative process, but other projects (even if I am simply 'delivering a score') almost always stem at the very least from a meaningful and nourishing mutual inspiration. I haven't thought about whether or not I am using the word 'collaborative' correctly in that context, but internally I do consider myself to be 'working together [with]' in those situations as well.

Generally, though, in a sort of common sense of the term, *Tracery* and my duo with Silvia [Tarozzi] are my current projects which explicitly prioritise collaboration.⁸

Q. What are the hallmarks of collaboration, in your experience, both in terms of process and outcome?

Hm. I find this question difficult actually. I don't know if I can answer it in general terms, perhaps only in relation to specific projects...

What makes *Tracery* collaborative is a mutual investment in the creative process. We often (though not exclusively) have different roles, but we commit in principle to doing as much of the work together as possible. We try to share the workload, the decisions, the artistic risk and vulnerability, the credit—but more than this, it's about working together to find making-activities that we can do together that *flow* for both of us in the moment of making (flow having something to do with creativity, with shared explorative/nourishing meaningfulness), and to prioritise the experience of those making-activities above the outcome.

In terms of 'outcome', I'm not sure that *Tracery* is truly more collaborative than any other situation where the composer is hidden from the audience and the performer is on stage, doing the actual work of sharing with listeners (though I do hope that the music made reflects what was meaningful for both of us in the process, and that this somehow infuses your experience on stage).

When I work with Silvia, it has an additional layer of collaboration in that we are both on stage at the end. We also share more equally the initial impulse-ideas for getting work started and for where to go. It's also a bit more balanced in terms of preparation between sessions. There's something about performing together that flips it into being a band. With Silvia, the band is the project, the pieces are just things we do.⁹

Q. What would you describe as the advantages and dangers of composer-performer collaboration?

Advantages are many. Primarily friendship—isn't music something we do with friends? Isn't that what it's for? These projects are satisfying and nourishing, both musically and outside of music. Essentially to 'compose' in this way is to propose a friendship in music.

⁸ Email from Cassandra Miller to Juliet Fraser, 2 July 2020.

⁹ Email from Cassandra Miller to Juliet Fraser, 2 July 2020.

Not sure I need to pick apart why that's wonderful. Learning together, witnessing life together, accompanying each other, listening to ourselves through the ears of the other, participating in what is meaningful to the other.

Dangers are also big. I have not found any trouble in the things that perhaps people talk about as [being] tricky: sharing credit, work, vulnerability, time, finances, decisions. All that is easy with goodwill and discussion. The difficult thing is what can happen when the needs of the collaborative relationship are at odds with the needs of a production deadline. It can become (all of a sudden and by surprise) impossible to navigate the needs of a production, the needs of the relationship, the needs of the other person, the needs of the self, when there is not enough time to do so. And then the horror of watching this beautiful thing fall apart is more heart-breaking than can be expressed.¹⁰

Q. Any further comments or observations?

Just that I think this is all bigger than the words. It's not really that collaboration is a way of 'working'—it's not really an artistic choice or a career choice—but it seems to me that 'collaboration' is a term we use when we talk about art-making as real life. And then it gets complicated like life gets complicated. Probably all composing always was this, but as composers we tend to think that we separate it out by pretending our pieces are products, objects. I know I'm being quite vague. I think I'm avoiding the essentialisation/definition of any of this: it's all a bit more alive than any definition I can muster. II

WECHSELWIRKUNG, a collaborative project with Pia Palme and Paola Bianchi

Early in 2018 I received an email from composer Pia Palme¹² inviting me to join a multi-stranded research project. In it, Pia set out her intention to explore 'the contemporary terrains of composition and music theatre as they are interwoven with feminist practice, theory, and aesthetics' and she stated that 'Exchange with performers and colleagues is vital for the process and will be cultivated throughout the project.'¹³ 'Bold claims,' I thought. 'Tve heard it all before,' I thought. But I clambered aboard. Looking back at that email, what's striking is that, despite the references to 'listening', 'cooperation' and 'exchange', Pia never uses the word collaboration: maybe she, like me, felt that it was often overused and therefore empty.

This was, essentially, a research project that would have as one of its 'outputs' a new piece of music theatre for singer, choreographer/dancer Paola Bianchi and Ensemble PHACE. In February 2020, I joined Pia and Paola, along with musicologist and co-researcher Christina Fischer-Lessiak, in Vienna for the first of two development periods. At this point, Pia had sketches of music for me to read, and

¹⁰ Email from Cassandra Miller to Juliet Fraser, 2 July 2020.

¹¹ Email from Cassandra Miller to Juliet Fraser, 2 July 2020.

¹² I had performed a work by Pia with my ensemble, EXAUDI, in 2015. Available at: https://soundcloud.com/palmeworks/mordacious-lips-to-dust (accessed 24 January 2021).

¹³ Email from Pia Palme to Juliet Fraser, 28 February 2018.

Paola had a choreographic schema to share: the plan was to discover to what extent I could combine them. (It's important to say that I have no movement or dance training!) Pia's sketches contained both extremely detailed, complex notated material and much looser, gestural motifs, designed to stimulate improvised material. Paola was using a choreographic system that she had developed (thankfully) for non-dancers: a series of recorded audio instructions described a pose that, through repeated listening, could be learned, embodied, and then strung together to form a sort of free sequence. These three days were exhausting. Learning the choreography demanded intense concentration and a lot of courage. I was frustrated that I hadn't had time to memorise the music and so couldn't really combine the singing and the movement. The whole experience was so far outside my comfort zone, and it was exhilarating.

But it could have been a nightmare. What made this a positive experience was the atmosphere in the room. From the beginning there was a sense of spaciousness to the creative environment and there was careful, respectful dialogue. It helped that Pia and Paola already had a history of working together, so there was a confident bond at the heart of the project. It was also a strength, I think, that we were four in the creative space and that no two roles were alike. Progress was limited during the second development period, in September 2020: I had hurt my back, Paola had burnt her arm, everyone was anxious about the pandemic... We concluded with a clear vision of the piece, but a daunting amount of work still to do. For me, the biggest questions still remained: Could I memorise such a complex score? Could I perform the movements in a convincing way? Could I combine the two with any confidence?

Against all the odds, we gathered in Vienna in November 2020 and pulled the piece together, filming it for Wien Modern. Achieving this does feel like something of a miracle, both at a personal level and against the broader backdrop of a cultural sector in paralysis, and stands as testimony to the trust that Pia places in her collaborative partners. The resulting piece, *WECHSELWIRKUNG*, ¹⁴ is one of the most challenging works I have performed, and probably the most collaborative. I gave myself one rule during this project: don't think about whether it works. That, I decided, was someone else's job. I was in terrain that was far beyond my expertise, and I was far too inside the task to attempt to assess it from the outside. I had to take a risk with what I was offering. And I had to trust my collaborators.

¹⁴ A trailer of the piece, presented by Wien Modern and *On the fragility of sounds*, is available at: https://vimeo.com/484769046 (accessed 28 June 2021).



image no.2: Juliet Fraser, Paola Bianchi and Pia Palme during a performance of WECHSEL-WIRKUNG for Wien Modern, 2020, © David Visnijc

Pia's words on collaboration

Q. Do you consider your work(s) to be collaborative?

In every aspect, my practice has been intrinsically and thoroughly a collaborative practice. However, it was especially during the pandemic crisis that I became increasingly aware of how I move and work within a dense network of collaborators—within an interconnected community. In my process of working I connect to performers, artists, ensembles, organisers, technicians, venues, PR people, instrument-makers, conductors, caretakers, curators, stage crews, funding bodies, filmmakers, printmakers, software programmers, light designers, sound designers, and so on. We work back and forth, discussing our various requirements. My artistic research occurs within a wide ecosystem consisting of various disciplines, practices, techniques, and art forms. Music is a forest and I'm a tree of my own within this living entity. I stand on my own but could not thrive without others of my kind. This might, again, be the Anthropocene throwing its shadow onto theatre: our situation makes me realise how interconnected things are—*Wechselwirkungen* and interferences everywhere.¹⁵

Q. What would you describe as the advantages and dangers of composer-performer collaboration?

¹⁵ Email from Pia Palme to Juliet Fraser, 20 January 2021, revised 4 May 2021.

The most delightful experience in a collaboration for me is the sense of sparks jumping over between artistic-minded individuals, a spark that can trigger something that reaches beyond what was there before, into some new terrain. When that particular occurrence happens, I feel it in a physical sense. Moreover, this experience seems to happen in a space outside of myself, yet connected to me—a 'third space'?

Every collaboration unfolds in a unique way as a specific relationship—like a love affair, in a way. Some collaborations last longer, some are short term affairs. Some barely come together and some actually break apart. [In terms of] composer-performer collaboration: [what is] important is to keep a certain kind of professional distance while opening up in an artistic sense, not holding back. Respecting each other's discipline and being curious about the other but not switching the disciplines. Learning, not imposing. Giving space and taking responsibility at the same time. Knowing one's own expertise. Not giving up. Entering discussions without fear or hesitation. Daring. ¹⁶

Q. Any further comments or observations?

For WECHSELWIRKUNG, I brought together a core group of five main collaborators. Rather soon, this collaborative group formed an ecosystem that began to develop by itself. I felt very much attracted to observe the various relationships, threads and filaments evolving between us, a kind of musical nerve fibres. Aside from being part of the overall collaborators' mesh, I distinctly experienced the unique relationship with every individual contributor—a relationship depending on the professional cooperation we shared. With the theatre scholar Irene Lehman, my relationship felt vividly intellectual: quick-footed meetings occurred mostly online, with lots of verbal exchanges. With Christina Fischer-Lessiak, my partner in research and project partner, the collaboration became a management and research affair in the best sense of the word: a more functional, practical and respectful connection. Apart from endless exchanges about how to organise this and that in times of crisis, we also met over topics of feminism and listening, and we exchanged our research observations. With dancer and choreographer Paola Bianchi, my relationship was intense and included edges and conflicts. I experienced it as quite physical, because of Paola's professional involvement with the group as a dancer and stage designer. Our relationship grew and took place in the theatrical terrains of space, stage design, movement and dramaturgy. With Paola, I felt the clashing of theatre disciplines that oftentimes draw on different systems of expertise and hierarchy. Often, I felt the need to negotiate and translate between the two of us. I felt a high degree of respect towards her work, underpinned by a sense of warmth and distance at the same time. From the compositional angle, it was most interesting to watch how Paola's and my ideas came together in the practice of Juliet Fraser—the singer who physically brought together the artistic collaboration between Paola and myself, merging it with her soprano voice, her expertise as a vocal performer, and her body work. The nexus Juliet/Paola/ myself was an intense affair. It is hard to find words for this complex collaboration that I want to investigate more deeply.

The collaboration with Juliet was at the core of the piece, it was the heart of the composition. Furthermore, she pointed out Francesca Caccini's work to me; the composer's texts and songs became important elements to work with for *WECHSELWIRKUNG*. To me, the collaborative relationship with Juliet felt fragile and very professional at the

¹⁶ Email from Pia Palme to Juliet Fraser, 20 January 2021, revised 4 May 2021.

same time, quite intimate and touching. Very much happened on a fictitious level: when composing alone [at] my desk, Juliet's voice rang in my ear, for hours and days. For writing the piece, I had to imagine her physical presence as a singer. This is the thing a lover would do when imaging the beloved person—in my case, it happened from a compositional and professional interest. A fascinating turn, the compositional twist on the old theme of love? Is this, then, a collaboration, too, or is it pure dreaming? In my mind's ear and eye, I saw and heard my collaborators, I conceptualised shared musical and theatrical activities that I wished to happen in the future. Shorter, real-life research sessions and sequences of feedback exchanges back and forth augmented the longer process of composition, until in the end we all came together physically, to rehearse and produce the piece in Vienna.

Then, during the final rehearsal period before the premiere, it was interesting to observe how our core group of five suddenly integrated into the much larger community who assembled to stage the piece. It seems that because the five of us trusted in our connection, having gone through a long and intense process together, we were able to integrate the entire group into a bigger collaborative body.¹⁷

Paola's words on collaboration

Q. Do you consider your work(s) to be collaborative?

I have been working alone for many years, I could say for as long as I can remember, but I am never alone in creating a show. There are moments of profound loneliness, of course, but without a series of companions a show wouldn't be born! Working in the theatre presupposes a strong collaboration between all those involved in the creation of a performance. The creation of a performance is something you do together with other people, you have to rely on different skills (performers, music, lighting, sometimes scenery and costumes).¹⁸

Q. What are the hallmarks of collaboration, in your experience, both in terms of process and outcome?

It is rightly necessary to make a distinction between process and outcome. The process is the part of the work that most involves collaboration—and by collaboration I also mean the discussions around the concept, discussions that can take place only among the close members of the working group or be extended to other figures (scholars, critics, professionals). The research and study phase is, even in the solitude of the studio, full of meetings, questions, and comparisons. It is absolutely important that all the people who will participate in the creation of the performance are fully informed about the phases of the process. The conceptual involvement of everyone is an integral part of my work. It is indeed important that by the time we enter the room to start rehearsals, everyone understands the concept and brings their thoughts translated into their own discipline. Even during the rehearsals, it is essential that everyone involved works together, even if, unless it is a purely collective work, whoever takes the lead (whether choreographer

¹⁷ Email from Pia Palme to Juliet Fraser, 20 January 2021, revised 4 May 2021.

