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Refiguring Composition

Artistically Researching the Contact between Composition,
Improvisation, and the outside World

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Abstract

Rooted in a composer-improviser's fascination with a musical composition's transformative potential, this artistic research project reflects on the composition through investigating it as a trace of creative interacting. It applies an artistic working method of individual and collaborative compositional experimental setups of iteratively combined creative activities, such as notating or playing saxophone. Interwoven with autoethnographic reflection, this yields a spiral creative-reflective path that focuses both on the activities and their traces, such as notations or recordings, as well as the human being's perceptive transformations. Drawing on artistic and sociological-philosophical specifications of the human being's interacting with its world such as Jean-Luc Nancy's or Hartmut Rosa's, as well as Sybille Krämer's and Jean-Jacques Nattiez's conceptualization of a trace, the project scrutinizes not only the diversity of evolving relations between all activities-traces-participants as transformative tools for each other, but also seeks a new language as a creative-reflective tool in its own right. Through exploring the notion of the trace, as well as creating neologisms such as the musical *Geschehen* for a specific notion of created sound, a concept of creative practices as being relational and transformative emerges, leading to the notion of a shared creative practice as shared modes of relating. Creative practice such as improvising and composing evolve as epistemological and semantic grids that conceptualize experiences of engaging with traces, alongside an understanding of a composition as a trace that is formed by and affords specific modes of relating to the "*outside*" world. Artistic results include new vocal and instrumental scores, lead sheets, electroacoustic pieces, and a selection of recordings.

Ausgehend von der Faszination einer Komponistin und Improvisationsmusikerin für das transformative Potenzial einer musikalischen Komposition untersucht dieses künstlerische Forschungsprojekt die Komposition als Spur kreativen Interagierens. Die künstlerische Arbeitsmethode besteht aus individuellen und kollaborativen experimentellen Kompositionsetups iterativer Kombinationen kreativer Aktivitäten wie z.B. Notieren oder Saxophon spielen. Verwoben mit autoethnografischer Reflexion ergibt sich ein spiraliger kreativ-reflexiver Weg, der sich sowohl auf die Aktivitäten und ihre Spuren wie z.B. Notationen oder Aufnahmen, als auch auf die Wahrnehmungstransformatio-nen des Menschen konzentriert. Ausgehend von künstlerischen und soziologisch-philosophischen Spezifikationen der Interaktion des Menschen mit seiner Welt, wie denen von Jean-Luc Nancy oder Hartmut Rosa, sowie der Konzeptualisierung der Spur durch Sybille Krämer und Jean-Jacques Nattiez, untersucht das Projekt nicht nur die Vielfalt der sich entwickelnden Beziehungen zwischen allen Aktivitäten-Spuren-Teilnehmenden als transformative Werkzeuge füreinander, sondern sucht auch nach einer neuen Sprache als einem eigenständigen kreativen und reflektierenden Werkzeug. Durch die Erforschung des Begriffs der Spur und neuen Begriffsverständnissen wie dem musikalischen *Geschehen* entsteht ein Konzept kreativer Praktiken als Praktiken der Beziehungen und Transformationen, das zu einem Verständnis von geteilten kreativen Praktiken als geteilte Beziehungsmodi führt. Kreative Praktiken wie die des Komponierens und Improvisierens ergeben sich als epistemologische und semantische Raster, die Erfahrungen mit Spuren konzeptualisieren, außerdem das Verständnis einer Komposition als Spur, die durch bestimmte Arten der Beziehung zur "*Außenwelt*" geformt wird und diese ermöglicht. Zu den künstlerischen Ergebnissen gehören neue Vokal- und Instrumentalpartituren, Leadsheets, elektroakustische Musik und eine Auswahl von Aufnahmen.

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Introductory remarks

This research project has been conducted within the Doctor Artium programme at the Artistic Research Center at the University of Music and Performing Arts Vienna (mdw) from 2021 to 2025, including an Erasmus+ phd short term mobility stay at the Royal College of Music in Stockholm (KMH) between September 19 and October 18, 2023.

Some of the following reflections, in combination with performances or audio or audiovisual media representing related artistic works, are based on reflections that have been developed for and presented at a variety of European conferences for artistic research. The reflections in chapter 3 and 4 emerged through the artistic and reflective preparations of and doings in performance-lectures and lecture-performances at the European Platform for Artistic Research in Music (EPARM) 2023 at RDAM, Copenhagen, the 12th conference by Forschungsnetzwerk Implizites Wissen (FORIM), 2023, at mdw, Vienna, and the symposium *Musicians' Perspectives on Improvisation Symposium* by Exploratorium Berlin in 2024. Many thoughts of chapter 6 are related to my presentation at the 2024 edition of the European Platform for Artistic Research in Music (EPARM), Ljubljana. The starting point for the reflections of chapter 7 was a presentation at 2024's *Forum Artistic Research: listening for beginnings* at Gustav Mahler Private University for Music (GMPU), Klagenfurt. Thus, the chapter's reflections are also related to the connected publication in preparation (Flick 2025). And finally, it was a presentation at the 4th International Network for Artistic Research in Jazz (INARJ) conference at JAM MUSIC LAB Private University for Jazz and Popular Music in Vienna that provided a basis for the findings of chapter 8.

Some of my reflections on notation were additionally promoted through summarizing some of my artistic and reflective findings for academic guest lectures, on the one hand in relation to different dimensions of creating and interacting-improvising with notation for a workshop for the Hunter Jazz Ensemble student group at Hunter College's music department in New York City, December 6, 2022, on the other hand on notational strategies applying notation as a relational tool between composers and (improvising) performers and collaborators for a lecture in the jazz theory and arrangement class (*Jazztheorie und Arrangement 01.9170*) at the Department of Composition Studies and Music Production at mdw, Vienna, December 18, 2024.

Before immersing myself into the actual research topic, a few practical aspects concerning the following reflections need to be mentioned as well.

All descriptions, tables or schemes depicting participants, activities and relations concerning the following reflections and resulting conceptualization function as philosophical models. These are models that can never depict the complex reality of the phenomena described and reflected on in the following, but that are still useful for analytical reasons since they nevertheless provide insights in crucial aspects of these phenomena which with their help can be highlighted and exemplarily described and analyzed.

Important is also that the result of this research is comprised and represented by *both* this following reflective documentation *and* all art works. The reflective text and the art works can obviously exist and offer understanding and meaning independently of each other and even outside this research context. However, *neither of them can stand for the outcome of this research alone*.

Concerning all described artistic experimental projects and especially the collaborative ones, I do not seek to provide a comprehensive analysis of the respective experiment's doings and results such as scores, lead sheets or recordings. It would on the one hand exceed the framework of this research and is on the other hand simply not necessary for following the trails of my research quest. It would instead lead the research into a completely different direction and abide by completely

different research questions and is therefore omitted.

Whenever referring to fellow participants of this research or any person mentioned, I use the third-person pronoun *they* and its respective forms as a gender-neutral form in order to respect gender plurality.

For the first appearance of fellow research participants in this text, I use their full names (but without possible academic titles). All subsequent references refer then to their forenames, reflecting the practices in the respective working fields in which the research happened and the tone established during the collaborations.

For some phenomena and the resulting concepts of understanding it was not possible for me to find appropriate English terms in which to dwell and that had the capacity to emphasize these phenomena's dimensions that are relevant for this research. In these cases I decided therefore to turn to my native language German and transfer the terms used there. These terms and their etymological and practical connotations are more than just denominations for these phenomena, they have shaped my reflective and artistic path through this research, they comprise its tools. In connection with their first appearance I will provide an English description for the understanding that I seek, but will then continue to refer to them in German. Also, I sometimes resort to rather unusual and non-idiomatic English expressions, applying the gerund instead of a noun to emphasize the dimension of action.

As this text document is written according to American English as a standard for all language-related aspects including typesetting/layout, pitch denominations were also made according to American Standard Pitch Notation (ASPN).

The numbers given in connection with the quotations from *Research Catalogue* expositions, in the format as for example 2533178/3028888/0/0, are position designations which, in conjunction with the URL root <https://www.researchcatalogue.net/view/>, lead to the specific page of the exposition from which the quotation was taken. The URL provided in the list of references links to the respective exposition's landing page.

All mentioned notations, audio and video recordings that this text is related to are supplied through the *Research Catalogue* exposition which belongs to this text and which can be retrieved through either the individual links placed whenever relevant in the text or in the attached list. They are also accessible through the following overarching exposition link which can equally be found in the appendix.

<https://www.researchcatalogue.net/shared/72b173317f2e4e37813a5eb60df3429c>

Some of the recordings were only made for documentary purposes and by simple means such as a phone. They are nevertheless shared here without any post-editing since they, despite the sometimes poor sound quality, contribute crucially to this research and an understanding of its path.

Both in regard to recording and notation, intermediary stages made for sharing with other participants of the research are kept in their original version to give as clear a picture of the situation as possible, thus potential typos, abrupt cuts or other such occurrences which would otherwise be corrected were preserved.

Please note that this version of the reflective documentation, made available to the public via the Research Catalogue, is a copy of the original reflective documentation with minor errata corrected as of January 22, 2026. The original can be accessed via the library at mdw – University of Music and Performing Arts Vienna and the Austrian National Library.

Chapter 1

Beginnings

1.1 Origin of my research

This research is rooted in a fascination and an amazement, an amazement that grew over the years into a full-blown puzzlement, arising from my professional practice as an improviser and composer with an artistic practice that is clearly rooted in jazz,¹ despite the increasing and always present “in-betweenness” between genres and traditions and also more and more interdisciplinary collaborative work in the field of Western contemporary classical music.² Educated in the jazz tradition and working with a continuous thread of playing saxophone in contemporary jazz contexts that a diversity of compositional activity has branched out from, my practice has also been formed through a notion of improvisation that is influenced through, amongst others, pianist and improviser Connie Crothers’ teaching,³ a great interest in older European church music and traditional practices of hymn singing and pastoral musical from certain regions in Sweden, as well as many years of performing and composing within the context of the protestant church in mostly Northern Germany and Sweden.

What was ongoing in my artistic practice often left me bewildered when looking at what I was actually *doing* when composing and when improvising, and when observing how the traces resulting from these creative doings—such as writing lead sheets for my bands, scores for a choir or when observing the changes in my compositional expression after improvising with certain materials or expressions on the saxophone—were related to these doings.

It also fascinated me how a composition could sound so different each time it was played, how it was possible to, for example, improvise with any parameter or “property” of a jazz standard, change the standard’s form, vary the melody or leave it out, create reharmonizations or *altered harmony*, leave out or add entire form parts—and still the feeling of playing just this specific standard would never change. The same was true for playing my own songs with my quartet, or even when improvising with references that had originally not been intended to become the basis for one’s improvising (or at least not in that context), such as an old Swedish hymn variant or dance piece, or a piano piece by Béla Bartók that would find its way into our quartet repertoire.

¹I am aware of the discourse in regard to the practice’s denomination in relation to today’s awareness of the racist entanglement of the term’s evolution. However, though greatly supporting the ongoing discussion on alternate terms that acknowledge the genre’s Afroamerican heritage, such as for example *Black American Music*, I decided to keep the denomination of jazz in this text, since it is how this genre is still referred to where the larger part of where my research project happened, and which also the jazz-related references I invoke apply.

²I do not aim to open up a dichotomy by separating practices into Western contemporary classical music or jazz, applying these category only for practical reasons and to highlight different art worlds that have evolved alongside different practices, invoking and agreeing with Georgina Born’s “disclaimer” when discussing the work concept in relation to jazz and what she calls “digitized music”, “I am aware of the dangers in referring to the ‘work concept’, ‘jazz’ and ‘digitized music’ as though uniform categories. My defence is that only by treating them in this way, as akin to Weberian ideal types, is it possible to draw out comparatively some core features of these complex musical cultures. I do not intend to fuel any evolutionist reading of these musics as successive stages of historical development, nor to imply that they are isolated, immune from mutual influence, or determined by technological change” (Born 2005, p. 26).

³After initial, singular, lessons with her in 2010 and 2013, I was lucky to study regularly with her in the winter of 2014/2015 and again for single lessons during 2015.

Compositions seemed to be something “infinitely elastic,” as I formulated it once. I was puzzled both over what happened with the composition in the moment of improvising and how to approach this elasticity as a composer—in order to on the one hand prepare and responsibly take care of and support it and; on the other, take advantage of it in the most effective and sensitive way. Thus, I became interested in how not only practices *originating in or including a composition*, such as a large part of my improvising, are bound up with this composition, but also how the creative processes *leading to a composition* are related to it.

In the introduction of my master’s thesis from 2020 where I for the first time tried to approach my puzzlement and the resulting yearning for better understanding, I formulated my artistic situation and parts of the problem.

When I improvise it feels best to not know anything at all and to just try to not be in the way of my own and the group’s collective intuition and flow. When I compose, I face the challenge to, on the one hand, have control over what happens musically which includes or is the starting point for improvisation, on the other hand, to open up improvisatory spaces and possibilities for the musicians that at the same time allows them to feel free and to serve the composition.⁴ (Flick 2020, p. 1, my translation)

I asked then,

Could I even compose for a larger setting and have improvisation included without giving up all the ideals and claims to improvisation that I have as a musician, I asked myself. Can a composition include an improvisational process where the musicians play as intuitively as possible, are present in the moment, and still make music in the spirit of the composition? Can I compose in a way where the boundary between what arises spontaneously and what is written is not perceivable? How do the written and the improvised influence each other? And as a summary question: is it in general possible, as a musician, to approach a composition with this “improvisational” attitude and discover it anew each time it is played - but in such a way that it still remains the composition itself?⁵ (ibid., p. 1, my translation)

To tackle this, I foregrounded the term permeability⁶ in my research, and used its stance to think about how my through-composed composition *LYSSNA* for choir, soprano voice and seven instruments would come into contact with the improvising of this octet. Creating the notion of *ytor* (surfaces), where the composition made itself permeable for the musicians’ improvising, such as the musicians’ listening, or aspects of its notation, as well as exploring notions of this listening and its function as a surface for permeability, and “classifying” improvisation’s function in *LYSSNA* in different ways, functioned as a helpful *scaffolding* technique. It provided an understanding for some of the above-mentioned problems and led to understanding a composition as “something ongoing, that through its enormous permeability is constantly in the process of becoming, with continuous transformation processes, stimulated by the connection and interaction with other components such as improvisation” (ibid., pp. 30–31, my translation).

However, another dilemma arose from this notion and it became clear that the questions I noted above had just been the product of an underlying, more general question. What was considered by

⁴ “När jag improviserar känns det bäst att inte veta något alls och bara försöka att inte vara i vägen för min egen och gruppens gemensamma intuition och flöde. När jag komponerar ställs jag då inför ‘utmaningen’ att å ena sidan ha kontroll över det musikaliska skeendet som inkluderar eller blir utgångspunkten för improvisationen, och å andra sidan öppna upp improvisatoriska rum och möjligheter för musikerna som samtidigt låter dem känna sig fria och tjäna kompositionen.” (Flick 2020, p. 1)

⁵ “Kan jag ens komponera för en större sättning och ha improvisation inkluderat utan att ge upp alla ideal och anspråk på improvisationen som jag själv har som musiker, frågade jag mig. Kan en komposition innehålla ett improvisatoriskt skeende där musikerna spelar så intuitivt som möjligt, liksom är närvarande i nuet, och ändå musicera i kompositionens anda? Kan jag komponera på ett sätt där man inte känner en gräns mellan det som uppstår spontant och det som är skrivet? Hur påverkar det skrivna och det improviserade varandra? Och som sammanfattande fråga: kan man helt generellt som musiker närlägga sig en komposition med den här improvisatoriska inställningen och upptäcka den på nytt varje gång den spelas – men så att det ändå förblir själva kompositionen?” (ibid., p. 1)

⁶ I chose the Swedish term *genomsläplighet* to mark that it was my own understanding of the term in contrast to established notions such as the ones of György Ligeti’s or others.

me as a composition and its mode of existence, where and how was it to be found, if a composition was such an ever-changing phenomenon, a process? I had the impression that “it must be possible to delineate a composition when it gets in touch with improvisation and the outside world,” which led to “asking, so to say, what remains when improvising with a composition” (Flick 2021, p. 1).

1.2 Original research questions and a draft for a method

At the same time fascinated and even more puzzled by this new issue, the following questions became the starting point for this research: “How can it be possible to delineate a composition when it gets in touch with improvisation and the outside world? What idea, what concept of a musical composition can be gained from this – and which new artistic and other insights and consequences arise from there? (ibid., p. 2)”

Anticipating the possibility of gaining an understanding by looking at the processes and the contacts of what had been composed would be involved in, the methodological design became the following:

[...] I want to undertake an artistic experiment with different experimental and reflective circles and follow an initial *seed* compositionally. I want to develop a network of new compositions through interweaving the composition process with purposefully exposing the composition seed in its different stages of development to outer contacts, especially improvisation by myself and other musicians – both following improvisational structures integrated into the composition in different ways or meeting the composition totally freely. My artistic method shall be interwoven with and informed by academic approaches, especially the method of *génétique in vivo* (or live genetics) as Nicolas Donin et. al. described it and applied it to musical composition and Interpretative Phenomenological Analysis (IPA)—so that I can perceive what the composition’s contacts set in motion in the composition’s and also in my inner process and perspective on the original seed’s possibilities and thus gradually can sense the composition’s delineations between its changes and transformations. (ibid., p. 1)

1.3 A first test case: the *seed*

My research began thus with a preliminary small-scale study of this envisioned experimental spiral in December 2021, using the occasion of the preparation of a lecture recital for the online festival of *The Arc Project*, a community founded in 2019 in Great Britain by composer Jake Adams.⁷

I tested working with such a compositional seed by exposing it during the time frame of a week to different contacts and chose a short melody, notated on Dec 6, 2021, as that seed. It was inspired by two pitches forming the interval of an ascending fifth which had resonated with me when improvising on the saxophone that day, created through singing, notating and playing saxophone, and notated as a line of stemless pitches (see Figure 1.1, p. 4). The seed was then exposed to the following improvisatory contacts.

(i) I began by *improvising with it* in different ways on December 8, 2021, and recorded everything with my phone. At first, I improvised with the seed in the “back of my mind” on the saxophone. After having landed in some “arpeggio-constructing thing,” as I expressed it then, and that I liked, I followed the impulse to continue improvising on the piano, recording this as well. Gradually, my playing returned to a song-like structure and I then also began singing. Suddenly, when already having ended the session, I began singing again—while singing, I began accompanying myself on the piano again, at first only with one hand since I needed to switch on the phone again with the other, then with both hands. The “song-form” that I thus created on the spot and that resonated strongly with me seemed to be very different from the original seed, but still somehow harmonically related.⁸

⁷The project’s website is not online anymore and thus neither the festival program, but some of the project’s collaborative results such as my piece *Tau* for *Aulus Duo* or some recordings of the festival—but not my own that are only stored privately—can still be found on the platform Youtube.

⁸The recording is not shared here, since I consider it too private.

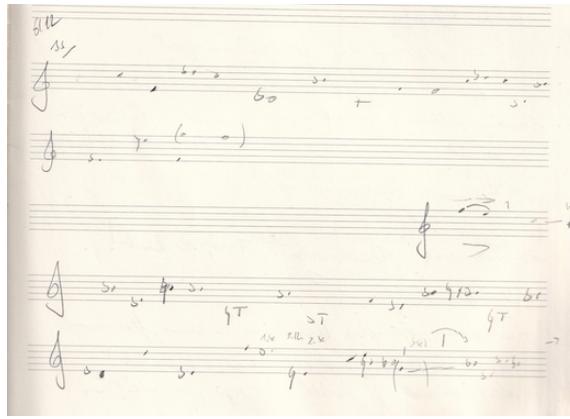


Figure 1.1: The seed, first sketch

(ii) Secondly, on Dec 10, 2022, I *overdubbed a series of saxophone improvisations*. I began with a saxophone improvisation to this piano/singing recording, then I muted the original recording's track and overdubbed another saxophone improvisation to the one made before and repeated this procedure twice, always exclusively hearing the previous layer while improvising a new one. It was, on the one hand, interesting to note how it had become easier to improvise with the original seed—done as some kind of coda at the end of the third improvisation—as if I had through the activities done in between discovered more facets and potentials of the seed. On the other hand, it was interesting how especially the second and the third improvisation sounded together.

Improvisation I

Improvisation II

Improvisation III

Improvisation II + III

(iii) Thirdly, I *transcribed the piano song-structure* that I had improvised on December 8, distributing what I perceived as melody, bass notes and mid-voices into a grand staff and structuring the improvisation into several (not-denominated) form parts through double bars. All pitches and rhythm were notated quite “literally” from my recording, only at points where the accompaniment got more complex and clearly “vertically structured,” I wrote chord symbols and slashes instead of the actual melodic-harmonic-rhythmic course, thus making the whole notation look more like a lead sheet instead of a score or a partcell.

(iv) The next activity was then *to improvise with the transcription in a trio setting*. Using the occasion of a trio rehearsal with bassist Lisa Hoppe and pianist Antje Rößeler on December 11, 2021, we sight-read the transcription and played and recorded it once.

Recording of sight-read transcription by Birgitta Flick, Lisa Hoppe, Antje Rößeler, December 11, 2021

Transcription, notation

(v) Then, on December 11, 2022—I don’t remember if that was before or after the trio recording—I *re-notated and supplemented* the original sketch of the seed as a “finished” and shareable version, a *Reinschrift*, the clean copy of the seed (see Figure 1.2, p. 5), comprised of the original series of pitches with the addition of three boxes with rhythmic propositions and also semantic associations (“Birds”, “Air”).

(vi) Lastly, I *improvised with the clean copy* in the aforementioned lecture performance on

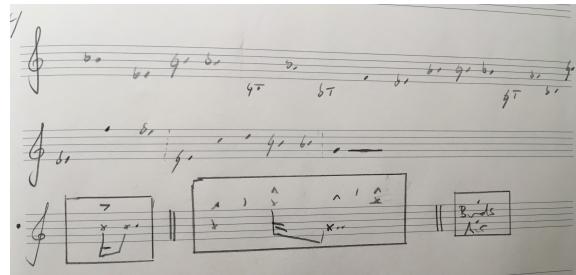


Figure 1.2: The seed's clean copy

December 12, 2021, embedded in a description of my research's background and this pilot version of my method, including presentations of some of the recordings and notations.

When I reflected parallel to these practical experiments on the lecture recital's structure, it became clear that the key topics of my lecture were actually *layers* and *traces*, a thought that I did not further at that time, but that nevertheless was the first, albeit *tacit*, *seed* of the following reflections. My talk was instead centered more generally on the aspect of transformation of musical material that my work had yielded.

However, it was only through this first methodological test that a number of crucial problems concerning the envisioned artistic methodology and the assumptions it was based on became obvious—problems that were even reflected in the formulations of my research question, but that also led to new questions. My method seemed to create a fractal problem of delineating.

Firstly, it was unclear how such an original seed could at all be delineated. It was unclear to me how the seed's temporal dimensions could be delineated—to know when its creation began and ended, on which basis an activity would be integrated in the seed's creation or be outside of it—dimensions I would need to know about to be able to conceptualize such a seed's contacts. Here the same problem occurred; to perceive a seed in its contact-making, it was necessary to delineate if the involvement in a certain activity such as improvising with certain participants of that activity was already such a contact, or if it was part of the seed's creation. Thus both the activities and the seed's “*outside*” *world* needed to be delineated. Interesting was here also the issue of conceiving of and practically dealing with tacit and explicit expectations and artistic value systems that are encountered during the creative process—and that would contribute to considering something as a seed and something that would be worth working with or not.⁹

Secondly, also the issue of *tracing* the seed's transformation through its contacts lead to a myriad of new delineation problems. Wouldn't everything done during my work with it and that was ever done before, both personally and musically, influence its development? An explosion of necessary decisions on delineation-delimitation in reference to what would be a part of and what would be outside of the seed's network, as well as what would be the criteria for that seemed to lie ahead of me.

Thirdly, how could *the translational processes* in between the different activities be conceived of—such as when transferring between the instruments, recording and playing, notating something that was played, playing through reading a notation, playing something notated by myself with others who do not know the original recording? It was yet unclear how and why this should be done, but it seemed in any case to be necessary to approach this question before returning to my original ones.

1.4 A second test case: documentation

Because of this multiplicity of, mainly, delineation problems, my focus shifted away from the idea of tracing transformations through watching an isolated seed to instead attempting to trace trans-

⁹This seed for example, had on the one hand turned out to be something very different than I had expected it and wished it to turn out, something necessary to accept during the week of experimenting. On the other hand, it was still not the very first thing I thought of in musical terms during that period, it was rather the first thing that I found interesting enough to work with. Thus already its selection was the result of underlying artistic value systems.

formations within my whole creative practice, using this new objective for a trial period of the autoethnographic documentation as the supposed second part of my methodology which needed to be tested as well.

The first step was to design a table of criteria to be filled in at the end of each working day. It was on the one hand based on Zembylas and Niederauer's topography of composition processes (Zembylas and Niederauer 2019, pp. 13–56) and the questionnaire they had given the participating composers in their study, on the other hand it was inspired by my reading of various research including autoethnographic reports of composers, edited by Nicolas Donin's, as well as his translation of Julius Bahle's writings (Donin et al. 2019; Donin 2010; Donin and Theureau 2007; Theureau and Donin 2006).

Instead of focusing on a specific creative process in connection to such a seed as before, the questionnaire encompassed all activities that were considered as creative when documenting. It consisted of practice-oriented questions such as on what, when, where, how and in which framework I had worked creatively, but asked as well about my evaluations of the working process and emotions connected to it. However, this test also quite quickly resulted in similar problems of delineation. The work was therefore terminated after about two weeks and the following questions arose, which are quite related to those resulting from my first trial experiment.

Firstly, it was again the fractal delineating that puzzled me. What were the criteria for classifying something as a creative activity? Wouldn't the activities need to be compared with each other in my documenting?¹⁰ Related to this question was, similar to when reflecting on the seed's creation, the temporal and structural delineation of my activity of documenting, how to choose what to document, how to reach completeness and also how to document tacit processes. Thus, secondly, the problem of how to trace transformation recurred. Was not the documenting already a creative activity in itself, influencing the further creative process through "curating" my memory? It seemed unclear how the documenting's effect on the creative activity could be traced in the chosen documentation method.¹¹ Thirdly, the issue of translating in regard to the problem of delineating recurred. Was not such a documenting actually based on a process of translating memories of memories when recalling them—the curating of memory already being dependent on an earlier memory of the process which was itself also dependent on prior memories—again creating a fractal process of delineating?

In sum, also this methodologic trail produced mainly new, though similar, problems of delineation. It became clear that both of my methodologic concepts had failed to put me on track of my research. However, the problems and new questions they resulted in, provided valuable insights that sharpened the research focus and made it possible to realign my methodology, as explained in the following.

Also, though my first research question consciously omitted defining the terms *composition*, *improvisation* and the "outside" world whose contact is in the center of my research, my methodological approach to the question led necessarily to asking for exactly that, thereby also enhancing the apparently dichotomic notion of improvisation and composition that my research aimed to resolve.

Instead of getting insights into the practices of composing and improvising, the seed experiment and the documentation highlighted rather how my artistic practices of improvising and composing

¹⁰At the point of documentation, I was mostly busy with evaluating and taking decisions on changes in the mix for the new record of my quartet (Birgitta Flick Quartet 2022), but also continuing the work on a (still unfinished) chamber music piece, as well as with practicing different material or techniques on the saxophone, teaching improvisation at a communal music school and sometimes having rehearsals and sessions with other musicians. Connected to these activities were also activities such as listening to concerts, or reflecting on my doings in different ways and settings.

¹¹A practical question was related to this as well. It was unclear to me how to escape the stress and the striving for being "productive," thus efficient and effective and "well-organized" in my creating alongside the documenting. Since all my activities and issues with it were visible in the documentation, I noticed how the activity of documenting enhanced the tendency to strive for results that would feel positive and show what had been intended to show, thus reducing my willingness to indulge into "risky" activities. The whole creative process was put under performance pressure. Obviously, this was just an amplification of a general potential problem of such kind of research where research subject and object can't be separated; it would necessarily occur, since there would always be the need to document my artistic doings. Thus, already then, it became clear that a large part of this problem could be reduced to the dimension of habituation, which in retrospect proved true. Nevertheless, this specific method of documentation did not seem suitable for me and as all other described questions and problems show, it was necessary to find other ones that would suit my needs.

consist of a plethora of creative activities that are constantly entangled with and contingent on each other, resulting in conglomerates of activities that leave a diverse multiplicity of *traces*, such as notations, recordings, or concepts for combinations of activities and traces. It was the *relations* between them that I seemed to be interested in, as also my recurring interest in the topic of translation indicates.

It also became clear how my failure and the fractal problem of delineating originated additionally in a linguistic problem. The questionnaire's first question for each documentation day referred to the classification of the creative activity—"Komponieren (*Spuren*¹²)", "Impro/Üben", "Mixen/nachhören" (Flick 2022g) were the main activities that were documented. However, as indicated above, there were so many activities within these overarching activities going on, which could be differentiated endlessly. Every composing day involved different combinations and orders of activities, despite working on quite similar issues. Thus, the terms *composing* and *improvising* seem not to necessarily say something exact about the actual *doings* and their combinations. This is reflected in the language used to describe my practice. On the one hand, composing and improvising seemed to be superordinate terms for practices of differentiated activities or rather combinations of them. On the other hand, I used them imprecisely and unconsciously mixed superordinate terms and subordinate activities—sometimes applying improvising, sometimes playing the saxophone when actually meaning the same activity; sometimes applying composing, sometimes instead referring to notating, making, or to similar terms. It became obvious that what I was actually doing when improvising or composing seemed to be varying and accompanied by a confusion of categories of thinking. Furthermore, it was not only the denominating of my practices or the actual doings within them that was unclear. I neither seemed to clearly separate the terms referring to the activity itself, nor the terms referring to the result of activity, thus confusing or at least not consciously applying the terms *improvisation* and *improvising*, *composition* and *composing*.