¹⁸ Email from Paola Bianchi to Juliet Fraser, 10 January 2021.

or director) makes the final decision. There are no majority decisions. There are discussions, different thoughts, but the character of an artistic work must be precise, clear. Then when it is time to go on stage, collaboration is obviously needed again. A lighting technician, for example, can ruin your show if he/she decides to change the lights during the performance, as can a dancer or a musician. I would also include the audience, a fundamental part of the live performance, without whom my work would not exist. Theatre is made of people, of several people working together. Without collaboration it does not exist.¹⁹

Three threads woven through a year

These three very different projects culminated in 2020. Proud as I am of the final works and of having survived the challenges (some pandemic-related; some not) that they posed, they represent major milestones in that year. Yes, all three happen to have been with, or between, women. Beyond that, though, I think there are very few similarities between the projects in terms of process or outcome. Their musical concerns and style certainly vary hugely, and I anyway fiercely resist the notion of 'feminine' or 'female' music.

Each collaborative project has had a significant impact on my work and on the way I think about my work. Working with Rebecca on *The Mouth* reminded me that a partnership doesn't need to be enmeshed at every stage to cultivate ownership and agency. This most recent period working on *Tracery* taught me that a shift in conditions can severely test a collaborative process. The project with Pia and Paola showed me that remarkable trust and respect between partners can hold a whole lot of mess.

Part III: Staying with the trouble

To be honest, there have been times in the past few years when I have despaired, when I have seriously considered having a T-shirt made with FUCK COLLABO-RATION across its front. I have been frustrated by the work. I have been hurt by my colleagues. I have been bored by the whole topic. I am wiser, though: I think I see collaboration for what it is, now, which is a pretty unstable chemical experiment—as for the outcome, all bets are off.

I would now define collaboration as 'the *process* of developing a shared and *transformative* practice that intentionally cultivates an intimate creative space and produces a distinctive body of work.' The purpose of collaboration is to explore a new process of making and the hope is that the results themselves somehow make a new proposition. And we do need propositions: in the words of Latour, 'If, as the

¹⁹ Email from Paola Bianchi to Juliet Fraser, 10 January 2021.

old maxim maintains, "politics is the art of the possible," there still need to be arts to multiply the possibles.' (Latour 2017, p. 257).

In terms of the purpose of collaborative work within my broader practice, it occurs to me that to judge individual pieces or projects is to miss the point: each commission, each new idea, is both a response to what has come before (sometimes a reaction against) and a bid for something new. My repertoire as a whole is a sequence of constantly re-orienting links—a fungal network!—a quest for the holy grail of fulfilment. The common thread through them all is a narcissistic obsession with growth. Shoshana Rosenberg and Hannah Reardon-Smith capture this well in their 'toolkit for transformative sound use': in all my music-making I want to be 'engaging with sound use that stirs something within, something direct and determined to make itself known in the world.' (Rosenberg, Reardon-Smith 2020, pp. 64–73).

I think my fascination with collaboration endures because I recognise that it is a rare thing. I've realised that I don't *need* it, necessarily; also, that it only makes sense with particular people and under particular conditions. As I hope is clear by now, I do not fetishize collaboration as the only means by which to create meaningful work but instead see it as one tool for change. I am weary of the old propositions in classical music that reinforce the hierarchies and the fixed roles, that ghettoise us or encourage us to ghettoise ourselves. Some of us, at least, need to stay with the trouble. Habits form attitudes; absence creates opportunity; new stories dismantle old myths. This is why I am stimulated by the poetic imagery of cosmic connection that I find in other fields: I need to keep my horizons wide and I need new stories to tell other stories with (Haraway 2016, p. 12).

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Undefined spaces

In pursuit of imprecision in instrumental technique

Molly McDolan

As a performer specialized in the playing of historic oboe instruments, I am constantly checking in with the state of my technique. Which sounds am I capable of producing with my instrument today, right now? Where are my limits at this particular moment? Am I still capable of producing the sounds that I produced yesterday—or reproducing those from earlier stages of my career? I listen into myself and my surroundings, constantly reevaluating.

Precision and imprecision

I allow my playing to be guided by both precision and imprecision. Within the context of describing my own technique, I see precision as the effortless control over myself and my instrument that yields reliable and reproducible results. Precision is the functioning virtuosic infrastructure that does not necessarily need to be reinvented. The gap between intention and result is as small as possible. Beyond the flashy virtuosity of speedy scales and arpeggios, there is also an easy mastery in the ability to *precisely* place a single note at *precisely* the right time. There is precision in acting exactly but also in reacting exactly: *exactly* reading the intentions of a conductor, *exactly* matching the energy of a colleague. A technique that is solidly rooted in precision and mastery yields a gallery of skills-as-objects which can be freely combined and re-combined by performers and composers alike.

Here I must take the opportunity to address one of the key terms of this article, indeed one of the key terms used in any discussion of precision in instrumental music: technique. The word technique itself floats on the border of precision and imprecision, as it is used to refer both to the individual skills used by an instrumentalist as well as the entirety of those skills in the playing of an individual musician. It can even refer to a tradition of playing shared among several musicians (which can also be synonymous with 'a school of playing'). An individual's technique is the toolbox made up of a multitude of individual technique-tools. The ability to articulate repeated notes quickly is a technique, the ability to perform a glissando smoothly is a technique. Certain techniques are instrument-specific; *pizzicato*, for example, a playing technique where string players pluck the strings of their instrument with their fingers, cannot be performed on the oboe. However practical it would be to have a precise nomenclature referring to the individual skills of the musician's trade, the sum of an individual player's abilities is also, somewhat un-

satisfyingly, referred to as their technique. In informal settings among instrumentalists, the positive evaluation of someone's overall technique corresponds to the expression 'you've got chops', which translates roughly to, 'you have developed an impressive amount of skills in your craft'. I find it fascinating that the vocabulary around precision in instrumental music is so tantalizingly imprecise and will lean into this ambiguity throughout the course of this article.

In my experience, which includes approaching contemporary music from a background in historical music performance, a precise technique implies control and reliability, whereas an imprecise one offers space for exploration and discovery. In this spectrum between the discrete integers of precise technique-objects, in the between-areas where stability is neither guaranteed nor intended, imprecision crops up as equal parts disappointment and wonder. In the context of a performer's overall instrumental technique, imprecision is generally seen as a negative; imprecise playing is out of control, inaccurate, and cannot be repeated with reliability. However, rather than focusing on overcoming imprecision in my technique, I see it as integral to my artistic development. While cultivating reliable precision in my playing, I aim to preserve and even celebrate imprecision. When I work with a composer on a new piece, it is always my hope that they will ask me to do something that breaks my technique wide open. The scope of these requests range from gentle reexaminations of my existing technique to acts of violent rediscovery of my instrument. Sometimes a composer asks the impossible, pressing against the limits of the technique I have already acquired and challenging me to break through to explore new spaces. Sometimes their requests are more nuanced, nudging me in a new direction and allowing me the chance to view an individual element of my technique from an unexpected angle. This is a delicate dance between the composer, myself, and the physical characteristics of my instruments.

These uncovered spaces—cracks exposed through the friction between experimentation and result, innovation and experience—are areas of essential imprecision. In my work, I take imprecision as a tool, a quarry of raw material that does not necessarily require refinement. It draws its power from being unrefined. Here, beyond the controlled and reliable, one has access to the power of the unintentional. Mistakes, errors, and accidents occur within imprecision. Some of these emergent actions drive the development of precise technique; they offer themselves as objects that can be tamed, trained, and made repeatable. Others are ephemeral, existing only long enough to be observed.

The contemporary oboe da caccia

When I collaborate with composers, it is often as a solo instrumentalist, as a specialist in the performance of historic oboes. This puts me in a unique position, as there is no existing contemporary repertoire or technique to draw on. In particular, I am a pioneer and advocate for the use of the baroque *oboe da caccia* in

contemporary music. This eighteenth-century tenor double reed instrument, used notably in the passions of Johann Sebastian Bach, was developed according to an alternate understanding of precision. It goes without saying that, at the end of the day, whether specialized in baroque or contemporary music, performers need to play with excellent intonation, control, and familiarity with the behavior and response of their instruments. However, the route that they take to arrive at their precise technique is different. In this article, I will refer to the modern equivalents, or successors, to the baroque oboe and oboe da caccia as the modern oboe and English horn (the modern tenor instrument of the oboe family is also known as the *cor anglais*). Whereas these later instruments have evolved over 45 keys, largely in a bid to aid in precision (and reduce imprecision), the earlier instrument takes another approach. With only two keys and an only approximate pitch center, the instrument retains an extraordinary amount of freedom: all options remain accessible in terms of pitch flexibility, dynamics, and tone color.

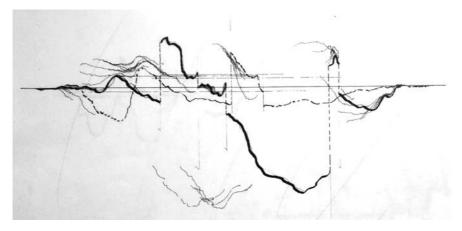


Figure 1 An oboe da caccia.

The flexibility of baroque instruments such as the oboe da caccia allowed the performer a maximum of adaptability in terms of intonation within chords. In terms of pitch flexibility and possibilities of articulation, baroque orchestras resemble the elasticity of a vocal ensemble. The relative simplicity in instrument design, rather than being due to any aesthetic considerations or technical limitations, was an elegant solution to the wide-ranging demands in terms of temperament, local pitch, and temperature. Before the second half of the twentieth century (and in some areas even today), there was no standard tuning pitch. Local areas or individual churches varied widely in pitch and temperament, corresponding to their customs and the fixed tuning of their organ. In my own experience performing early music, this is still now very often the case; I have been asked to play at pitches of anywhere from 404 to 422 Hz (with the normative standard baroque pitch being 415 Hz) and at temperatures from 0° to 40° C. Variations in temperature change

the properties and response of the instrument. As a performer, this can feel like standing on shifting sands. As the temperature restricts or expands the inner bore, the instrument quite literally changes shape. The precise technique required to maintain intonation under these circumstances is a precision of adaptation and flexibility: the virtuosity of meeting the moment.

When used in contemporary music, the inherent flexibility of the oboe da caccia translates to an uncommon ability to produce rowdy multiphonics and glissandi over nearly the entire instrument, and to access especially nasal or overtone-rich timbres. These features would not be possible to this extent on the modern oboe or English horn, with their many keys and their development toward homogeneity across the entire range of the instruments. Composers often express their excitement about the ability to access the older instrument's between-spaces: spaces between notes, between registers, between tone colors.

As the oboe da caccia is not generally used in contemporary music, I find my-self in the interesting position of creating new technique, both for myself and for the instrument in general. The traditional technique for this instrument centers around the performance of baroque music, which has very different demands than those required by contemporary composers. Baroque music has its own multitude of self-referential codes and chromatic melody is used rarely as an exceptional gesture. Many effects which are standard in contemporary music, such as multiphonics and glissandi, are not employed at all in baroque music. As such, there is no established technique for the performance of any of the instrument-specific effects I have developed. I see the absence of a canonized approach to the use of the oboe da caccia as a unique opportunity. It allows me space to confront not only the hidden possibilities of the instrument itself, but also my own expectations as a performer. In order to do this, I exit my conservatory-trained world of clean technique and follow the instrument as it leads me into a reservoir of imprecision.

Acquisition of a new technique

As technique is acquired, this is generally done with an eye towards repeatability. Certain results are favored, others are suppressed. Eventually, with much repetition of an individual result, it becomes effectively impossible to access the suppressed options, ensuring that only the favored results are produced. Beginner instrumentalists still have access to all the latent options that their instruments are physically able to produce. They unintentionally generate amazing sounds, which they are unable to harness or even replicate. Those students learning wind instruments such as double reeds, which require a delicate touch, have not yet perfected

¹ A sampling of these techniques can be heard in my performance of *Solo I* by Jakob Ullmann: https://www.youtube.com/watch?v=Dzxm5IyCi5g&t=212s (accessed 13 October 2021).

their default positions when it comes to finger placement, embouchure, breath control, or support. Their technical imprecision often results in accidental split tones, notes that are overblown or underblown, or unintended results due to misaligned fingers. In absence of a stable and established technique, they are capable of using their instrument in ways that an experienced performer would likely find difficult to replicate.

I see the tale of the imprecise beginner being refined into a precise technician as a cautionary one. In my work developing an oboe da caccia technique for use in contemporary music, I am very careful to preserve spaces of imprecision, wherever they occur. These are fragile ecosystems, where all types of sounds and approaches are simply allowed to happen—whether intentional or not. I do not see a need to conquer their uncertainty or smooth over their rough edges. On the contrary, the condition of imprecision is an invitation for closer observation; it is an opportunity to openly and honestly listen into myself and my environment.

The act of intentionally accessing uncertainty unlocks the power of the unintentional and, by exploring this potential, it becomes possible to harness its power. Defining spaces for the unintentional to occur makes it possible to observe the actions that emerge organically at the intersection of performer, instrument, and environment. Relaxing into active observation, one releases control and allows the instrument to guide the performer, instead of the other way around. There is room for surprise and wonder as imprecision unfolds. Some of these observations may later guide intentional discovery. Certain actions can be isolated, repeated, and can then go on to augment the repertoire of stable techniques. Others are useful in that they facilitate better understanding of the grey areas between intentional actions and the fluctuating fields of mental and physical background noise from which they emerge. An example of this would be observing an unexpected transitory multiphonic, attempting to replicate it, and using this experience to help understand the broader category of multiphonics based on the same fundamental tone.

As I carve out specific islands of precision in order to establish a novel instrumental technique, both for myself personally and for my instrument in general, I am mindful not to close doors along the way. Today's indeterminate noise could be tomorrow's discovery. Especially with an instrument that is defined by such a high degree of flexibility, it is imperative to retain access to imprecision while also working on improving control and reliability. It is possible for a practiced and precise technique to exist alongside pockets of imprecision. The immensity of options made available by the flexibility of the instrument demand a progress that is not linear in one forward direction, but rather expands organically, with elements of precision and imprecision together forming a dense and ever-expanding network.

Exploring my own technique for areas of valuable imprecision, I inevitably run into the limits of my own perception. To get past the barrier of familiarity, there are a number of other sources that I look to for inspiration. Patterns and

sounds of a non-musical origin are important in this regard, such as environmental noise, bird song, machine noise, or human speech. Absolute beginners and their brute-force imprecision are also an interesting role model. However, they are not ideal partners for discussion, as it is not generally possible to reflect with them on the mechanisms of their unorthodox technique. Instead, for nuanced dialogue, it helps to turn to composers and instrumentalist colleagues.

Even within the existing wider traditions of instrumental technique, individual musicians cultivate their own personal approaches and are able to articulate what they do and why they do it. Although we may have different motivations for learning a specific skill, different musical backgrounds and technical vocabularies, sometimes there is just enough overlap for a spark of an idea to fly across the gap between us. It was conversations with brass players that helped me to develop a technique of using the instrument itself as a mouthpiece, playing without a reed. Double bass colleagues have helped me to understand the physics of how sound travels for lower-sounding and overtone-rich instruments, which has in turn influenced how I approach the relationship of tone color and response.

Composers have their own particular wishes and expectations, built on their own previous experiences working with various instrumentalists. Their requests elicit positive friction, whether they are soliciting information or asking me to produce a new musical effect; they ask me to dig down within my technique, into the space where precision collides with imprecision. Some of these requests are for things that initially seem impossible. It is exactly at this intersection of the possible and impossible that innovation takes place.

As an example for the creation of an 'impossible technique', I would like to present the example of Jakob Ullmann's *Horos Meteoros* (2009), a large-scale work prominently featuring the oboe da caccia.² When I was first approached about the preparations for this new composition, I worked with the composer to help him understand the capabilities of my instrument. It is hard to overstate my surprise when, upon receiving the draft score, I saw that he had written a fifth higher than the highest note of the instrument. When consulting him about what I assumed to be an error, he explained that this was intentional, that he was looking for a sound that was uncomfortable and strained, something beyond the limits of what the instrument could produce normally. This request caused me to reevaluate the entire upper range of my instrument. In the end, I was able to consistently produce the seemingly impossible notes by replacing or modifying various parts of the instrument. The technique I established during this interaction opened up a whole new area of possibilities, which I have since incorporated into my repertoire of stable techniques.

² A recording of this piece is available at https://www.thewire.co.uk/audio/tracks/listen_jakob-ullmann_s-horos-meteoros (accessed 13 October 2021).

Ullmann's request to have his performers produce uncomfortable sounds, to play at or beyond the border between precision and imprecision, shows his acceptance of and even intention for a performer's inevitable loss of control over their own technique. Paradoxically, this prompt to cross into uncharted territory is issued with a great deal of trust. Ullmann often cultivates a personal connection with the performers of his music, ensuring that they have the freedom they need to create the necessary innovative technical solutions. In my experience working closely with him, he has always stood behind me in my explorations and given me every confidence to lay bare the bones of my technique.

While Ullmann is certainly a good example for discussing this topic, he is by no means the only composer addressing the question of precision in their works. Some composers (like Ullmann, who studied with John Cage) are attracted to the dissonance between intentionality and imprecision. Many composers flirt with the line between stability and imprecision, with or without the goal of escaping controlled technique. Performance indications such as 'explosive', 'disordered', or 'without holding back' are used as invocations of powerful imprecision. Innovative notation systems, such as graphic scores, elicit intermediary spaces between defined positions.

Figure 2 shows a fragment of a graphic score by Jakob Ullmann. The performer is to follow the contour of one of the lines according to a strict set of performance instructions but may break away and switch to another line at will. The straight horizontal lines represent specific pitch references, while the vertical lines indicate a strict time framework. This piece made excellent use of the glissandi possible on the oboe da caccia and challenged me to produce these sounds at a nearly inaudible quietness.



The question of character

Igor Stravinsky's The Rite of Spring (1913) opens with a distinctive bassoon solo, which is legendary as an audition excerpt for orchestral bassoonists due to its high register and difficulty to play in a controlled way. What gets lost in the drive for controlled mastery is the function of the solo in the larger work. The piece describes the sacrifice of a virgin to the god of spring and opens with a sacrifice of another sort. The bassoon solo is not unintentionally difficult and foreshadows the ritual that is to follow. Although the French bassoons of the early twentieth century would have had easier access to the higher register of the instrument than their German counterparts, the melody would still have been at the extreme of their possible range. The bassoonist would have been playing at the edge of their technique, very much grappling with the risk of losing control. Stravinsky would have been acutely aware of this fact and would have used this information strategically. Playing the passage with virtuosity and facility, as it is often done today, 'making it sound easy', eliminates an important compositional element. The bassoon may have been selected as an implication of sacrifice due to the long tradition of using this instrument to express the grotesque. Until the mid-twentieth century, the bassoon was commonly understood to have a hideous, comedic, or grotesque character. When Sergei Prokofiev needed an instrument to play the role of the grandfather in Peter and the Wolf (1936), he scored for the bassoon. When Giacomo Meyerbeer wanted to convey the horror of dancing skeletons in his *Procession des* Nonnes (1831), he chose to use two bassoons. The specific character of the bassoon made it the ideal instrument to embody the vulnerability evoked by Stravinsky.

Likewise, the unrefined character of the oboe da caccia has implications for its use. It shares certain qualities with the other instruments of the oboe family, which were long-defined by their pastoral characters. The oboe d'amore, tuned a minor third below the oboe, was often described as 'sweet'. For example, both instruments were used together in the second cantata of J.S. Bach's Christmas Oratorio (1734) to represent shepherds. Oboe da caccia literally translates to 'hunting oboe'. Its only definitive recorded use was by Bach—and then only in a handful of sacred contexts. Bach's inclusion of the oboe da caccia in cantatas, passions, and oratorios was a way to invoke the pastoral world of the secular without ever exiting the theologically laden church environment. Along with his use of other instruments of the 'hunting' family, such as the corno da caccia and tromba da caccia, his writing for the oboe da caccia was a way to transport the unrefined natural world into an ecclesiastical context. The sound, overtone-rich in some registers and almost nasal in others, contrasts with the uniform consistency of strings and voices. Adding the tone color of this instrument to a string orchestra expanded the composer's palette and created an instant association with the pastoral.

In several key dances in Jean-Philippe Rameau's *Platée* (1745), the composer intentionally pushes the otherwise pastoral oboes into indecency. The flawed protagonist of this comedic ballet bouffon is a frog-like creature, a swamp-dwelling nymph defined by her arrogance and hideous appearance. The oboes are used to make mocking caricatures of this self-important figure, stumbling through delicate dance movements with uneven melodies and raucous trills. The physical characteristics of the instrument make these passages impossible to play elegantly, resulting in a deliberate display of onomatopoeic ugliness unparalleled in the literature. In Figure 3,3 all four oboes, playing in unison, croak out a thunderously froggy 'quoi!' [what!] at the lowest and loudest extreme of their range. Rameau's female anti-hero Platée is designated to be played by a male tenor singing in a female costume. The oboes, playing at the outer limits of their technique and, for comedic purposes, at the grotesque limit of acceptability, are also playing in drag, masquerading in the tenor register. The double reed cacophony puts Rameau's masterful orchestral writing into stark perspective and invites the audience to participate in shared outrage over the protagonist's vulgar audacity of acting above her social station. (The audience, one must keep in mind, was the aristocratic court of Louis XIV at Versailles.)



Figure 3: *Dis donc pour quoi* from *Platée* (Act I, Scene IV) by J.-P. Rameau. The unison oboes are notated on the same staff as the violins with the indication 'un peu fort' [a bit loud].

³ Paris: Chez l'Auteur, la Veuve Boivin, M. Le Clair 1749, available at https://imslp.org/wiki/Platée%2C_RCT_53_(Rameau%2C_Jean-Philippe) (accessed 13 October 2021).

Imprecision as a space of innovation

The character of double reed instruments, from the grotesque to the pastoral, is intrinsically linked to the physical dimensions of the instrument. The wide conical bore produces a dense network of overtones while the delicate double reed allows for exceptional versatility in sounds, timbres, and intonation. Many of these potential options remain unexplored, as they were considered unpleasant or impractical. Overly flexible sounds, split tones, the fragile rattle of underblown octaves: none of these latent sounds were necessary or desired in the dominant performance practices of the eighteenth through early twentieth centuries. Although it remains physically possible to execute these unwanted sounds, they are abandoned, refined away, as players progress toward their mastery of a traditionally-understood technique of precision. By reducing options to only those considered desirable, a clear concept of precise technique emerges. This refinement is fundamental within the context of an established repertoire. However, this act of constraint also has the natural consequence of closing off the areas of imprecision which can serve as a gateway to powerful alternate techniques. It is in the interest of both performers and composers to have access to this reserve of innovation.

The contemporary oboe da caccia, a powerhouse of imprecision with a relatively small body of established techniques, presents a counterexample to the concept of refined mastery. The instrument itself, as well as my experiences of using it for contemporary music, suggests an alternative approach to the acquisition of a standard repertoire of precise techniques; mastery can be understood as a movement towards virtuosic precision while simultaneously retaining the options inherent in imprecision. Intentionally creating space to observe fragile surprises, independent of any intended result, unveils an entire landscape which remains otherwise inaccessible. In our broad ecosystem of musical approaches and specializations, there is place for all types of techniques, those streamlined towards a specific goal as well as those that are more holistically developed. As part of this discussion, I feel that it is important to step back and take a longer historical view. What we understand as contemporary music today does not hold a monopoly on audacious sounds. The audacity of centuries past may sound different to our otherly-adjusted ears, but it is nonetheless audacious. In order to benefit from all the sound-objects that previous centuries have to offer, it is important to recognize the power inherent in an imprecise technique. The curious, frail, brittle, and unruly does not take place in spaces of precise virtuosity, but in the questioning and doubting wonder of imprecision.

On the interaction of composition and musicology

Malik Sharif

A remarkable aspect of the artistic research project *On the fragility of sounds* is the close collaboration between a composer (Pia Palme) and a musicologist (Christina Fischer-Lessiak), which forms an intrinsic part of the methodology of this artistic research project. This collaboration is remarkable because close interaction between composition and musicology is (and has been) usually fairly limited in relation to both fields' overall expansion. The present article provides a broader context for this aspect of On the fragility of sounds by charting possible modes of interaction between composition and musicology and by providing examples for each of these modes drawn from the twentieth and twenty-first century history of composition and musicology. The article is grounded in a survey of relevant cases over the past 150 years, but the account does not strive for the complete representation and exhaustive coverage of all historical instances of such interaction between composition and musicology. Instead, selected and contrasting examples are discussed, in order to sound out the dimensions of this interactional field. The range of examples encompasses musicologists conducting research on or criticizing contemporary composition, composers drawing on musicological results as a creative resource or seeking musicological assistance in their artistic work, and one integrated instance of musicology-based composition and composition-based musicology.1

The data discussed is in most cases textual sources (publications, archival materials). With regards to my comments on the project *On the fragility of sounds*, the discussion draws on several sources: First of all, at the time that the project was conceived and submitted to the Austrian Science Fund (FWF), I was responsible for the grant services of the University of Music and Performing Arts Graz. In this capacity, I provided advice to principal investigator Palme and the application's co-author Fischer-Lessiak throughout the proposal preparation process. Thus, I had rather close insight into the development of the project and the ideas that inform it. Furthermore, I followed the project activities after funding was granted and had repeated opportunities for informal conversations with Palme and Fischer-Lessiak. Finally, both Palme and Fischer-Lessiak commented on draft versions of this article and provided valuable insights into the complexities of their collaboration.

Interaction between		Musicology	
		non-initiating	initiating
Composition	non-initiating	с—м	C ← M
	initiating	$C \rightarrow M$	$C \leftrightarrow M$

Figure 1. The matrix of initiative in interaction between musicology and composition.

The charting of modes of interaction in this article proceeds on the basis of a heuristic model expressed in the form of a two-dimensional matrix (see Figure 1). The model assumes that both musicology and composition can have an either active or passive role in initiating interaction and defining its terms. Thus, there can be cases in which one field seeks interaction with the other to the specific ends of and on terms defined by the actively engaging field. The other field, which is passive in initiating this interaction, may respond to this initiative by entering into a proper interactional exchange, but may also react by merely 'enduring' this instance of engagement—often unaware of the engagement at all. Equally, however, there can be cases in which both parties actively engage with each other and jointly define the aims and terms of interaction or where they mutually abstain from any active engagement. This simple model helps to grasp the multi-faceted factuality and potentiality of the specific area of empirical reality covered by the fields of musicology and composition. The simplicity of this model is essential for its heuristic efficacy. It may be that expressing a dualist conception of musicology and composition as clearly separate fields and the focus on initiative may arouse suspicions of oversimplification. These suspicions shall not be brushed aside but rather further impress the obligation of critical examination of the model that has to go hand in hand with its application.

As the central concepts of the present investigation, both 'musicology' and 'composition' need clarification: 'musicology' is used as an umbrella term referring to the bundle of music-related scholarly disciplines that gradually established themselves in international academia from the second half of the nineteenth century onward, including historical musicology, comparative musicology/ethnomusicology, psychology of music, and so on. The extension of concepts is thus far broader than the specific understanding of 'musicology' common among American English speakers, referring only historical musicology. At the same time, forms of scholarly thinking and writing about music from eras preceding the academic establishment of modern musicology or those that took and take place outside the discourses of modern musicology are deliberately excluded from the following discussion. In the context of a differently framed study, some of these cases might, of course, be reasonably considered musicological in content, method, and theoretical viewpoint.