It also caught my attention that my documentation repeatedly referred to the topic of the body. It was documented how the creating felt, for example when I enjoyed the creating of arpeggios on the saxophone, or how I reacted emotionally to something, for example in reference to the seed. Also, in all creative sessions there seemed to be the constant thread of body work and a constant need to deal with physical constraints, or, if not constraints, then at least the necessity of dealing with the needs of the active body when being creative. Although it at that point was unclear how this should be approached, it became clear that the dimension of the body needed to be included in my research; its constraints or needs were not only related to my own general physical condition, but also to the creating itself. Thus, they could potentially be turned into a resource. A resource in the sense of, on the one hand, considering my body work activities as creative activities in their own right, and to take my corporeal experience as a means to reflect on (other) creative activity, and, on the other hand, to consider the human body as the starting point to reflect on what I had denominated as the "*outside*" world.

1.5 A shift

Thus, both method trials showed that it was mainly the focus on delineating in the sense of delimitating that was problematic for my research. On the one hand, they had both produced increasing delineation issues, resulting in an infinite regress, while, on the other hand, both trials had highlighted a diversity of related activities *within* the practices referred to as composing or improvising, resulting in what I experienced as an entanglement of all doings and their traces when working creatively. This is related to Hans Roels conclusion when describing how he arrived at looking at the limitations of his study in which he had investigated the genesis of only one composition:

Within a dynamic process, it is difficult to draw conclusions starting from one "frozen" instance [such as my seed]. Studying one instance of experimentation separately may lead to absurd observations: the challenge is to find a meaningful grouping of experiments, a cycle of experiments. The cognitive/emotional processes that together with the

¹²*Spuren* was the chamber piece I was working on at that time, a piece that I had begun in June 2021 as a continuation of the piece *Webungen* for LUX:NM from Berlin, a piece that I neglected shortly after the documentation's end when it was nearly finished and that still waits for its conclusion.

actions give shape to the phenomenon of experimentation change in time, thus it is also important to reflect upon the referential time one uses when linking an experimental action to cognitive/emotional process.¹³ (Roels 2014a, pp. 234–235)

It seems to be this *variety of activities in their entanglement with each other as well as with their traces* that seems to be the point here, that needs to be scrutinized. A shift to investigating what is *happening* and what is *done* within a practice through looking both at the practices and at the traces *in a cycle of experiments* that forms an incremental process, seems to be necessary to say something about the practices of composing and improvising, and thus about a composition in connection to these practices and the “*outside*” world that it is existing in. As Howard S. Becker et al. formulate it in their foreword to a collection of sociological investigations of an art work’s state of being and its stability,

So objects and performances take their shape in the daily labor of artists and their collaborators. It is what the creators do, in concert with others, that gives the work its distinctive character. Detailed descriptions of the production of specific works show how the features we now regard as crucial got there, how the work changes and continues to change. Our investigatory methods should and do take account of this.¹⁴ (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 13)

As Roels points out and quoted above, the matter of time also needs to be taken into account as well as how it influences both the meaning-making and the relation of the creator to the creation process and to what has been created—something that I had not been aware of in its complexity in my original research design.

A second point of pivoting concerning the *semantic notion of delineating* seemed to be equally important. Could not the activity of delineating instead of an activity of defining and thus delimiting as my research questions tacitly presupposed it, be understood as an activity of *describing*? Not circumventing something with a line and delimitating it through that, but a *de*-lineating in the sense of “to mark out in lines,” or “to sketch out” (etymonline 2025e). Delineating thus still acting as an activity of “drawing lines,” but lines of connection instead of circumvention; delineating as sketching and thus developing a clearer picture of these entanglements and its different qualities, of looking for co-actions and connections instead of definitions or delimitations.

I thus agree again with Roels who concluded, “For the study of the genesis of compositions, it is a future challenge to find a method that treats the start and end of the creative process as transparent boundaries, and that is aware of how intertwined loose creative acts, cycles of experimentation and the creative process might be” (Roels 2014a, p. 236). He then adds in a footnote,

To this a more speculative thought may be added: maybe the entanglement of loose, creative acts, cycles of experimentation, and the creative process is not the only challenge. The process and product (the composition) of “cycle” composers such as Neyrinck [whose work was the research object of the cited chapter] may also be more interwoven. Some *Aphorismes* [the parts of the composition cycle Roels refers to] may not only function as a work within a cycle, but also as a preparatory “sketch”, or “draft” or “experiment” for the next *Aphorisme*. (ibid., p. 236)

¹³In the conclusions of his dissertation, Roels does indeed propose a similar setup as I have done it in my test experiment, “For example, why not study all compositional activities and ideas during one week at regular, pre-defined dates (once every six months) or even a random intervals? This could provide valuable information when juxtaposed with analyses of CPs [creative processes]” (Roels 2014b, p. 260). Obviously, I did not apply my test method repeatedly and it led me to a different research focus as his, as it will be explained in the next chapters. However, it resulted in the same emphasis on the importance of using study periods for compositional processes that do not only refer to a specific creative process, as he proposes it for future research, “Future artistic research could benefit from the more complete picture that I have given of an individual compositional practice. The performative link with practice in artistic research could pay less attention to the traditional end project – the finished composition – and more to the independent practices which are also an indispensable part of (my) composition practice” (ibid., p. 261).

¹⁴Earlier, Becker et. al. remark how “[p]ersonal knowledge of the craft may not be necessary, but it is always a help.” But said also, “Of course we can’t always observe artists at work and we can’t all be practitioners of the art we study” (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 13). Here it must be added: this may be true for the objective of Becker’s et al.’s research, but in the case of this research, this personal knowledge and the coinciding of making art and reflecting about art is not only a help, but indeed a precondition—which then of course needs to be contextualized.

This remark seems crucial—and instead of considering this a speculative thought on practices of composers who work explicitly with cycles, this statement expresses the basis for my understanding of any compositional and creative activity which I attempt to unfold and explore in the following.

How can I frame this new objective of my research? How can I contextualize it and what would be an appropriate method?

Chapter 2

Systematization, contextualization and methodology

2.1 Reformulated research questions

With this reformed notion of delineating and the focus on the activities and their entanglement as a tool for approaching my original fascination and puzzlement, my research questions need transformation and read consequently as following: (i) How can it be possible to describe the entangled creative activities that a musical composition is involved in? (ii) What concept of a musical composition can be gained from this? (iii) Which new artistic and other insights and consequences arise about the creative human being's relation to the "*outside*" *world*, including all other participants and that which is created?

Regarding the first question's formulation, it was a conscious choice to ask about the entangled creative activities that a musical composition is involved in, instead of the creative activities in composing. This highlights that the research focuses not only on the creative process leading to a new composition, for example when creating new pieces for the afore-mentioned quartet. It also implies scrutinizing activities that originate in contact with a composition that has already been created, such as when we as a quartet improvise with new compositions. Given the previously described understanding of a creative practice as a practice of interwoven processes and results, this is necessarily interwoven with creative processes leading to other compositions. The formulation of the question emphasizes thus also the research's necessity for a granular level of investigation, which prescinds from a preconceived dichotomic denomination of processes as either compositional or improvisational. At first glance, introducing the question with "How can it be possible?" might seem confusing in regard to its point of reference and does not seem to contribute to prompting a concrete methodological approach to the research. However, since it hints at the aforementioned linguistic problem, it prompts to not only focus on the practical artistic doings, but also on the search for an appropriate way of relating to these doings through language. It is in this way that it contributes to the research methodology.

With the first question thus stating the foundation for the research's reformed methodological path, the second and third question simply ask about the consequences. They ask, on the one hand, for an understanding of a composition as such a complex trace of creating, and, on the other hand, for the resulting creative human being's embedment in the world. As described in chapter 1, the quite vague term of the "*outside*" *world* needs to be investigated more closely during the course of the research. However, the initial test experiments have shown that examining activities and their traces as well as the resulting relations must necessarily include examining the manifold participants involved in these activities. It is in this way that the third question even clarifies the starting point for researching a composition's relation to the "*outside*" *world*.

2.2 Staking out the research field

A few introductory reflections to my quest's contextualization seem necessary in order to locate the research artistically-scientifically and thus to understand the foundation of, on the one hand, the hitherto explained stance and the so far made reflections' embedment, on the other hand, the chosen methodology and all following reflections.

In the beginning, it might be appropriate to briefly revisit the terms of composition and improvisation, composing and improvising. There is a lively discourse on possible differences between the practices of improvising and composing, as well as their traces, thus also on what is considered a composition or an improvisation. Reflecting on the different traits and traces of these practices such as their relation to time and the possibility of reproduction—connecting for example the practice of improvisation to the spur of the moment and the act of composing to a trace of creation that one can access outside the moment of its coming into being—was also part of the aforementioned master's thesis on the choir piece *LYSSNA* and the topic of permeability (Flick 2020). However, as indicated in Chapter *Beginnings*, while such reflections help to clarify “practical” differences, it has to be emphasized once more that they do not scrutinize what is done in these practices and thus don't contribute to advancing the research. Also, these notion obviously differ, depending on the interlocutor's specific lived experience of improvising. Turning to the terms' etymology brings a certain elucidation (see *ibid.*, pp. 3–13)—making it clear that a composition must be something that is put together, related to the Latin verb *compono* (Hau and Fromm 2006, p. 165), and improvisation focuses on the dimension of the unforeseen, of not looking ahead (Flick 2020, p. 10)—and a certain basic understanding that most practitioners operating with this terminology could probably agree on. But again, these terms do not address what is put together, how it is put together, how to relate to the unforeseen, or what activities are implied by not looking ahead. Questions about motivations for improvising and composing and further philosophical and practical questions remain unanswered. Thus, the following overview of the artistic and research field in which my quest is located will provide more context for my perspective and contribute to locating my research's starting point artistically and scientifically. However, it should be kept in mind that my primary research interest lies in investigating entangled activities and traces of creating from a specific composing and improvising practitioner's point of view, rather than in examining and comparing notions of practices. My practitioner's point of view—some components of which have already been briefly outlined at the beginning of chapter 1—has mainly been formed through *doing* composition and improvisation, especially in the intersecting communities of practice and education in Berlin, Stockholm, and New York City, that put emphasize on one's relation to the instrument and promote “to play what you hear and feel” (*Lennie Tristano Festival* 2006)¹ as the highest achievement in every instant of making music. This has formed my stance on any creative undertaking. It is for these reasons that the terms of composition and improvisation, composing and improvising, will not be theorized further here and will be applied in their most basic sense, according to their etymological origins, and in relation to my practical knowledge. As the research progresses, they will be reflected on more closely.

To continue, a first general line of thought concerning the location of this research is important. By looking at a composition's contact with improvisation and the “*outside*” world through focusing on the entanglement of creative activities a composition is involved in, my research deals with a complexity of conglomerated and continuously transforming research objects and thus also with a constantly moving—circulating—reflective focus.

It deals thus on the one hand simultaneously with activities, the situations they are embedded

¹When interviewed by Irv Shenkler in 1973, he described how listening to Bud Powell helped him to achieve this. “One of the more significant things that happened was Bud on the piano in jazz, was that Bud made it possible for people like me to get a hold of this idea; that when you're playing the piano your obligation, musically, is much more than just reproducing notes, or with a certain overall touch [...]. But Bud went beyond that. *Every note* meant something special. It was not an overall generalized thing, it was one note after the other. The way you hear Prez [Lester Young] playing. Every note had specifically individual attention paid to it. [...] Because of the nature of the instrument—you've got this split second to hit that beat and make that sound, reflect where your feelings are. And this is what I've always strived for; to be able to sit down and play what you hear and feel” (*Lennie Tristano Festival* 2006, broadcast recording transcribed by the author). It should be noted that the reference to the original interview with Irv Shenkler could not be reconstructed, so it is referenced through the secondary source from which it was retrieved.

in as well as the different processes that unfold through their combinations. On the other hand, it therefore also deals with the results as the traces that these activities and processes leave as well as the relations between these activities and their traces. In that way, it is necessary to not only deal with traces such as notations or recordings, but also with the creative human being and all other human and non-human participants that engage in these creative activities as well as the relations that unfold between them. My individual perspective as someone partaking in creating who will—with the specific knowledge that only the participating practitioner of creating can contribute to and gain from the creating itself—perceive the transformations resulting from these activities as traces within oneself and everything that will be created is crucial for the research. Thus, although the focus of this research lies on what is *done* and on all *transformations* and *relations* that these doings yield and *not the human participant* themselves, the proceedings of this research are observed and reflected on *through the lens of this participating human being's manifold experiences*. This reinforces, on the one hand, the necessity of approaching my research quest through an artistic research methodology, in agreement with Paulo de Assis who states that “the concrete, creative practice of music generates philosophical insights that ‘pure’ philosophy or applied musicology are not delivering” (de Assis 2018, p. 45). On the other hand, such a focus “on the intersection between mind and world, neither of which can be understood in separation from each other” (Zahavi 2019, p. 30) shows that this research is in a wider sense phenomenologically inspired. All further reflection relies therefore broadly on preceding research from various philosophic, sociological, artistic and artistic-philosophical perspectives that investigates and conceptualizes aspects of the human being's relationship with the world and the phenomena they experience through being in the world. In looking at the creating through the variety of lenses these perspectives offer or inspire, the focus switches between the human being, the ongoing activities while creating, and what these activities yield as physical traces even outside of that human being and “on the way to” or in relation to what we can be called a composition.

Of utmost importance as a basis of this research is therefore Michael Polanyi's conceptualization of *tacit knowledge* (Polanyi 2009) as well as Alva Noë's enactive approach to perception (Noë 2004; Noë 2010) with the focus on the human being as formed and transformed through their interactions. Equally important are philosophical and sociological conceptualizations of the various dimensions of the human being's *interactings* and thus *relatings*, such as Jean-Luc Nancy's (Nancy 2002), or Heinrich Jacoby's reflections on listening (Jacoby 2003) as well as Georgina Born's understanding of sound as an “inherently relational and ‘mediational’ phenomenon” (Born 2019, p. 198). This includes also Hartmut Rosa's concept of resonance (Rosa 2020) as well as artistic research that deals with the perceptive dimension in a holistic way such as Vincent Meelberg's conceptualization of improvising as a tactile practice (Meelberg 2022).

Crucial here is also the aspect of knowledge generation that comes through (inter-)acting with the world and its phenomena. Here I draw on Donald Schön's conceptualization of the *reflective practitioner* which deals with the complexity and fuzziness of the situation they are acting in and especially Schön's conceptualization of the different modes of reflecting (Schön 1984) as it will be explicated later on.

Concerning the inevitable entanglement of research subject and research object of such an artistic research project as mine and the concomitant challenge of applying this entanglement in a productive way instead of considering it as a constraint, my working methodology draws heavily on research methods that put exactly this first person experience in the center of attention. Besides general reflections on the method of autoethnography that have inspired me, such as reflections by Carolyn Ellis et al. (Ellis, Adams, and Bochner 2011), examples of such methods developed especially for investigating the *doings* in creative processes and that lead to descriptions of practices focussing on the practitioners' experiences were most crucial.

Most interesting and inspirational as an example of interweaving accounts of corporeal experience with artistic-philosophic reflection and making their interrelation explicit is here the already quoted text of Georgina Born, where she applies an autoethnographical method to apply two of her experiences of nonhuman sound and her ways of relating to that sound as a starting point for reflections on conceptualizing sound, especially nonhuman sound (Born 2019). Interesting in the realm of improvisation and jazz are the first-person accounts of specifically improvisational processes, such as David Sudnow's descriptions of his experiences of learning jazz piano (Sudnow 1999) or more

general reflections on the practice of improvisation, such as, more recently, Simon Rose,² (Rose 2017). Interesting is also Derek Bailey's classic and, also to me, highly inspirational comprehensive reflection on improvisation as "an account by practicing musicians from various idioms of their use of improvisation, its place in music and their speculations on its nature" (Bailey 1993, p. viii). Similar to the approach of these authors who do not attempt to *define* or *explain* improvisation, I will attempt to highlight specific traits of the never fully graspable complexity that is in the focus of my research through the practitioner's perspective and experiences.

While Sudnow focuses on the transformations in his body and mind and their interrelations through the experience of learning to play jazz and thus learning to improvise in a specific way, Rose and Bailey seem to be more interested in the phenomenon of improvisation as an overarching understanding of a certain set of activities and the practice's affordances as a whole, or in relation to specific topics such as learning (Rose 2017, p. 6). And it is here that my research interest deviates from theirs. On the one hand, I am mostly interested in how activities that I consider as improvised *transform* the trace or *referent* (Pressing 1984, p. 346) I improvise with and thus in the reciprocal influences between activities, as well as activities and traces. On the other hand, and this is much more crucial, I consider it necessary to conduct the investigation on such a granular level where I, for reasons explained before, investigate what is done within specific creative situations on a level that *precedes any denomination or classification of these doings* such as improvising or composing and their sociocultural embedment before I return to my research questions and the terminology used there. These denominations of practice function in the following reflections rather as a tacit framework of the creative doings, brought to the foreground only if necessary for the reflection's course. Since I am interested in the inner-musical transformations spurred by what evolves from the doings within creating, looking at the doings or the participants who interact and thus their sociocultural and historical reality is just a means to an end.

Hence, since I am in this regard not researching my practices as such, I only rarely turn to research that seeks to understand more about the practices of improvising or composing as such, such as the already mentioned literature on improvisation and jazz or even important research on the activities in the field of specifically jazz-related improvisation as well as on interaction and the collective creative processes within that practice, such as Ingrid Monson's (Monson 1996) or Paul Berliner's (Berliner 1994) research. Equally, I therefore rarely turn to the specific field of artistic research that investigates different facets of improvising in different artistic practices such as the nevertheless very inspirational volume *(re)thinking Improvisation: artistic explorations and conceptual writing* edited by Henrik Frisk and Stefan Östersjö (Frisk and Östersjö 2013).

It is for the same reason that my research bears at the same time similarities to and also very clearly deviates from Marcel Cobussen's influential work on improvisation (Cobussen 2017). Inspired by Bruno Latour, and developing an understanding of improvisation as a field and as a "complex system, as an actor-network" (ibid., p. 44) through combining reflection on specific improvisatory situations with looking at such situations through the terminology and theories of other research on complexity such as, besides Latour's, Félix Guattari and Gilles Deleuze's, Cobussen researches the practice of improvising from an ecological perspective (ibid., p. 28). Thus, looking at what is ongoing in particular improvisations, his work focuses "on particular sites, concrete manifestations, and specific articulations" (ibid., p. 30) and emphasizes, as I will also need to do it, simultaneously both complexity and singularity (ibid., p. 43).³ It thus focuses "first of all on the

²Based on phenomenological, qualitative interviews with improvisers made from the stance of himself being a practitioner of that art form, his work "considers what the lived experience of improvisation in music, represented by themes, also tells us about improvisation as a phenomenon across experience" (Rose 2017, p. 5). In his most recent volume, Rose specifically takes up the practice of improvisation's relational potential and how it can relate different artistic disciplines (Rose 2024).

³"It is the central aim of this study to add two things to the discussion on musical improvisation, two things that together form the core of the FMI [Field of Musical Improvisation] theory: complexity and singularity. I understand complexity as the dynamic, nonlinear, and constantly changing interactions between several (independent) actors and factors that lead to various forms of self-organization. In my opinion, improvisations can be regarded as complex systems, as systems continuously trying to find a balance (or to create a tension) between fixity and fluidity. However, not all of the actors and factors are always present in each improvisation or determine every improvisation to the same extent; in certain situations (periods, styles, cultures as well as more singular circumstances), some are more prominent and active than others. Therefore, the FMI theory will not be a theory dealing with improvisation 'in general.' It emphasizes singularity: each improvisation will yield a different network of actors and interactions, a different configuration or a different assemblage" (Cobussen 2017, p. 43).

specific actors, factors, and vectors that make the music possible" (ibid., p. 92). Again, since my own research shall on a granular level investigate what is done within specific creative situations, thus on a level that *precedes any denomination or classification of these doings* as formulated above, it is here that my objective differs from Cobussen's. Instead of aiming to understand a certain field of practice and therefore looking at its particulars, I aim to look at such particulars' transforming and relating to gain understanding about the transformation of specific particulars or what they result in—compositions. Thus, though sharing his interest in "the specific actors, factors, and vectors that make the music possible" (ibid., p. 92), and equally needing attention "for both human and non-human actors, for interactions between human bodies, objects (instruments), environment, locations, and acoustics, as well as less tangible agents such as past, culture, politics, ethics, etc" (ibid., p. 92) for my research, the focus remains on the specific innermusical transformations of these actors and those that their relating yield.

It is due to this focus that the following reflections consciously do not discuss certain alternate terminology that has developed within certain (interdisciplinary) improvisation scenes located between genres, such as *composing in real time* or *echtzeitmusik* that is related to the Berlin-based *echtzeitmusik* scene (see also Beins et al. 2011). They therefore relate neither to concepts such as Cage's *indeterminacy* (Cage 2011), or Stockhausen's *intuitive music* (Stockhausen 1968) that consciously omit the term of improvisation, nor to notions of *openness*⁴ or to discourses on *freedom* or *freedom* in relation to *fixity*. This is also why I neither relate to concepts of *liminality* between practices nor research or concepts attempting to explicitly reconcile practices of improvisation and composition such as Sandeep Bhagwati does with his concept of *comprovisation* (Bhagwati 2013), a term that Cobussen also occasionally applies (see Cobussen 2017, pp. 25, 53), and that to me rather highlights the dichotomy I try to escape from.⁵ Besides that as a contemporary jazz performer the trans-traditional dimension is in any case implicitly at the heart of my practice⁶ and though crucial as such, my research only marginally and implicitly deals with this aspect of trans-traditional

⁴It would exceed the scope of this text to discuss the relation between specific terminology and respective practices, and to reflect on why certain Western classical contemporary music composers such as Cage or Stockhausen emphasize to not speak of improvisation. Nevertheless it can be mentioned that the difference between for example Cage's indeterminacy and the term of improvisation certainly is related to an "attempted erasure or denial of the impact of African-American forms on the realtime work of European and Euro-American composers" that George Lewis observes in "texts documenting the musical products of the American version of the move to incorporate real-time music-making into composition" (Lewis 2002, p. 92) and where he especially discusses concepts in relation to realtime musicking and especially Cage's conceptualizations in relation to the African-American improvisation tradition and the Bebop artists, especially Charlie Parker ("Bird"). He describes how "[...] the fact that both Bird and Cage expressed an experimental bent in describing their respective creative processes has not, so far, induced the authors of music history texts concerned with 'American music since 1945' to classify the output of these two composers according to their relationship with the experimental. Instead, texts appropriating the term 'experimental music' construct this classification as denoting a particular group of postwar music-makers who come almost exclusively from either European or European-American heritage" (ibid., p. 101). Through discussing the concepts of *whiteness* and Gibson's and Somers' "Epistemological Other," he states eventually: "Clearly jazz must have been a powerful force in postwar improvisative music, since so many fledgling Eurological improvisers needed to distance themselves from it in one way or another" (ibid., p. 104). Lewis introduces the terms *Afrological* and *Eurological* for his analysis: "These terms refer metaphorically to musical belief systems and behavior which, in my view, exemplify particular kinds of musical 'logic.' At the same time, these terms are intended to historicize the particularity of perspective characteristic of two systems that have evolved in such divergent cultural environments" (ibid., p. 93). He continues later on, "Thus, my construction of *Afrological* and *Eurological* systems of improvisative musicality refers to social and cultural location and is theorized here as historically emergent rather than ethnically essential, thereby accounting for the reality of transcultural and transracial communication among improvisers" (ibid., p. 93).

⁵This is my own reading of this concept. Bhagwati clearly understands improvisation and composition as a spectrum as he expressed it in the public presentation of the Trickster Orchestra's *Encounter on Trans-Traditional Comprovisation* on April 16, 2025 at Berlin's Radialsystem that I listened to, and as he also expressed it in the above-cited volume. "In embedding the concept of a music-making tradition within a score, by encapsulating aspects of tradition and re-combining them, encapsulated traditions offer a rich potential for the analysis of processes in music-creation: they become tools to understand how both in improvised and composed music, traditions of music-making inform and generate sonic material according to contextual rules and how this generated material relates to the context of listening. In doing so, they demonstrate that the concepts of composition and improvisation are extreme and unattained poles of music making, and that all music-making is in fact a *comprovisation*: a music with a score – and with a context" (Bhagwati 2013, p. 104).

⁶Lewis considers an improvisational practice as inherently transcultural: "The extensive and well-documented collaborations among improvisers from these and other cultural locations lead us to a view of improvised music, seen in historical terms, as a transcultural practice" (Lewis 2002, p. 113). I prefer to use Bhagwati's and the Trickster Orchestra's term of *trans-traditional* instead of *transcultural* to highlight the dimensions of education and experience as they argued in their above-mentioned *Encounter*.

creating that Bhagwati's concept is innately related to—and that for example also the Berlin-based *Trickster Orchestra* focuses on in its *Trans-Traditional Music Lab* with its five *Encounters* to different subtopics (Trickster Orchestra n.d.) and which otherwise seems to be driven by similar questions. Their project with its momentary quest of researching the field between notation and orally-aurally transmitted music in a post-migrant musical practice that includes also dealing with the topic of notation and scores⁷ and where they by now have already worked with, amongst others, George Lewis and Sandeep Bhagwati, is in its musical dimension closely related to my research. However, though my practice could be understood as residing in between musical traditions and this research's experimentation explicitly includes encounters between different musical traditions, it does in contrast to theirs not investigate and highlight this dimension, focusing only on what is ongoing intramusically and intermusically between the participants of creating, taking in account the broader perspective of the surrounding society only implicitly for the afore-explained reasons.

Concerning my general artistic starting point and especially my artistic approach to interacting as an improviser with compositional traces, some remarks have already been made (see chapter 1, p. 1, and above in this chapter, p. 12). It should be emphasized that it is indeed the rich “biotope” of composer-improviser practitioners especially in the diversity of entangled music scenes of Berlin, where I mostly work, but also Stockholm and New York City that form a fundamental base. These are scenes located in and between jazz and improvised music, and Western classical contemporary music, scenes that foster and reward individual paths of creative practice, resulting in diversities of practices across traditional genre boundaries. It is not possible to describe these scenes and the related influences adequately by mentioning names or venues, nevertheless, since it neither is useful to apply too much classification on overlapping scenes with musicians who work interdisciplinary, the following will list some names that can be mentioned as examples of artistic influence. A rough picture of some of these entangled influences is provided by them when assembled in their diversity. However, this must be a (re)constructed picture and cannot be comprehensive.

First and foremost, the individual musicians and groups who became my musical partners for this research are important, as listed in the appendix and, though not in total, discussed in the following chapters. Also, I am deeply influenced by collaborations with other musicians from these scenes whose individual artistic expression as improvisers or composers has inspired me, such as Franz Bauer, Silke Eberhard, Esther Kaiser, or Uwe Steinmetz in Berlin, Erika Hammarberg, Eva Lindal, Pål Nyberg, and Sebastian Voegler in Stockholm, or my band *Flickstick* between Sweden, Finland and Germany with Lisa Stick, Max Thornberg, Aleksi Ranta, and Christian Augustin. Important has also been, as previously mentioned, composing for jazz services in Berlin's protestant regional church, or chamber music for groups within Western contemporary music scene such as LUX:NM in Berlin. Also, listening over many years to other contemporary improviser-composers and groups who shape (not only) these scenes such as *Dell-Lillinger-Westergaard*, Hannes Zerbe, and the already mentioned rich *echtzeitmusik* scene in Berlin, was influential, as well as the circle of improvisation musicians that Connie Crothers introduced me to, and the scene around the *Arts for Art* organization in New York City. This is equally true for the community places of all these scenes as centers for listening, performing, and engaging into discourse—venues such as Berlin's *Jazzkeller 69 e. V.* and *Kunstfabrik Schlot* in Berlin, Stockholm's *Glenn Miller Café* and *Khimaira*, or New York's *Saint Peter's Church* or *IBeam Brooklyn*. Furthermore, my artistic approach has been formed by improviser-composer teachers and especially their methods of practicing listening, intuition, sound, and of approaching harmony. To these belong, as already mentioned, Connie Crothers, as well as Christof Griese, Kurt Rosenwinkel, Andreas Schmidt, and Peter Weniger, those who explicitly taught me in composing and influenced my way of approaching creative processes and notation, such as Peter Danemo and Karin Rehnqvist, or those to whom I owe enlightening ensemble playing-improvising experiences such as Volker Holly Schlott, Gebhard Ullmann, Rolf von Nordenskjöld, and Jiggs Whigham. The dynamic web spun through all these threads of formation

⁷ “What is a score? In European musical practice, the answer to this question is often associated with paper and graphic notation. But most of the world's musics were and are situated in a continuum between written composition, orality and free improvisation. [...] So how do writing, speaking and score relate to a post-migrant musical practice in which non-European approaches and global instrumentation are incorporated into contemporary music? Can entire scores be conveyed through pre-arrangements, spoken live instructions or memory? And how can orality expand the boundaries of written notation and create new musical experiences” (Hellerau n.d., Translated with DeepL, 20250512)?

includes also the multiplicity of records by contemporary and past role models from different genres listened to over the years, including foremost jazz musicians from the US such as Lester Young, John Coltrane, Warne Marsh, Dave Liebman, Lennie Tristano, and Richie Beirach as well as a diversity of musicians from Scandinavian jazz and interdisciplinary Scandinavian music, such as Jan Garbarek's classic collaboration with the Hilliard Ensemble, and Anders Jormin's or Lisa Rydberg's artistic work. This is embedded into other threads of education and practice, such as, as previously mentioned, exploring Franco-Flemish polyphony as well as ancient hymns and pastoral music from Dalarna in Sweden. Once more, my practice of composing and improvising, despite its clear rootedness in the jazz tradition, is a practice that often happens between genres and threads of traditions that form its tacit background. It is thus on purpose, that the traces resulting from this research's artistic experimentation are not explicitly contextualized with specific styles of expression from specific genres unless these are explicitly addressed in an experiment, or are necessary for understanding what is at play there.