Pia Palme's work as a composer and as an artist in general, including her work in *On the fragility of sounds*, is informed by a critical attitude towards the conventional practices and ideologies of what is commonly referred to as 'Western art music' or 'Western classical music.' She is especially concerned with the masculinist and White supremacist aspects thereof and the dominant role of music from the Classical and Romantic periods. Palme also did not receive formal training in composition but studied recorder and oboe performance at the (former) Conservatory of Vienna, which included lessons in harmony and counterpoint (*Tonsatz*). Her path to composing led, on the one hand, via a creative exploration of electronic music and, on the other, via work with experimental ensembles, gradually enhancing her role as a performer in these ensembles with preparatory conceptual and notational work. It even took a while until she started to describe herself as a composer, as she felt like an outsider to this domain.

Yet despite Palme's critical attitude towards so-called Western art music, her lack of academic training in the compositional techniques of this artistic field, and her initial reluctance to identify as a 'composer,' On the fragility of sound does not radically break with contemporary Western art music and its historical traditions, which, after all, contain a stream of vanguardism, experimentalism, and critique of established practice. Of course, the project is also not isolated from other cultural spheres and draws influence from them as well. But especially with regards to the concept of composition that is at work in the project and the creative practices that this concept entails, there is no fundamental redrawing of conventional delineations of musical roles like 'composer' or 'performer' in the project,3 even though boundaries may be subjected to deliberate blurring and individual agency in the overall process of musical creation may be redistributed to a smaller or larger extent in comparison to more 'conservative' Western art music cases. Likewise, the institutional ecosystem of On the fragility of sounds, which notably includes the University of Music and Performing Arts Graz or the festival Wien Modern, developed to a large extent out of the traditions of Western art music and retains a strong connection to this field.

Thus, it seems to be appropriate to delimit the concept of 'composition' in the context of this article only to those forms of creative practice that are usually subsumed under this term with regards to the traditions of so-called Western art music and which center around—but are not necessarily limited to—what is

The statements in this paragraph about Palme's work, her career, and her self-conceptualization as a composer are based on an email exchange between her and the author in January 2022 and a Zoom conversation on 1 February 2022.

³ For instance, in the description of the piece WECHSELWIRKUNG, which is a major artistic outcome of *On the fragility of sounds*, Palme is the only participant who is credited with 'composition' (https://www.fragilityofsounds.org/wechselwirkung/, accessed 2 February 2022).

referred to as 'writing music.' Additionally, given that the historical extension of 'musicology' has for the present purpose been limited to the era of modern academic musicology, composition is likewise considered only from the late nineteenth century onward.

Mutual passivity

It could be said that the default mode of interaction between the fields of musicology and contemporary composition is that they do not take each other into account. It is safe to say that the majority of musicologists have worked or work in areas with no direct relation to contemporary composition—even though they may have a non-professional interest in contemporary composition. Likewise, most composers active during the past 150 years seem to have had only limited interest in the results of musicology beyond, for instance, obligatory course requirements in conservatory contexts. Even if certain individual composers have a deeper interest in musicological matters, this interest does not necessarily translate to a tangible influence on their compositional work.

The complete absence of direct or indirect interactional effects is a borderline case of mutual passivity and indeed, it is safe to assume that there are many areas of musicology that have practically no influence on the bulk of contemporary composition and vice versa. Researchers, for example, who study the use of songs in healing rituals among indigenous groups in Amazonia can ignore contemporary composition in the above-defined sense and most contemporary composers will go about their business being completely unaffected by this research. Even in cases of research topics which are less distant in a socio-culturally sense (regarding contexts of contemporary composition), such as song broadsides of the early modern period, the social history of opera in the eighteenth century, or twenty-first century German hip hop, one can safely assume that neither musicologists nor composers will take any note of each other in their professional work.

It is important to note that a mutually passive stance does not necessarily result in a total absence of interaction. Musicology and composition do not exist in fully separate socio-cultural domains; they often share institutional environments and participate—alongside other fields such as music journalism—in broader discourses about music. Given this somewhat indistinct and opaque interrelation of both fields, one can reasonably assume the presence of indirect—and difficult to analytically ascertain and quantify—interaction mediated by these institutions and complex discourses, an interaction of which one or both parties may be largely unaware.

⁴ Obviously, many musical traditions conceptually structure (and value) creative practices differently, feature different divisions of musical labor, and employ different modes of musical creation.

Unilaterally initiated interaction

Beyond the default situation of mutual passivity there are cases of interaction between musicology and composition resulting from unilateral initiative. This type of interaction can take on various forms. When the initiative comes from the musicology side, the most obvious example is when scholars are doing research on contemporary composers and their body of work. This may not be the most prominent field of research, but it is at least an established one, especially in historical musicology. This type of research occasionally tends to treat living composers as unapproachable, as if they were already dead, as pointedly remarked by the composer and musicologist Konrad Boehmer (1993, p. 137). In such cases, this kind of research abstains from direct engagement with the contemporary composers whose work is under study, drawing exclusively on existing sources (scores, recordings, published interviews, etc.) while apparently failing to recognize the value of the living composers themselves as one of the most fruitful sources to tap for data about their practices, works, and lives.⁵ This methodical gap is possibly an instance of institutional blindness stemming from the established disciplinary practice of historical musicology. The scholarly training of historical musicologists is predominantly (when not exclusively) grounded in the study of the music of deceased composers; they may thus fail to recognize the simple act of asking a living composer for an interview or sending an email to them as a methodical possibility. This specific methodological stance yields a true passivity on the side of composers, as many composers may even fail to notice when a musicologist publishes something about them or their music in a scholarly context beyond the composers' perceptual horizon.

However, there are also musicologists who approach research on contemporary composition differently and seek dialogue with the composers they study.⁶ Vivian Perlis' research into twentieth-century American music is one such example, as it grounded in extensive oral history interviews with key figures in the field, including numerous composers (e.g. Perlis and van Cleve 2005). Another example is Pirkko Moisala (2009), who, coming from an ethnomusicological background, authored a monograph on Kaija Saariaho. In the course of the underlying research for this book, Moisala worked closely with Saariaho. As part of their collaboration, Moisala interviewed Saariaho seventeen times and invited her to review and comment on the book manuscript at various stages of the publishing process (Moisala

Of course, the opinions and experiences of composers do not need to be considered important data for every possible research question about contemporary composition. Likewise, it may happen that musicologists attempt to contact composers, who then decline or ignore their requests.

There are also established institutional settings that facilitate this approach, such as the *Darmstädter Ferienkurse*, which treat reflection by scholars as a relevant means to advance the cause of avant-garde composition and performance.

2009, p. vii; 2011, pp. 446, 448–449). Likewise, Christina Fischer-Lessiak had extensive access to the creative process of *On the fragility of sounds* and to the artists involved. This access provided her with data that she could use for her intrinsically musicological purposes, no matter whether her research was perceived by Pia Palme to be immediately relevant to Palme's artistic ends or not. As the further discussion will show, the interactional constellation in *On the fragility of sounds* was more complex. But one analytically discernible axis of interaction within the project was that of a musicologist studying a composer, her collaborators, and her music to the end of furthering scholarly understanding of contemporary composition.

Such close involvement of the researchers with the subjects of their study challenges the assignment of initiative as well as the power to define the terms of interaction to musicology alone. As the initiative in cases like Perlis or Moisala lies with the researchers, they have the privilege of proposing the initial terms of the respective encounter between the fields of musicology and composition. However, as soon as a composer accepts this invitation, the terms become inevitably subject to negotiation. The composer is able to actively influence the further course and content of interaction, for example, by controlling the quality and extent of information they choose to disclose in response to the musicologist's requests. This renegotiation may occur by making overt or covert demands, by creating emotional dependencies, or by way of many other subtle or less subtle means from the toolbox of social interaction. The original interests of the musicologist—purely epistemic or otherwise—are no longer the sole driver of interaction as the composer's interests—such as expanding their visibility in the music market or shaping and controlling their public image—enter the equation.

The direct interaction of musicologist and composer also adds complexity to the ethical entanglements present in the research process. Musicologists studying contemporary composition who do not seek contact with contemporary composers are certainly not free of moral obligations regarding the people they write about. There is a general expectation for musicologists to reflect on the consequences that their published research might have, in order to avoid unnecessary and disproportionate harm; this obligation is conventionally understood to decrease drastically or even vanish with growing historical distance in the case of research on dead composers. However, when composers agree to contribute actively to the musicologists' research by, for example, sharing their thoughts in interviews or making non-public sources available, new dimensions of moral—and also emotional—responsibility and potential ethical conflict emerge. Not least of which is the specific authority conferred to publications that can claim direct access to a composer, which necessitates particular care with regard to the representation of both the composer and music. Moisala (2011, pp. 447-449), for example, has discussed how her direct involvement with Saariaho led her to omit certain topics in her book that might reflect badly on the composer, such as criticism of the contemporary art music scene. Acute deliberation is necessary in such cases to assess whether the integrity of research is compromised by such adjustments or not.

A different—and nowadays seemingly less common—kind of interaction, in which the initiative lies with musicology, is the practice of what might be called 'musicological critique'. Though this critique may take place in newspapers and magazines, it must be distinguished from everyday journalistic music criticism (for example, concert and record reviews) as it mobilizes the authority of academic erudition for its critical judgments. In contrast to the examples of research discussed above, this mode of musicological engagement with contemporary composition is marked by its emphasis on explicit value judgments and outspoken concern for the future of music.⁷

An early and prominent characterization and justification of this mode of interaction can be found in Guido Adler's (1885, pp. 15, 17-20) famous article Umfang, Methode und Ziel der Musikwissenschaft (The Scope, Method, and Aim of Musicology). Adler assumes that avant-garde composers will easily go astray when left to their own devices, with their unbridled urge to create something new and heretofore unheard. According to his reasoning, they will then likely fail to enable a sustainable development of the art of music and will end up in artistic dead ends. In contrast, Adler argues that musicologists are—by way of their deep understanding of the history and fundamental principles of music—in a better position to discern promising avenues of development from inauspicious ones. For the sake of music's fate, it is thus an important task of musicologists to provide guidance and support to composers throughout their career: musicologists should contribute to the education of young composers, they should study new works and make them thereby accessible to the broader public, and they should also preserve these works, documenting and systematizing the present state of music for future generations. While musicologists should therefore be active in facilitating new musical developments, they must also defend music's integrity against the perils of blind experimentation. Indeed, Adler issues a dramatic warning to composers:

Finally, [the musicologists] are the guardians of order; they codify, as has been shown, the customs that have become law, but they must also—or rather should—keep the law flexible to the demands of life. When the artist [i.e. the composer] leaves the realm of the ancestors to conquer a new territory, the art historian [i.e. musicologist] does not allow the old one to become desolate and deserted. At the same time, he undertakes the double task of assisting the artist in the occupation with his auxiliary army, of lending a hand in the cultivation of the newly acquired soil, and of setting up the framework for the construction of the new work. His experience is the advisor of the young master builder. If the latter, in his overconfidence, rejects the sympathetic assistance, then

⁷ Of course, this distinction between non-evaluating, descriptive research and evaluating, normative critique is analytical. In reality, both modes of engagement often occur in mixed form, the descriptive and normative aspects being not always clearly distinguishable.

he will either not be able to put the building under roof at all, or it will soon collapse because it stands on loose soil and will not withstand wind and weather (1885, p. 18; author's translation).

Composers therefore, in Adler's account, depend on the (unsolicited) critical advice of musicologists and the latter are obliged to provide this advice in an outright manner, following the maxim: 'as to the dead so to the living nothing but truth' (Adler 1885, p. 18; author's translation).

In contrast to this programmatic statement, Adler himself was rather cautious in publicly expressing value judgments about new music. He offered public support to the efforts of the younger generation of Viennese composers and generally voiced negative criticism in private and with the caveat that he may simply be too old to understand the latest developments of, especially, Arnold Schönberg and his students.⁸ However, his criticism found a voice in the publication of his jingoistic work *Tonkunst und Weltkrieg (Musical Art and World War*; Adler 1915), which lambasted the recent musical production of the enemy nations of the Austro-Hungarian empire, while also criticizing the low quality of some wartime compositions by Austrian and German composers.⁹

With regards to musicological sophistication, a more interesting critical engagement with contemporary composition is presented in Adler's (1931) remarks on modern music in the Handbuch der Musikgeschichte (Handbook of Music History). Interpreting the developments in composition of the five decades preceding his publication, in light of his organicist conception of style history, Adler takes the view that composition is in a liminal and stylistically chaotic condition—after the decline of the romantic style and before the advent of a new style—a condition which will soon develop into a state of crisis. Likening the situation in the first half of the twentieth century to that around 1600, Adler however expects this crisis to result in a new reformed style that will then go through its life cycle. Adler's review of recent explorations in scale construction and tonal organization, rhythm, form, and aesthetics is marked by skepticism about the sustainability of these developments, characterizing some of them as 'experiments [...] that are alien to [music's] innermost nature' (Adler 1931, p. 998; author's translation). 10 Developments that give Adler cause for optimism are, in contrast, composers' interests in music making as a social activity, reduction of the orchestral apparatus, cultivation of cham-

⁸ See Antonicek (2003–2005, pp. 61–64); Eder (2005, pp. 105–114). See also the benevolent remarks about the composers who studied musicology with Adler in his autobiography, among them Anton von Webern and Egon Wellesz (Adler 1935, p. 43).

⁹ See the discussions of this article in Antonicek (2003–2005, pp. 64–67) and Boisits (2017, pp. 25–26).