Important is also to mention that, while this research—as it necessarily must do since it deals with the continuous contact between orally-aurally transmitted and notationally transmitted aspects of practice and their entanglements—leads me additionally into the wider field of researching music notation in relation to sound and vice versa, it does not explore these topics by developing a new notational system. It rather explores the affordances of the different notation traditions that so far occurred in my practice and in their combinations, thus continues to apply the Western five-line staff-based notation in relation to other traces and activities. It is therefore that the following reflections bear no explicit reference to important innovators that work between practices and traditions, such as Anthony Braxton with his broad oeuvre and his holistic philosophic-artistic view on creating music.⁸

It is also for such reasons mentioned above that my research, though it explicitly seeks a concept of a musical composition, does explicitly refrain from dealing with the long tradition of researching a musical work's way of existing and its impact on music making. Even when studying seminal writings on musical works that explicitly conceptualize the feature of openness or transformation in art works, such as Umberto Eco's (Eco 2016), discourse on concepts such as the polywork, or even research that emphasizes improvisation's role for composing and for musical works such as Bruce Ellis Benson's (Benson 2010), even when studying the discourse on musical works in relation to improvisation, both from the perspective of Western contemporary classical music (Dahlhaus 1979) or the manifold reflective branches of the discourse on the traditional Western classical work concept in relation to jazz standards (such as Kania 2011; Dodd 2014; Feige 2014; Michaelsen 2017; Kane 2018)—engaging into discourse on the ontology of musical works seems for the purpose of this research to be a discourse that leads astray from my research quest. Though dealing with the same musical parameters as my reflections will do, the discourse on a musical work's ontology seems to be conducted not from the stance within what is ongoing musically when creating or interacting in whatever way with musical references that are considered as musical compositions, but is necessarily always connected to a socioculturally-politically embedded stance on music.⁹ Thus, I consciously

⁸“The term ‘Tri-Centric’ derives from Braxton's three-volume collection of philosophical investigations, *The Tri-Axiom Writings*. Braxton believes creative thinking cannot be reduced to dichotomies, but must embrace multiple perspectives. For instance, music is not only composed or improvised, but also includes intuition. We must not only consider the past and the present, but also the future. It is not always this or that, it is often the other” (Tri-Centric Foundation n.d.). More information on the work and legacy of Anthony Braxton is provided on the Tri-Centric Foundation's website, from which the quote was taken (*ibid.*) or in other extensive research on Braxton, for example in works from the artistic-research perspective such as Kobe Van Cauwenbergh's recently concluded PhD project and related publications such as (Van Cauwenbergh 2021).

⁹“The ontology of the musical work envisions a hierarchical assemblage: the composer-hero stands over the interpreter, conductor over instrumentalist, interpreter over listener, just as the work ideal authorizes and supervises the score, which supervises performance, which supervises reception. In its idealism, manifest in the conviction that the work is not instantiated in any particular material or social form, the philosophy of the work insists that neither music's objectification in recording (wax cylinder, vinyl disc, CD) nor music's sociality form part of the creative process. Indeed, at the same time that it effects hierarchies, the work ontology disavows each of the three orders of social mediation set out at the start of this article [‘It produces its own varied social relations,’ ‘It inflects existing social relations,’ and it is ‘bound up also in the broader institutional forces that provide the basis of its production and reproduction’ (Born 2005, p. 7)] through its belief in music's transcendence of the social. The sociality of music-making, the embeddedness of the work in broader social relations of class, gender, race and nation, its dependence on patronage or market exchange: none are understood as immanent in the musical object; all are disavowed and denied. [...] The work ideal is therefore experienced as unchanging: it exists outside and supervises history” (*ibid.*,

chose to not even touch more systemic views on that subject that would be highly interesting to scrutinize in light of my research questions such as the already above-listed one of Brian Kane's or de Assis' reflections relating the discourse to Deleuze's (or Born's reading of his) concept of assemblage and the context of artistic research and experimentation in artistic research (de Assis 2014; de Assis 2018; Kane 2018).

Instead, I decided to look at what is ongoing musically and thus propose a *basis* for conceptualizing musical compositions that is not predicated on a dichotomy of works and non-works. I thus depart from an innermusical perspective and hope to complement research in that field such as Born's (Born 2005) or Becker's (Becker 2006) that looks at music's or sound's capacity to relate and to transform and understands it as complex assemblages "between subjects and objects" (Born 2005, p. 7), entangled with the social and historical realities it is created in.¹⁰

If a musical composition is considered in such a light, thus *as a transformable trace that results from such interacting and relating*, it might indeed be more fruitful to dwell in reflections on how creative activities and their traces are related and to conceptualize the term of the *trace* as such, thus placing my research in a context of philosophical and musical conceptualizations of such traces as symbolic forms related to human being's creative activity. While I adopted the term of the trace of creative activity from research on creative processes in musical composition such as Nicolas Donin's or Hans Roels' as explicated in the following, it will be necessary to develop an own understanding of that term, an understanding that will both suit the diverse nature of activities occurring in my practice as well as highlight the transformations that these activities yield so that it can unfold its full potential as a multifocal lens for my investigation. An important philosophical perspective for this will be Sybille Krämer's work (Krämer 2016b; Krämer 2016a) who, as it will be discussed in detail later on, considers the manifold dimensions of in-betweenness of traces and conceptualizes a trace a.o. as resulting from the "blind compulsion" of interacting bodies" that nevertheless only come into existence through interpretation (Krämer 2016a, p. 159, Translated with DeepL, 20250425), resulting in "the gap between the materiality of a past event and the—usually multiple—discursivity of a narrated event" (ibid., p. 160, Translated with DeepL, 20250425). From the musicological perspective, it is mainly Jean-Jacques Nattiez's reflections on his tripartition model (Nattiez 1990) that will be central for my own reflecting, drawing on his understanding of a trace as the "the neutral level" of a symbolic phenomenon as "the symbolic form [that] is embodied physically and materially in the form of a *trace* accessible to the five senses" (ibid., p. 12), and investigating how "recognizing, elaborating, and articulating the three relatively autonomous levels (poietic [as relating to such a trace's creation], neutral [the trace], and esthetic [relating to the process of meaning-making of such a trace]), facilitates knowledge of all processes unleashed by the musical work [...]" (ibid., p. 92).

It is only then, when reflecting on the concept of the trace and examining its interactions—including the different temporal dimensions of this involvement—that notions of concepts related to such traces that arise from looking at what is ongoing musically can be formulated. It is in this way they can break new ground for approaching and reconfiguring notions such as *interaction*, or *interpretation*, and thus also notions related to both practical questions arising when interacting with traces and the work concept such as *Werktreue*—finally also of composing and improvising, thus also refiguring an idea or concept of a musical composition and arriving at an understanding of the creative human being's relation to the "outside" world, including all other participants and to what is created.

pp. 26–27).

¹⁰It should be noted that I will refer to de Assis' reflections on artistic experimentation (de Assis 2014) as it will be explicated in the following, but chose to omit a discussion of my research in relation to his reflections on musical works for the above-named reasons.

2.3 Methodological design

How can I research something as dynamic and transient as conglomerates of entangled activities and emerging relations between their participants and their traces? How do I research a complexity where it is due to the all-encompassing entanglement not possible to look isolatedly at components that I am even myself involved in?

At first, if my research object is a dynamic complexity of entangled research objects, it is especially this characteristic of being dynamic that I can take advantage of and need to investigate. In accordance with Becker et al.'s remark in the already mentioned volume on the art work's state of being and the manifold dimensions: "The view most of us [the authors and symposium participants] more or less share is that artworks change continuously and that our analyses should not treat this as a problem to get around somehow but rather as an opportunity to deepen our understanding of art" (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 7). As I saw it in my method trials, this dynamic complexity of entangled research objects, or what at some point will be called the "the artwork," *the composition*, changes depending on how and from which starting point the creating begins or on what dominates the process—as well as from where, how, and when I choose to describe or analyze a process and, or, artwork.

Thus, if this complexity would be imagined as an experimental system, consisting of a web of all that is taking part in the creating, and that which is going on—activities, participants and traces—one can give impulses to this system and thus shape this web in different ways and watch what happens. On the one hand, changes in my activities and position in relation to or within it will produce changes in my perception and my notions of them resulting from said movement which can be used. On the other hand, the application of metaphorical lenses for watching the system can *filter* or manipulate my perception and its focus in certain ways. Each stance or focus yields specific practical, methodological and epistemological insights and sheds light on a certain dimension or section of the network.

As already argued, the project needed to be undertaken as an artistic research project with my own artistic work as the main research object, drawing on my personal artistic practice and thus my subjective stance on what happens as both a resource and background for the research.

The challenge was to find a methodology that would not only acknowledge, but indeed embrace and make use of this subjectivity and the different aspects of lived experience that I would undergo during the research in order to use its potential as a source of information and knowledge. As both the designer and the participant of the research, I would be experiencing this dynamic research object within the research situations as well as its influences on my whole human existence through my thinking-feeling-moving body. Research object and subject would inevitably become entangled (see also Borgdorff 2006, pp. 6–7).

My research approach demanded thus a methodology that on the one hand would process and contextualize my subjective experiences in a thoroughly stringent way to gain such new knowledge that exceeds the personal artistic sphere and would become accessible and shareable and result in if not objective, at least intersubjective perspectives on my research questions.¹¹ Also, it would be impossible to foresee how my artistic practice and I myself would change through the research. A method was needed that would give a clear structural framework for action and reflection, but not for how action and reflection were to be undertaken and would prescribe neither artistic or reflective context or content.

An interesting starting point for my thinking and how to approach this methodological quest were Ruth Wiesenfeld's and Fredrik Hedelin's reflections and artistic doings. Though only rarely explicitly referenced, the development of my methodology was spurred through recalling what I had over the years learned from Wiesenfeld's Feldenkrais teaching and in conversations with her on her composition practice and research as well as through engaging with her concept of the *Towards Sound* project (Wiesenfeld n.d.).¹² This led to a methodology of tracing intra- and intermusical

¹¹I agree with Deniz Peters who describes how "Thought in artistic research thus proceeds via doing and perceiving. [...] In being felt, the thought has a subjective quality. This is why the first person perspective, and (as is often overlooked) the second-person perspective, grounds artistic research, next to a reflective component that further involves the third-person perspective" (Peters 2017, p. 25).

¹²"Inventing a new sound world is a highly complex adventure, even more so if refraining from auxiliary means such as musical instruments or audio software. Once the imaginative powers are overextended, the desire for a palpable

movement and transformation in the traces these leave in the form of tangible transformations in myself as a body-mind-unity and also in what I can interact with. Fredrik Hedelin's research on music's creative capacity through investigating what is ongoing musically through Deleuze and Guattari's *ritornello* and his resulting view on "musical structure as a network of forces and connections" (Hedelin 2017, p. iii) gave then, on the one hand, an idea of how to focus on what is ongoing and evolving in music *itself* and, on the other hand—though through a very different approach to a very different quest with very different means—an inspiring example of how it can be possible to utilize language and find an understanding for this music's continuous transformative forces.¹³

Different from him, I will not think *through* a specific philosophy and apply it in such way, but it is nevertheless in that spirit that I aim to speak about what it is experienced in the music, developing a way of expressing myself and thus of understanding by not only reflecting on my artistic doings through language, but also by developing specific terms as reflective tools or lenses for reflection. Though my research does not explicitly draw on Deleuze and Guattari's thinking, Fredrika Spindler's reflecting on Deleuze's philosophy in combination with my own reading of *De la ritornelle* (Deleuze and Guattari 1980, pp. 381–433) and other chapters of Deleuze and Guattari's has provided much inspiration for how to reflect *on* and *through* my musical practice. Especially important here was Spindler's description of *thinking* (*tänkandet*) understood as a development of *terms, notions or conceptions* (*begrepp*). "Thinking becomes groundless, in the literal sense, and must at every moment stake out its own ground, be shaped like a net over chaos; the concepts are twisted out as the knots or crossings that enable a continued weave" (Spindler 2013, p. 146, Translated with DeepL, 20250512).¹⁴ And, "Rather, it is about being able to identify the question, trying to get out of it through a threefold movement in which each step intersects the other two—the creation of concepts as solutions or ways out, the mapping out of a plane of immanence as a prerequisite for the problem, and the invention of the conceptual forms that will contain the question and take it further" (ibid., pp. 149–150, Translated with DeepL, 20250512).¹⁵

Hence, through the course of this research, I aim to find a more appropriate language for describing what is happening in my creative practice, a language that seeks terms, categories and connections based on what is done and what evolves and that thus can be more diverse than a twofold system for creative output (such as when using the terms of composition and improvisation). I seek a language that informs notions of practices and makes them more versatile and that than can feedback into the practice and transform it from within, filling these overarching, seemingly dichotomic denominations of the practices I move in with new meaning. My research thus does not only look at the affordances of activities, their traces and the resulting relations and how all of them can become tools of transformation, but seeks a new language as a creative tool in its own right, as a trace of creating that co-acts with all other traces and sheds light on them and vice versa.

vis-à-vis comes into play: anything but sound that enables the passage from the first vague conception towards a finished work. Acts of drawing, sculpting, writing, filming, ordering, assembling and taking apart facilitate a deeper comprehension of ones imagined sound world - its textures, energies and structural elements" (Wiesenfeld n.d.).

¹³He states in the beginning of his reflections: "The purpose of introducing Deleuze and Guattari is not to explain their philosophy or to show similarities between music and philosophy, but rather to use philosophy as a lever to penetrate deeper into music" (Hedelin 2017, p. viii, Translated with DeepL, 20250512). "Syftet med att föra in Deleuze och Guattari är alltså inte att förklara deras filosofi eller att visa på likheter mellan musik och filosofi, utan meningen är att filosofin skall fungera som en hävstång för att tränga djupare in i musiken." (ibid., p. viii) And concludes then in this way, "By this I mean that the solo concerts are not a demonstration of philosophy or a program for composition. Rather, they are the voice of music, the counterpart of the voice of philosophy, and these voices have been allowed to pass through each other in order to reveal hidden connections in the music, to discover something else. The ritornello thus reveals something that can apply to all music" (ibid., p. 187–188, Translated with DeepL, 20250512). "Med detta vill jag ha sagt att solokonserterna inte är en demonstration av filosofin eller ett program för komposition. De är snarare musikens röst, motparten till filosofin röst, och dessa röster har fått passera genom varandra i syfte att blottlägga dolda samband i musiken, att upptäcka något annat. Ritornellen frilägger därmed något som kan gälla all musik." (ibid., pp. 187–188)

¹⁴"Tänkandet blir grundlöst, i bokstavligen mening, och måste i varje ögonblick själv staka ut sin mark, utformas som ett nät över kaos; begreppen tvinnas fram som de knutar eller korsningar som möjliggör en fortsatt väv." (Spindler 2013, p. 146)

¹⁵"Det handlar snarare om att kunna identifiera frågan, försöka ta sig ur den genom en trefaldig rörelse där varje moment genomkorsar de två andra – skapandet av begrepp som lösningar eller utvägar, utstakandet av ett immanensplan som förutsättning för problemet, och uppfinnandet av de begreppsliga gestalter som kommer att härbärgera frågeställningen och ta den vidare." (ibid., pp. 149–150)

With this as a foundation for my research methodology, I turned to such researchers who have used autoethnographic methods to understand more about their practice in connection to the relation between traces and the creating individual human being and these traces—thus mostly research on compositional processes.

Most inspirational for drafting the methodological design had been, on the one hand, Nicolas Donin et al.'s method of *remise en situation de composition* (see a.o. Donin 2010; Donin and Theureau 2007; Theureau and Donin 2006), where he together with others developed a methodology that worked with both collecting the traces of the composing process and aiding the composer (of Western contemporary classical music) through specific interview methods in retrieving their doings from the process. On the other hand, it was work by Hans Roels (see a.o. Roels 2016; Roels 2014a; Roels 2014b) who designed a research setting where he combined the investigation of the creative processes of musical composition of eight other composers from Western contemporary classical music with a long-term self-study with the question “what the main activities and procedures that composers perform during the composition process are, and which of these concern only details and local problems” (Roels 2014b, p. 4), developing different methods and tools for analysis of processes and the relation between self-study and studying others.

In retrospect, these examples have served as some kind of scaffolding examples, providing me with a basis for developing a first design for my research that were then modified and refocused. However, since my research focus is not the creative process as such, but is directed on the inter-relations between a composition and the activities it is involved in and thus the resulting relations between the participants in creating as well as the creative human being's relation to the “*outside world*”, my own research does for the most part leave aside the rapidly growing body of research on creative processes within composition that both Donin and Roels draw on.¹⁶ Although for example Roels explicitly reflects on the creative activities in composing, he, as also Donin et al., and all other predecessors such as Julius Bahle (see for example the already mentioned chapter Donin et al. 2019) look at the composing process as such in a certain field of music (here Western contemporary classical music, in Roels' case “*contemporary-classical and experimental composition in Flanders (Belgium)*” (Roels 2014b, p. 7) through focusing on the doings when creating specific *musical works*. Roels acknowledges that “no clear and distinct distinction can be made between composition and other creative music activities like improvisation or performance” (ibid., p. 6), but he describes composition as “an elaborate preparation of performed or realized music” (ibid., p. 7). He states that “composition activities such as rehearsing, performing or taking part in artistic, cultural or political debates are not the main focus in this dissertation” (ibid., p. 7), during which he conducted his study from which the other quoted texts are drawn. Roels and Donin seem to be interested in *mapping* and discerning what is done as well as in how activities influence each other in their combinations—and though this overlaps with my interest, this approach leads back to a delineating in the primary sense of the word or at least to classifying doings during a compositional process.¹⁷ While I am equally interested in combinations of doings, my focus on a composition's *transformation* through the activities it is involved in puts the activities' entanglement with each other and in relation to the traces as participants in creating within these combinations at the center of attention. Thus, as described before, this must also encompass the realm of corporeal perception and thus opens up for a much broader consideration of activities as creative ones than the ones Roels and Donin research—classifying and analyzing activities not by their productivity as for example Roels does (Roels 2016, p. 423),¹⁸ but looking at their transformative qualities and affordances *while* creating.

Hence, with the resource of being both a performer and composer, and thus a research object

¹⁶For an overview over the development of this field in relation to musical composition, see e.g. (Roels 2014b, pp. 12–21).

¹⁷“To conclude: so far group studies of the CPMC [creative process in music composition] have faced the problem of designing a *common* research framework, built upon the many different insights and approaches of previous group studies. More clarity on the analysis stages of the research is needed and the knowledge of the role of non-textual data, the formation of syntheses and the level of generalization in the analysis phases need to be further explicated and elaborated” (Roels 2016, p. 417).

¹⁸“I consider the four proposed compositional activities [what he summarizes as planning, exploring, writing and rewriting] to be crucial to the CP [creative process] because the four activities are *productive*: they add something new (a music fragment, score, new version, visual plan, etc.) to the composition in development. [...] My proposed activity framework is based upon productivity [...]” (ibid., p. 423)

and subject in a twofold way who therefore can also study all transformations from many different stances, I am not only interested in the solitary activities that precede “performed or realized music” (Roels 2014b, p. 7), but equally in the interrelations between what is ongoing solitarily and collectively, thus when creative human beings interact with materials, tools, instruments and what they create, and also with other human beings. However, concerning this collaborative dimension that my research bears, it stays on the granular level of looking at the very basic evolving relations while interacting instead of scrutinizing the social-cultural dimensions of my practice(s).

Nevertheless, Karin Hellqvist’s recently concluded dissertation project *Transforming with the Artistic Palette* (Hellqvist 2025) where she developed the concept of the *artistic palette* as a means to research performer creativity and collaborative work as well as other related writing of hers (see e.g. Hellqvist 2024; Hellqvist 2022) is very relevant for my research, discussing some of the topics that will be explored here. Although her work broaches much more the issue of the sociocultural dimensions that I only touch at times if necessary but do not focus on, some of her reflections are of a great interest for my research. This concerns especially her reflections on the function and transformation of notation through joint creating as well as her reflections on the relation between the instrument and the human body in connection to creative activity. While her project had already in its beginnings been a highly inspirational example of artistic research, most of her findings became known to me only when concluding these reflections. Since she developed, while partly drawing on the same research context as mine, a totally different terminology for some similarly experienced phenomena, I will refer to her terminology in cases where it can shed light on what is described here from another angle. From time to time, there will also be references to Peter Knudsen’s findings regarding notational experimentation in relation to joint creating, especially collective improvisation activities that he describes in his just concluded doctoral project *Expanding horizons – Improvisational explorations of 20th-century classical music* (Knudsen 2025). Also this research became in its full extent only recently known to me, despite my knowledge of some of its reflections and findings through Knudsen’s presentation at the 2024 edition of the *EPARM* conference¹⁹ and through a personal exchange meeting shortly after that,²⁰ thus at a time when both of our experimentation periods were nearly or totally concluded. As someone who experiments within a practice that experiments with notational tools from both jazz and Western contemporary classical music, Knudsen’s explicit jazz perspective on notational transformation through experimenting with notation of Western contemporary classical music is especially interesting for my research.²¹ Despite the fact that our artistic methodologies bear similar traits and we even at times draw similar conclusions in regard to the different notation forms’ affordances and potentials for relating, our research differs strongly not only in its overall focus, but in its reflective approach. His project “aims to contribute to knowledge on how different kinds of departure points can be useful for musicians when approaching 20th-century Western classical music through improvisation, an understanding of how one can navigate and negotiate the musical language of this repertoire, and insights into how the tension between different performance values can be navigated in this process” (ibid., pp. 2533178/3028888/0/0). He thus negotiates what is happening musically and how this influences or is spurred by notational parameters as well as the partaking musicians on the basis of the two genres’ usual categorizations of practice, and resulting conceptualizations of aspects related to them. Thus, in contrast to my research, he classifies activities and traces of and, or, starting points for activities such as scores, lead sheets or recordings on the basis of specific notions of the practices of improvisation and composition—which though they are questioned, transformed and expanded through the research in a highly interesting way, nevertheless form the starting point for reflection.

¹⁹Peter Knudsen. *Expanding horizons - A jazz exploration of 20th century classical music*, March 22, 2024, Parallel Sessions III, Primož Kuret Hall, AEC European Platform for Artistic Research in Music 2024, Academy of Music, Ljubljana. <https://aec-music.eu/event/european-platform-for-artistic-research-in-music-eparm-2024/programme/> [Accessed on 20250609]

²⁰Meeting in Stockholm for discourse on our research and playing together on April 18, 2024.

²¹In some experiments, I worked equally on the basis of already existing notational traces, though it concerns in my case the inclusion of older Western repertoire from times where notation functioned very differently than in the 20th century. In one case, it was notation of Johann Sebastian Bach’s *Six Suites for Violoncello Solo* in the project with *alter ego*—that is not discussed here since its findings relevant to this research were already immanent in the findings of all other experimentation. In another case, this included making transcriptions of Hildegard of Bingen’s songs when experimenting with *VoNo*, as discussed in chapter 8.

In summary, in contrast to Roels and Donin who have strongly inspired my methodology, and unlike other relevant recent artistic research such as that of Hellqvist and Knudsen, my research does not seek to systematize activities. Rather, it seeks a much more basic description and acknowledgement of how activities, when creating, afford contact-making and relating and, consequently, transformation—and thus tangible results in the form of scores, lead sheets, recordings or any other trace of creation. This has led to a language-based approach that applies the search for an appropriate terminology for describing all doings as a reflective and creative tool in its own right that precedes categorization.

Thus, though having relied on Donin's and Roels' research for the development of my methodology, the following reflections draw to a much broader extent on Tasos Zembylas et. al.'s research on composition processes and their focus on tacit knowing as well as "those components and conditions that constitute *artistic agency*" (Zembylas and Niederauer 2019, p. 1).

It is noticeable and important to acknowledge that also this is a publication, as many of the others referenced here, that deals with creating in the context of Western contemporary classical music. Thus, it is even more relevant to add another musical perspective that researches relations between individual creative doings and traces and between individual and collective creative doings. My position at my individual specific intersection of art worlds as described in the very beginning of these reflections, brings certainly a differently informed perspective to the relation between creative activities and their traces than the ones mentioned here that mostly are rooted in a practice of Western contemporary classical music and are not related to a jazz practice. A perspective which hopefully might contribute to forming a basis for other conceptions in approaching questions around musical identity, collaboration, authorship, concepts of a musical composition and *Werktreue* that depart from these relations. An approach that can be on a par with and enter a new relation to the discourse from the stance of Western classical music on these topics which seems to dominate the research stance of said topics and still permeates tacitly the musical discourse and realities of art worlds also of other fields—even if only as a stance or a counterpart to accumulate or develop ones own with and thus even when imbuing these concepts with new, broader and more practice-related notions from other artistic perspectives as for example Knudsen has done.²²

Returning to my methodology's development and concerning its overall structure, I kept the original idea of interweaving various artistic experimental setups building on one another with continuous analysis of the doings and their traces happening within such a setup through reflection using tools of autoethnography.²³

These experimental setups are based on iterative cycles of various activities and their combinations, resulting in a spiral working process within each experimentation while the reflective path through the research and all its experimental creative situations would equally take the form of a spiral. Incrementally, I designed situations that put a spotlight on constellations or situations often experienced implicitly as a regular part of my usual practice as a saxophonist-improviser or, and, composer. Thus, these could be scrutinized through making aspects of that situation an explicit part of the experiment's design.

Different to my original design was the scope and the objective of my experiments. They built on each other as in the first design around the seed, but the relations between them were much more diverse and not reduced to one certain type of musical relation or concrete musical material such as the seed. The experiments could also be connected through their tools, their objective, their participants or any other aspect of the process or the resulting trace. This in turn opened up for a more flexible form and function of autoethnographically inspired self-analysis than envisioned before, one that no longer consider as solely an isolated reflection *on* my actions, but as reflection-in-action (Schön 1984, p. 56), thus as a creative tool that is in itself entangled with the web of entangled activities, traces and participants as the following reflections will show. It thus happened in much more diverse working modes and through more varied methods and media of reflecting as sketched originally.

Concerning the practical execution of these experiments, some essential basic points regarding the choice and design of situations and their order were pre-structured beforehand, including some

²²For more reflections on this tacit permeation, see for example the already quoted paper by George Lewis (Lewis 2002).

²³This is quite similar to Knudsen's basic methodological approach (see Knudsen 2025, pp. 2533178/3024773/0/0).

of the participants such as the earlier mentioned quartet. From the beginning, it was clear that the research would start with individual experimentation, then proceed to working with smaller groups, including the quartet, where I both played and composed in, and be concluded through collaborating solely as a composer with larger, improvising, ensembles. Thus, the scope of the research was secured to widen, and it was possible to take on different roles in the creative work and to vary the focus on different combinations of activities.

However, the exact order, the setups' concrete design including each setup's specific questions and participants were only decided incrementally, balancing artistic and research-related necessities with collaborations, artistic subprojects and performance opportunities that were currently at play in my ongoing artistic work, as well as practical necessities such as musicians' and ensembles' availabilities or financial implications. This allowed for both planning ahead and staying flexible enough to adjust the experimentation to the respective research stadium and its needs. The collaboration partners were musicians and ensembles with similar artistic or research interests and whose work is to a high degree relevant for the respective artistic field of my research's subprojects, including both beloved and influential artistic longterm partners, and inspirational musicians or ensembles whom I had the luck to get in touch with through the research. Without the generous artistic and practical commitment of such high-caliber musicians, the research and its methodological design would not have been possible.

Lastly, each setups' design and starting point for experimenting was consciously specified in different degrees and through different parameters. Important to note is that it was always exclusively the research purpose and the artistic means and goals of creating that were specified, but never the specific artistic outcome. Thus, though they necessarily abided by practical circumstances such as the envisioned or possible mode of dissemination or the project participants' time constraints, the experimentation's traces could unfold as afforded by the experimental setup and its participants, which led to a large variety of artistic research results.

2.4 Experimentation

One could wonder how an experimental setup in the context of artistic research and especially regarding this dynamic and entangled complexity can work, or even, if such a thing can be possible at all, given also the just described subjectivity and entanglement of research object and subject and even the entanglement of analysis and creative doings.

The basis for conceptualizing artistic experimentation lies to me in the nature of artistic creative processes themselves. Tasos Zembylas explains how testing and trying out are essential to artistic creation processes (Zembylas 2020, p. 70).²⁴ Artistic creative processes are thus experimental by nature. In the wider sense of all etymological dimensions the latin root *experior* imbues even today's English *experiment* or *experimenting* with (Hau and Fromm 2006, p. 324), it is exactly this activity of testing and trying something, but also the dimension of getting to know something through experience (which shares the same latin root with experimenting) that is at the core of it. Experiencing and testing, trying and thus experimenting is also innately connected to daring something and also to arguing. When experimenting, I dare to test something new or to involve activities and their traces, people and artefacts in a new combination, an experimental setup. The difference of artistically experimenting to mere trying out or accidentally noticing something while creating lies in this activity of arguing—embedding my tryings, my findings and also my non-findings or failures through discourse within a certain artistic and research context and within my respective community, thus resulting in the activity of researching.

Roels also bases his notion of experimentation on the creative process of music composition and concludes how “experimentation hovers in between general creative acts and the creative process of a composition” (Roels 2014a, p. 236). He starts his reasoning by describing:

I consider experimentation to be a dynamic and transformative process between mind and matter. It refers to searching for activities by the composer, through which he or she tries to transform an idea or feeling into an expressive figure that can become (a

²⁴, *Das Ausprobieren und Herumspielen sind charakteristische Herangehensweisen in allen künstlerischen Schaffensprozessen.*“ (Zembylas 2020, p. 70) See also (Zembylas and Niederauer 2019, p. 86).

part of) a composition. Experimentation has a double-sided nature: it implies a coming together of cognitive/emotive processes on the one hand and actions on the other. This has important implications for the research method used to study experimentation. (ibid., pp. 229–230)

He continues through explaining how he does not consider any unexpected action as experimentation (since there might for example be practical reasons for it). Also, he discusses, how, “if one only relies on the data produced by these actions (sketches, score versions, . . .), one risks labelling changes or new elements as experimentation” (ibid., p. 230). Also, to him it would not be enough to rely exclusively on the accounts of composers, “if one only relies on what composers thought (and thus use verbal accounts or interviews), one risks labelling every new plan or idea as an experiment” (ibid., p. 230). He therefore applies a “combination of different data and not just on one kind of data” (ibid., p. 230), thus emphasizing the need of a “data-rich approach” for his study of composition processes (ibid., p. 230), which I basically follow, although modified for my purposes. While I agree with such a multi-perspective and multimodal approach and thus the inclusion of all traces of a creative process in order to research it, I am hesitant to the implied assumption of the general possibility of making judgments about the nature of a creative act from the outside perspective, thus also if it was experimental or not. This can only be done through propositions or assumptions and through carefully looking at the relation between research object and subject and the consideration of the creative process’ context. Probably any creative setup can turn into an experimental one if connected to arguing for it and thus to a discourse of its outcome. Nevertheless, I then agree with Roels’ emphasizing how “experimentation is not a stationary phenomenon: it changes constantly,” including also “what the composer thinks, imagines, and feels while composing” (ibid., p. 230). It is precisely this transformative nature of creative processes and their proceedings that made me conceptualize the experimental setup as a spiral iterative cycle of doings.

Interesting is here also Paulo de Assis’ notion of *epistemic complexity* and his conceptualization of experimental systems, drawing on Hans-Jörg Rheinberger and connecting reflections on the concept of a musical work, with Rheinberger’s terminology and conceptualization originally situated in the realm of molecular biology (de Assis 2014). De Assis summarizes his understanding as follows:

In short, an experimental system is a specific unit of research, spatiotemporally precisely located, wherein two kinds of “things” interact: technical objects and epistemic things (whose difference is functional and not ontological). Within such a system, mechanisms of reproduction and repetition aim at the generation of differences. Furthermore, an experimental system is a space of representation where inscriptions are made in order to generate and preserve traces. Finally, experimental systems might establish links to other experimental systems (conjunctions), be divided into several experimental systems (bifurcations), or merge with other experimental systems (hybridisation). (ibid., p. 48)

Most important here is, on the one hand, the continuous mobility of that system that Roels also had emphasized, with its parts’ function depending on the position or the lens one observes the system from. Dependent on that position or lens, they can oscillate between functioning as epistemic things, thus knowledge-generating tools, or technical objects, thus tools to construct the experimental system. On the other hand, it is also the relation between those systems that is essential.

In contrast to Roels, I am not looking for moments of experimentation within a creative process. Rather the whole process that happens within and through my setup is considered as an experimental setup that functions as the basis for the next one, thus relating these setups themselves to a spiral pathway, or, in de Assis words, quoting Rheinberger, to an “experimental culture” (ibid., p. 49). Within the processes, I will obviously resort to using well known or earlier explored compositional means which function, as in de Assis’/Rheinberger’s sense, as technical objects within that setup. However, since the whole process will happen under the guidance of a new and experimental objective, also these will contribute to the knowledge generation and will be experienced and judged in a new context, and can also thus turn into epistemic things. Crucial is that, because of the generally experimental nature of creative processes, they can be used and shaped as experimental setups

for looking at what is ongoing musically, the activities and their traces as well as the participants of these and how all of them are related.²⁵

It is useful to keep in mind the distinction Zembylas and Niederauer make between *goal-directed* and *goal-controlled* that they make when speaking about composition processes, which I would also apply to artistic experimentation.

Our entire empirical material confirmed that composition processes are goal-orientated but not goal-directed, since the piece still has to be created and since even detailed specifications do not determine the final gestalt of the piece. Katharina Klement compares the creative process to a “hike”, during which you have to adapt to the terrain on the ground because “you’ll be sorry if you take a path that you believe you absolutely have to take”. This metaphorical comparison also contains the reason why we assign such attributes as “open”, “exploratory” or “experimental” to these processes. (Zembylas and Niederauer 2019, p. 75)

The method of the iterative cycle of activities or combinations of activities and participants was based on this fine distinction. I thus formulated methodological principles as well as an envisioned goal for each experiment, such as finding answers to a certain sub-question of my topic or the mere experience of a certain process—and obviously, all of this was connected to the practical circumstances and context the experiment would happen in. But again, besides that, the exact practical and artistic course of the process was indeed kept open. Thus, while doing very different creative processes with very different combinations of participants and activities in partly very different artistic and social contexts, a common basis for analytical discussion is ensured. Of course, a claim of comprehensive comparability and completeness in my experimentation can not be made—but this is also not necessary for this research. It is neither possible nor do I aim to depict all possibilities for creative processes or relations between activities, traces and participants. And though I consider it as important to look at all traces of a creative process, the diversity and interrelation of traces is more important than their completeness. It is also for that reason I chose not to work with Donin’s method of *remise en situation* (see a.o. Theureau and Donin 2006, 5ff) to recall a composition process.

In summary, I aim to explore a complex multiplicity by examining examples to understand principles and make differentiations—thus making aspects of what is ongoing, as well as relations, explicit that were previously experienced implicitly.

2.5 Autoethnography

Concerning the reflective path the research unfolds through, it was thus necessary to choose an approach that would look both at the activities and the traces, their relations and their affordances. It consisted therefore of different modes of reflecting through and on the doings and their traces that happened within the different experiments. With different lenses and foci, from different perspectives—such as a performer-improviser, a listener, the originator of a trace—and positions in relation to the experimentation—after doing it, while doing it etc.—I look at the traces in the form of physical or symbolic artefacts such as scores, lead sheets, music notation sketches, recorded improvisations, recorded versions of notations, written text or mindmaps. Nevertheless, also the mostly immaterial traces concerning myself or fellow project participants and that I become aware of through noticing changes regarding myself are examined. I use myself as a research tool through observing the changes within my perception, my notions, my thinking, in short, my lived experience of what is ongoing which includes how I relate to the traces that are created and how the meaning-making of these traces transforms through the experimentation. Also de Assis describes this specific use of the subjective experience and the exclusive knowledge that it brings when experimenting in

²⁵Since I do take up de Assis’ reflections only as an inspiration and a contextualization of my thinking and not as a “prescription” for my experimenting, I refer to his text for a closer discussion of terms as inscription and the notion of epistemic complexity and how he relates notions of a musical work with his application of Rheinberger’s experimental system (de Assis 2014). For yet another perspective on Rheinberger’s experimental concept and artistic research as well as a discussion of the terms of *inscription* and *exposition* I refer to Michael Schwab’s chapter in the same volume in which de Assis’ appeared (Schwab 2014).

the context of artistic research and creating, “In a deeper sense experimentation is not the act of conducting experiments (and even less of making tests). Aesthetic experimentation relates primarily to a completely new orientation of the senses and of the reason, aiming to reconfigure the sensible” (de Assis 2014, p. 52).

It is therefore that, despite my failure in my first autoethnographic trial experiment, I applied autoethnographic documentation and reflection as a second methodological basis, adopting a more open approach to documentation that did not include daily reports in an Excel form, but invited to notate or record or formulate reflection in whatever media and at whatever timely distance from the creating that felt right. Parallel to conducting my experimentation, diary files on my computer and on the phone were used by me for reflection in key words or through-written text whenever it felt right and necessary. Additionally, a collection of phone recordings of reflections, written essays on my experiences within experiments or from reflections on them grew. By regularly analyzing the material in different ways by extracting recurring keywords to form the basis for further written reflection or asking questions to identify specific lines of thought, meta-structures on and between documents and topics were created. These structures helped me sharpen my research focus and clarify its key dimensions. The resulting topics and new questions were applied when incrementally engaging in discussions about specific aspects of my research during semistructured interview or discourse meetings with other artists and artistic researchers, either research collaborators or other musicians and artistic researchers whose work inspired me and seemed to relate to my quest, namely Peter Knudsen, Jonas Labhart, and Josh Sinton. The semistructured interview approach was inspired by Simon Rose’s phenomenological research method (Rose 2017) that was mentioned earlier. However, different to my original research design is that these interviews were not following, as Rose’s, the method of Interpretative-Phenomenological Analysis (IPA) and neither became a central element of the research, they turned rather into *punctual* exchange that flanked and intertwined with my doings every now and then and are therefore not analyzed and discussed explicitly if not quoted or referred to explicitly.

This documentation-reflection that often was related to concrete situations of puzzlement or sudden inspiration could also be related to Carolyn Ellis et. al.’s observance of the centrality of epiphany in autoethnography (Ellis, Adams, and Bochner 2011),²⁶ epiphanies referring to for example changes in perception, changes in skills on my instrument or notation, new thoughts and artistic motivations or interests that occur, emotions experienced while or after creating. And it is here that the tool of autoethnography builds the bridge between my personal experiences and intersubjective knowledge, making explicit use of my personal knowledge as a basis for the research and acquired through the research that otherwise would stay tacit.

Carolyn Ellis et. al. introduces autoethnography in this way: “A researcher uses tenets of autobiography and ethnography to do and write autoethnography. Thus, as a method, autoethnography is both process and product” (ibid.). In other words, autoethnography serves here both as a research method, and, as described before, as part of the research results, as well as, additionally, as a part of the artistic process, since I myself am both researcher and research object. In line with Ellis’ et al.’s description of autoethnography’s importance of contextualization of the personal experience such as through relevant research findings, other person’s perspectives and objects (ibid.), I aim to proceed the reflectional path through this research through including not only my own view, but from time to time making the voices of fellow musicians and composers heard, either emerging from discourse that happened within the collaborative experimentation, or in the above-mentioned interviews or discourse meetings held to specific topics of my research. Also, this is intertwined with constantly building on and embedding my argumentation in existing research.

Considering not only autoethnography’s function as product and process at the same time, but its potential to look at both processes and products, or activities, participants and traces as formulated earlier, I also follow Donin’s reflections about self-analysis (Donin 2015) who writes:

²⁶ “Most often, autobiographers write about ‘epiphanies’—remembered moments perceived to have significantly impacted the trajectory of a person’s life (BOCHNER & ELLIS, 1992; COUSER, 1997; DENZIN, 1989), times of existential crises that forced a person to attend to and analyze lived experience (ZANER, 2004), and events after which life does not seem quite the same. While epiphanies are self-claimed phenomena in which one person may consider an experience transformative while another may not, these epiphanies reveal ways a person could negotiate ‘intense situations’ and ‘effects that linger—recollections, memories, images, feelings—long after a crucial incident is supposedly finished (BOCHNER, 1984, p.595)’ (BOCHNER, 1984, p.595)” (Ellis, Adams, and Bochner 2011, p. 6).

[...] the focus of self-analysis is alternatively the score as a product, and score writing as a mental and practical process—none of these two objects being perfectly isolated from the other [...]. Embedding knowledge of both the process and the product, it seems to me, is a defining feature of in-depth self-analysis. The interplay between the work project and the resulting aesthetic object allows the artist to eventually emancipate his/her thinking from the lines that once guided his/her action. Analysis proves instrumental both in recalling the riches of the creative path and in distancing the present and future of the composer from his/her past. Reflection and introspection, turned toward the past as they seem, can also end by feeding prospection [...]. (Donin 2015, p. 353)

He describes as well how successful self-analysis “approaches the work as (productive or perceptive) experience, process, and singularity—as opposed to a thing, an output, or a particular instance of some general type of overarching system” and also, how self-analysis “would be the first step of a long-term, bottom-up process of theorisation” if taking its observations and hypotheses as starting point for generalizations “by confronting them to other composers’s findings” (ibid., p. 353).

Important is nevertheless that, as it is the issue with looking back on any event, course or process that lies in the closer or more distant past, the recall of a composition process or its activities is a reconstruction that can never be separated from the present notion of the composition, resulting from that process and in relation to what is at all memorable. As Roels continues his above cited reflections about artistic experimentation, “Thus, a researcher needs to be very conscious of time gaps between the traces of an action of an experiment and the reports on the cognitive-emotive component of the same experiment” (Roels 2014a, p. 230). In other words, the process itself—or, my memory of it—as well as its activities while still being in the process will always be interpreted and reconstructed in the light of my present condition, possible performances of the piece, my present artistic priorities and my present immaterial surrounding—including discourses of my working scene—that influence my interests, values and beliefs as well as my research interest.

Considering Donin’s ascription of self-analysis’ potential of “distancing the present and future of the composer from his/her past” (Donin 2015, p. 353), I am willing to agree that this must be the goal and in some way a necessary outcome of any self-analysis, but feel nevertheless obliged to put emphasis on how this, because of the fluid and time-related nature of our self and our consciousness as well as its embedment in time, can never be more than an attempt and approximation. As described before, all our consciousness and thus our thinking is embedded in time’s linear progression and supplied by the simultaneity and indeed entanglement of on the one hand linearly experienced contacts with the “*outside*” world through our senses and language with, on the other hand, the ongoing non-linear processing of everything we experience, embedded in the linear advancement of time.

Of course, documented material of the process such as sketches, recordings, comments etc. can be of use, as especially Nicolas Donin and Jacques Theureau have shown in their already mentioned method of what they call *interview within situation simulation through material traces* (Donin and Theureau 2007, p. 235) or *remise en situation de composition* (Theureau and Donin 2006, 5ff). With the help of these traces one can try to reconstruct the process as closely as possible—but never fully, it can never be more than an approximation. Thus, not only the composition process, as any creative process, but also the notion of it is therefore a quite versatile matter. Obviously it will change depending on the point in time from which we look at it, since both the process and I as the observer change through it. However, having said that, it is nevertheless necessary and valuable to reconstruct selected parts of what has been happening through the different lenses and with different foci and apply the *hermeneutic circle* that establishes through iteratively going back and forth between the material—the traces—and the reflective reconstruction and sense-making to guide me through my research.

To begin with my reflections, the very first experimental setup will serve as a starting point to understand more about the creative situations that my research was undertaken in. The following reflections will apply the expression of the creative situation in two ways. On the one hand, it mainly denominates the overall context where the creative process is happening in and refers therefore to its general feature of situatedness, including spatial and temporal aspects or any other material and immaterial parameter of its contextual embedment. On the other hand, it nevertheless also includes the possibility to look at chosen instances or parts of this process.

Chapter 3

The creative situation

3.1 A piece for myself: *Circular Composition II*

Due to the decision to start experimenting individually, I chose to use the occasion of an invitation by Ruth Wiesenfeld to compose a new solo piece for myself on the tenor saxophone¹ and to perform it at the *Towards Sound* festival in Berlin in the spring of 2022 as the first experiment's framework. *Towards Sound* is a festival in the framework of her previously mentioned archive project of the same name, where she collects the physical traces of compositions—a project she initiated “out of her curiosity about the creative processes of other composers. With TOWARDS SOUND Ruth wants to engender encounters embracing the vulnerable state of not knowing intrinsic to the artistic quest” (Wiesenfeld n.d.).

Apart from the instrumentation, Ruth's only specification for my piece was the length of about ca. 10 min. To this, I added the objective of taking improvisatory sound explorations on the saxophone as a starting point for creating a through-notated piece with intersected improvisation parts, a piece that therefore would require an equally exploratory approach of interacting with the instrument to explore the notated musical course and material in the performance. I was interested how the creating would be related to performing the piece and what the creation's tools and activities would afford.

Despite being a saxophone player, deliberately using the saxophone in composing and conceptualizing a composition process around its use was new to me. Though I from time to time notated improvised melodies or something “discovered” while playing saxophone—even when explicitly writing songs for my quartet or for improvising in any band context, I would mostly either exclusively notate, or combine singing and improvising on the piano with notating.²

New was also the focus on sound exploration³ in a piece for myself and to use this as a basis for creating a through-notated piece. So far, exploring sound had been something I had explored exclusively in my imagination or while playing. When notating music for others, I had always given up the topic of sound exploration to the performers—on the one hand, it was in my first years of writing music much more interesting to explore melodic-harmonic connections and writing *songs*, on the other hand, it has always been the encounter between the individual creative expression of the performer with what is notated that is most interesting to me. Thus, in these contexts of writing *songs* or anything to be explored through playing, it was deliberately left open *how* something was supposed to be played or sound. Many of these notations would often just be

¹The beginning of the composition process was also included in the project *Zirkuläres Komponieren & Digitalisierung*, funded by a scholarship of GEMA in the framework of Stipendienprogramm der Verwertungsgesellschaften in NEUSTART KULTUR by means of the Federal Government Commissioner for Culture and Media, October 21, 2021–February 19, 2022.

²Nevertheless, the songs for my bands would often include my favorite higher part of the tenor saxophone range, probably since the tenor range corresponds with my singing range apart from, mostly, the lowest three half-steps on the tenor. Maybe the ranges aligned over the years through my singing-transcribing practice of solos of Lester Young or Warne Marsh or others, inspired by Connie Crothers.

³With sound exploration, I mean here the searching for sound colors or timbre that I did not yet know how to achieve technically or did not have heard yet, in contrast to practicing sound quality, specific sounds or playing techniques that were already part of my repertoire.

comprised of traditional five-line music staves with pitches, rhythm and meter, and depending on the context chord symbols—*changes* or *chord changes* as they are called in the jazz idiom—or sometimes explanatory text.

However, in the past years, this topic of sound exploration had gradually “spilled over” from my improvising practice to my (much newer) practice of creating for non-improvisatory contexts and from there to any creative endeavor. Thus, in this first experiment, the sound exploring served a double purpose. Taking advantage of my double perspective as both the performer and the creator of the score, I both wanted to see what would happen if my growing interest in exploring sound color would become an explicit compositional means as well as when it then, as a part of the score, became something to interact with when playing.⁴

I was also interested in experiencing what it would be like to write a piece specifically for my instrument and my specific way of playing it, rather than using any piece of music as a starting point for playing saxophone or using a “general” saxophone piece. Indeed, one of the main differences to working with sound exploration as a composer for non-saxophonists or for other performers was that I would not just imagine sounds or at some point in the process ask someone to try out something, but that it was possible to explore the actual sounds and let my own response to them feed back into the composition process. Thus, either actual sound itself or a way of producing a sound—the movement and interaction with my instrument—would be the starting point for the composing, instead of an idea or an imagination of a sound and of how to produce it. My first person experience would steer the decision taking and have an impact on many levels, since I would for example not only judge how something would sound, or if it would be “practical”, but also how it would feel and if it was possible for me to achieve sounding in that way.

The composition process began thus with an iterative cycle with the central activity of playing saxophone and recording (with my phone) which would be alternated with taking notes—on paper or on my phone, as either written or dictated notes or recorded voice memos—or listening to the recordings and transcribing on paper (see Figure 3.1, p. 30). The written or spoken notes would include reflections about my doings, practical descriptions of sounds, such as for example new multiphonics, notation of sounds and other material in five-line staff music notation or text description, as well as any new ideas in music or text notation inspired from my doings. After a few days, I transitioned to notating as the main activity and to intersecting this with saxophone improvising or playing what I had notated, singing, or listening back to my recordings. Thus, while the focus shifted, it was the same kind of cycle, only the emphasis and the functions of activities had changed.

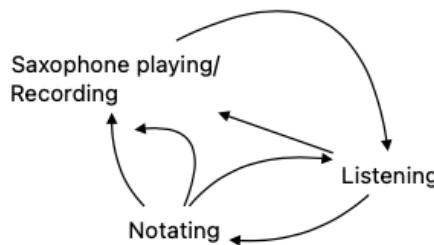


Figure 3.1: Basic iterative cycle for *Circular Composition II*

Before examining the activities in relation to the evolving music and all other traces they left more closely, it is necessary to reflect on the premises and characteristics of the above-described proceedings, as well as the objectives connected to them.

⁴It should be added that at that time there was a certain discrepancy in reference to notation between my practice as a saxophonist and the compositional one, with the notations I used as a saxophonist stemming from a much more narrow field than the compositional ones. This resulted in me as a composer having a much broader notational practice than as a saxophonist. Since all sound exploration as a saxophonist had until this point had exclusively been improvisatory, I had until then not yet interacted with notation that dealt with these explorative sound issues—in contrast to when working as a composer.

3.2 Topography

At first, the overall framework of this creative process seems to be one that whose handling or accomplishment requires *Könnerschaft*, a German term that is not completely translatable to English, but could be translated as *mastery* and is included in the very broad term of *knowing*, including both the concept of *knowing that* or *knowing what* (*propositionales Wissen*) and *knowing how* (*Können*). Guided by the leading concepts developed by FORIM, Forschungsnetzwerk implizites Wissen,⁵ Georg Hans Neuweg describes specific characteristics of such situations that require mastery (Neuweg 2020, p. 16), including how these situations are characterized through a certain fuzziness (ibid., p. 17) and require mastery as “the ability to deal with variability” (ibid., p. 18, translated with DeepL, 20250519).

Referring to Donald Schön, he describes the fuzzy characteristics of these kinds of situations: “Indeterminacy due to open, multiple and often conflicting objectives, ambiguity of the work assignment, unclear information situation due to missing, imprecise or overwhelming information, uncertainty, instability, time pressure, general complexity and, above all, individual case-relatedness” (ibid., p. 17, translated with DeepL, 20250519).⁶ This corresponds with Tasos Zembylas’ description of how “By definition, artistic creative processes represent non-standardized situations, relatively open objectives, and volatile requirements” (Zembylas 2020, p. 80, translated with DeepL, 20251028).⁷

To illustrate this through my situation, I knew the instrumentation for tenor saxophone solo, the rough length of the piece—ca. 10 min although it then turned out to be 15 which was fine for the festival—and the performance space, which was the *Hilbertraum* in Berlin. I also roughly knew the context, the festival and its background, and I even knew how I wanted to begin the creative process. My interests as a researcher and artist were known, on the one hand the role of improvisatory sound exploration for the creative process, and, on the other hand, the application of my instrument both as a tool in creating and for performance, as well as the perception of the evolving relation between composition and creative process. However, as already discussed earlier, “composition processes are goal-orientated but not goal-directed, since the piece still has to be created and since even detailed specifications do not determine the final gestalt of the piece” (Zembylas and Niederauer 2019, p. 75).

Thus, even if without a new methodological core element and the transformation of my saxophone from an occasional implicit working tool into an explicit core tool of the process, the earlier described experimental nature of these kind of processes and the consequent emergence of new knowledge make such creative processes *fuzzy* by nature. As Donin and Theureau have formulated it generally for situations such as compositional ones, “The system formed by each actor and the environment under consideration has no spatial or temporal boundaries, and no *a priori* determinable content” (Theureau and Donin 2006, p. 223, translated with DeepL, 20250519).⁸

This emphasizes the characteristic of complexity of such creative situations, resulting from a multiplicity of individual and collective factors, as well as the specifics of specifically artistic mastery that Zembylas and Niederauer point out. On the one hand, they reject the Dreyfus brothers’ five-step model (see Dreyfus and Dreyfus 1984) “because the recognition and appreciation of artistic achievements is highly dependent on contingent social factors” (Zembylas and Niederauer 2019, p. 96). On the other hand, they state that it is never possible to give a complete answer on what constitutes competence, “And all the elements that constitute mastery cannot be represented exhaustively because they cannot be analysed and comprehended in their entirety” (ibid., p. 97).

⁵ “This international and interdisciplinary research network, founded in 2009, brings together researchers who are interested in discussing the phenomenon of human *Könnerschaft* from the perspective of implicit knowledge. Coordinated by Fritz Böhle (Munich), Jörg Markowitsch (Vienna), Georg Hans Neuweg (Linz), and Tasos Zembylas (Vienna), the network usually organizes an annual conference on the topic” (Neuweg 2020, p. 16). For more information, see (FORIM n.d.).

⁶ „Unbestimmtheit durch offene, multiple und oft konfliktäre Ziele, Ambiguität des Arbeitsauftrages, unklare Informationslage aufgrund fehlender, unpräziser oder in ihrer Fülle erdrückender Information, Ungewissheit, Instabilität, Zeitdruck, ganz allgemein Komplexität und vor allem Einzelfallbezogenheit.“ (Neuweg 2020, p. 17)

⁷ „Künstlerische Schaffensprozesse repräsentieren per Definition nicht-standardisierte Situationen, relativ offene Zielsetzungen und volatile Anforderungen.“ (ibid., p. 17)

⁸ « Le système formé par chacun des acteurs et l’environnement considéré n’a donc pas des bornes spatiale et temporelle, ni de contenu, déterminable *a priori* ». (Theureau and Donin 2006, p. 223)

They continue by describing how composing results thus in “two levels of achievement: the work being created and the artistic practical knowing that has been generated” (Zembylas and Niederauer 2019, p. 97). Thus, considering the diversity of aspects that seem to direct the starting point and conditions of creative activities, it seems helpful to begin my reflections by getting an overview over the framework of these creative situations—in Zembylas and Niederauers’ terms, I need to begin by sketching a *topography* of the creative situations of my experiments (ibid., 13ff.). The first one is this specific one of my new solo piece for *Towards Sound*, eventually denominated as *Circular Composition II* (Flick 2022b), which shall serve as an example and starting point for looking at the further experimentation. Zembylas and Niederauer explain their approach to topography as following:

The term “topography” usually refers to the representation of a terrain’s physical limits (land/water) and height differences. Topographical maps provide a geographical orientation; in this chapter, we will be using “topography” metaphorically to set out the web of practices, material constellations and professional relations within which creative processes of composition take place (see Figure 1.1). All those who are directly or indirectly involved in the composition process – from the original idea to the premiere – are part of this web. (Zembylas and Niederauer 2019, p. 13)

Their idea of a topography and this web of *participants* as I also will denominate the topographic web’s properties, or, “[a]ll those who are directly or indirectly involved” (ibid., p. 13), is based on a multiplicity of sociological concepts. It surpasses the scope of this work to go into detail here, but it might be useful to mention that they a.o. reference “Herbert Blumer’s (1986: 16–20) ‘joint action’, which refers to the social division of labour, social coordination, and the interconnection of different actions. Wider forms of social action – we might call them fields of practice – are generated when actions by different participants with different positions, motives, abilities and knowledge are interlinked” (ibid., p. 13). Important is also the concept of *art worlds* by already mentioned Howard S. Becker (who also references Blumer) “to define art as the result of collective action” (ibid., pp. 13–14),⁹ and finally their reference to Werner Rammert’s concept of distributed agency.

According to Rammert (2008: 65), “[a]ctions emerge out of complicated constellations that are made of a hybrid mix of agencies like people, machines, and programs, and that are embedded in coherent frames of action. The analysis of these hybrid constellations is better done with a gradual concept of distributed agency than with the dual concept of human action and machine’s operation.” It must be added that this web (human beings/media/ artefacts) is always anchored in social and institutional settings, which influence agency and competences. (ibid., p. 14)¹⁰

They discern between four groups or, as they say, “clusters” of participants, “woven into a web of relations” (ibid., p. 13), that are listed here in clockwise order of their figure to give an overview (see ibid., p. 14), firstly, material objects—musical instruments, computers and technical apparatuses as well as writing material, secondly, parameters and resources—commission and instructions, place of creation and performance, working and living conditions, thirdly, immaterial objects—theoretical and aesthetic discourses and considerations, algorithms as well as systems of musical notation, and fourthly, also peers and non-peers—audience, composers, instrumentalists, sound engineers and software developers.

⁹In the following I will therefore apply the term of the *art worlds* in Becker’s sense. For a closer discussion see for example (Kirchberg and Zembylas 2025, pp. 31–49).

¹⁰Donin and Theureau remark, when specifying the above quoted non-determinability of the system and environment of creating, “The boundaries and content of this system depend on the actor and his [sic!] history, and are constantly changing, not only as a result of the interactions that take place within it, but also as a result of the interactions between each actor and other environments, which contribute to the constitution of his [sic!] culture, namely the environments of his other practical activities (family life, leisure, work, sport, etc.), whose characteristics may differ from those of the environment under consideration” (Theureau and Donin 2006, p. 223, translated with DeepL, 20250519). « *Les bornes et le contenu de ce système dépendent de l’acteur et de son histoire et varient constamment, non seulement du fait des interactions qui se déroulent en son sein, mais aussi du fait des interactions entre chaque acteur et d’autres environnements, qui participent à la constitution de sa culture, à savoir les environnements de ses autres activités pratiques (vie familiale, loisirs, travail, sport, etc.), dont les caractéristiques peuvent être différentes de celles de l’environnement considéré.* » (ibid., p. 223)

If applied to my creative situation of *Circular Composition II*, the topography can be described as follows, with the participant groups sorted in the same order as in their analysis.