¹⁰ In an earlier publication Adler had offered the following diagnosis: 'A time like ours, in which subjectivism has become almost unrestrained, is not conducive to the creation of new stylistic forms. Bold experiments, exuberant endeavors are almost always outside the organic line of development' (Adler 1919, pp. 145–146, author's translation).

ber music, and less radical approaches to musical innovation. He also acknowledges unnamed 'proficient masters and a nobly aspiring young generation, who seem to be called upon to lead the art of music beyond the perils into a new realm' (Adler 1931, p. 1002; author's translation). Adler is confident that these composers will, supported by scholarship, educated audiences, and the moderating power of the music market, overcome the stylistic crisis.

Another example of musicological critique of contemporary composition by a prominent scholar is Friedrich Blume's (1959) lecture *Was ist Musik?* (*What is music?*). This lecture included harsh, musicologically-clad criticisms of post-World War II avant-garde music, written by one of the most influential German musicologists of his time. It addressed especially serialism as incomprehensible ivory-tower art and electronic music as sonically unnatural, even blasphemous, and pleaded in favor of retaining the idea of tonality in contemporary composition. Blume's lecture is an interesting case for the purpose of this article as it was—unlike Adler's critical remarks—able to attract the public attention of composers like Pierre Boulez or Karlheinz Stockhausen and motivated them to publish responses to Blume's critique in *Melos* (Blume et al. 1959).¹¹ Thus, although the initiative to seek interaction came unilaterally from musicology and was framed in the terms defined by Blume, a bilateral polemical exchange developed.¹²

Apart from attending specific courses or even earning degrees in musicology as part of their general musical education, a common case in which composers seek interaction with musicology is when they put musicological results to creative ends. In this type of interaction, the field of musicology often remains passive, as composers draw on existing and published research. This has the effect that musicologists cannot control how the composers interpret and use their research. Olivier Messiaen's appropriation of the *tālas* that he first discovered in the section on Indian music in the Encyclopédie de la musique et dictionnaire du Conservatoire13 as rhythmic formulas, while they are better understood to function as meters in their original context, exemplifies the transformations that are possible in this free transfer of scholarship to artistic practice. Another remarkable aspect of the application of musicology as a resource in composition are composer-musicologists who switch between the roles of researcher and artist and draw on their own scholarship as input for their creative process. Akin Euba (2014) has referred to this practice as 'creative musicology'. A prime example is Béla Bartók, whose experience as a comparative musicologist collecting and studying folk music from various countries informed his compositional work in manifold ways (see Suchoff

¹¹ See also the subsequent exchange between Blume, composer Wolfgang Fortner, and Melos editor Heinrich Strobel (published as Strobel 1959).

¹² Further examples of critical engagement by musicologists with contemporary composition are discussed in Cahn (2000).

¹³ See the table in Grosset (1913, pp. 301–304).

1987).¹⁴ In a related fashion, Michael Nyman's three years of doctoral studies in historical musicology and his work on editions of baroque music provided him with an arsenal of musical materials and concepts that he would exploit in several compositions (see ap Siôn 2007, pp. 22–23).

A rarer and, as it seems, more recent type of interaction coming from the composition side is that of composers asking musicologists for specific scholarly services. The emergence of this type of interaction seems to be tied to the rise of artistic research in recent decades, which facilitates the integration of scholarship into artistic processes. In these cases, composers are able to define the initial terms of interaction but then have to actively negotiate the further course of interaction with musicologists, who may, for example, attempt to redefine the requested services from their scholarly perspective or according to their scholarly standards, or they may want to use the interaction to pursue their own intrinsically musicological aims of researching contemporary composers.

One example for this enlistment of musicology as an auxiliary discipline is the artistic research project *GAPPP: Gamified Audiovisual Performance and Performance Practice* (2016–2020). This project, led by the composer and audiovisual artist Marko Ciciliani, sought 'to develop a thorough understanding of the potential of game-based elements in audiovisual works in the context of Western art music' (Lüneburg 2020a, p. 5). Part of the project's design was not only to compose and perform game-based pieces but also to study the audience perception thereof (see Lüneburg 2020b). To this end, the musicologists Susanne Sackl-Sharif and Andreas Pirchner were recruited and employed a variety of research methods (questionnaires, group interviews, digital feedback interfaces) in order to shed light on the audience experience of the compositions created during the project (see Pirchner 2020). The research conducted by Sackl-Sharif and Pirchner was thoroughly musicological in nature and designed from a musicological vantage point, but its scope was defined by the overarching artistic aims of *GAPPP* rather than intrinsically musicological aims.¹⁵

A similar axis of interaction between composition and musicology is also present in *On the fragility of sounds*:¹⁶ Palme, as principal investigator of the project, sought to accompany and enrich the creative process of composition and music

¹⁴ Euba (2014) focuses on the work of composer-ethnomusicologist J. H. Kwabena Nketia, but he considers Bartók to be the model case of creative musicology. Further composer-musicologists discussed by Euba include José Maceda, Halim El-Dabh, and Valerie Ross.

¹⁵ Note, however, that Pirchner has spun-off a musicological PhD project from *GAPPP* that addresses methodological and epistemological questions of experimental audience research.

¹⁶ It should be noted that the theatre and performance studies scholar Irene Lehmann was also part of the project team in 2021 and contributed her scholarly expertise to the artistic research aims of *On the fragility of sounds*. Given the scope of this article and Lehmann's disciplinary background, her role is not discussed in the present context.

theatre performance, which constitutes the core of the project, by way of autoethnographic reflection. She brought Fischer-Lessiak into the project as a musicological researcher to help her in this reflexive process by documenting the creative work and conducting interviews with Palme as well as her collaborators. At the same time, Fischer-Lessiak herself assumed the role of an autoethnographer, observing and analyzing her involvement in the project, thereby adding another layer of reflection and creating a multi-perspective account of the project's work (Palme and Fischer-Lessiak, 2019). Additionally, Fischer-Lessiak acted as a discussion partner for Palme, offering her scholarly perspective in the development of the theoretical framework for Palme's work in artistic research.¹⁷

Mutually initiated interaction

Given that there is one axis of interaction stemming from composition within *On the fragility of sounds* and another one stemming from musicology, one could ask, why the project is discussed under the rubric of 'unilaterally-initiated interaction' instead of 'mutually-initiated interaction'. It is true that there is an overlap of axes, and the work conducted on both axes draws to a large extent on shared data. Yet both axes are not dependent on each other, the resulting bidirectionality of interaction is contingent: each axis could be part of the project while the other could be absent. Fischer-Lessiak could assist in the autoethnographic reflection as part of the project's approach to artistic research in composition without conducting farther-reaching musicological research and vice versa. Thus, while both the interests of composition and of musicology inform the interaction taking place within the project, they are not mutually invested in a single axis of interaction that integrates the interests of both parties.

Such emphatically integrated mutual interaction between composition and musicology is certainly the rarest case. One other extensive example approximating this ideal type is the joint scholarly and artistic work conducted by the composer-musicologist Charles Seeger and the composer Ruth Crawford from 1929 until the mid-1930's, which resulted in a series of musical works, articles, and the unfinished, posthumously published book-length treatise *Tradition and Experiment in (the New) Music* (TENM; see Figure 2). This collaboration originated in compo-

¹⁷ Though the present article's perspective and scope entails a focus on Fischer-Lessiak as a musicologist, it should also be noted that she contributed to these discussions and the project in general certainly not only as a musicologist. Her experience in gender studies and feminism, and as a singer-songwriter and guitarist also informed her viewpoints and role in manifold ways. Additionally, her background as a cultural manager and event technician was crucial in managing the overall project and the several music theatre productions that were part of the project.

¹⁸ Substantial accounts of their collaboration can be found in Gaume (1987), Pescatello (1992), and Tick (1997).

sition lessons that Crawford took with Seeger between September 1929 and May 1930, after which Seeger invited Crawford to work with him on the mentioned treatise. Their joint work continued in the wake of the romantic relationship that developed between them, which eventually resulted in their marriage in 1932. By the mid-1930's, however, their professional interests had by and large shifted away from avant-garde composition, thus justifying the historical focus of the present discussion.

Textual output (ordered by year of publication) and musical output (ordered by composer and year of completion/year of first publication) of Seeger's and Crawford's collaboration.

a) Textual Output

Seeger, C. (1930) 'On dissonant counterpoint', Modern Music, 7(4), pp. 25-31.

Seeger, C. (1932) 'Carl Ruggles', *Musical Quarterly*, 18(4), pp. 578–592. Reprint (1933), in Cowell, H. (ed.) *American composers on American music*. Stanford: Stanford University Press, pp. 14–35.

Seeger, C. (1933) 'Ruth Crawford', in Cowell, H. (ed.) *American composers on American music*. Stanford: Stanford University Press, pp. 110–118.

Seeger, C. (1933) 'Music: music and musicology; occidental' in Seligman, E. R. A. (ed.) *Encyclopaedia of the Social Sciences*, vol. 11. New York: Macmillan, pp. 143–150, 155–164. Seeger, C. (1994) 'Tradition and experiment in (the new) music', in *Studies in musicology II*, 1929–1979. Berkeley: University of California Press, pp. 39–273.

(b) Musical Output

Crawford, R. (1930/1941) Diaphonic suite no. 1 for solo oboe or flute.

Crawford, R. (1930/1972) Diaphonic suite no. 2 for bassoon and cello.

Crawford, R. (1930/1972) Diaphonic suite no. 3 for two clarinets.

Crawford, R. (1930/1971) Three chants for women's chorus.

Crawford, R. (1930/1932) Piano study in mixed accents.

Crawford, R. (1931/1972) Diaphonic suite no. 4 for oboe (or viola) and cello.

Crawford, R. (1931/1941) String quartet 1931.

Crawford, R. (1932/1973) Two ricercare on poems by H. T. Tsiang for voice and piano.

Crawford, R. (1932/1933) *Three songs to poems by Carl Sandburg* for contralto, oboe, piano, and percussion with optional orchestral ostinati for strings and winds.

Crawford, R. (1933?/2001) When, not if, round for three voices.

Seeger, C. (1931/1954) The letter for solo voice.

Seeger, C. (1933/1934) Song of the builders for SATB and piano.

Seeger, C. (1933/1934) *Mount the barricades* for unspecified men's and women's voices and piano.

Seeger, C. (1933/1934) Who's that guy? for unspecified men's voices and piano.

¹⁹ Though *TENM* has been published under Seeger's name alone, there is sufficient evidence that Crawford was closely involved in shaping its content (see Rao 1997).

Seeger's and Crawford's work centered around the concept of dissonant counterpoint. This was originally a propaedeutic exercise in preparation of free composition used by Seeger when he served as Professor of Music in Berkeley (1912-1918)—in his words 'a complete topsy-turvy approach to counterpoint' (Seeger 1972, p. 106). Inverting conventional Fux-inspired species counterpoint, dissonances were considered the unproblematic norm and consonances had to be prepared by and resolved into dissonances. In 1929, at the start of Crawford's lessons, Seeger's version of dissonant counterpoint had already developed into a comprehensive approach to contemporary composition incorporating all aspects of musical design, not only vertical pitch relations, but transferring the concept of dissonance and consonance also to melodic construction, dynamics, timbre, metric and rhythmic design, as well as micro-, meso-, and macro-level form. The mutually inspiring experience of the lessons sparked sustained efforts by Seeger and Crawford to work on the thorough and systematic exploration and elaboration of dissonant counterpoint in music and writing. Superficially, one might therefore think that Seeger and Crawford worked purely in practical composition and compositional theory, with musicology playing no role in their collaboration. On closer inspection, however, one can see a reciprocally related interlocking of musicology-based composition and composition-based musicology in the interest of the future of music, justifying a classification of their work as artistic research avant la lettre.

In this regard, several aspects of the collaboration must be considered. Firstly, they had more in mind than just the elaboration of a compositional concept. As stated in the introduction to TENM (Seeger 1994, pp. 51–58), their aim was to actively influence contemporary compositional practice in general through their musical and theoretical work. This aim was motivated by musicological theories about the course of music history and the processes and principles that inform the assignment of value to specific pieces of music. The basic idea, related to Adler's concept of style history discussed above, is that periods of style alternate with periods of manner in the history of music. Periods of style are characterized by a broad consensus among composers on how, under what conditions, and to what extent the available musical techniques are to be employed. There is balanced attention to all aspects of music. Periods of manner lack such a consensus and are characterized by experimentation with new forms of musical technique, exploring the possibilities of some aspects of music, such as pitch, while neglecting a corresponding revision of others, like rhythm (Seeger 1923, p. 423; 1994, pp. 73–77). Seeger and Crawford assess the first decades of the twentieth century as a period of manner. The problem is that—in their account—reception history seems to suggest that the works which have been assigned the highest and most lasting value have been produced in times of style (Seeger 1994, p. 74). Furthermore, it appears to them that individual talent depends on an environment of style to produce what is in turn considered a lasting masterpiece due to embodying equally mastership

of style and individual excellence (Seeger 1923, pp. 426–427; 1994, pp. 76–77). Thus, if one desired the production of works that remain valued through the ages, one would have to seek the progression into a period of balanced style out of the stage of mannerist experimentation. It is this progress that the musical works and theoretical texts are intended to support by reviewing the state of contemporary composition and proposing a 'frank stylization of technique' (Seeger 1994, p. 57). This proposal, they hoped, might lead other composers to adopt it in actual compositions or at least in training their skills, to be inspired by it, to build on it, to criticize and transform it, or to pursue alternative approaches to an integral organization of musical technique.²⁰ From this critical process might, in the long run, spring a new consensus of style (Seeger 1923, pp. 430–431; 1994, p. 54).

Furthermore, the practical theory of composition underpinning their musical works, which is outlined in the second part of *TENM*, is research-based, with Seeger and Crawford developing it out of (or relating it back to) the musicological analysis of the state of compositional technique and musicological critique of concepts like dissonance and consonance already conducted in the first part. While remaining agnostic about the processes of how their practical theory came into being, whether it is actually derived from musicological analysis, or emerged as a result of artistic experimentation, or, most likely, a mixture of both, this musicological fundament can be interpreted either as a systematic framework for artistic theorization or as a strategy for the justification of their practical theory and lending it authority by correlating it with scholarly analysis.

These first two aspects relate to the musicology-based nature of Seeger's and Crawford's work in composition. But work in contemporary composition is also intrinsic to the presupposed concept of musicology. In opposition to the predominance of historical research in early twentieth-century musicology, Seeger (1939) called for a musicology centered around the study of contemporary music as it is and develops. He therefore required musicologists to practice composition themselves, on the one hand as a means to the end of gaining understanding of the music of the present, while on the other hand as a kind of applied musicology using the insights of scholarship 'to take an active place in the avant-garde of our musical present' (1939, p. 126) and thereby going even a step further than Adler in his vision of musicology's involvement with contemporary music. Thus, in addition to the previously-described application of musicological theories to composition

²⁰ Crawford commented publicly on her works that she 'was trying through form, rhythm, dynamics, to work out disciplines which would expand musical technique and give it wider horizons' (cited in Gaume 1987, p. 202).

²¹ Gaining practical experience in music making (performing, composing, etc.) is a key research method in post-World War II ethnomusicology (Baily 2001).

²² Waldo S. Pratt already understood creative work in compositional theory 'that launches out into the unknown' (1915, p. 14) and 'show[s] paths in composition that are untried' (1915, p. 15) to be a possible, but not obligatory field of musicological research.

and compositional theory, the first and more scholarly part of *TENM*—as well as related publications (such as Seeger 1933)—can be considered to be empirically informed by Seeger's and Crawford's experience in contemporary music. For these reasons, their joint work can serve as an example in which the interaction between musicology and composition is mutually and integrally interlinked and informed by both scholarly and artistic interests.

Concluding remarks

Having explored contrasting modes of past and present interaction between composition and musicology, I would like to conclude with some reflections about the necessity and desirability of such forms of interaction discussed in the present article. These reflections are deliberately conducted from my own specific standpoint, which is to a large extent informed by my background in musicology and by the fact that I am not a composer in the aforementioned sense.²³ These reflections may be interpreted as normative hypotheses submitted to the negotiations of the methodological, epistemological, and also aesthetic/poietic discourses surrounding the interface of composition and musicology.

Musicology should certainly study contemporary composition as it is understood in this article within a general disciplinary aim of gaining scholarly understanding of all facets of music past and present and around the world. I am also very much in favor of musicologists reaching out to the composers whose music they study, as far as this is possible and as far as it is necessary for their specific scholarly aims. There is no a priori reason to ignore them as expert sources of possibly relevant data. Gaining at least some practical experience in contemporary compositional techniques, even if this does not result in actual compositions, is likewise a recommendable research method for musicologists studying this field, at least with regards to research focusing rather on musical structures and processes than on larger socio-cultural contexts.

I am not convinced that the role of musicology is to offer critical comments and advice to contemporary composers in the peculiar fashion represented in the present discussion by Adler and Blume. I do, however, not argue in principle against the inclusion of critique and discussions of musical value in musicology, quite the contrary (see Sharif 2019, pp. 216–218). But such musicological critique is probably better oriented towards informing the reception of existing music than towards guiding the production of new music, unless such advice is explicitly solicited by composers. Though critique of the former sort can also influence composers in their current work, I would argue that a more diverse array of music is created when composers are as free and independent as possible in figuring out their individual future artistic paths, rather than relying on scholarly advice of

²³ However, this should not be construed as a claim to be able to speak for all musicologists.

usually dubious prognostic value. The more diverse this music is, the more likely it will contain some works that some people find value in.

Since I am not a composer in the above-defined sense, I leave it to composers as to whether or not they would like to involve musicology as a creative resource or as a provider of scholarly services. Regarding the former mode of interaction, it seems to be primarily a matter of the composers' approach and their specific artistic aims as to whether existing musicological research is useful to them or not. They should carefully consider the way in which they engage with results from musicological research as they might, for example, today be accused of cultural appropriation—not only and not necessarily by musicologists—when drawing superficially on non-Western music (or musical concepts) discussed in musicological literature. Regarding the latter mode, it primarily falls to the composers' method of working and their given aims to determine if musicologists can likely provide any useful services. Nothing speaks against this in principle, but interesting artistic results are certainly not by necessity dependent on the involvement of musicologists. A fortiori, this holds for the close integration of composition and musicology pursued by Seeger and Crawford. Those among composers and musicologists who are interested in artistic research may consider it an interesting case model and a worthwhile challenge to approach twenty-first century composition and musicology in such a fashion. Personally, I do not consider these modes of interaction to be essential to the continued existence and flourishing of music (and in turn musicology).

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'A dialogue between two fragilities' A conversation

Chaya Czernowin, Pia Palme

This conversation took place online during the Corona crisis lockdown on 11 May 2020. The two composers were seated at their private workplaces in their respective home studios in Boston, USA, and Vienna, Austria. Chaya Czernowin had initially planned to speak about her work at the Fragility of Sounds Festival and Symposium at the University of Music and Performing Arts Graz in May. The conversation was held after the cancellation of the festival due to the pandemic crisis. During the email exchange beforehand, the two composers had already noticed that they were both deeply interested in the theme of fragility.

Transcription: Lena Hengl

Missing Stones

Palme: What are you doing at the moment? Are you able to work at home?

Czernowin: I work a lot. What's happening is a tragedy, but it is also an opportunity to rethink. In a way, the pandemic is saving me, because I was supposed to travel a lot and I also have a lot of music to write. How about you?

Palme: It keeps changing. Sometimes I feel I can work well, but at other times there is uncertainty about the future. Not knowing whether the pieces will be performed or not—I'm missing the second step in the future—you step on something, and then there is nothing.

Czernowin: The second stone. You are in the river, and there is no second stone; you can't jump.

Palme: Yes, exactly. I find it difficult.

Czernowin: It will all fall into place, and I think that the pieces that probably were important for you and that were already planned, will simply be postponed. I hope so.

Palme: The whole schedule of the festivals seems to be falling apart. Everything is changing all the time.

Czernowin: Yes, it's very very strange. We will see how it all falls into place. The truth is that especially performers are very depressed right now, and some of them are losing hope for the future. But I think that it will all return, it's just a matter of time.

Palme: I wonder... do you find your way of composing changing now, or are you continuing in the same way as before?

Czernowin: No, I'm constantly changing, I'm always changing. I mean, there is a lot that stays the same, that you can see from the outside, but from the inside, I don't ever feel like I'm doing the same thing. Of course, it's like I have the body of my creation and the *métier*—but it is constantly changing, hopefully, and growing. So, you know, I just had *Heart Chamber* premiered last November and I think that hearing that piece and being in it changed me completely.¹ Then I wrote a big piece for Musikfabrik, which I still haven't heard and I'm very unsure about. It was very hard to write, and it lasts an hour and four minutes, it's really long. You know, I'm able to write from this situation. It came, it all happened. I'm sure it will make a huge difference in my way of writing, mainly because I am at home for three months, four months—I have never been at home for such a long time.

Palme: Many people say that these days.

Czernowin: It's so nice not having to travel and only to be in music and in family, and with the computer, of course, most of the time. For you, does it make a difference? What is the difference in the way of writing?

Palme: I recently said to someone, I'm more interested in old forms and older kinds of compositional structures. For some reason, I find I want to focus more. I feel that something is changing. I want to do away with unnecessary things. When I am at home, I just dress kind of normally. As you said, there are so many things that you don't have to do or cannot do, and that is a kind of reduction happening. And also, this thing with the old forms: I think about things that have prevailed across the centuries. Somehow it gives me inspiration and consolation to look at centuries-old buildings or read very ancient literature and study historic handwriting. Then I think about the fact that they made it through all kinds of crises and catastrophes and wars and pandemics—and they continue to be here. I find that interesting. Maybe I would say I write more simply, in a way.

¹ Czernowin, C. (2019). Heart Chamber. An inquiry about love. Opera in four acts and eight close-ups. Mainz: Schott. Premiere 15 November 2019, Berlin, Deutsche Oper, conductor: Johannes Kalitzke, Orchester der Deutschen Oper Berlin. Available at https://en.schott-music.com/shop/heart-chamber-no374943.html (accessed 27 September 2021).

Czernowin: Maybe a better word is elemental. Is it more elemental or is it simple?

Palme: Minimalist.

Czernowin: Elemental, I think it's more elemental.

Palme: Yes, that's a good word.

A dialogue between two fragilities

Czernowin: Did you want the interview to be about the topics of your symposium?²

Palme: Yes, I was very surprised to find out that you are interested in similar topics.

Czernowin: [laughs] That was very surprising to see. All the themes of the *Fragility of Sounds* symposium and what you read about *Heart Chamber* are close...

Palme: What got you interested in these topics?

Czernowin: For me, they are not precisely like topics. For me, they are ways of being an artist. Vulnerability, for example, is so important to me because when you compose something, and it is not vulnerable, it would take away from its depth. I believe that depth is very connected to the notion of vulnerability and risk. I do not mean the old depth, the romantic kind of depth which is connected to showing the history and the roots, and so on. That is one type of depth, but there are different types of depths... There is a depth that is revealed when a material or an utterance is fragile. If they are fragile, then they are transparent, and you are able to see all their connections and interrelations which make them what they are: so many connected parameters influencing each other. Seeing them, you can decipher these connections between the parameters: are they stable, or not, are they at risk, or are they secure. At that point, you can get closer to understanding what motivates the existence of these materials or utterances, and that is another kind of depth. Like looking underwater and seeing what is happening in the deep layers of an ocean.

The symposium and music festival mentioned here was transformed into the online *Fragility of Sounds* lecture series. The main areas of research were: fragility, vulnerability, precariousness; membranes, skin, surfaces; filtering, transition; physicality, body, identity, gender, feminism. See: https://www.fragilityofsounds.org/fragility-of-sounds-lecture-series/ (accessed 16 November 2021).

Palme: Would you say that certain things need to be more deeply embedded or hidden because they are the fragile element?

Czernowin: Yes, the deeper you go, the more fragility you would probably find. And it affects time and memory, especially because it is connected to your experiences, to how you sorted them out, so the past holds some depth concerning the present. But fragility is also completely connected to the present and to how you feel the moment of the present, with all its complexities. The moment as you experience it, on the spot, as it happens. It's the experience of the fleeting moment, sensing its force and fragility. Seen this way, you can touch the texture of the moment, the rarity of the moment.

Palme: Is it because the things that are found more in the depths are more sensual? Is the depth also the core, the centre—or what is it?

Czernowin: So, there are two kinds of depths that I'm thinking of. Let's think about one of them as going down, and this is the one you are talking about. It has to do with a kind of archaeology of the soul. A kind of archaeology, where things can be found that were buried deeper. What is deeper is a bit more hidden than what is on the surface. This is the depth of going down: the deeper you descend in the layers the more depth is felt. There is also, though, the depth that is going up. This type of depth has to do with the present moment and with the feeling that this unique moment will not return. This uniqueness also has to do with how that moment came to be. When you look, for example, at a flower in time-lapse videos, and when you see how the flower comes out—every flower is very individual. It has the depth of the moment where, when it comes out, you are aware of its individuality and fragility. You don't see that moment of growth as disconnected and severed from what was before, because it's connected to what was two seconds ago. So it's like the *now* has a kind of depth of perception. The stem is finding its way out, but it could actually wilt and die—its emergence is not secure, and you witness all this, as you see the stem finding its way and growing.

The moment, then, is the connection between the future and the past. If you only see it as a *now*, you lose the depth of its connection to the future and the past. That connection also includes the risk that the stem, for example, can die. Its existence is not secure. This is why, for me, fragility is connected to a new kind of depth. The fragility of the moment as things emerge, and the fragility of going into the lost layers of the past, not knowing what one can find—these two fragilities can converse with each other. And it is in this dialogue between these two fragilities, that depth is created: a depth which is akin to sensing the texture—the skin—of the moment.

Palme: Very interesting.

Czernowin: The danger, the risk... what in this moment will create the next moment. I think that those two types of depths are very related: the depth experienced in the fragility of the connection to the past, and the depth experienced in the fragility of the future of the current moment. Figuring out the interconnectedness between these two depths and finding out the myriad of parameters interrelating these two in explicit or implicit ways, that is how I create perspective and depth in my work.

Language and the riverbed

Palme: Do you connect the term fragility with a sense of time?

Czernowin: Yes, absolutely, that is a very nice observation. Fragility has to do with the rarity of one's existence. Because basically and fundamentally, I do not take my existence for granted, and do not take the existence of humans in a hundred years as something that for sure will be there—I'm not so sure (*laughing*). So, if all those things are not taken for granted... it's all about a kind of a reading of reality, right? And that reading of reality can have different depths and different layers of consciousness.

Palme: Let me to go back to the beginning of our conversation, when you said the element of fragility is not a 'topic.' I found that very interesting. Is that because the dimension, or the element of fragility is so fundamentally connected to the reality of existence that it is not merely a topic? Is it more existential, or something basic or elementary?

Czernowin: It's more like a way of seeing the world or, as an artist, it's more like the way of life. You know, I have never written a manifesto and I will never write a manifesto, because I don't believe in manifestos. A manifesto would capture one view—and then in ten days I would regret my manifesto because it's fixed in words. I write my manifesto with every piece, so every piece is doing what it needs to be doing. So in that sense, the connection to fragility is a way of life as an artist. Anyway, over time, after working for so many years, you realize that some things are essential for you. And it's not that they are important because you think that they must be there, but through your work you have realized that these issues have been present for a long time, and they became a part of your artistic body, as it were. The relationship to fragility, the relationship to taking risks, these things are the riverbed of my work.