(i) Firstly, concerning *parameters and resources*, there was the framework and experimental task of my research as described above and the commission by the *Towards Sound* Festival to write a solo piece for myself to be performed on March 13, 2022 at Hilbertraum. Known also was the festival's program and that I was additionally taking part in another contribution as a performer which turned out to play an important role for the course of this research. Because of other work until January 2022, there were about four weeks to work on the piece. I thus consider the starting point for the actual composition process to be February 15, 2022, when I suddenly felt inspired by something I had played. Additional context was that during the working time, I did not have any another larger composition or performance project, and I was reflecting through writing essays about my artistic activities. I was teaching saxophone and improvisation one day a week, and also needed to practice saxophone. Part of my working and living conditions was also that I had a shared practice space available, but at that time, I was mostly working at home because of the better "infrastructure" for processes that involved both playing and writing there. However, the creative process did actually start in a teaching pause in a music school room, thus, there were three different locations involved.

(ii) Secondly, concerning *peers and non-peers*, not much was known to me about the festival's further context, but the names of composers who would take part (peers) and that it was a festival in the context of *Neue Musik*. It happened thus in a context, where I had begun to feel at home compositionally for a few years, but had not worked in much in Berlin and never worked in as a saxophonist before. I knew the work of Ruth Wiesenfeld and the playing of one of the other instrumentalists, but was otherwise curious to meet the composers-participants new to me and also, to be for the first time in a context with many practitioners of artistic research outside of university. The process before the premiere did not involve exchange with other peers, however, after the premier, when layouting the score, advice and feedback on certain notational details was given by another saxophone player and two other composers of Western contemporary classical music.

(iii) Concerning *material objects*, I myself as a composer used several specific material objects as tools, primarily my tenor saxophone,¹¹ but also my favorite writing paper, fountain pen and pencil, my phone for recording,¹² my laptop with the notation software Finale¹³ and its external screen, mouse and keyboard.

(iv) Concerning the forth group or cluster, the *immaterial objects*, making the saxophone a building block for my creative process brought an immaterial issue into the process that I had not foreseen in that extent. As a musician with perfect pitch, I had nevertheless begun learning the tenor saxophone as a transposing instrument in B-flat, meaning that it transposes a ninth downwards. At some point, I therefore switched reading from Bb parts to concert ones and began also training to not only transpose, but to change the mapping of my keys, a process that is still ongoing and will probably never be completely finished. However, although it was clear that somehow my imagination of a saxophone tone was all muddled up through this issue—which probably was the reason why I unconsciously had not used it for composing—I had not been aware of how strongly my motorical saxophone skills were still attached to the denomination of pitch in Bb. For the first time in many years, I voluntarily included notation in Bb in the creative process, realizing that as soon as the notation was not only about pitch, but about sounds that required new fingerings, such as certain multiphonics or microtonal pitch, it was more immediate and direct to—at least while creating—note them in Bb instead of concert. When reading successions of pitches or harmony to try out what I had created, it was however preferable to read concert, thus leading continuously to situations of changing between concert and transposed notation. To summarize, the immaterial objects included two systems of relation between pitch and fingering at the same time and additionally, also several systems of music notation. Some of the other relevant theoretical and aesthetic discourses and considerations have been mentioned already, these must and will be explored more in detail at a later point.

¹¹Selmer Super Action Series III, Super Session mouthpiece tip opening I, at that time Rigotti reeds 2 light

¹²iPhone 12 mini

¹³Finale 26.3, but I switched to version 27.3 in the beginning of 2023.

Zembylas and Niederauer's research of composition processes happened under the guidance of the question of "what constitutes artistic agency" (Zembylas and Niederauer 2019, p. 1), focusing on *tacit knowing* in composing in the chosen context of Western contemporary art music (*ibid.*, pp. 1–4). Their above-mentioned topographical and the broad epistemological conclusions are drawn through a complex methodology that combined following five composition processes by five different composers from Austria in real time, while also conducting one-off interviews with 23 composers from Austria as well as interrogating composers and watching different parts of processes such as rehearsals with musicians at IRCAM (*ibid.*, p. 6). As already mentioned, this is an invaluable basis for my own research that I will continue referring to at different points throughout my reflections.

However, since my research interest is a different one and the creating happens in a greater diversity of genre-related contexts, collaborative settings as well as with a variety of different creative goals and desired kinds of results, my focus leads away from the creative human being with its agency and knowledge, and toward the creating and what is created itself—in its entanglement with the creative activities and all their other traces. I therefore propose a modified topography that includes all of these components that Zembylas and Niederauer have found, but that can function as a tool to reflect on the evolving relations between the participants *while* interacting and *in relation* to the evolving sound that is created. This aspect as such was not integrated in their topography and analysis and I have not seen that being researched so far. Naturally, this includes the human being with its agency, knowledge, and mastery, but the difference to Zembylas and Niederauer, as already described in reference to the afore-mentioned research by Donin and Roels (see chapter 2, p. 21), is that the reflection and analysis on the human being's doings and transformations function only as a tool for the research and not as its objective. Thus, a topography is needed that offers a perspective that on the one hand can generally give an overview over the participants of a creative experimental situation as Zembylas and Niederauer's topography does, but that on the other hand also can look at a specific instances or part of a situation in the moment of creating.

Since this research investigates creative processes that I am involved in as both a creator and researcher, I additionally propose to look at the situation from an individual point of view. The basis for my scheme is therefore an individual human participant, such as myself, who interacts with what I in reference to my research questions summarize as the "*outside*" world. Through their interaction they create the evolving sound. This evolving sound is a complex musical *Geschehen* of sound. The German term *Geschehen* does not seem to have an English equivalent. It means something that is ongoing and constantly evolving—similar to an event it also denotes something that happens in a certain instant of time, but at the same time the focus is on the complex and simultaneous totality of related and entangled sound *movement*, to which it is even related etymologically through its origin in a former indoeuropean root of *springen*, *jumping* (DWDS - Digitales Wörterbuch der deutschen Sprache 2025), that stretches at the same time in and over time. Thus, a term like *happening* or *event* is not appropriate here, they focus on other temporal dimensions. Both lack this quality of evolving and focus etymologically even more on the result of something which occurs in a certain moment of time. A *Geschehen* is something that is continuing, lingering, that is held up, is ongoing over time. The "*outside*" world consists thus of both material and immaterial components and I propose a scheme as shown in Figure 3.2, p. 35.

To denote material and immaterial objects instead as material and immaterial *surroundings* allows for the inclusion of material or immaterial components that are not objects as well as to subsume here the parameters and resources as well as peers and non-peers in relation to all their art worlds including the ones oneself is part of and which are not immediately part of the situation that Zembylas and Niederauer have listed—thus reassembling Zembylas and Niederauer's components into these two categories. Kathleen Coessens' metaphor of the *web of artistic practice* (Coessens 2014) as a background for artistic practice and experimentation that includes all the parameters and resources, peers and non-peers as well as the immaterial objects that Zembylas and Niederauer describe is important here as well. It highlights on the one hand their interconnectedness, on the other hand the creative, dynamic, and relational aspects of what forms this background or surroundings, something that is always tacitly with us, but that an artistic practitioner has been shaped through and keeps shaping *actively* by interacting with their surroundings. In her words:

This web of expertise functions as a kind of dynamic artistic background, an internalised and integrated whole on which the artist relies for his or her creativity. It is constituted

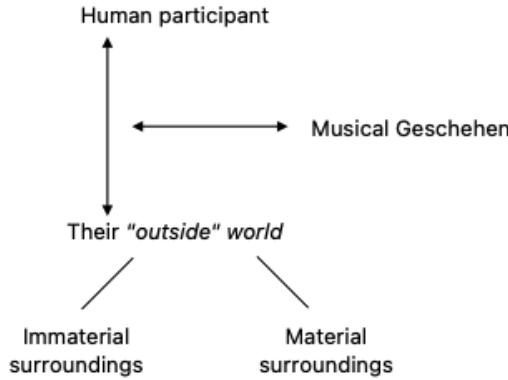


Figure 3.2: Modified topography of a creative situation

by five dimensions that refer to the complex interactions and exchanges between the musician and his or her environment: embodied know-how, personal knowledge, the environmental, the cultural-semiotic, and the receptive dimension. Together they form a “web” of artistic practice, woven repeatedly by the artist over multiple periods of education, exploration, and performance, offering a solid but agile support and augmenting artistic expertise. (ibid., p. 69)

One could argue that what here was denominated as material surroundings could be integrated in this web so that the term of the web of artistic practice would substitute the terms of the material and immaterial surroundings. However, I decided to keep to these terms of the surroundings, since the personal web of artistic practice is only one, though the most important, subcategory of the immaterial surroundings. These are also comprised of the webs of other human participants and immaterial components—that eventually through the creative situation’s doings turn into components of these webs in their own right. Additionally, the web can not depict the material surroundings’ components as such, but only the practitioner’s relation to them.

In that way, the immaterial surroundings are comprised of entangled sedimented layers of experience that make contact with the present immaterial and material surroundings of the creative situation. Thus, the previously mentioned commission, my research project, the experimental setup, and the space’s physical and symbolic dimension of being a class room of a specific school, meet and result from my personal embodied know-how on for example saxophone playing and composition processes, my way of relating to material and immaterial surroundings, the knowledge of the space’s acoustic specifics, as well as my symbolic relation to my surroundings, influences how I perceive and listen to sound. The following reflections will by and by examine how these interrelated five dimensions acquired through my previously mentioned education and collaborations afford, co-act and transform through creating. The personal web of artistic practice thus emphasizes how the creative situation’s doings and the knowledge acquired through them are at the same time situated in my individual lived artistic experience, and in my relation to others. It is in turn continuously transformed through these doings as newly-made lived experiences,¹⁴ offering a “space or zone of exploration” (ibid., p. 70) that is individual and collective at the same time.

3.3 Contact

To begin with, the opening of the creative process of my *Circular Composition II* and especially its first movement *Lichtspiel* shall be looked at in detail. It began on February 15, 2022, during a break

¹⁴“These different input-spaces—or aspects of them—can then be blended into a new space, a creative mental and/or embodied idea, which finds its translation into the external world through the creation of an artefact. Moreover, this dynamic process will be repeated in the creative activity of the artist, each time in slightly different settings, thus increasing the flexibility and differentiation of acquired schemata, augmenting the artistic expertise, and solidifying the web” (Coessens 2014, p. 80).

between two saxophone students in a classroom.¹⁵ When I looked out the window and perceived the afternoon sun's play of light reflected on the typical Berlin fire wall opposite the room, I felt a sudden, strong urge to play saxophone. I began playing and felt at once inspired and happy about some kind of melodic movement that had evolved. Immediately, there was a certainty that this would be the root for my new piece and its creative process. I quickly started recording on the phone and continued playing, exploring different motivic fragments and also sounds that emerged from my playing—sometimes even sounds that I didn't know I could produce on my instrument such as *whistle tones*.¹⁶ Sometimes I would pause to reflect orally and make voice memos.

First recording for what became *Circular Composition II*, February 15, 2022

Whistle tones, same session, February 15, 2022

With the modified topography, an overview over the interacting participants of that specific instance could be sketched as in Figure 3.3, p. 36.

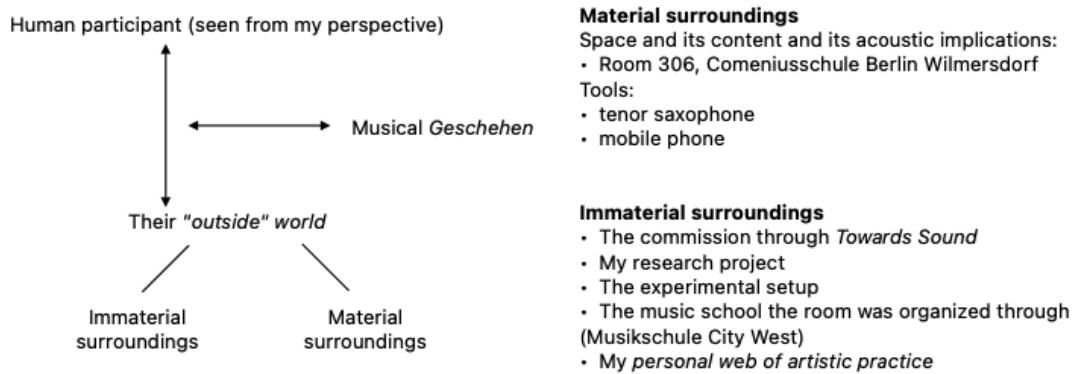


Figure 3.3: Topography of the creative situation at the beginning of *Circular Composition II*

As before, the arrows show how the musical *Geschehen* is created through the interaction of the human participant, in this case, myself, and the “*outside*” world. This musical *Geschehen* I understand twofold: on the one hand, there is the actual sound I produced, and interacted with, on the other hand, there is an idea or very faint vision of some aspects, some atmospheric anticipation of the musical *Geschehen* that later on should become my piece.¹⁷ To characterize this “idea or faint vision” is beyond language's possibilities, I use these two metaphors to denominate some kind of holistic experience that in this case does not have anything to do with pitches or sound color of my saxophone. I could connect my memory of visual and spatial imagination to these, but neither of them can be described with adequate words. It is a *tacit knowledge* in many entangled layers that

¹⁵It was a class room used in the afternoons at Comeniuschule in Berlin, that being part of the communal music school of Charlottenburg-Wilmersdorf, where I was freelancing for one day per week as a saxophone and improvisation teacher.

¹⁶I had so far known whistle tones exclusively as a technique and sound from the flute. During that exploratory session I noticed that, if I blew the air in a certain angle and with a certain speed over the tip of the mouthpiece—while not touching it, but just letting the airflow break at the tip—certain overtones would evolve. It is a sound that accompanied me through the whole research project and that I will return to several times later on.

¹⁷In German, the term of a *musikalisches Geschehen* is quite frequently applied, however as far as I know, mostly for the actual ongoing sound and not in the extended dimension I propose. An example for such a usual application as known to me so far can be found in Heinrich Strobel's translation of Igor Stravinsky's *Poétique musicale sous forme de six leçons* when mentioning the structuring of music as a relation between certain musical parameters or elements. „Die Gliederung des musikalischen Geschehens bekundet eine geheimnisvolle Beziehung zwischen dem *tempo* und dem tonalen Spiel.“ (Stravinsky 1983, p. 196) In the English translation, this *Geschehen* is referred to as “the articulations of musical discourse” (Stravinsky 1947, p. 36), a term that would be misleading in my reflections. Unfortunately, I have so far not been able to get access to a copy of the French original expression, which would probably shed more light on the relation between the German and English terms.

has emerged within me through my interaction with my material and immaterial surroundings of my “*outside*” world, resulting from manifold layers of tacit knowledge sedimented and entangled in myself through all previous interactions and experiences, interactions such as practicing saxophone, creating music for and with different groups and a constant listening for the evolving of such visions. This resulted on the one hand in a tacit knowing that I had indeed started the creative process, that there was a potential in what I had played and envisioned. On the other hand, also this indescribable faint vision of how I wanted my piece to be perceived or felt (by myself) had evolved as a tacit knowledge.

The term *tacit knowledge* refers to the concept originating in Michael Polanyi’s research and terminology that I consider as an essential basis to reflect on the relations that evolve through the interacting of the participants of such a creative situation, including all traces that these interactions result in (and that in turn can become new participants of these situations through involvement in further creative doing). As the practical knowledge arising from the doing itself, it is a key to understanding how we as human beings, as the body-mind-unity that we are, are connected to our surroundings and can experience our body through its contacts. Michael Polanyi—who knew the works of Maurice Merleau-Ponty and his philosophy of the body—stated once:

Our body is the ultimate instrument of all our external knowledge, whether intellectual or practical. In all our waking moments we are *relying* on our awareness of contacts of our body with things outside for *attending* to these things. Our own body is the only thing which we normally never experience as an object, but experience always in terms of the world to which we are attending from our body. It is by making this intelligent use of our body that we feel it to be our body, and not a thing outside. (Polanyi 2009, pp. 15–16)

It is thus through our interaction with our surroundings that we experience ourselves and that our consciousness is formed, as Alva Noë who promotes an *enactive* approach of perception has also described it. Crucial is here, how “By changing the shape of our activity, we can change our own shape, body, and mind. Language, tools, and collective practices make us what we are” (Noë 2010, p. 67). It is in that way that Coessens’ metaphor of the personal web of artistic practice works so well with its emphasis on the complexity and transformability of our formation. Drawing on Polanyi, she explains how “Knowledge is then the visible outcome of these complex processes of interaction between the outer world—social, intellectual, educational—and the researcher—his or her commitment, intellectual capacities, personality: every act of knowledge is an act of ‘personal knowledge’ (Polanyi 1958, 62–64, 315–21)” (Coessens 2014, p. 74). The body-mind-unity’s transformations through its being in the world are thus the foundation for making any experiencing and thus also any creative activity and research on creative activity possible. Thus, by changing the shape of my activities in a creative situation, I change the practice, its traces and my understanding of it. In other words, by changing the shape of my *interacting* in a creative situation, I change the practice, its traces and my understanding of it. By changing the shape of my way of *making contact* with my material and immaterial surroundings, I change the practice, its traces and my understanding of it. Thus, by changing the shape of *making contact with* my material and immaterial surroundings, I do not only change the practice, its traces and my understanding of it, but also my *way of relating* to that material and immaterial surrounding. How can the contact and these evolving relations between my body-mind-unity with its surroundings in this very beginning of creating *Circular Composition II* be described?

It is interesting to reflect on the term contact itself and its usage. Contact is derived from the latin noun *contactus*, derived from the verb *tango* and the prefix *con-* that stems from *cum* and in most cases means *with*. The verb *tango* translates in English as to touch or to grasp, both physically or spiritually (Hau and Fromm 2006, p. 905). Both touch and contact and all their latin origins are connected to movement and, to the actions to “”move or reach so as to make deliberate physical contact with; put hand or finger on (something) so as to feel; bring into physical contact (etymonline 2025j) as an explanation to the first connotations from about 1300 reads, relating the world to the Old French verb *tochier* and the Vulgar Latin *toccare* (ibid.).

In German, this connection is even more obvious since the German translation of contact or touch or their latin origins is *berühren*, *Berührung*—derived from the verb *rühren* that is a verb of

movement. The prefix of *berühren* makes also the necessary consequence of the activity of touching or any movement obvious: the prefix *be-* changes the intransitive verb *röhren* into a transitive one, thus highlighting the aspect of transformation that always comes through movement. It is a mutual transformation that happens on many levels. On the one hand, contact-making can through its basis in movement and result in transformation be considered as a process, considering also how the term process comes from the Latin verb *procedo* for moving forward, again implying movement and change. It is a change that happens in time, sometimes very quickly, so that it appears as just an instant, sometimes it can be so slow that the change is only perceivable after years. On the other hand, a process has a clear beginning and a clear ending, but this is not true for all contact-making. Thus, it is again the term *Geschehen* that might be more appropriate here, which is, as mentioned earlier, even related etymologically to the dimension of movement.

This could be discussed further, but for reasons of simplicity I will continue referring to this contact *Geschehen* or movement as a contact, but keep in mind that its most important characteristic is indeed that it is something ongoing and constantly evolving. When e.g. my human body touches my material surroundings in the form of a saxophone (such as when a finger tip lies on the key's nacre), there is always movement going on to keep that contact or to balance it. Thus, also, the tactile relation that is established through this contact is rather a constant procedure of relating than a single result of a process. It is a continuous dynamic establishing or even negotiating of relating, at times shaped tacitly, at times explicitly through the participating bodies and their affordances in movement.

One could go so far as to state that this tactile relating is the basis for all relating to one's surroundings, thus for all interacting that happens when creating, thus shaping indirectly or directly the activities that become entangled there and their traces, as well as the transformations that come with them in one's body-mind-unity when moving, contacting, relating to the surrounding through the creative interacting. As Noë writes:

The central claim of the theory of perceptual consciousness that I am laying out here is that it is not the intrinsic character of sensory stimulation that fixes the character of the experience; rather it is the way sensory stimulation arises as a function of movement in relation to the environment that does the important work. (Noë 2010, p. 63)

Reformulating and connecting this to his afore-quoted statement: It is through the physical-sensual interacting with our surroundings as a function of movement that we can change our own shape, body, and mind. Thus, the tactile aspects of interacting also contribute to how we experience our "outside" world and thus how we interact with it and understand it, be it a saxophone's keys, the experience of a sound or the contact with a pen and a paper.¹⁸

Returning to this very beginning of creating *Circular Composition II*, how can what happened be described in the light of the above stated reflections? I once formulated: "My lips, teeth, tongue and fingers are the surfaces where my body and the saxophone touch each other, but it is the flowing air that I initiate the sound with – and that moves both our bodies from outside and within when listening and playing."¹⁹ In other words: there is a direct touch between surfaces of my body and the instrument—lips and teeth and often the tongue are touching the reed or the mouthpiece, my fingers are always laying on the keys, and the whole saxophone body is supported by my own body, through in my case a complex strap that surrounds the thorax to lift the weight from my neck that would traditionally carry it through the strap.

Together with the instrument, I am in a space whose air I breathe and that I move through my breathing and any other movement I do with my body. And this forms the most basic and continuous relation to my surroundings in any circumstances of my existence—bringing me in constant, tactile relating with my surrounding and myself, blurring and permeating my physical borders, never allowing me to not be touched and interacting, always making me entangled with my surroundings through my breathing.²⁰ When playing the saxophone, the instrument's body shapes one's breathing and interacting with the surroundings since the instrument prolongs the

¹⁸Of course, this has to be conceived of in a differentiated way and does not work through reverse concluding.

¹⁹Birgitta Flick, *Circular compositions for saxophone solo: Following a composition's transformations through improvisation and collaborative creating*, March 31, 2023, "Not-the-L8Nite performances," European Platform for Artistic Research in Music (EPARM), RDAM, Copenhagen.

²⁰As indicated before, this space where the contact happens is of course never a purely physical space, it is also a

body(-mind-unity) who breathes through the saxophone.²¹ And again, it is the moving air column in the saxophone's body I set in motion through my breathing and that moves both our bodies from the inside and connects the saxophone body and the human body, as well as both with their surroundings. The choice of where and how to tactiley connect the body with the instrument's body shapes this air flow. Through enclosing the mouthpiece with the lips with a certain muscular tension, adjusting this to the proceeding air flow and the imagination of the air flow, moving the keys with the fingers, opening and closing them, the shape of the saxophones tube changes, thus shaping the air column and it's way of vibrating and thus the sound, forming the musical *Geschehen*. Also this touches the body-mind-instrument-unity tactiley through the moving air, making the body and especially its direct surfaces of contact such as the eardrums vibrate and thus transport or rather transfer the sound waves.

As the human body is a body-mind-unity and not a purely mechanical body, even these tactile contact processes are shaped by the whole being's experiences and its artistic web of practice, thus all the contacts made so far in life. It exceeds the scope of this research and my competence to indulge into further psychologic, neurologic or anatomic aspects of this contact-making and the resulting transformations that I have tried to describe in very simple terms as a basis for the creative activities and the resulting interactions. However, as soon as there is an interaction that involves or as it is the case here, aims at the creation of a musical *Geschehen*, there are some additional dimensions of such a contact process that need to be taken in account and to be looked at for the advancement of this research *from the creative practitioner's perspective*.

An interesting dimension of the tactile relating to the instrument is the term of *pleasure-inducing touch* that Vincent Meelberg's reflects on when discussing improvising as a tactile practice (Meelberg 2022, p. 19). Drawing on Matthew Fulkerson, he reflects about pleasure-inducing touch and its differentiation in "affect-causing touch" and "affect-presenting touch" (ibid., p. 19), the former inducing a pleasant feel, while the latter feels pleasant because of the touch's sensory characteristics (ibid., pp. 19–20). Meelberg describes the pleasure of touching the instrument as a compound of both forms of touch, "and the balance between the two depends on the player, the instrument, and the kind of music that is played" (ibid., p. 20)—something that is reflected in how I experienced that very beginning of my creative process for *Circular Composition II*.²²

After having "found" that melodic line and stumbled over the whistle tones, I remember that I enjoyed more and more the pleasant bodily feeling of playing. I was curious and energized through both the musical *Geschehen* that was evolving, the sheer interacting with the instrument and the (for teaching purposes quite enervating, but for this playing session very nice) reverb of the room that enhanced certain frequencies (such as the 3rd partial, the interval of a 5th above the A, the second-lowest pitch on my saxophone) which also made the sound of key clicks quite reverberant. My playing became more and more eager, it felt more and more "urgent" to play and at some point, I began also stomping on the floor with my feet, establishing some kind of dialogue between key clicks, slapped pitches and intersected foot stompings. I remember that I wanted to produce percussive accents and had a strong urge to move more than just my fingers and my air flow, longing for interacting and moving more holistically. I remember how I associated to the experience of playing and listening to *polska*, Swedish traditional dance music, and how I was consciously connecting my playing to my memory of the sound and the bodily feeling of groove in playing *polska*, despite that I was not at all playing a pulse and instead established a rather staggering sort of free pulse without meter and regular repetition. Still, I remembered how it felt to watch and listen to people or myself making that pulse on the one and the three with the foot and to establish a groove with the whole body, to see people's violin bows moving and forming that groove, with this interplay between foot and grooving melodic line that I used to enjoy so much.²³

cultural-symbolic space that prefigures the ongoing experiences. In a similar way, the saxophone is a cultural object made intentionally to move humans on manifold levels.

²¹Sometimes, the body does not even touch the instrument directly at all points of interaction such as when producing whistle tones.

²²It should be added that there is not necessarily a congruence of affect-presenting touch and what the body can endure well, but this has to be discussed elsewhere since it is not relevant for this research to scrutinize that aspect.

²³Violonist and artistic researcher Karin Hellqvist describes this experience of playing *polska* very vividly and beautifully when reflecting on and analyzing her collaborative work with composer Liza Lim which evolved on the basis of her embodied practice of playing *polska*. "I'm inside the pulsating heartbeat of the *polska*. As a rubber band, it connects every cell in my body. Its heavy first beat opens the flow of melody, connecting me to the ground as my

I merged into going back and forth between recording voice memos with reflections and playing glissando lines and other more virtuosic phrases, moving my fingers and letting the air flow as smoothly as possible, enjoying that bodily feeling of effortless flow and at the same time experiencing how a vague and overwhelming conglomerate of concrete musical ideas, an overall atmosphere (this “faint vision” of my piece) and bodily feelings as possible components for the new piece established. Probably the enhanced frequency of A in the class room contributed to playing a repetitive arpeggio pattern with this pitch as a root, relating to that afore-described joy in playing arpeggios which had been inspiring in my first method test with the seed in December 2021. As also the whistle tones, certain kinds of such rediscovered arpeggios became from that day on indeed an integral part of the creative process and also my general saxophone practice.

As these memories, and also Meeberg’s statement are indicating, the musical *Geschehen* created through this interaction with the instrument, brings an additional dimension to that interaction that completely changes the experience. Of course, as it is expressed repeatedly by musicians, affect-presenting touch is one of the reasons for making music and cannot be separated from perceiving the musical *Geschehen* itself. As Becker et al. phrased it, “the artwork is one of the actors involved in the drama of its own making” (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 3). Or in my own words: the *Geschehen* is a participant of the creative situation in its own right. However, it is not just one of the actors but a special one—it is that *Geschehen* that directs the contact and resulting relative qualities between the participants of creative situations such as the one between myself and the saxophone. If the goal of the interaction with the instrument is to produce sound, all interaction is subordinated or at least entangled with what one hears or wants to hear. This is what distinguishes a musical interactive situation from any other kind of interactive situations, and reveals also another dimension of that *Geschehen*. Despite its constant evolving quality, there is a dimension of some kind of fluid directionality and its potential to direct all that are in contact with it. In Becker’s words, who because of that involvement relates the artwork to Bruno Latour’s term of the *actant* (ibid., p. 4) which could be transferred to the musical *Geschehen*:²⁴ “Like any other participant in the process of making art, it imposes constraints on what others, including the artist or artists who are constructing it, can do” (ibid., p. 4). Latour’s term of the *actant* who “can literally be anything provided it is granted to be the source of an action” (Latour 1996, p. 7) would indeed be an interesting one to use also in this context as an alternative to the term of the participant, however, I choose to stay with the term of the participant to highlight the participants embedment in the situation and their relational dependency.²⁵

left foot taps the rhythm. Soon, the second beat responds, now expanding the pulse beyond regularity. This is an airy, elastic, and light beat, but at the same time, it is the centre of motion. It swirls up, as if caught by a sudden wind. I inhale. Muscles gain tension, and for a fraction of a second, time freezes. Then, after this thrilling moment of weightlessness, the third beat falls. It injects renewed focus and direction to the pulse, it draws me back to a new first beat. The melody continues to unfold and the cycle repeats” (Hellqvist 2024, pp. 1865089/2952267/0/0).

Though myself not having grown up in that tradition and in contrast to Karin only being on a beginner level in playing *polska* and other Swedish traditional music, my studies of *folkmusik* from Dalarna where Karin comes from seem to have shaped my musical perception very deeply. Despite only once having played to a dance and though it is long ago that I jammed with other musicians within Swedish *folkmusik*, I clearly recognize my experiences in Karin’s descriptions and especially in what she describes as an ongoing “internal dance-like movement” (ibid.).