Palme: Ah, that's a nice word. Riverbed. You mentioned layers of consciousness—is that something that you experience within your own consciousness? Do you conceive your consciousness as having layers?

Czernowin: I think so, like when you look into the water—when you look at very deep water, what is then alive in very deep water, close to the ground? (*Laughing*). And when you go higher up, towards the surface, what kind of fish and plants do you find higher up, in the water? So many layers of existence.

Palme: This reminds me of Humboldt. Humboldt was the first one to make drawings of mountains which show these strata of plants and trees and animals. Down in the water, you find the same kind of layering. There are certain parts of the ocean where there is more light and then, when you go deeper, the pressure gets higher and there is no light. The chemical content changes, and certain animals live in this layer together with certain plants, and then the next one, and the next one...

Czernowin: Yes, exactly... the layers of consciousness... At times a feeling of a moment is answered by a huge resonance inside of one. At that moment the present and past talk to each other, and there is an internal movement, something is happening. You are able to see layers coexisting or even dialoguing.

Palme: What is the relationship of space and time for you? When you said that fragility is connected to a sense of time—what is the relationship of space in this? How are space and time connected in music?

Czernowin: It's an interesting question. I see space and time as interconnected. Perhaps they really become each other; they are not two separate categories. One could even say, they are categories of the same continuum. Time, if it slows down enough, becomes space; if spaces change faster, they delineate time. So both directions can be manifestations of change. Time, becoming space, and space becoming time, are signs of change. And of course, for this to happen, we need energy (laughing), and energy is the thing that motivates and makes the moves that create the change from space to time, and back. I have never thought about it so schematically (laughing).

Humans, instruments, and wild things

Palme: When you write a piece of music theatre, do you have a sense of the performance space?

Czernowin: Yes, for *Heart Chamber*, I spent a long time, a few days, in the Deutsche Oper Berlin and I did have the sense of the place. But in other pieces, this is not as much the case. Also, because in *Heart Chamber* I spatialized the electronics and I have a lot of speakers—in a way, I force the place, it is a kind of forcing. Maybe I persuade the place to become the place of my imagination. That's always a kind of a dialogue between the internal space and the real space, the external physical space where the performance takes place. One hopes that the piece will be performed at different places. This means that the sound should retain an essential quality, even when transferred to a new space.

Palme: With electronics you can do all kinds of spatializations. And when you write for an instrument there is a single instrument in space. Is there a difference for you when you're using electronics as a kind of ambient, and when you're writing for instruments—in terms of space?

Czernowin: Yes, absolutely. During the past year, as I was writing Heart Chamber—but also before—I have really created a small, particular universe and I'm realizing now, that I am going to break it. Because I want to get out of it. The universe that I have created is such that the electronics give me a horizon, they give me a field, they give me a very alive background. In *Heart Chamber*, there is a whole storm with a lot of bees and all kinds of noises of nature, and they surround you. So that's actually a recording of real storms. I use a lot of recordings of nature. It's really an environment, almost an ecology. Instruments are carriers of a much more human spirit, they come to life in this ecology. In the past, I used to record instruments multiple times, so that the instrument could become its own ecology, or its own solo. Those categories have definitely been very active in my mind, in all my last pieces, and I'm now beginning to question them. You know, why does it always have to be an enveloping ecology? Why can't it be an ecology that comes, unwraps, and goes, and another ecology comes? Not so immersive? These things are not rational, but they have to make sense in some physical way. I'm going to start questioning now, that's what I'm doing in my piece The Fabrication of Light.3

Palme: This ecology of electronics is a certain role that you assigned to the electronics. As you said, it's more the background, part of the scenery, different from the soloist performer and human performer.

³ Czernowin, C. (2019). The Fabrication of Light for large ensemble. Mainz: Schott. Premiere 19 November 2021, Huddersfield, conductor: Enno Poppe, Ensemble Musikfabrik.

The leaf's solo

Czernowin: Indeed not the human, yes. But sometimes soloists: for example, in *Heart Chamber* there is a solo of one leaf. It's a small leaf and it's a solo of a leaf breaking (*laughing*). That's how the piece finishes. One leaf, and we worked on it very long to record it precisely. Actually, I was not able to record it, it was Lukas Nowok from the SWR Experimentalstudio, who stood near the microphone with the dried leaf and almost did not move at all, or this is how it seemed, but he did produce a very tiny sound. This was exactly the right noise we needed for this solo. (*Laughing*)... holding the leaf and pressing it so little—that was what we needed. Anyway, that was the kind of solo that I would take from nature but it is not a human solo, and I think that all those things are going to change now.

Palme: Now you want to change these roles.

Czernowin: I want to release them from fixation. I don't like the fixation.

Palme: Do you see the instruments as more on the human side, so the performer, the musician is... they really have a kind of...

Czernowin: ... agency. These are beautiful questions that you ask, and clearly you are a composer, these are questions from inside of the work process.

Palme: (*Laughing*). These are the things that I also think about when composing.

A question of time and energy

Czernowin: So, let me say that instruments are double agents or multiple agents, and the voices as well, because there are always points where you can get to a place where a performer doesn't have control of what comes out from the instruments. When you write a lot of bow pressure, for example: if you wanted to exactly control all the parameters, you would have to write a book for one measure. And in the moment when something is not controlled, it starts touching on the quality of nature. The quality of nature, which is outside of control, that is what I am looking for. But the truth is—that's what I am discovering—that the controlled element with human agency and the uncontrolled element with its physical or natural way of being, these two forces, are not a dichotomy, they form a continuum and that continuum is not linear. In the moment of a great solo with a great expression, suddenly you can ask for the voice to break, and suddenly it becomes a voice of an animal and is not human anymore, but the human quality does not exactly stop in the moment that you want it to, you know.

We find an even larger palette of colors if we look into the spaces between, where things are wild and not wild; human and inhuman, and how the inhuman comes from the human or the human comes from the inhuman. And, if we look at the way that they branch off each other, that is for me the biggest question. The timing, the energy. How to make the right transition with the nodes of change in the right physical point in time. You can think about two opposite situations, let's say the extreme situation of a Beethovenian solo—and the total opposite, such as a noise taken from nature, drops dripping, no emotional underpinnings, no ego, nothing—these two would be the extremes. If I want to be neither here nor there, neither expressive dramaturgy nor Wandelweiser4... then I must actually discover everything, I want to use everything in between. Then I have to deal with how to make it sound; then I have to figure out why does the change happen, how does it happen that something breaks, or another thing arises from a flower and starts singing, or how, from a song, the line suddenly becomes a field—how does the change happen? And this is a question of time and of energy, and this is a question which is really, really difficult and interesting for me. That's where my future *métier* will emerge from.

Palme: Yes, basically it's about making decisions: when to move from one materiality to the other, finding the right time to decide that something has passed and something new is beginning.

Czernowin: That's the thing, that it cannot be a decision. It has to come from the material itself, it cannot be your decision. When you listen to the material, it can tell you how to make the change (*laughing*).

Palme: Do you get the feeling that the materiality begins to change, in a way? That the material becomes more fragile or breakable?

Czernowin: Yes exactly. So, it is about—if we want to make it very pointed—it's all about what is changing and what is not changing, which seems like a linear movement but is actually not. Rather is about moving between different modalities. Different modalities of reading the world, modalities that are in a dialogue. And this is maybe connected to the layers of consciousness that we talked about, the depth created between the going up and the going down, in layers of memory or sensations of the moment.

⁴ Wandelweiser (https://www.wandelweiser.de/home.html) is a network of musicians and artists known for their specific style. Alex Ross presented them as interested in 'music between appearance and disappearance', in an article available on https://www.newyorker.com/magazine/2016/09/05/silence-overtakes-sound-for-the-wandelweiser-collective (accessed 27 September 2021).

Palme: I understand. It sounds like you use a lot of organic metaphors to describe a sense of time and change—would you call that organic or even biological? I am always wondering about the correct term to use in this context, I'm looking for a good word. Because, when you say as a composer: I am thinking about kinds of organic growth... it sounds like salad (*laughing*).

Czernowin: Yes. It is physics, it is biology, it is neuroscience, you know, it is a kind of interdisciplinary thinking. A science that really connects the body to some kind of consciousness, like neuroscience or the science of the consciousness. That is where the music is now operating—that's my feeling. And all those words that you used, the fragility, the sensitivity, the risk, the not knowing, the questioning. All this is really connected to that type of being. It's a type of being that is connected to what comes before the word, and that particular place is a very important place that we are looking at now.

Palme: I am at times fascinated when I look more closely at this place of fragility. On a hike in the forest, I found this unique tree which fell in a storm, in the middle of its life, and for some reason it was still connected to the earth by a few of its roots—and now some of the branches had started to grow vertically and became new trees by themselves. They turned into treelike forms. It touched me that there is this fragile moment of this tree, when it's almost killed, yet the sense of growth is continuing. This sense of growth is so strong that it prevails over whatever happens. It was still continuing.

Czernowin: Exactly, yes, this is so beautiful!

Palme: So there is certain balance between the fragility and the duration, the continuation.

Czernowin: From my point of view then: there is an energy of continuation, there is an energy of carrying life's energy further. And that energy needs to find outlets. It does not matter where or through what it comes forth, it doesn't matter. Life's energy doesn't identify with its carrier, it's not as if the tree, you know, fell, and therefore the tree is so depressed that it would give up. No (*laughing*). That kind of energy is looking for ways to move forward, so either the tree will be dead and then there will be worms working on it, or the tree will grow some new things, or some mushrooms will grow on the fermented tree. And when I talked about the way things change, I was talking exactly about this process. In music, for me that means: how to make this energy travel in time in a way that makes sense, compositionally.

Palme: So that it might move from tree to mushroom, or from tree to earth or worm, from one being to another...

Czernowin: It can move into all kinds of crazy things, but it is your mission as a composer—if you want to bring that image to the listener—to make physical sense. It's not that, after the tree fell, immediately beautiful red mushrooms grew. That is impossible (laughing). It needed to die, to get fermented and decomposed. I don't precisely know how that happens biologically, but some conditions have to happen for this to occur. You know... in music, you have to make that happen, so that things can develop and move forward. But it's also not the case that every time change happens, it happens gradually. Things can happen very quickly. The tree dies, all of a sudden. So sometimes you have to be sharp. The brutality of this! This kind of energy is blind, and it sometimes evolves extremely gradually, sometimes suddenly, and it takes much work to create the emergence or flow of this variegated energy in one's music (laughing). But that's what I am looking for.

Palme: What is the importance of words in your music when you write for voices? I know that in *Pnima*⁵ you have not written any words, and then there are other pieces where you have used words. What is the stage where words emerge? How do words appear, or how do they come into being?

Czernowin: In *Heart Chamber*, for example, the words are like placeholders. They are, like, when you put clothes on a clothes hanger—the words are like clothes hangers. I didn't want *Heart Chamber* to be as abstract as *Pnima*, I wanted people to have some guidance as to what is happening. Because *Heart Chamber* is so huge, I needed to offer some kind of a rail to hold on to. But the words are really not poetry, they are making a place to the music.

Palme: That was a lot. Thank you so much for this conversation! I now have to think about all that.

Czernowin: I know, thank you for this talk, it was lovely talking. Thank you so much, I really enjoyed it.

Palme: Yes, thank you so much for this!

⁵ Czernowin, C. (2000). *Pnima... ins Innere*. Chamber opera for four vocal soloists, instrumental soloists and a string orchestra, after the novella *See under: Love* by David Grossmann. Mainz: Schott. Premiere 10 May 2000, Munich, conductor: Johannes Kalitzke, Münchener Kammerorchester. Available at https://en.schott-music.com/shop/pnima-ins-innere-no168965.html (accessed 27 September 2021).

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Notes on contributers

Paola Bianchi, choreographer and dancer, has been active on the contemporary dance scene since the late 1980's. She collaborates with musicians, writers, video artists, and film and theatre directors. With her performances and video works, Paola participates in many international contemporary dance and theatre festivals. She regularly leads choreographic research workshops and gives lectures at Italian universities; she is involved in the artistic direction of several festivals. In 2014, her book *Corpo Politico_distopia del gesto, utopia del movimento* was published by Editoria & Spettacolo. In 2020, her choreographic research project *ELP* won the Rete Critica Prize. In 2020, the directors Clemente Tafuri and David Beronio produced *La parte maledetta. Viaggio ai confini del teatro. Paola Bianchi*, a film project on the artistic career of the choreographer. http://www.paolabianchi.com; https://vimeo.com/paolabianchi.

Chaya Czernowin is a composer of operas, orchestral and chamber works with and without electronics which have been performed worldwide. She is the Walter Bigelow Rosen Professor of Music at Harvard University; she was a Professor for Composition at the University for Music and Performing Arts Vienna Austria and at the University of California San Diego. She was composer in residence in the Salzburger Festspiele (2005/2006), and at the Lucerne Festival (2013). Czernowin works imaginatively and analytically with metaphors as a means of reaching a sound world which is unfamiliar and is never taken for granted attempting to give a voice to what is internally hidden from one's view. Her main pieces are the opera Pnima (1998/1999); the orchestral piece Maim (2001-2007); HIDDEN (2014) for quartet and electronics; the operas Infinite Now (2016), Heart Chamber (2018/19), The Fabrication of Light (2019/20), and Atara (2021). Czernowin's work was awarded the Composer Prize of the Siemens Foundation, the Guggenheim fellowship, the Fromm and Kranichsteiner Musikpreis at Darmstadt Ferienkurse, among others. Both operas Pnima (in 2000) and Infinite Now (in 2017) were chosen as the best premieres of the year in the international critics' survey of Opernwelt. Her CD The Quiet won the German Record Critics' Prize. Her work is published by Schott, and she is a member of the Akademie der Künste Berlin and the Akademie der Schönen Künste Munich and is on the board of the European Musiktheater Akademie. http://chayaczernowin.com.