²⁴This *Geschehen* obviously could be denominated as an artwork, however, I would not use the term in the context here since there would be too much focus on a musical *Geschehen* as a *fixed* result of that contact-making and not a participant that is a *fluid* or transformable result.

²⁵To emphasize the participants active involvement in what is ongoing and their potential for transformation, also Deleuze and Guattari’s concept of the multiplicity that forms an assemblage could have been interesting to apply, as for example Fredrik Hedelin does inspiringly, when describing the violin or any multiplicity of participants in a musical situation as an assemblage.

“Overall, the violin can now be considered as a particular assemblage of parts, components, environments and rhythms. [...] Therefore, the playing of instruments is also incorporated into the assemblage, since the playing activities, i.e. the movements of the performer, are vibratory components of the environments of the arm, hand, breath and lips. One could speak of a violin assemblage instead of a violin instrument and violin playing, a flute assemblage instead of a flute instrument and flute playing, a music assemblage instead of a musical instrument and instrument playing. So even the notes are a assemblage of signs, the listeners an assemblage of the eardrums and the synapses of the brain, and the musical life an assemblage of instrument makers, note makers, schools, audiences and stages. This whole musical assemblage is like a machine in which connections and relationships between elements are established and dismantled” (Hedelin 2017, pp. 25–26, translation based on DeepL, 20250520).

”Sammantaget kan man nu betrakta violinen som en särskild anordning av delar, komponenter, miljöer och rytmer. [...] Därför blir även instrumentspelet införlivat i anordningen då spelaktiviteterna, det vill säga utövarens rörelser, är vibrerande komponenter i armens, handens, andringens och läpparnas miljöer. Man skulle kunna tala

Considering these reflections in light of my research quest, some interesting preliminary conclusions and propositions arise. Firstly, they confirm how describing the entangled creative activities in which a trace of creating, potentially a composition, is involved, must also include to examine the participants of these activities. However, applying a tool such as my modified topography, provides not only an overview over the premises of creating, on who and what takes part. Much more important is that describing these participants through their doings can be done through describing how they relate to each other, thus, how they *transform*. As the reflections on contact and the new notion of the musical *Geschehen* show, it was indeed through semantic considerations that these insights accrued.

Hence, regarding my second question, such a trace's and also its creation process' situatedness (see also Domin and Theureau 2007, p. 251) could be characterized through these relations, resulting from being “involved in the drama of its own making” (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 3) as already quoted above. Again, from the first tacit “faint vision” of a musical *Geschehen* to a sounding *Geschehen*, created through for example interacting with the saxophone, that which is created—or the traces that at some point will lead to what will be considered as the composition—“imposes constraints on what others, including the artist or artists who are constructing it, can do” (*ibid.*, p. 4). At the same time, it is formed through all other participants' interacting, for example through my interactions with the saxophone.

In other words, regarding my third question, the creative human being's relation to their “*outside*” world develops alongside the musical *Geschehen* and the constraints that even a “faint vision” of a *Geschehen* that as such only opens up the vision for a composition, offer. The *Geschehen* thus *directs* these relations, such as for example between the human body-mind-unity and an instrument such as a saxophone. The tactile dimension and the origin in movement that any contact-making and thus any relating implies are especially interesting here. By describing the practice of improvising as a tactile practice, Meelberg highlights the connection between the tactile and the explorative dimension which my descriptions above hint at.

Touch connects bodies, minds and also sounds. It creates identities, musical and otherwise. And through touch, these identities are constantly formed, reformed and communicated. This account again confirms that touch is exploratory. Touch depends on improvisation, on in-the-moment actions and reactions, a process that is exemplified in musical improvisation. (Meelberg 2022, p. 26)

From this perspective, any contact-making to, any interaction with a musical *Geschehen* and a trace of creating could be understood as connected to the dimension of the unforeseen in a broader sense. Hence, the application of improvising as a tool for creating a new piece such as *Circular Composition II* emerges as an activity of exploring the traces of creative activity tactiley. Could, as a consequence, the practice of improvising also be understood as a tool for making contact to one's “*outside*” world? To gain a deeper understanding about the consequences and apparent importance for my research quest, it seems necessary to take a closer look at the *Geschehen* of contact-making and the aspect of mutual transformation that has only been discussed marginally thus far.

om en violinanordning i stället för violininstrument och violinspel, flöjtanordning i stället för flöjtinstrument och flöjtspel, musikanordningar i stället för musikinstrument och instrumentspel. Så är även noterna en anordning av tecken, lyssnarna en anordning av öronens trumhinnor och hjärnans synapser, och musiklivet en anordning av instrumenttillverkare, notframställare, skolbildningar, publiker och scener. Hela denna musikaliska anordning är som en maskin där kopplingar och relationer mellan element inrättas och avvecklas.” (*ibid.*, pp. 25–26)

However, since the choice of applying this concept would have led my quest onto a different path of thinking with another focus, I chose to stay with my own terminology and spare the subject of following my quest in relation to Deleuze and Guattari's terminology and thinking to another occasion.

Chapter 4

Spielgefühl

4.1 Interacting as mutual transforming

I have now made contact-making which leads to interaction a central concept in my argumentation. Given the semantic understanding of interaction as reciprocal action, implying mutual transformation, one could wonder if it is really appropriate to speak of interaction between human and non-human participants, animated and non-animated participants of a creative situation.

In reply to such a potential objection, it should be reminded that the transformative aspect of any tactile contact that comes through the laws of physics as described above, leads to mutual change in any of the contact's participants, animated or not. Sometimes this change seems to be just temporary, such as when the exhaling of air into the saxophone on the one hand changes the instrument's temperature and makes it vibrate, and on the other hand changes the muscular shape and structure of the human body, for example in the embouchure muscles or the diaphragm. However, even such small and in the case of the instrument purely physical changes leave an imprint over time. Over time, the saxophone's responsiveness to vibrating is changed through repeated stimulation, an instrument becomes played in ("eingespielt" as one would say in German), its affordances to sound change and are so to say dependent on the number and kind of interactions it has taken part in. Some of the traces of repeated contact with the instrument are even more palpable than the one that the vibrating air leaves. My saxophone's keys' slightly concave and symmetric surface of nacre and the metal around it have been worn down by the contact with my fingers and their concavity and angle form the exact counterpart to the part of my fingertips that touch them. Besides that, some parts of the instrument's mechanics are explicitly adjusted to my body's affordances and thus have changed the affordances of the body-mind-saxophone-unity.¹ Thus, the by now 23 years of interacting with my specific instrument have left an imprint on myself and changed me as a body-mind-unity, but also the saxophone itself.

When in turn scrutinizing this imprint or traces on the saxophonist's body, the activity of blowing and touching the saxophone transforms also the muscular shape and structure (more) permanently—the repeated exhaling air into and the direct contact with the instrument changes the structure and even the tension of the participating muscles such as the diaphragm, even influencing the shape and functionality of adjacent and underlying body structures or parts such as the teeth or related joints such as the temporomandibular joints.

As indicated earlier, such contact and interaction brings obviously not only physical changes upon a human participant of creating, it transforms the interacting human participant and their capacity for creative interaction on a very complex level. Most basic and important is here and as it is the case with any interacting—this process of familiarization or *practicing* or *learning* results in the acquisition of tacit knowledge on manifold levels and creates manifold relations between the practicing human participant and their surrounding. It is helpful to again have a look at Polanyi's

¹ An example is the exchange of the "front F" (Eb5) key from the original somewhat oval (and already bent for adjustment) to the round and flatter one of another Selmer model in June 2023 that finally enables effortless playing and less strain for my left hand in the altissimo register around the G6 (F5) than before. The new key's form and weight fits much better to the shape and muscular capacities of my hand.

understanding of this. He describes how we “in an act of tacit knowing we *attend from* something for attending *to* something else; namely, *from* the first term *to* the second term of the tacit relation” (Polanyi 2009, p. 10). The first term that we attend *from* he denominates as the *proximal term*, the second one as the *distal term*, the term that we attend *to*. He explains further, “It is the proximal term, then, of which we have a knowledge that we may not be able to tell” (ibid., p. 10). Transferred to the long-term contact process of interacting with the saxophone, it is through the playing or practicing, and generally the familiarization with the instrument or aspects of interacting with it, that the saxophone turns from the distal term that is attended to into the proximal term that one attends from, to the musical *Geschehen* that is created and interacted with and that one has a knowledge of that one may not be able to tell or not even be aware of. Polanyi’s conclusions from the process of familiarization with a tool or a probe can thus be applied to the constant relating to, or the practicing of an instrument:² “In this sense we can say that when we make a thing function as the proximal term of tacit knowing, we incorporate it in our body—or extend our body to include it—so that we come to dwell in it” (ibid., p. 16).

This leads to the next aspect of the relations that evolve between the participants through their contact. How do I attend to the musical *Geschehen* or does it direct me together with the incorporated tools I interact with, such as the saxophone? How do I relate to it and how do I interact with it?

As mentioned before, sound touches tactiley. As the sound waves make my body vibrate, they do not only touch the eardrum, but also move my body as a whole, the consequences depending on their strength. As the human body is built, it can not prevent them from affecting the body. However, if I and how I perceive sound and how I interact with what touches me tactiley is totally dependent on the situation and my relation to it, based on my objectives as well as all my so far made experiences, i.e., all earlier contact-making (Flick 2020, p. 7).³

This means that we can not prevent hearing something, that our senses interact with the sound that reaches us, but if and how we perceive it. If and how we *listen* to it is individual and situated. The philosopher Jean-Luc Nancy reminds of the French formulation of “tendre l’oreille,” “literally, to stretch the ear,” describing how “Every sensory register thus bears with it both its simple nature and its tense, attentive, or anxious state [...]”, listing pairs of terms for all sensory registers, and thus also the pair of “hearing and listening” (Nancy 2007, p. 5).

Interesting is however, to not exclusively think of a dichotomy between an intensified and a simple state here as also the multiplicity of etymologically related terms for the sensual perceiving and the activity of attending aurally indicates. Between the mere perceiving of sound such as hearing in English or *hören* in German and the intensified attentive state of listening in English or *zuhören* in German, there are many more terms that constitute some kind of etymological and semantic network of perceiving and attending aurally. In German, *lauschen* and *horchen* can also be found as examples—corresponding to the English verb to hearken. The pedagogue Heinrich Jacoby stated that the activity of *zuhören* (listening) is more goal-directed than *lauschen* (hearkening) and that *lauschen* (hearkening) functions more procedural than the listening where one prepares for the activity of listening or for letting in something or the readiness to be permeated by something (Jacoby 2003, pp. 39, 195).⁴ As described earlier when investigating the term of permeability in relation to composition (Flick 2020, p. 7), it is interesting to reflect on Jacoby’s term of “antenniges Funktionieren” (“to function as an antenna”) (Jacoby 2003, p. 39) and how he emphasized the importance of being *erfahrbereit* (“to be ready to experience” (ibid., p. 39).⁵

²An instrument is by etymology nothing else than such a tool.

³“Listening is thus also something that is highly biographical and linked to individual experiences, knowledge, experience as such and emotions.” (Flick 2020, p. 7, translation aided by DeepL, 20250522) “Lyssnandet är därmed också något som är i högsta grad biografiskt och kopplat till individuella upplevelser, vetande, erfarenhet och känslor.” (ibid., p. 7)

⁴See also (ibid., p. 7).

⁵I am aware that these reflections and all consecutive ones following from there, are just one possibility to conceptualize listening. However, it serves best the purpose of following my intended research path to confine myself to those developed myself, based on my own artistic experiences within this research. A thorough contextualization with other conceptualizations would exceed the scope of this work and comprise a new research in itself. Nevertheless, I refer for further reflection and other conceptualizations of listening in relation to attention and knowledge-production not only to the repeatedly mentioned publications such as Born’s on nonhuman sound (Born 2019), but also such as Pierre Schaeffer’s conceptualizing of listening (see Schaeffer 2017, pp. 80–93).

Though not always traceable in a contemporary use of language, the etymological roots and relations between terms for activities or tools do give a basis for a broader understanding of their affordances and their impact. Crucial is here the etymological relation between listening and obeying (etymonline 2024) that opens up a perspective on the activity of listening as both a sensual and sense-making activity that always encompasses the whole body-mind-unity and is the multi-dimensional tool that directs me to what I listen to, and that lets me be directed by the musical *Geschehen* that is created. Through understanding obeying through its etymological origin as something connected and directed by the hearing and what is heard—as it is very obvious in the German translation of *gehoren* or the Swedish *lyda* or even *åtlyda* which inspired that thought (Flick 2020, p. 6)—the activity of listening could therefore be understood as an activity of obeying or following as also Nancy has noticed (Nancy 2002, p. 18) and as I elaborated earlier (Flick 2020, pp. 5–7). Relating to the musical *Geschehen* exceeds thus the tactile-aural relating, it is an obeying, a following and thus an attuning of the whole body-mind-unity through listening.⁶ It is in that way that the directedness of the whole body through the musical *Geschehen* is established.

It is interesting how this notion of listening brings a new dimension of transformation to the relation between this *Geschehen* and the listening participant of a creative musical situation and also, how different concepts of resonance are connected to the relating.

When I listen to physical sound, I actually listen for a resonance. When I hear and when I listen, it is an interacting with something that is already an interaction in itself, I can never listen exclusively to myself or exclusively to something else. As soon as I listen, I listen to myself involved in contact with something that is the result of a contact itself, a re-resonance in the literal sense of the word. This is of course true for any activity involving the senses, since any sensual perception depends on the tactile interaction with our surroundings. However, concerning the activity of listening it is a trifold nested interaction: something must have had tactile interaction with something else to make the air vibrate—and these air waves that are actually contact processes of air particles reach my eardrums or other skins, or even propagate to subjacent structures, and make them vibrate as well, thus transferring the sound and enabling me to perceive it.

However, not only the way of perceiving and relating to sound is biographically and socially conditioned, it must equally be true for how one obeys-follows and becomes transformed through the musical *Geschehen*. Thus, the activity of listening is deeply entangled with the topic of identity. Listening does not only shape the relation to the surrounding, but this relating to the surrounding shapes the relating to the self (and vice versa). Summarized in Nancy's words:

To be listening is thus to enter into tension and to be on the lookout for a relation to self: *not*, it should be emphasized, a relationship to “me” (the supposedly given subject), or to the “self” of the other (the speaker, the musician, also supposedly given, with his subjectivity), but to the *relationship in self*, so to speak, as it forms a “self” or a “to itself” in general [...]. (Nancy 2007, p. 12)

Hartmut Rosa's sociological concept of resonance as a “*mode of relation*” (Rosa 2020, p. 31) can additionally shed light on this individual and situated relation between the listening human participant and what they listen to. Rosa highlights the aspect of transformation, as shown by his four characteristics that he describes resonance through. If an interaction turns into a resonant one, there is again the moment of touch, of “being affected” through a “call” or an “appeal”: “Something suddenly calls to us, moves us from without, and becomes important to us for its

⁶When discussing the topic of fidelity toward a piece of music, Peter Knudsen developed, together with fellow musicians, the metaphor of *the room* “as a musical space highly defined by the presence of the composition, through its sounding manifestation” (Knudsen 2025, pp. 2533178/3027086/0/0). As also the notion of listening-obeying, the metaphor of *the room* is connected to listening-obeying-attuning to the musical *Geschehen* of the present creative situation, “to focus on the sounding manifestation of the music in the room, the present moment” (ibid., pp. 2533178/3028503/0/0). Karin Hammar's and Peter Danemo's statements during their discourse on how the improvising relates to the respective composition they would be working in underline the notion of obeying that I see also in their *room* metaphor. This becomes especially clear when Hammar states, “We have a focus that we try to hear what the music wants us to say, and then it's not that difficult. Then you always try to go inward and get a feel for it. And ... things that you react to and are inspired by. (Panel discussion, 2024-03-08)” (ibid., pp. 2533178/3027086/0/0). In Danemo's words, “A composition, it's a room, so you can't just clumsily walk around like an elephant and knock over all the stuff in this room... and that's what it's all about, I feel. So, as long as everyone knows what room you're in, you have total freedom really. (Conversation with Danemo, 2024-02-20)” (ibid., pp. 2533178/3027086/0/0).

own sake" (Rosa 2020, p. 32). This is of course not exclusively reduced to aural and sensually based phenomena. I can feel addressed and thus *moved* by anything, for example a sensual-tactile phenomenon or something that I read (ibid., pp. 33–34)—or the play of light on the fire wall in front of me in February 2022. Resonance develops if there is “our own active *responseresponse* is for Rosa always connected to a physical reaction⁷ such as goose-bumps (ibid., p. 32), it is an answer of movement that he connects to the term emotion in its etymological sense of a movement (e-movere) to the outside (ibid., p. 33). It is also in this way that I remember this urge of playing saxophone, it was both an urge to do something, and indeed to move, and at the same time I was emotionally moved by what I saw. What I saw was transformed for me into something significant, and at the same time I was transformed, making me react in a way that would in turn transform me further.

This is what Rosa denominates as “adaptive transformation” (ibid., p. 34) and describes as the third characteristic of resonance. Crucial for resonance in this three-step process of affection, answer and transformation can happen is the fourth characteristic of resonance, the *uncontrollability*, we can never force resonance or prevent it fully—neither can we say in which way things become transformed (ibid., p. 37). Referring to my example, it can not have been the first time that I had seen this play of light on the wall, but it was just on that day, in that instance, that it became significant to me and transformed me, and was transformed for myself. However, I could not have foreseen this transformation, but because of other experiences of such transformations, I could become aware of it and *obey* it. Thus, what we can do to promote resonant relationships is to try to establish preconditions for them through training our abilities of listening (ibid., p. 36) and thus obeying to what *calls* us.

Two important consequences follow from all so-far made reflections. Firstly, if listening is understood as an activity of transformation and relating and if, as Rosa explains, all participants of a resonant relationship become transformed, this has consequences for not only an understanding of the listener, but also what is listened to, thus also sound. Georgina Born, in reflecting on nonhuman sound and on conceptualizing sound as a mediator, concludes, drawing on reading of Nancy as well as Mark Grimshaw and Tom Garner, how “sound as a hybrid assemblage composed of a relay of material and immaterial, nonhuman and human mediations baffles any purification of subject from object, mind from body, and individual from collective experience” (Born 2019, p. 198). She continues later on, a.o. drawing on her reading of Alfred North Whitehead:

But the approach that I want to advocate, suggests the possibility of traveling the bifurcation of nature—notably, the separation of scientific description from an appreciation of the effective and aesthetic qualities even of nonhuman sound as it enters into historical nations that endow it with such qualities. This is certainly a challenge. It entails seeking, as Whitehead suggests, to attune oneself to the multiple relations constituting an event, while recognizing that they can only ever be elements of a series of yet more complex nexuses or “systems of relations.” (ibid., p. 202)

Thus, listener and what is listened to transform each other and the listening human being’s relation and “delineation” to its “*outside*” world changes through its listening.

Secondly, listening to something other than physical sound is therefore not a mere metaphorical description, but rather an expanded notion of listening that highlights the activity’s holistic dimension and the immanent complex transformative qualities.

This emphasizes also how listening to physical sound is always connected to a listening *for* something—something that is not always there yet in a physical way or not there any more. Although I can not fully follow Yü-Yen Li’s analysis of the activity of listening and her description and classification of the ear’s affectation in her investigation of concentration in relation to the body (*Leib*) through the example of musical performance, I find her concept of the “‘pre-auditive’ formation of the ear” (Li 2022, p. 9, my translation) very helpful, when she describes how the ear is already productive before interacting with something audible (ibid., p. 9).⁸ Because the activity

⁷I would express it as a corporeal one, in German the term Rosa chose is *leiblich* (Rosa 2018, p. 49).

⁸„Das Ohr des Interpreten ist damit auf präauditiver Ebene, d. h. vorwegnehmend bereits produktiv.“ (Li 2022, p. 9)

of listening already directs us *before* perceiving something audible, it is so strongly connected to what we have listened to earlier, to what we expect, what we imagine; in short, to all earlier interaction with our surroundings and the web of artistic practice which forms how and to what we listen. Listening and all other perceptive activity is thus indeed a creative activity that constructs manifold relations, making us actively involve with our surroundings to become permeable for it in order to become transformed. Listening is therefore not only connected to transformation but to the *expectation* of becoming transformed.

It is because of these mechanisms, that what I describe as a musical *Geschehen* is thus not only a physical *Geschehen*, but also related to a whole tacit or explicit conglomerate of creative expectations, ideas, emotions, or physical tactile or movement urges.⁹ The relating to a such a *Geschehen* could thus be understood as a constant movement in its own right, an iterative cycle or feedback cycle in itself, moving back and forth between not only what is physically audible, but also including this conglomerate of expectations, ideas, emotions or physical movement urges that we answer with—with the *Geschehen* and the moving body-mind-unity interacting, mutually directing each other and becoming dependent on each other. A cycle of movement that is never controllable and thus never fully foreseeable. In other words, a cycle that is related to the dimension of the unforeseen in making contact with one's “*outside*” *world*.

4.2 Spielgefühl as a creative tool

When reflecting on my doings in the continuation of this creative process, I noticed a recurring term that hints at this multifaceted sound-directedness in relation to the continuous interaction with it that the activity of listening and the afore-described pleasure that a physical interaction induces—a term that is not appropriately translatable into English, but that I in German called *Spielgefühl*.

In February 2022, I noted the following thoughts on this already mentioned musical idea or tool of the arpeggio structure, entitled “Die Körperlichkeit der Komposition, wenn ich für mich selbst schreibe (rev. 22.2.2022)”:

I am fascinated by the mechanics of harmony when I enjoy not only the sound of the resulting broken chords and their voice leading, but the *Spielgefühl*, the mechanical rhythm that arises in and through my hands and my air flow and becomes audible through the key sounds and my phrasing. Of the fine balance between what I want to hear and what I can play, what I can repeat for a longer period of time. Of the clash between the outer world and my inner world and how I can sense the mutual shaping of the two worlds with my body. Every musical decision is always also a physical one, but in this case all the more extreme because I have to make musical decisions that I can also realistically implement on my instrument. I could perceive it as a restriction, but at the same time it is also an enabling. Because through the physical enjoyment of a chord, a sound material, a sound as such, new musical ideas arise; ideas that are also generated mechanically through the contact of my body with the instrument. [...] It's a *Spielgefühl* when it's “grooving” or something is “tight,” or when I intonate well.¹⁰ [...] (Flick 2022i, 20220220, rev. 20220222, translated with DeepL, 20250223)

⁹I chose to write *creative* instead of *acoustic* expectations, since these exceed the purely acoustic phenomena, as described before.

¹⁰„Ich bin fasziniert von der Mechanik der Harmonik, wenn ich nicht nur den Klang der entstehenden gebrochenen Akkorde und ihre Stimmführung genieße, sondern das *Spielgefühl*, den mechanischen Rhythmus, der in meinen und durch meine Hände und meine Luftführung entsteht und durch die Klappengeräusche und die Phrasierung hörbar wird. Vom feinen Abwagen zwischen was ich hören will und was ich spielen kann, was ich wohl auch länger wiederholen kann. Vom Aufeinanderprallen der äußeren Welt mit meiner Inneren und wie ich mit meinem Körper das gegenseitige Formen der beiden Welten erspüren kann. Jedes musikalische Entscheiden ist immer auch ein physisches, aber in diesem Fall umso extremer, weil ich musikalische Entscheidungen treffen muss, die ich auch realistisch auf meinem Instrument umsetzen kann. Ich könnte es als Beschränkung wahrnehmen, aber es ist gleichzeitig auch ein Ermöglichen. Denn durch den körperlichen Genuss eines Akkords, eines Tonmaterials, eines Klangs entstehen neue musikalische Ideen; Ideen, die also auch mechanisch durch den Kontakt meines Körpers mit dem Instrument generiert werden. [...] Es ist ein *Spielgefühl*, wenn es ‚groovt‘ oder etwas ‚tight‘ ist, oder wenn ich gut intoniere. [...]“ (Flick 2022i, 20220220, rev. 20220222)

This line of thought was continued when speaking at the FORIM conference (see chapter 3, p. 31) in September 2023 about all these issues.

The quality of the so-called *Spielgefühl*, as I would like to call the totality of these complex relationships and processes during instrumental playing, thus results from our ability to establish tactile relationships with the participants in a musical *Geschehen*, directed and shaped by the resonance with this *Geschehen*. It is also important to note that incongruities between relationships are potential disruptive factors.¹¹ (Flick 2023e, p. 6, translated with DeepL, 20250223)

The term *Spielgefühl* exceeds indeed the English term *coesthesia* that summarizes the bodily feelings. Because of the directedness through the musical *Geschehen*, *Spielgefühl* refers to the contact-making activities and relations the body is involved in instead of relating exclusively to the bodily feelings that come with these. Also, since it is about this mutual directedness of the body-mind-unity and the musical *Geschehen*, a *Spielgefühl* relates, despite the overall bodily perception, foremost to a quite selective attention that makes these parts of the body that are connected to the musical activity more present than others that stay in the background. It is thus always connected to evaluations, producing a continuity of on the one hand judging how something feels to play and which implications for the creating this will have and on the other hand an evaluation of what is audibly created based on criteria connected to the creative situation, created ad hoc while being in the situation. All of this results in the most important characteristic of such a *Spielgefühl* which could be summarized as its *potentiality*, and that results from resonant relationships within the creative situation. If the *Spielgefühl* is a good one, I am simultaneously in a resonant relationship with both my instrument and the musical *Geschehen*, the touch of the instrument feels pleasant in relation to the musical *Geschehen* that is going on or that I anticipate, that calls me to play. I experience self-efficacy in answering to that urge and become transformed through entering that feedback cycle of listening-playing, moving and being moved by what I interact with tactilely-aurally-emotionally. The *Spielgefühl* is thus not only about the feeling in answering, but about the experienced certainty that I *could* answer to what calls me in a way that would feel resonant. This correlates also with Coessens' description of a "total' experience" that she describes for the "synaesthetic and multi-modal arousal of the artist in the process of creation", as an "an experience in which the whole body and mind, the inner and the outer world, are moved as a whole, as a unified striving towards a creative purpose" (Coessens 2014, p. 71). She describes how this "often happens in a kind of dimensionless flow in which temporal and spatial awareness of the here and the now, as well as a conceptual and conscious awareness of the self, recede in front of the creative act, the focal point" (ibid., p. 71).¹² Thus, in line with Nancy's earlier-mentioned formulation of how listening functions as to be "on the lookout for a relation to self" (Nancy 2007, p. 12), the *Spielgefühl* transforms the creative participant's conception of self through relating to the "outside" world.

As with the phenomenon of resonance, the *Spielgefühl* is a condition that is not foreseeable. However, all musical and creative practicing strives for reaching this condition and it is possible to train the tools to reach it and avoid or resolve potential obstacles—tools such as listening or practicing an instrument as described earlier, obstacles such as the earlier-mentioned discrepancy of key mapping and perceived pitch.¹³

¹¹, Die Qualität des sogenannten *Spielgefühls*, wie ich die Gesamtheit dieser komplexen Beziehungen und Vorgänge während des Instrumentalspiels nennen möchte, ergibt sich also durch unser Vermögen, tactile Beziehungen zu den Teilnehmenden eines musikalischen *Geschehens* aufzubauen, gerichtet und geformt durch die Resonanz mit diesem. Wichtig ist dabei auch: Inkongruenzen zwischen Beziehungen sind dafür potenzielle Störfaktoren.“ (Flick 2023e, p. 6)

¹²She also states how "It thus recalls Mihaly Csikszentmihalyi's (1990) notion of flow: an optimal experience of focal attention and dimensionless motivation in acts of creativity, sustained by synaesthetic and multi-modal processes of embodiment" (Coessens 2014, p. 71).

¹³The term of the *Spielgefühl* seems to describe something similar as Karin Hellqvist's term of the *body-mindset*. "The expression 'mindset' captures a specific way of thinking. When playing the violin, I enter an expanded mindset, embracing my whole body, a *body-mindset*. It captures a specific way of being in the body. This *body-mindset* feels different depending on the music I perform and the degree of how internalised the music is in my body. In contemporary classical music, works can be complex and demanding in terms of rhythm or technique, oftentimes resulting in limited focus on my *body-mindset*. When it comes to traditional music, my body knows how to connect to the inner, dancing *body-mindset* of the polska, and all body parts join in the dance. I can enter this *body-mindset* through the act of playing folk music but also by recalling it or imagining it. This *body-mindset* is necessary for me to enter in order to play a polska" (Hellqvist 2024, pp. 1865089/2952267/0/0).

These reflections on resonant relationships and Spielgefühl could also be connected the term of *inspiration*. On the first glance, inspiration seems to be denominated as something that comes from outside when we look at its latin etymology and how it literally or metaphorically is used in today's expressions such as in German (*seinen*) *Geist einhauchen* or in Swedish: *blåsa liv i*. Indeed, it must come from "outside," as it is born through our interacting with the surroundings—including all dimensions of these surroundings, the material and the immaterial ones and thus also potential others, with whom we play.¹⁴ However, when connecting the notion of inspiration to Rosa's terminology, inspiration can only happen if we answer actively. It leads then to a mutual transformation through our answer that initiates an interaction. "Inspiration transforms us in the moment and makes us understand a logic or a context, even a potential in a particular composition [*sammansättning*—the composition comes alive" (Flick 2020, p. 4, translated with DeepL, 20250523).¹⁵ And again, this transformation is a holistic one that includes and transforms the whole body-mind-unity's relation to its surroundings. In Maurice-Merleau Ponty's words, "Sometimes—and then we have the feeling of being ourselves—it lets itself be animated and takes upon itself a life which is not simply its own. Then it is happy and spontaneous, and we with it" (Merleau-Ponty 1978, p. 120).¹⁶

It is interesting how this transformation—despite its uncontrollability—can be used as a tool in creative situations. As soon as I felt inspired in that first creative situation of *Circular Composition II*, thus in a resonant relation with the play of light and my saxophone playing in connection with the musical *Geschehen* it created, I embedded my doings into the creation process of *Circular Composition II*. In that way, my before "purposeless" saxophone became part of a larger creative situation with the objective of creating a score. Hence, also the Spielgefühl transformed into something purposeful, a tool for measurement or evaluation in relation to the notion and knowledge of the piece to be created. For the first time, I consciously developed this Spielgefühl as a creative tool, applying its potential to evaluate not only how something sounded, but how I experienced what happened in a holistic way, acknowledging and using intentionally the awareness and growing understanding of my body-mind-unity's complex interacting with other participants of creating such as my instrument as well as its directedness and interdependence with the musical *Geschehen*. Acknowledging and using even its dimension of uncontrollability intentionally, thus acknowledging and using the unforeseeable relation to my "outside" world as a creative tool.

Perceiving and evaluating aspects of my own transformations through these diverse and entangled relations between my body-mind-unity and their interdependence with the musical *Geschehen* while creating thus turned into a powerful tool that could be used in any creative situation within any interacting, adding other knowledge about the traces of these activities and their interdependence than the exclusive concentration on the musical *Geschehen* itself, engendering in that way new procedural knowledge. This includes any creating, not only the activities that include my instrument or that yield audible sound, thus exceeding what had been stated in my above-cited reflections for FORIM. Again in Alva Noë earlier-quoted words, "By changing the shape of our activity, we can change our own shape, body, and mind. Language, tools, and collective practices make us what we are" (Noë 2010, p. 67). The shape of our activity continuously changes our perception of and the perspective on our activities and their traces and thus also on what is created, thus at all affording creation. Thus, when creating, in whatever way, *I as a body-mind-unity function as a measurement device that is constantly gauged and re-gauged* through the interacting with the surroundings, *sounding* the respective "outside" world through the relations thus established. This became especially obvious and useful when my work on the 3rd movement of *Circular Composition II* began.

¹⁴It exceeds the scope of these reflections to discuss the notion of Spielgefühl in relation to others with whom one interacts and creates a musical *Geschehen* more closely. However, I believe that it could be useful to describe how also the tactile way of relating to the instrument and the holistic feeling of potentiality is different in each collaborative creative situation.

¹⁵"*Inspirationen förvandlar oss i stunden och gör att vi förstår en logik eller ett sammanhang, även en potential i en viss sammansättning – sammansättningen blir levande.*" (Flick 2020, p. 4)

¹⁶It had been the German translation where this formulation had caught my attention. „*Manchmal jedoch, und dann haben wir das Gefühl, wir selbst zu sein, lässt er sich beseelen, nimmt ein Leben an, das nicht nur das seine ist. Dann ist er glücklich und spontan, und wir mit ihm.*" (Merleau-Ponty 2003, p. 174)

Chapter 5

Traces

5.1 Entangled activities and traces

As described before, I had so far been working in different cycles that centered the exploring of sound on the saxophone and combined it with listening back to recordings of these explorations, reflecting orally and in text, exploring sound and sketching the piece's course through notation. Quite quickly it became clear that the piece would become structured into several short movements—eventually four: *Lichtspiel*, *Glass*, *Sorrow*, *Transformation*—with the first one, *Lichtspiel*, based on that first melodic idea and faint vision that initiated the working process as discussed in chapter 3. On a large scale, I worked for most of the process somewhat chronologically on these four movements, but in the days before the premiere between March 5–11, 2022, I changed to working rotationally on details and courses of all of them, postponing the making of a shareable score until after the premiere. The genesis of the third movement *Sorrow*, sticks out both in regard to my activities and their traces.

It was while exploring and playing around with arpeggio ideas and large leaps and glissandos in between them for the second movement, *Glass*,¹ that I on March 4 also happened to play a short series of pitches that I was eager to develop melodically and harmonically for the piece's third movement. As with all musical material for the piece so far, it also seemed important to develop this series of pitches physically through interacting with an instrument. However, quite quickly it became clear that this would be impossible. Despite years of training in transposition and of “remapping” the original Bb fingerings to my sound imagination and perception in concert as described earlier, there was still a threshold to overcome when imagining saxophone sound or any pitch with the tone color of a saxophone. On the one hand, imagining-thinking-listening to sound in C with a congruent key mapping in C was something that worked only when undertaken pitch by pitch and at different speeds, depending on my quickness of thinking in that moment and on the complexity of the imagined. On the other hand, only if pretending for a shorter period of time to play in C, it was possible to try to intuitively play around with such a motive—but as soon as I would pause playing and imagine sound or sing it, there would again be that friction. This muddled-up state of things of listening and understanding-analyzing-relating to any sound in concert while playing in Bb flat functioned well enough for reading music, playing by ear with others or following or developing a single line or two polyphonic melodic lines. However, it did not afford the quick, enjoyable and, most important of all, fluent generation of new complex polyphonic melodic-harmonic thinking-imagining-exploring which I longed to plunge into for movement III.

Hence, the saxophone had turned from a tool and facilitator into an obstacle for the chosen creative method, it simply did not afford the musical thinking-imagining needed here. In Noë's

¹ Recording 344 from March 6, 2022, shows an example. Being aware of all occurring flaws in my playing technique, recording 344 is not shared as an example of saxophonistic proficiency or of rigor of ideas and motivic development, but as a quite typical example of how such an exploration of ideas could sound. Interesting is also, how it is the aforementioned and at that point not yet exchanged “front F” key and my problems with it that lead to the squeaking before playing the Eb4 at 00:07. The recordings from March 4, 2022, the day when the sudden switch to the creation of the third movement happened, are not shared since they are considered too private. See *Research Catalogue* exposition in chapter 5 for files or follow <https://www.researchcatalogue.net/view/2635968/3700940/0/0>.

words, having spent much more life time relating to sound and pitch without a transposing instrument had obviously formed my body and mind (see also chapter 3, p. 37) more than assumed.² However, since I was determined to use this series of pitches and it was interesting for my research to perceive how a change of activities within a creative process would change my body and mind, I interrupted the work on *Glass* and abandoned my methodological principles in order to develop the next movement. I consciously engaged in another familiar activity without the obstacle of transposition—going back and forth between developing that series of pitches as a sung top-line when accompanying myself on the piano and notating pitches of what I sang and played in a grand staff.

This resulted in some kind of song form, notated and played during a work flow of probably 20–40 minutes and that I after completion called *Sorrow* (see Figure 5.1, p. 52). It had become a song that felt so clear and unusually familiar, that I, despite this being a desirable outcome of creating and one that I was used to, made a piano recording to document the song and asked pianist Andreas Schmidt from my quartet if he did recognize something known to him in that song.

Sorrow, first documentary piano recording, March 4, 2022

After some further explorations with this notated sketch of *Sorrow* on the saxophone, I decided to stick to the lead sheet-like notation of the grand staff, not elaborate it more and turn it into a through-written form as I did with movement I and II. I changed, at least in the notation, the pitch of G#2 into an A#2 for the second-last chord of the piece on March 11 and it was only on the morning of March 12, one day before the premiere, that I typed the song into Finale and decided about parameters such as meter and (dotted) bar lines and thus the exact phrasing.

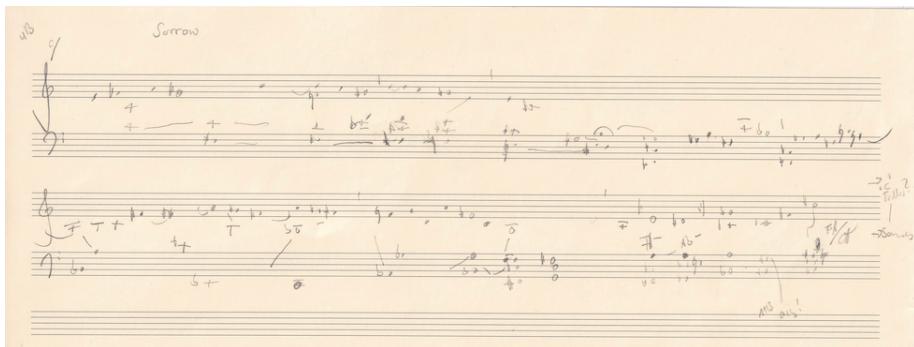


Figure 5.1: *Sorrow*, first handwritten sketch

The experience with *Sorrow* formed also my approach to the fourth movement, *Transformation*, where I aimed to take up material from the first movements while at the same time seeking a totally different character, something like a dance.³ This time, the creative activities began with notating a sketch (see Figure 5.2, p. 53) with an approximate melodic course with cross note heads in a single staff as well as some ideas for how to interact with it: “Canon, Loop, Material from [movement] II see notebook” (Flick 2022d).⁴ When testing it on the saxophone and making the digital clean copy in Finale, I changed the sketch only slightly through specifying articulation, altering some rhythms as well as abandoning the afore-quoted ideas for interaction with it.⁵ The note in the notation for the premiere read instead, “Take this as a starting point for an improvisation that looks back on what has happened in movement 1–3 and at the same time transforms this into a new musical statement and concludes the piece” (Flick 2022b, p. 10). A summary over the just

²Also, it was a new insight for me to realize how my understanding and imagining of harmony was so strongly connected to an imagination of concrete pitches and to the urge of experiencing them through interacting physically—not necessarily in order to hear the pitches’ sound, but to tactiley support their movement in my imagination.

³I notated “lightly, airily”, “leicht, luftig” (Flick 2022d, my translation) in my convolute of sketches for *Circular Composition II*.

⁴„Kanon, Loop, Material aus II siehe Notizbuch“ (ibid.)

⁵When making the clean copy of the full score, I eventually changed the cross noteheads to omitted noteheads.

Movement	First activity	Cycle of activities	Trace for premiere	Other physical traces
Lichtspiel	Playing saxophone	Playing saxophone, recording, listening, notating	Single staff score (Bb)	Recordings, typed and handwritten music notations and notes, fingering charts
Glass	Playing saxophone	Playing saxophone, recording, listening, notating	Text-based plan, grand staff (concert)	Recordings, typed and handwritten music notation and notes, fingering charts
Sorrow	Playing saxophone	Playing piano-singing—notating	Grand staff (concert) as lead sheet	handwritten transcription and grand staff sketch, recordings
Transformation	Notating	Notating, playing saxophone	Single staff lead sheet (concert) with comments	handwritten sketch, recordings
Whole piece before premiere	Playing saxophone		Combination of previous traces	recording, legend with signs, fingering charts
Whole piece after premiere	Notating			Full score (Bb)

Table 5.1: Activities and traces related to *Circular Composition II*

described happenings and the whole period of working on *Circular Composition II* looks as in Table 5.1, p. 53.

Figure 5.2: *Transformation*, first handwritten sketch

When reflecting on the described happenings, it is interesting to see how the different creative activities relate to each other. Donald Schön established the terms “reflection-in-action” and “reflection-on-action” to discern between the reflecting activities during acting from reflective practices after an action. The difference lies first on the temporal relation to action (during or after action) and further on the purposefulness of reflection. Reflection-in-action aims at understanding a situation, a task, a particular problem, and finding practical solutions while acting; therefore, reflection-in-action is fully integrated in action. In contrast, reflection-on-action often takes an evaluative perspective to better understand what went wrong and to learn from experience (see Schön 1984, 49ff., especially 56, 276). As it shines through my reflections on the described situations, both kinds of reflection are part of any doing. There is a constant movement between the two of them, possibly in different intensities, proportions, tacitly or non-tacitly, but always present.

Applying Schön's terminology, the very beginning of *Circular Composition II*'s creative process when creating the first movement, *Lichtspiel*, could be described as a movement between *reflecting-in-playing* and *reflecting-in-speaking*. Both activities functioned at the same time as reflection *on* each other and thus feed back into each other. When creating the third movement, *Sorrow*, however, there was a constant movement between *reflecting-in-playing-singing* and *reflecting-in-notating* as well as reflecting *on* the playing and singing *through* the notating and vice versa. It is in such ways that we oscillate between reflection-in-action and reflection-on-action, using any action as reflection on the other action, creating continuously moving iterative cycles between them, at the same time creating the preconditions for a creative situation and shaping it through our interacting.

Schön describes how this results in a conversation with the situation (Schön 1984, 76ff.) and we enter into a *transactional* relation to the situation (ibid., p. 150):

The inquirer's relation to this situation is *transactional*. He [sic!] shapes the situation, but in conversation with it, so that his own models and appreciations are also shaped by the situation. The phenomena that he seeks to understand are partly of his own making; he is *in* the situation that he seeks to understand. (ibid., pp. 150–151)

A fractal structure of interwoven cyclic movements between reflecting in and on action could thus be drawn to describe a creative process and also the larger context such as this research, with the human participant in a transactional relation to this situation: beginning on a small scale with the entangled activities-interactions in single situations of creating as the ones just described, involved in the larger context of a series of creative situations that reflect on each other and form a larger creative process, entangled with the reflective activities on the artistic action of this research such as writing this text—together forming the spiral path of this research that the following reflections trace.

Two new questions arise from these reflections. At first, it is again the term of process that has to be reflected on—is it indeed meaningful to speak of a creative *process* for what has been described so far, considering that a process is etymologically connected to a forward-bound movement, that *runs*, that gets started and seems to have a clear goal. How does that conform to these cyclic or spiral movements between activities as well as the transactional relation between practitioner and creative situation which implies that one can shape the situation and what is ongoing only while being active, but not beforehand? Secondly, when examining further the above-made overview over what happened during the creation of *Circular Composition II*, there is a striking correlation of changes in activities and their traces. In which way do they relate to each other?

Before turning to the first question, the second question seems more urgent and will hopefully eventually shed light on the first one.

Some examples for these striking correlations can be found when comparing some details of my doings and their traces (see again Figure 5.1, p. 53 for a summary of all doings and their traces). The iterative cycles for creating the movements I, *Lichtspiel*, and II, *Glass*, consisted all in all of the same kind of activities since I was for both movements following my originally designed methodology of centering the saxophone playing in the process. They seemed for the most part to have produced similar traces in different combinations. There are for example many phone recordings of my saxophone playing, written or recorded language reflections as well as many handwritten notes, mostly in music notation, but also in text. Nevertheless, it is in their characteristics, their position in the process as well as their amount relative to all traces that the differences show. For example, while the first music notations for both the beginning of *Lichtspiel* and *Glass* were made at a quite similar point in the process, the notation for *Lichtspiel* is notated in Bb, while the one for *Glass* reads in concert.

Several explanations are conceivable. A first explanation is connected to the temporal relation between the activity of notating and playing saxophone and the activities' function for each other and the creating: both the beginning of *Lichtspiel* and the one of *Glass* were made through listening back to the first recording or several first recordings of saxophone playing, but while for *Lichtspiel* the recordings (see chapter 3, p. 35) functioned as an inspiring starting point listened to *in between* explorations on the saxophone and before a separate iterative cycle of playing and notating, the first activity of notating functioned in the case of *Glass* as a transcribing of the first recording's pitches without using the saxophone, done *after* playing. In the case of *Lichtspiel*, it must have been faster

and more consistent to notate the first sketch in Bb in order to not have to deal with the already discussed threshold in my thinking and imagining, while in regard to *Glass*, the notating was in that first stage detached from playing saxophone, thus there was no need for a detour of Bb notation. Another possible explanation for this difference between these first notational traces is the nature of what is notated—the first ideas for *Lichtspiel* did not yet include many microtonal elements or new sounds that were not part of my notational repertoire yet, but I was already anticipating their usage. This could explain why the notated part of my sketch for *Glass* also transitions to Bb as soon as the movement transitions from a melodic and harmonic approach to sound exploration.⁶ In summary, the differences in the temporal and functional relation between otherwise same kinds of activities seemed to have led to different choices of notational symbols and thus to a different relation between the notated and the player, resulting from and leading to different interactions with the notated.

In the case of movement III and IV, *Sorrow* and *Transformation*, the differences between them and the first two movements are of another kind. *Sorrow*'s sketch (see Figure 5.1, p. 52) and clean copy (see Circular Composition II, full score in Bb) are both notated in concert and, similarly to the first notations of the above-discussed movement, without any parameters notated other than pitches or, in the case of *Transformation*, pitches with cross noteheads which transformed into omitted noteheads in the clean copy to emphasize to relate to the range of pitch and the relations between intervals instead of the exact pitch heights.⁷ Also, when for example examining the clean copy of *Sorrow* more closely, clear temporal relations and a possible phrasing through (dotted) bar lines were added when transcribing the notation into Finale, but in contrast to the notations of *Lichtspiel* and *Glass*, the only description on *how* to interact with the notation is a comment on top of the notation, “Treat this as a regular Jazz 'leadsheet', with all improvisatory freedom this implies. Choose freely how to represent the different voices on the saxophone. Choose when to play rubato, when to play pulse (and which tempo)” (Flick 2022b, p. 9). Another difference is that, concerning both *Sorrow* and *Transformation*, no sound exploration happened during the process and no reference to sound exploration found its way into the sketch nor into the clean copy. When reflecting on the recordings that were made during the process, there are two recordings of *Sorrow* from before the premiere (besides a run-through of everything from March 9). Firstly, there was the afore-mentioned piano recording from directly after the process of playing-notating (see *Sorrow*, first documentary piano recording, March 4, 2022) which, in contrast to the recordings made during the above-described process of *Lichtspiel* and *Glass*, was made merely for documentary and communication purposes and that was used *after* the first notation, functioning as an aid or guideline when making the clean copy and taking decisions on if and how to structure the notation into bars. Secondly, while, afterwards, a saxophone recording was made with the intention to explore the notated through another activity, this recording's function still differs from the functions of the recordings discussed above for *Lichtspiel* and *Glass*, since it was made to explore and potentially extend an already existing notational trace instead of exploring not-yet-notated ideas to then create a notational trace.

In summary, while there are differences between movement III and IV's notations in reference to the relation between notation symbols and their associated text explanations, both of them, in

⁶This is certainly also the reason for the general mixture of notations I used for the piece's premiere on March 13, 2022. However, since both the piece and many of its musical means were new to me due to finishing the piece only very shortly before the premiere, it also was necessary to work with notation that met the requirement of playing the piece without much further preparation in reading, resulting in some sort of “patchwork” of notation forms assembled together, before I later on unified them in a traditional five-line music staff notation score with text instructions. When later on comparing the two digital clean copy notation versions of *Circular Composition II*, the first one in Bb and the second one, made ahead of the piece's performance at the EPARM conference 2023, that reads in concert, these look quite similar and function also similarly—both notated in concert as five-line music staff notation with possible text instructions. This hints that decisions for notating in Bb or concert were indeed at least partly, though not exclusively, made due to the tight schedule for my work and the temporal relation between creating and premiering the piece. After having performed the piece a few more times after its premiere, I had become so acquainted with the new sounds that it was now the Bb version of the score that functioned as an obstacle in relating to the musical *Geschehen* and therefore needed to be transformed. The sounds had become incorporated as the proximal term of knowing.

⁷It should be noted that the clean copy of the score that is provided in the *Research Catalogue* exposition is nevertheless a complete Bb score, in order to make to make comparisons between movements more accessible and provide an easily readable version for tenor saxophone players.

contrast to movement I and II, do not propose a musical course. Rather, they provide different kinds of starting points for the musical course which the performer must then create during the performance.

Circular Composition II, full score in Bb

Circular Composition II, video recording from the premiere, March 13, 2022

Thus, the notations in their differences are not only the result of different kinds of interactions, but also seem to steer *future* interactions. Expressed in reference to my research questions: the contact to a trace in the moment of interacting—improvising with it—can in manifold ways be connected to the temporal and functional relations between activities and their traces and to the different combinations of activities and traces. The creative human participant’s relationship with their “*outside*” world while creating a trace can be connected to the trace’s future function in that relationship. In other words, the contact between activities such as exploring sound through playing saxophone and activities such as notating or even recording *while* creating can be connected to the relations that such a notational trace—which could later be considered the finished compositional trace—will afford.

In which way do the notational traces steer future interactions and what kind of relations evolve between them and all other participants of creative situations that interact with them? What are their different functions not only for the situation(s) of creating, but for the creative situation of a performance—something that is connected, but does not necessarily correlate? What about other kinds of traces besides the notations examined here? Is the same true for them, or would the answers to these questions be different if examining other kinds of traces such as recordings, more closely?

To investigate this, as well as to return to my question about the procedural qualities of creating, and eventually to my overarching research questions, it is necessary to yet apply several other types of metaphorical lenses to my network of activities, traces, and participants in creation. It is also necessary to shift the focus from the activities to the traces themselves.

5.2 A first conceptualization of traces

How can I conceptualize such traces?

So far, I have used the term *trace* quite broadly for basically anything that results from my own or others' creative activity, denominating anything as a trace that remains physically "tangible" from the moment of contact-making and interacting and thus transformation. Thus, the term summarized a quite diverse multitude of artefacts: there were recordings of saxophone and piano playing or singing as well as of oral reflection, handwritten notes in music notation and text, digital music notation and legends for music notation including fingering charts. Some aspects of these artefacts' genesis, appearance or their function were described.

To proceed with these reflections and understand if the term trace can indeed continue to be useful to shed light on these artefacts and their relation to the creative activities they were involved in, it might be useful to examine some of the differences and commonalities of some examples of traces discussed so far. Let's therefore look again at the first recording I made for *Circular Composition II* as well as the first notation for *Sorrow* and recall what happened when they came into being, this time applying the analytical lens of the traces themselves.

In both the recording of my saxophone playing inspired by the play of light on the fire wall and the notation for *Sorrow* made while singing and playing piano it is movement and the resulting tactile interaction that brings forth what I denominate as traces: in the case of the phone recording it is at first a contact between my finger and the touch screen that activates the microphone membrane movement as well as what could be described as *inscription*, the *recording*, memorizing these changes through *transferring* these changes as variations of movement on the memory of my phone (and the icloud)—thus creating a trace of another such complex *Geschehen* of movement, the saxophone playing. In the case of notating *Sorrow*, the movement of my hand with the tool of the pencil (as a result of my body-mind-piano-pencil-unity's movement through the musical *Geschehen*) changes the paper's surface through leaving traces of graphite on it.⁸

The term of the trace is also etymologically connected to movement. In the late 14th century, *tracen* meant to "follow (a course); draw a line, draw or make an outline of something." This also functioned figuratively as to "ponder, investigate, from Old French *tracier, traicier* 'look for, follow, pursue' (12c., Modern French *tracer*), from Vulgar Latin **tractiare* 'delineate, score, trace'[...], a frequentative form from Latin *tractus* 'track, course,' literally 'a drawing out,' from past participle stem of *trahere* 'to pull, draw'" (etymonline 2025h). It is interesting that in that way even the terms of the score and the trace are etymologically related.

Also the German equivalent for trace, the "Spur", is connected to movement and has an even broader movement dimension to it than the English trace: to begin with, it comes from the old-High German *Spor* (Krämer 2016b, p. 13), translating to the English term of the *footprint*. It is etymologically related to the verb *spüren*, thus "the action of with serendipity following or sensing of a track" (ibid., p. 13).⁹ However, this *spüren* as a sensing is in German at the same time also the term for perceiving, discerning, observing—or *tracking*—the own inner movements: the sentiments, emotions. And this hints to a crucial aspect of the trace: something, that is an *effect* of the transformation of something through making contact and interacting with something or someone else, has to be *perceived* to turn into a trace. Traces are not simply existing, but considered as such. Something *functions* as a trace instead of *being* a trace. As Krämer writes, "Although traces owe themselves to the 'blind compulsion' of interacting bodies [thus resulting from contact as a form of movement as I would express it], they are not found, but produced through interpretation" (Krämer 2016a, p. 159, translated with DeepL, 20250423).¹⁰

The interpretation or, as I would say, the becoming aware of a trace is based on a perception of *difference* that this transformation has effectuated and that provokes a search for meaning. Krämer

⁸This is of course again only an exemplary reduction and a small part of what happens. As described earlier, all participants are transformed—thus, through the sound the strings of the piano are also influenced on a long-term basis, as well as my body-mind-unity in manifold ways and so on.

⁹„[...] die mit Spürkraft ausgeübte Handlung des Aufnehmens und Folgens eine Führte“ (Krämer 2016b, p. 13, my translation)

¹⁰„Obwohl Spuren sich dem ‚blindem Zwang‘ aufeinander einwirkender Körper verdanken [thus resulting from contact as a form of movement as I would express it], werden sie nicht vorgefunden, sondern durch Interpretation hervorgebracht.“ (Krämer 2016a, p. 159)

speaks of the disturbance or disruption of an order that makes us perceive and consider something as a trace (Krämer 2016a, p. 160) and concludes then, “Only deviations make traces obvious” (ibid., p. 160, translated with DeepL, 20250423).¹¹

Krämer scrutinizes traces from a phenomenological perspective and notices “that there are always two opposing specifications” (ibid., p. 158, translated with DeepL, 20250423).¹² She summarizes six of these pairs of juxtaposed specifications. Because of that connection between the trace’s “grammar” and the *tracing* or *reading a track* whose semantic constitutes that trace, she describes at first a trace as something between object and activity (ibid., p. 159).¹³ Secondly, the trace is for her the simultaneity of “presence and absence, visibility and invisibility and present and past” (ibid., p. 159, my translation).¹⁴ Thirdly, because of the already mentioned twofold constitution through on the one hand the contact of physical bodies and on the other hand the act of interpretation, she characterizes traces as *polysemous*; there are always multiple possible variants of interpretations, or readings (ibid., p. 159).¹⁵ Fourthly, as already stated, traces function as a disturbance and become only perceivable, “if an order is disturbed, when in the usual something unfamiliar comes up or when the expected fails to appear” (ibid., pp. 159–160, my translation). Most important is here: “But when we read the trace, this also means that the disturbed order must be transformed into a new order and reintegrated. This integration takes place by reconstructing the trace-forming [Geschehen] as a *narrative*” (ibid., p. 160, translated with DeepL, 20251015).¹⁶ However—and this is utmost crucial for this research, “[...] the gap between the materiality of a past event and the—usually multiple—discursivity of a narrated event remains unbridgeable. *Deviation and regularity, disruption and order only allow traces to emerge in their interplay*” (ibid., p. 160, translated with DeepL, 20250425).¹⁷ Krämer continues then in her fifth aspect of inbetweenness, which she entitles “Zwischen Widerfahrnis und Ermittlung”, with a reflection on how traces are left “independent of intentions, purpose or interests of those who leave them” and at the same time the “deliberate investigation” that constitutes the traces (ibid., pp. 160, translated with DeepL, 20250423).¹⁸ Traces are left involuntarily, as she explains, “Even the deleting of traces leaves new traces” (ibid., p. 160, my translation). Then, she describes in her sixth reflection how traces happen in a tension between naturality and sociality (ibid., pp. 161–162).¹⁹

The conclusion Krämer draws from traces as happening in between those two dichotomic poles is to apply them as epistemic-methodologic tools for understanding more about the genesis of such a dualism of perspectives and—what Krämer then denominates as the “epistemic double life” of a trace (ibid., p. 163, my translation)—describing how a trace in combination with the activity of reading that trace opens up for a “fundamental experience” (ibid., p. 162).