Veza Fernández is a voice, dance and performance artist navigating different scenes and forms of expression. Her art entangles singing, writing, dancing and speaking practices that collaborate polyphonically with each other as passionate forms of study and performing, all in visceral expression. The sentimental, the strident, the hyperbolic, the poetic, the transverberating are her preferred materials. She studied English and Spanish Studies before pursuing a career in the Arts. After years of choreographing, she developed a screaming practice with Christina Lederhaas and a writing practice together with Christoph Szalay. In 2021, she graduated from the DAS Choreography Masters. In 2014 she won an audience prize for her solo *Calamocos*. In 2015 she was awarded with the danceWEB scholarship. In 2016 the Austrian city of Graz granted her a prize of excellence for her labour as an 'Ausdruckstänzerin' in the city. Her work has been shown in Tanzquartier Vienna, brut Vienna, Sophiensaele, DeSingel and Gessnerallee, among others. www.veza.at.

Soprano **Juliet Fraser** specialises in the gnarly edges of contemporary classical music. Internationally recognised as a committed interpreter of new music, she regularly appears as a guest soloist with ensembles Musikfabrik, Klangforum Wien, Ensemble Modern, Plus-Minus and Talea, and is co-founder of EXAUDI vocal ensemble. She is an active commissioner of new repertoire and has worked particularly closely with composers Pascale Criton, Michael Finnissy, Bernhard Lang, Cassandra Miller and Rebecca Saunders. Juliet is the founder and artistic director of the *eavesdropping* series in London and co-director of *all that dust*, a label for new music. https://www.julietfraser.co.uk.

Susanne Kirchmayr a.k.a. Electric Indigo is active as a musician, composer and DJ. Her name is synonymous with the intelligent interpretation of techno and electronic music. She began her DJ career in 1989 in Vienna and worked at the legendary Hard Wax record store in Berlin from 1993 to 1996. In 1998, she founded female:pressure, an international network for female*, non-binary and transgender artists in electronic music that was awarded with an Honorary Mention at Prix Ars Electronica 2009. She feels equally at home in the infamous Berghain DJ booth or on the live stages of Europe's and North America's most adventurous festivals. Electric Indigo's compositions premiered at festivals such as Wien Modern, CTM and Heroines of Sound. In 2018, Imbalance Computer Music released her debut album 5 1 1 5 9 3 and her album Ferrum was released by Editions Mego in 2020. She received the Kunstpreis Musik 2020 from the Republic of Austria. https://indigo-inc.at.

Susanne Kogler combines aesthetic, analytical and historical perspectives in her research, specifically focusing on music from the 19th to the 21st centuries. Her numerous publications address language and music (song, opera, music theatre),

modern and postmodern aesthetics (music and nature, temporal forms, performativity, expression, gesture, electronics, multimedia), contemporary creation and gender issues. Current interests concern the methodology and possibilities of music history and critical aesthetics in the digital age, the change in cultural topographies, music (science) after 1945 and research on the Third Reich.

Flora Könemann works with experimental sound, performance and installation, focusing on deep listening, inner/outer awareness (synesthetic perception), drawing, site specific art and movement. www.there-is-something-wrong-with-the-view. net.

Irene Lehmann is a theatre and performance scholar, author and dramaturge. After studies of Theatre, Comparative Literature and Philosophy at Freie University Berlin she completed her PhD on politics and aesthetics in Luigi Nono's experimental music theatre (Auf der Suche nach einem neuen Musiktheater. Politik und Ästhetik in Luigi Nonos musikthetralen Arbeiten zwischen 1960 und 1975, Wolke 2019). She pursued a post-doctoral research project on processes of composing-performing in music theatre and dance at Friedrich-Alexander-University Erlangen-Nuernberg. On behalf of her research, she was a PhD fellow with Ev. Studienwerk Villigst, DHI Rom, DSZV Venedig and a PostDoc fellow at the Bavarian State Program for the Promotion of Women in Academic Research and Teaching. She co-edited the book Staging Gender. Reflektionen aus Theorie und Praxis der performativen Künste (transcript 2019) and publishes in academic journals as well as in theatre and music magazines. As a part of her current research she has engaged with artistic research projects including Pia Palme's On the fragility of sounds (KUG Graz, Austria) and Heike Langsdorf's Distraction as a Discipline (KASK Gent, Belgium). Lehmann is active as a guest lecturer at FAU Erlangen-Nuernberg. www.irenelehmann.com

Christina Fischer-Lessiak, born in Klagenfurt, is a musicologist, pop-musician, songwriter, event engineer, and cultural worker. She studied Musicology and Interdisciplinary Gender Studies at the Karl Franzens University of Graz, University of Music and Performing Arts Graz and Aarhus University/Denmark (BA, MA). In her academic work she focuses on aspects of gender in the fields of art and music. 2019–2021 she worked with the composer and co-researcher Pia Palme in their project *On the fragility of sounds* (funded by the Austrian Science Fund FWF) at the KUG University of Music and Performing Arts Graz. Here, she explored aspects of composition and performance, feminism and autoethnography. Currently, she works at the Coordination Centre for Gender Studies and Equal Opportunities (University of Graz) and the IG Kultur Steiermark.

Liza Lim is a composer, educator and researcher whose music focusses on collaborative and transcultural practices. The roots of beauty (in noise), time effects in the Anthropocene and the sensoria of ecological connection are ongoing concerns in her compositional work. Her four operas The Oresteia (1993), Moon Spirit Feasting (2000), The Navigator (2007) and Tree of Codes (2016), and the major ensemble work Extinction Events and Dawn Chorus (2018) explore themes of desire, memory, ritual transformation and the uncanny. Her genre-crossing percussion ritual/opera Atlas of the Sky (2018) is a work involving community participants that investigate the emotional power and energy dynamics of crowds. Liza Lim has received commissions from orchestras and ensembles including the Los Angeles Philharmonic, Bavarian Radio Symphony Orchestra, Ensemble Musikfabrik, ELISION, Ensemble Intercontemporain, Ensemble Modern, Klangforum Wien, International Contemporary Ensemble and Arditti String Quartet. Lim is Professor of Composition and inaugural Sculthorpe Chair of Australian Music at the Sydney Conservatorium of Music where she leads the Composing Women program. Her research has been supported by grants from the British Academy, by an Australia Council Interdisciplinary Fellowship and Ian Potter Foundation Senior Fellowship as well as numerous international commissions. Other recognition for her work includes the Don Banks Award for Music (2018), Paul Lowin Prize for Orchestral Composition (2004), Fromm Foundation Award (2004) and DAAD Artist-in-residence Berlin (2007–08). She has been awarded the 2021 Happy New Ears Prize of the Hans and Gertrud Zender Foundation and is a Fellow of the Wissenschaftskolleg zu Berlin in 2021–22. Her music is published by Casa Ricordi Berlin and by labels such as Kairos, Hat Art, WERGO, HCR and Winter & Winter. https://lizalimcomposer.com.

Margarethe Maierhofer-Lischka (*Regensburg, 1984) is a musician, researcher and sound artist currently living in Graz. She studied double bass, musicology, interdisciplinary art and contemporary music in Dresden, Rostock, Zurich and Graz and completed her dissertation on auditory staging in contemporary music theatre at the University of Music and Performing Arts in Graz in 2020. She is one of the founding members of Ensemble Schallfeld, with which she performs worldwide. She loves to think and work in sound and text across different media. Her work has been awarded scholarships from the BKA Austria as well as the Theodor-Körner-Preis 2018.

Molly McDolan (Basel/Vienna), a specialist in historical oboes, completed her studies at the Schola Cantorum Basiliensis (Switzerland), an interdisciplinary institute for the historically informed performance of Early Music, following studies at the University of Southern California (USA) and the Royal Conservatory of the Netherlands (The Hague, NL). As an active performer and advocate for her instruments in contemporary music, she has lectured on her analytical and performance

techniques at the University of Basel (Switzerland), Aarhus University (Denmark), soundSCAPE Festival (Italy), and SoundCheck – Festival for Performative Philosophy (Germany). Recordings for Edition RZ and state radio throughout Europe. Solo performances at Wien Modern, Documenta 14 (Athens), Klangspuren, Skaņu Mežs – Festival for Adventurous Music (Latvia), and Der Sommer in Stuttgart.

Chikako Morishita received her PhD in composition at Huddersfield University in the UK. Her works have been performed at international festivals such as HCMF (UK), BIFEM (Australia) and Rainy Days (Luxembourg). She currently works at the University of Tokyo. https://chikakomorishita.com.

Pia Palme (Vienna) is a composer and artistic researcher with a focus on experimental forms of music theatre. Known for her ecological and multidisciplinary concepts, her practice interacts with writing, movement, and visual art. Important music theatre works include ABSTRIAL (2013); the piece MY ROOM, UNTIL YESTERDAY (2017) developed with a group of seventeen young people; DUSK SONGS and MATTETOLINE (2019); and the collaborative opera WECHSEL-WIRKUNG (2020) with dancer Paola Bianchi, soprano Juliet Fraser, and ensemble PHACE. The backbone of her work is the physicality of performance, a theme she regularly revisits as a musician with her bass recorders. Her collaboration with the composer Éliane Radigue led to the realization of pieces for bass recorder as part of Radigue's OCCAM collection. From 2019-2022 she directed the PEEK artistic research project On the fragility of sounds (Austrian Science Fund FWF) at the University of Music and Performing Arts Graz, exploring, composing, and producing new formats of music theatre and composition; she cooperated with musicologist Christina Fischer-Lessiak and theatre scholar Irene Lehmann. Her recognitions as artist include the Outstanding Artist Award of Austria (2015), scholarships and residencies such as the Konen Saari Residency in Finland (2022), Sound and Music UK, the City of Vienna, the Örö Residency Programme Finland, Uncool Residency Switzerland, and The Banff Centre of the Arts, Canada. https:// piapalme.at.

Suvani Suri is an artist and researcher currently based in New Delhi, India. She works with sound and intermedia assemblages and explores various modes of transmission such as podcasts, auditory texts, sonic environments, maps, objects, data compositions, installations, experimental workshops and live interventions. Actively engaged in thinking through the techno-political processes that listening is embedded in, her research interests lie in the speculative capacities of listening, voice, and the histories and politics embedded within the technological processes of production, mediation, perception and interpretation of sound.

A graduate of the New Media Design programme (2014) from the National Institute of Design, India, she has been a part of several interdisciplinary practices, as an artist, assembler, designer, educator, researcher and sound-producer. Her work has been exhibited at Khoj Studios (2014), 4th Kochi-Muziris Biennale (2018), Mumbai Art Room (2018), Sound Reasons Festival VI (2018), Khoj Curatorial Intensive South Asia (2019). In 2020, she was one of the artist-actants in Five Million Incidents, a year-long series by Goethe-Institut /Max Mueller Bhavan in collaboration with the RAQS Media Collective. As part of an artists' collective, she has been awarded the Public Art Grant award (2021) by the Foundation for Indian Contemporary Art. Currently, she works as an artist-editor for the *Timezones* series at Norient Sounds and is a fellow in the ongoing program Capture All: A Sonic Investigation, with Sarai and Liquid Architecture, supported by Australia Council for the Arts.

Alongside her independent art practice, she has been teaching at several universities and educational spaces.

Since the 1980s, the musician and composer Elisabeth Schimana has been active as one of the Austrian female pioneers of electronic music, with projects marked by a radical approach and equally unconventional aesthetics. After completing vocal training, she earned degrees in composition, computer music, musicology, and ethnology. She has worked intensively with the theremin in Moscow and with the Max Brand Synthesizer in Vienna. She has created countless radio works in cooperation with ORF Kunstradio as well as numerous sound installations and interdisciplinary and performative projects. Her concepts for experimental set-ups fathom the social field and test new ways of interacting musically on the Internet. In her artistic work, Schimana examines questions of space, communication, and the body in its presence or absence. It is especially the imparting of compositional concepts (scores), which gives rise to new approaches. Experimentally exploring ways of hearing and listening, her concepts demand a heightened musical presence on the part of the performer. Her approach led her to establish the IMA Institute of Media Archeology in 2005, which is dedicated to acoustic media at the analogue/digital interface and to the subject of women, art, and technology. Schimana's award-winning and internationally performed work spans the gamut of composition and free playing, is inextricably bound to her as a live performer, refers to historical positions, yet resists all attempts at categorization. https://elise.at.

Malik Sharif is the Research Coordinator of the Music and Minorities Research Center at the University of Music and Performing Arts Vienna. He studied musicology (BA 2009, MA 2011) and philosophy (Mag. phil. 2012) in Graz and Halle an der Saale and holds a PhD in Ethnomusicology (2017) from the University of Music and Performing Arts Graz. His monography *Speech about Music: Charles Seeger's Meta-Musicology* was published in 2019, and his research has been awarded prizes by the Austrian Ministry of Science and Research, the State of Styria, and the German Society for Popular Music Studies.

Germán Toro Pérez (*Bogotá, 1964) studied composition and electroacoustics in Bogotá and Vienna. His work encompasses instrumental and electroacoustic pieces in diverse combinations and formats as well as works related to graphic design, visual and fine arts. His music theatre piece *Journey to Comala* was premiered in 2017. From 1999–2007, he lectured in Computer Music and Electroacoustic Composition at the University of Music and Performing Arts, Vienna. In Autumn 2007, he was appointed Professor for Electroacoustic Composition and director of the ICST—Institute for Computer Music and Sound Technology at the Zurich University of the Arts. He researches and publishes in the fields of composition, theory and aesthetics of electroacoustic music, artistic research, and history and identity of Latin American music. His current research topic at the ICST is the performance practice of live electronic music.