It is the experience that we become aware of the invisible in the visible, detect the absent in the present, reconstruct the past in the present, become aware of the spiritual in the physical, recognize the interpretative in the causal – and this not as a glass bead game of intellectual combinatorics, but as a fundamental requirement of our orientation in the world, i.e. in the elementary pursuit of our practical interests.²⁰ (ibid., pp. 162–163,

¹¹ „Erst Abweichungen lassen Spuren sinnfällig werden.“ (Krämer 2016a, p. 160)

¹² „[...] dass sich stets zwei einander gegenläufige Spezifizierungen anbieten [...]“ (ibid., p. 158)

¹³ „So verschwistern sich in der Spur die Dinghaftigkeit von Markierungen mit dem Tätigkeitscharakter des Spurenlesens.“ (ibid., p. 159)

¹⁴ „So kreuzen sich in der Spur Präsenz und Absenz, Sichtbarkeit und Unsichtbarkeit, Gegenwart und Vergangenheit.“ (ibid., p. 159)

¹⁵ „Die Effekte ‚blinder Kausalität‘ und ‚polysemischer Interpretation‘ – oder sollen wir sagen: von Körper und Geist? – verbinden sich in der Spur.“ (ibid., p. 159)

¹⁶ „Doch wenn wir die Spur lesen, so heißt das zugleich, dass die gestörte Ordnung in eine neue Ordnung zu überführen und zu reintegrieren ist. Diese Integration geschieht, indem das spurbildende Geschehen als eine Erzählung rekonstruiert wird.“ (ibid., p. 160)

¹⁷ „Die Kluft zwischen der Materialität eines vergangenen Geschehens und der – meist multiplen – Diskursivität eines erzählten Geschehens, bleibt allerdings unüberbrückbar. Abweichung und Regelhaftigkeit, Störung und Ordnung lassen erst in ihrem Zusammenspiel Spuren hervorgehen.“ (ibid., p. 160)

¹⁸ She also concludes, „Unabsichtliche Hinterlassenschaft und absichtsvolle Ermittlung, das ganz und gar Unwillkürliche und das in höchstem Maße Willkürliche müssen zusammen treffen, damit Spuren entstehen und eine Wirkung entfalten.“ (ibid., p. 161)

¹⁹ „Naturalität und Sozialität vereinigen sich in der Spur.“ (ibid., p. 162)

²⁰ „Es ist die Erfahrung, dass wir im Sichtbaren aufmerksam werden auf das Unsichtbare, im Anwesenden das Abwesende aufspüren, im Gegenwärtigen das Vergangene rekonstruieren, im Körperlichen des Geistigen gewahr werden.“ (ibid., p. 162)

translated with DeepL, 20250527)

She proposes to think of the dealing with traces as some kind of “primal scene” (ibid., pp. 163, translated with DeepL, 20250527) that we can use to understand this dualism of perspectives, with semiotics and metaphysics turning out as further dimensions of these (ibid., pp. 162–163, translated with DeepL, 20250527). With the questions of in which way it makes sense to discern between a semiologic or metaphysical reference to the trace on the basis of the criterion of “indexicalizability,” she looks at Carlo Ginzburg’s *Indizienparadigma* as a prototype for a “semiologically oriented theory of immanence” and Emmanuel Levinas’ philosophy of the trace as a representative of a “metaphysically oriented theory of transcendence” (ibid., p. 167, translated with DeepL, 20250527). Krämer concludes how even in the work of these two thinkers the trace bears a double function “in the field of tension between immanence and transcendence, between orientation and the experience of withdrawal” (ibid., p. 180, translated with DeepL, 20250527).²¹

In relation to my previous reflections and what I am investigating here, those of Krämer’s findings that seem central for my research could be summed up in this way: any contact-making and interaction with our surroundings as a function of movement transforms the participants of a situation in such a way that the perception of these transformations can become the starting point for understanding something about that contact-making and interaction—through considering this something as a trace of that contact-making. However, this understanding can not be more than an interpretative reconstruction since it happens in retrospect and is neither exclusive nor necessarily congruent with the happenings that lead to this trace, but is thus no less than a creative activity in its own right that leaves new traces. As Jean-Jacques Nattiez explains, “Human beings are symbolic animals; confronted with a trace they will seek to interpret it, to give it meaning. We ascribe meaning by grasping the traces we find, artworks that ensue from a creative act” (Nattiez 1990, p. 128).

It is in that way that engaging with traces can function as a tool for revealing more about the ambiguous nature of the conglomerates of activities around them and the transformations they yield, as well as the multiple relations they foster. Based on all our lived experience, thus also including our personal web of artistic practice, we deal with the absent and present at the same time as well as the tension between them, revealing and adding new traces to that network of creating, new traces that become participants of the creative situations in their own right.

When looking back on Krämer’s reflections and relating them to such traces that this research investigates, it could on the first glance seem quite contradictory to apply her conceptualizations of the trace for this research context when remembering her statement of traces being created unintentionally.²² How can physical “remains” of creative experimentation with the explicit objective of creating pieces of music or, in fact, traces (de Assis 2014, p. 48) (see also 2, p. 24), in different forms of appearance such as the score of *Circular Composition II* or all discussed artefacts created “on the way” to this score be considered as unintentionally left traces? Two lines of thought can shed light on this issue.

At first, it is obviously true that my experimentation aimed at creating transformation through activity and “leaving” physical traces, some of which I would then consider as “finished” pieces of music.²³ However, even if this aimed result of my experimentation, besides the production of knowledge as discussed before, is known and intended, it is never known *how* the resulting artefacts will be. Many of the characteristics are unknown or subject to changes until or even exceeding the termination of the creative work. Something will always be unknown, because one can not know everything about one’s own doings or their effects, simply because everything including oneself

den, im Kausalen das Interpretatorische erkennen – und dies nicht als Glasperlenspiel intellektueller Kombinatorik, sondern als grundständiges Erfordernis unseres Sich-Orientierens in der Welt, also in der elementaren Verfolgung unserer praktischen Interessen.“ (ibid., pp. 162–163)

²¹ „[...] dass die Doppelfunktion der Spur im Spannungsfeld von Immanenz und Transzendenz, von Orientierungsleistung und Entzugserfahrung auf subtile Art bei *beiden* Autoren, wenn auch auf je andere Weise zur Verschränkung kommt.“ (ibid., p. 180)

²² „*Unabsichtliche Hinterlassenschaft und absichtsvolle Ermittlung, das ganz und gar Unwillkürliche und das in höchstem Maße Willkürliche müssen zusammen treffen, damit Spuren entstehen und eine Wirkung entfalten.*“ (ibid., p. 161)

²³ For further discussion of the problem of considering something as a finished piece of music see also Becker’s reflections (see also Becker, Faulkner, and Kirshenblatt-Gimblett 2006a).

changes over time. One will have a new perspective on what is created at any point in time, since the lived experience changes us at any given point in time. For example, only when writing out the clean copy of *Sorrow*, did it become clear where to make the bar lines or if they should be dotted or continuous. I reconsidered the directionality of motives and switched, for example, the stress on the melody's C in what became bar 7 to the Bb that then even became an A#—which I can see by comparing the two notations and when listening back to the piano recording where I even seem to have omitted the G# that this motive starts with and that I nowadays consider as very important. Or, only much later when rethinking the piece once more before playing it together with my quartet in April 2022, I realized that I would need to change the meter in what then had become bar 15 from 4/4 to 6/4.

Also, as described before when discussing the topology of creative situations: even individual creating, as in the case of *Circular Composition II* is never done independently, but in the already described network of implicitly or explicitly present others, thus always including unknown dimensions of what is created through the contact-making with these others. When reflecting more about the so unusually intense feeling of familiarity or *Selbstverständlichkeit* when notating *Sorrow*, it was interesting how I at first thought it was a “recreation” of an older song of mine or of motifs from Carla Bley's *Jesus Maria* as recorded on the ECM album *Jimmy Giuffre 3, 1961* by Jimmy Giuffre, Paul Bley and Steve Swallow, a longterm favorite one of mine. When asking pianist Andreas Schmidt from my quartet for aid, he could relate to this experience. Additionally, he indeed recognized a motif of a song—but one of his that we often had played. He described to me how he for a short moment had had a strange feeling of him playing a song of mine on the piano when listening to my recording.²⁴ There was indeed this motif in his quoted recording of the song at 00:50, in mine at 0:30 (bar 11 or actually already before at bar 8). Obviously a motif of two descending seconds (or the descending minor scale from scale degree 3 to 1) is something most common and the song as such is also part of a wide field with endless original compositions that can be recognized as such as Andreas also reminded me of.²⁵ *Sorrow* had obviously turned out to be an example of where this relation both to concrete others and to a tradition within a practice was both implicitly “present” and explicitly traceable in the own work, while at the same time having created something that nevertheless is distinct from these references.

How this continuous interrelation to other traces leads to an ongoing and continuously dynamic diversity of narratives on such traces becomes even more explicit when indeed explicitly hearing (or taking part in) others' creative activities with these traces. Because of the polysemous character of traces, other participants of creative situations may relate differently to them and thus make other meaning or learn other aspects from them compared to oneself, as it became obvious when *Sorrow* transformed into *Kumbhaka* as the next experiment in this spiralic movement of cycles of collective and individual creating that comprises this research shows.

This leads to a second line of thought concerning the issue of unintentionality: even if taking conscious decisions about creating a piece of music or its properties such as bar lines or meters—because of the human relation to time and the importance of the lived experience as a basis for dealing with traces, the unknown and unintentional dimensions of each such trace are endless. Also, different kinds of traces open up for reconstructing the different aspects of the creative activities that lead to their existence. As Krämer had phrased it: when dealing with traces, “we become aware of the invisible in the visible, detect the absent in the present, reconstruct the past in the present” (Krämer 2016a, pp. 162–163, translated with DeepL, 20250527).²⁶ Traces thus always

²⁴ „ist echt total lustig, weil ich da auch was höre was von dir oder vielleicht sogar von mir ist. meine eigenen sachen erkenne ich manchmals auch nicht mehr. ein motiv klingt wie aus LOOKING FOR YOU von schmidt [https://open.spotify.com/track/5VNdOdJJsLoC5agVbdVpcz? si=EEQXel5bTmWdzRiZPHAWJA](https://open.spotify.com/track/5VNdOdJJsLoC5agVbdVpcz?si=EEQXel5bTmWdzRiZPHAWJA) MINUTE 0.50 bei dir ist das MINUTE 0.30h motiv ist sogar gleiche tonart daher dachte ich bei deiner aufnahme kurz : äh, bin ich das am klavier und spiele ein lied von DIR ?!“ (email to author by Andreas Schmidt, March 16, 2022)

²⁵ „glaube ich das ist einfach das GROOOOOOSSSE rubato eher 2 stimmig frei tonal gebiet, wo man noch 2348172847182371232 stücke schreiben kann und der BOGEN des songs ist immer ,NEU und erkennbar DIESER song“ (email to author by Andreas Schmidt, March 16, 2022)“—a field that he as a former teacher and long term musical partner had introduced me to when I had been in the beginning of my professional education—with him also being the musician who systematically played my first compositions with me and with whom in mind (as a member of and the reason to found the already mentioned quartet) still a large part of my lead sheet songs are written.

²⁶ „[...] dass wir im Sichtbaren aufmerksam werden auf das Unsichtbare, im Anwesenden das Abwesende aufspüren [...]“ (Krämer 2016a, pp. 162–163)

point to something that is no longer or not yet present in their tangible gestalt.

One example is the choice of accidentals in a notation such as *Sorrow* and which could—amongst many other things—be considered as a trace of the creator’s horizontal and or vertical thinking. For example, at the time of writing this reflection, I can not recall all aspects of decision taking and, as explicated before, it is never possible to create a comprehensive documentation. However, on comparison of *Sorrow*’s first handwritten notation and the different versions of the Finale notation, there is an enharmonic pitch change on beat 4 in bar 2 from an Eb to a D# visible that I must have made when digitalizing the notation (see Figure 5.3, p. 61).



Figure 5.3: *Sorrow*, comparison enharmonics in bar 2

This could point to the possibility that I perceived the setting’s upper line not only horizontally, but also heard it as a wandering functional line in relation to the F# pedal that the lower voice holds until about the half of bar 4, thus making explicit the movement from the D as the minor 6 on beat 2 to the D# on as the major 6.

In contrast to that, I do indeed remember that there were several other places where I was considering changing enharmonics, the traces of which I can still see in some of the pencilled proposals in a printed copy of the Finale file. However, I also remember how I decided against it: in some cases because I found the horizontal movement more important than the vertical harmonic structure.²⁷ In other cases, I just didn’t like the visual appearance of an accidental in context to others, thus “disguising” harmonic structures I was well aware of, such as when keeping the Bb as the first pitch for the lower left-hand voice in bar 16 which functions as the major third of the F#maj chord that the voices of bar 16 and 17 form (see Figure 5.4, p. 61).



Figure 5.4: *Sorrow*, disguised enharmonic relations in bar 16 and 17

Even this short description shows how all these analytic thoughts form narratives that have been constructed in retrospect. Of course it is totally possible to analyze *Sorrow* vertically as a functional harmonic course or to understand the upper left-hand line in the beginning of the piece as a line that moves horizontally between different functions in relation to a pedal tone or as some kind of “color changer” for what is ongoing. Another reconstructed possibility could be that I intended to shape four independent voices when I began notating, one of them functioning as a pedal point that slowly opens up for melodic and harmonic changes. However, these are narratives that only partially correspond with how that notation was created. The functional harmonic course is definitively much clearer than in the other movements of *Circular Composition II* which corresponds with the afore-described switch of instruments for this movement in order to be able to apply the body-mind-instrument-unity’s affordances for working with that. However,

²⁷Therefore the Eb in the lower line of the left-hand staff in bar 10 is not a D# despite functioning as the major third of the B7 chord that the melodic lines of this bar comprise. Instead, the downward movement of a fifth from the Bb in bar 9 to the Eb in bar 10 is visible.

despite bearing such harmonic-melodic knowledge and experience with me in any creative activity, I also know that there were at least no conscious intentions present at all. All there was, was a *dwelling* in that activity of notating-playing-singing, letting myself being directed by what my fingers and my voice *found* and trying to *serve* the unfolding musical *Geschehen*, to listen-obey in order to develop and unfold some of the potential of what I experienced I was creating. As Nattiez frames it when continuing his explanation of humans as creative animals as quoted earlier, “Music is not a narrative, but an incitement to make a narrative to comment, to analyze. We could never overemphasize the difference between music, and music as the object of metalanguages to which it gives rise. Only thus we can start to outline its symbolic functioning” (Nattiez 1990, pp. 128–129).

Also, a trace such as my handwritten sketch of *Sorrow* or the previously discussed first phone recording of my saxophone playing of *Circular Composition II* points to aspects about the creative situation that are not necessarily intended to be transmitted: in the case of the notation, one could reconstruct something about the pencil or the paper applied, my muscle tension or other psychological or physical aspects of myself as a human body-mind-unity that my handwriting reveals. The recording contains unintentional information about the room I was playing in, or the kind of device used for recording. All of these information particles will only become a trace of that situation if someone attends to them and considers them as such—and if they differ from other traces.

Traces can thus not be separated from the activity of reading them—in Krämer’s sense: they can be considered as between object and activity (see above, p. 58)—and any staged trace opens itself up for endless narratives that are totally dependent on the person reading that trace. There is therefore no such thing as a completely staged or intended trace and I therefore continue considering the artefacts of my research as traces, though this term has to be differentiated further and also distinguished from other related terms such as the symbolic form itself, the sign and an index, as I will do in the following. Any reading and thus reconstruction of a trace is thus related to, but indeed separate from, an author’s intention or choices.

5.3 Jean-Jacques Nattiez’s tripartition

This *gap* that Krämer had described as “the gap between the materiality of a past event and the—usually multiple—discursivity of a narrated event” (Krämer 2016a, p. 160, translated with DeepL, 20250425, see above, p. 58) is something that also Jean-Jacques Nattiez highlights in his tripartition model.

Based on Jean Molino’s work and terminology, Nattiez introduces three dimensions of a symbolic phenomenon within his conception of a semiology of music: (1) the “*poietic dimension*” that refers to the “*process of creation*” (Nattiez 1990, pp. 11–12) (2) the “*esthetic dimension*” that refers to the construction of meaning “in the course of an active perceptual process” (ibid., p. 12) and (3) the “*trace*”, the “*the neutral level*” which is “*the symbolic form [that] is embodied physically and materially in the form of a trace accessible to the five senses*” (ibid., p. 12). He speaks of the neutral level as a level “*in the work, a level whose poetic and esthetic aspects have been neutralized*” (ibid., p. 12). This can on the first glance be misleading, but despite speaking of the “*objective description of the neutral level [that] can always be proposed—in other words, an analysis of its immanent and recurrent properties*”, he explicitly does not speak of the “*neutral level of analysis*,” as he emphasizes (ibid., p. 12), for, as I would phrase it, the obvious reason of the already described embedment and never ceasing contact of a human being with the “*outside*” world that forms their analysis. About the analysis of the neutral level he explains then:

This is a level of analysis at which one does not decide a priori whether the results generated by a specific analytical proceeding are relevant from the esthetic or poetic point of view. The analytic tools used for the delimitation and the classification of phenomena are systematically exploited, until they are exhausted, and are not replaced by substitutes until a new hypothesis or new difficulties lead to the proposition of new tools. “Neutral” means both that the poetic and esthetic dimensions of the object have been “neutralized,” and that one proceeds to the end of a given procedure regardless of the results obtained. (ibid., p. 13)

Nattiez emphasizes further:

(a) Poietic and esthetic phenomena are *processes* [...]. (b) To distinguish between the level of the *object* and the level of the *analysis* is paramount, in order specifically *not* to confuse the *trace* itself with the *analysis* of that trace. The trace remains merely an amorphous physical reality, until it is entrapped by analysis. (ibid., pp. 15–16)

When relating this to Krämer's reflections, one could say that a trace in its inbetween-state between object and activity becomes considered as a trace only through the esthetic process of the analyst, who reads the trace as the object resulting from an interaction between someone and something (or someone) who is potentially absent. This object, physical transformation or disorder that is accessible to the five senses is there no matter if someone comes in contact with it or not. However, only through that activity of making contact, does this physical and material presence unfold its symbolic reality and becomes a trace—through the esthetic activity of the human being as “symbolic animal” (ibid., p. 128) that considers that trace as something referring to the activity of another (human) being or representing something. Thus, it is read as the trace of an (unknown) poietic process that someone through an esthetic process makes meaning from by interpreting it, by creating a narrative. It is in that way that also the material artefacts resulting from creative activities such as the notations or recordings that result from my experiments or even the tangible changes in myself through such creative activity can be considered as traces and be looked at through a symbolic lens—as material realities that because of their polysemous nature and their existence as in between object and activity do not reveal something like a hidden truth that I am about to uncover, but that instead do refer to or point to relations that they have been, they are or that they potentially could be engaged in. For analytical reasons, separating between poietic and esthetic processes and the neutral level which is neutral only insofar as it is the same starting point for then individual—and of course socially-culturally conditioned—processes of meaning-making, can be useful.

It would exceed the framework and objective of this research as well as my professional competence to discuss and contextualize the dimension of the symbolic comprehensively. However, it is necessary to summarize at least some basic assumptions that form the basis for Nattiez's semiology of music and his tripartition and my own further reflections.²⁸

²⁸An interesting example of artistic research undertaken through Nattiez's model in the tradition of Western classical music is the application of Henrik Frisk and Stefan Östersjö application with the objective “to acquire a deeper understanding for the underlying processes in the communication between the composer and the performer and the social significance traditionally assigned to these roles in relation to their operative significance” (Frisk and Östersjö 2006, p. 242). Also, they aimed “to better understand the necessary conditions for a successful interaction between the performer and the electronics” (ibid., p. 242). While we partly draw similar conclusions, I will apply the model on a more granular level with different objectives. Concerning an application in relation to jazz performance, I thank Rik Cornelissen for having pointed out Robert Hodson's application (Hodson 2007, 15ff.) to me. Hodson explains his modified model as following, “Since jazz is substantially improvised in performance, the poietic process and the performance occur at the same time of the same person—in other words, the musician composes and performs simultaneously without the intermediate step of writing the improvisation down. As a result, the only trace is the sound produced by the performer, which is received by the listener, initiating the esthetic process of perception and cognition.” (ibid., p. 15) He also states, “[...] besides being a composer and performer, each musician in the group is also a *listener*—that is, they are hearing the traces produced by the other musicians, and deciding whether or not they will alter the improvisations based on what they hear. Thus, this diagram describes a (not quite) closed loop that is occurring around each musician: the jazz musician decides what to improvise, plays it, hears the other musicians improvising, at which point the process starts all over again, in almost immediate succession” (ibid., pp. 15–16). Hodson summarizes then, “In adapting Nattiez's model to describe the perspective of a jazz musician, I've laid the groundwork for my views on the process/product question and set up the analytical perspective that will be used throughout this work: I will analyze the product of an improvisation (in the form of a transcription) in order to deduce processes that contributed to its generation” (ibid., p. 21). Though I see the point in applying Nattiez's terms in that way, Hodson's research goal and thus his application is a very different one than mine. “The analyses [...] will explore the ways that improvising jazz musicians balance the constraining factors of the structural, syntactical aspects of the composition they are performing with the dynamic, interactive processes that take place between the members of the ensemble” (ibid., p. 21). Seen from the perspective of my quest, I miss a closer discussion on the relation of the notational trace (for him the score) as such and the performer as the participant of the creative situation engaging with it, thus also the notational trace's poiesis. This is also reflected in his use of notational transcriptions of the musical *Geschehen* he analyzes, such as in his analysis of Miles Davis' solo on *So What* from his *Kind of Blue* album (with John Coltrane, Julian “Cannonball” Adderley, Bill Evans/Wynton Kelly, Paul Chambers, Jimmy Cobb, Columbia Records 1959), which he takes as a first example of applying his revised model of Nattiez's (ibid., 16ff.). In contrast to Hodson, I aim to look at a variety of creative situations instead of exclusively the situation

For him, “the expression ‘symbolic form’ [...] must be taken in its most general sense, *as designating music’s capacity (with all other symbolic forms) to give rise to a complex and infinitive web of interpretants*. Within the framework of the particular theoretical stance adopted here, my specific goal is to illustrate how these interpretants are divided into neutral, poietic, and estheticic.” (Nattiez 1990, p. 37)

It is this complex and infinitive web of interpretants that makes a human being experience meaning:

An object of any kind takes on meaning for an individual, as soon as that individual apprehending that object, places the object in relation to areas of his [sic!] lived experience—that is, in relation to a collection of other objects, that belong to his or her [their] experience of the world. [...] Meaning may be defined by a formula more lapidary still, *meaning exists when an object is situated in relation to a horizon*. (ibid., p. 9)

In other words, this experience of the world and the horizon resulting from there form the kinds of narratives that a trace is embedded in as soon as it is considered as such, which is the basis for what Nattiez denominates as interpretants or the implicit references (*Verweise*) that these narratives tell. They form which of the manifold representable and non-representable aspects of the trace we construct through our esthesis and which of them we consider as meaningful. Referring to the earlier mentioned example of *Sorrow*’s accidentals—these accidentals can only potentially point to a certain horizon of horizontal and vertical harmonic thinking, if having a lived experience of that kind of thinking and recognizing it as the potentially absent in the trace that is present. Important is also that a trace’s faculty to refer to something absent could be mistaken for such a trace’s *affordances* in the sense of the terminology and concept developed by Gibson (Gibson 2015). However, while there are similarities between the concept of an affordance as an object’s potential fields and ways of application and the so far discussed conceptualization of something as a trace—such as that it reveals potential knowledge that is useful to interact with the object or phenomenon considered as trace—the recurrently mentioned characteristic of the trace as something between different layers of time that results from its fundamental existence between absence and presence as well as the fact that a trace has to be perceived or *constructed* differentiates both concepts from each other. I would argue that the concept of the affordance can be seen as a subset of a trace’s characteristics.

Thus, there is one more aspect that distinguishes the two concepts—which is the already indicated capacity of the trace to point not only to interpretants potentially having been present and potentially present also at a later instance of time, but also to point to something that can never be represented in an explicit way, that will always stay implicitly present in the trace’s tangible gestalt. The issue of my harmonic-melodic thinking when creating *Sorrow* might be an example that eludes a totally clear classification of implicit or explicit representation, but such a simple aspect of, for example, how a pulse feels while establishing itself, or how the transition from one pitch to another is a *Geschehen* that seizes my whole body-mind-unity and moves it in manifold ways can not be represented when notating a series of pitches or an indication for a pulse. Thus, anything can function as a trace and anything is situated symbolically in relation to our personal *horizon*. While this horizon makes future ways of interacting with that trace *affordable* and explicit, the trace is at the same time physically tangible and a symbolic gestalt pointing to the future, present and past and also to aspects of these interactions that can only be mediated implicitly.²⁹

of a performance. Also, it shall be applied at a more granular level, thus, in a more multidimensional way as I read his application.

²⁹The main difference between an affordance and a trace might be clarified even more through Gibson’s own formulation: “Note that all these benefits and injuries, these safeties and dangers, these positive and negative affordances are properties of things *taken with reference to an observer* but not properties of the *experiences of the observer*. They are not subjective values; they are not feelings of pleasure or pain added to neutral perceptions. There has been endless debate among philosophers and psychologists as to whether values are physical or phenomenal, in the world of matter or only in the world of mind. For affordances as distinguished from values, the debate does not apply. Affordances are neither in the one world or the other inasmuch as the theory of two worlds is rejected. There is only one environment, although it contains many observers with limitless opportunities for them to live in it (Gibson 2015, p. 129). And then: ‘The observer may or may not perceive or attend to the affordance, according to his [sic!] needs, but the affordance, being invariant, is always there to be perceived. An affordance is not bestowed upon an object by a need of an observer and his act of perceiving it. The object offers what it does because it is what it is’ (ibid., p. 130).”

Nattiez describes later on how meaning in relation to music has been conceptualized throughout the history of Western classical music in many ways and in different normative and dichotomic degrees (Nattiez 1990, pp. 102–129).³⁰ Most interesting here is the general conceptual differentiation between “music’s internal or external *referring*” that he acknowledges.

Drawing on Wilson Coker, he discerns therefore between *intramusical* and *intermusical* reference (ibid., p. 116), with *intramusical referring* marking the relations between musical units within a piece of music and the analysis where the “analysis of the neutral level allows us to categorize *possibilities* for establishing these relationships” (ibid., p. 116). Drawing on Robert Austerlitz, he describes how this is connected to expectations that are raised through constructing intramusical relations and thus to the dimension of prediction (ibid., p. 117), which relates to my earlier made reflections about the activity of listening (see also my earlier-made reflections on that topic in chapter 4, p. 46). The intermusical referring is to him the process “through which we associate a particular music with a larger musical universe, to which it belongs. This is, in effect, style [...]” (ibid., p. 117). It needs to be emphasized that these are again differentiations made only for analytical reasons. In reality, they become entangled as well, especially when attempting to use the terms not for an analysis of an already existing neutral level, but for a piece’s poiesis. If I for example feel inspired by something I have played because of an inspiration of the play of light on a firewall and I then make recordings to continue exploring this inspiration and decide that these explorations are part of the creation of a composition as when creating *Circular Composition II* it is both intra- and intermusical referring that is at play during the creation. During the advancement of the creating, I do intermusically relate what is created to other traces of creating, such as my notes or other saxophone recordings, but at the same time relate it intramusically to other instants of the ongoing musical *Geschehen*, since I both categorize *if* or *that* what I play is part of this specific creative situation and also *if* and *how* what is played relates to other creative situations or their traces.

This example points also to the second category of referring, music’s capacity for extrinsic referring which is equally entangled with the intrinsic one (ibid., pp. 117–118). Nattiez categorizes this extrinsic referring into the fields of spatio-temporal, kinetic and affective symbolization (ibid., p. 118). Most relevant to me here is how he relates these to the general aspect of movement (ibid., pp. 119–120) and emphasizes, through the example of varying associations to keys throughout the centuries, the dependence of extrinsic referring to the individual’s “*outside*” world, “To learn music is not merely to learn an arrangement of notes compatible with the tonal system, but also to command all the twists of a signifying code, one that is not always coherent, not always explicit” (ibid., p. 124). This is obviously true also for intrinsic referring. Summarizing this, using Noë’s words: If “[l]anguage, tools, and collective practices make us what we are” (Noë 2010, p. 67), obviously our symbolic thinking and meaning-making is shaped by the language, tools, and collective practices that we are embedded in through our personal webs of artistic practice.

Nattiez also points to the aspect of translation that is always present when connecting musical meaning to other, semantic, meaning and when verbalizing it (Nattiez 1990, p. 124).³¹ He concludes how music, through its capacity of referring both intrinsically and extrinsically “represents

³⁰It could generally be questioned if semiotic reflections with Western classical music in the center of attention are a useful reference for the musical realms I discuss here, since these often elude clear genre classification and are, despite their connection to Western classical music, definitely deeply rooted in practices and traditions of a broader jazz context. To this potential objection, it could be replied that, as long as these reflections such as Nattiez’s, are undertaken in such a way that they do take specific musics as a starting point instead of turning them into a norm, they render possible an analytical perspective that can as well be applied in different ways. Thus, they can also shed light on other kinds of musical *Geschehen* than the ones originally thought of. Both the analysis of musics in these other realms, such as mine, as well as the original perspective, can only benefit from such an attempt. Thus, although I do not share Hodson’s approach of applying Nattiez’s tripartition to his conceptualization of interaction within jazz groups (Hodson 2007), as already discussed, I surely consider it valuable to apply Nattiez’s model in whatever context it can shed light on.

³¹“Above all, we must not confuse music’s meaning, properly speaking, with *translation* of that meaning, since verbalizing music’s meaning is itself a special type of symbolization” (Nattiez 1990, p. 124). Relating this to his earlier made statement of that “the whole enterprise [that is, the analysis of the esthetic and poetic and esthetic description] assumes us to be able to *giving a name to sound material*, so that relevant poetic or esthetic components might be identified and integrated into a model” (ibid., p. 92), the analysis of all three levels of the tripartition contributes to my quest of “developing specific terms as reflective tools or lenses for reflection themselves” (chapter 2, p. 20) and seeking “a new language as a creative tool in its own right and as a trace of creating that co-acts with all other traces and sheds light on them and vice versa” (chapter 2, p. 20)

a superimposition of two semiological systems. To the composers, performers, and listeners, all participants in a ‘total musical fact,’ musical material will establish connections to their lived experience and to the exterior world. These semantic interpretants will be split between the poietic and estheticic [...]. But musical material’s play of forms is itself a semiological system, inasmuch as it functions and develops independently of the extrinsic meanings conveyed [...]” (Nattiez 1990, p. 126). In other words, although I can find a never ending plethora of semantic interpretants to music, there is always a dimension in music that is meaningful only through intrinsic referring and that eludes at least in parts explicit semantic referring to. Also, both the semantic interpretants and the intrinsically musical ones can be looked at through analysis of the poietic and esthetic level.

Important is however: poiesis and esthetic are autonomous creative processes, but they are always connected to each other through the trace that is either the result or the starting point for the creative activities. Hence, Nattiez emphasizes also how their analysis’ and the one of the neutral level can not be separated from one another and only together can reveal knowledge about music, “Analysis never stops engineering a dialectical ostentation among the three dimensions of the object” (ibid., p. 32). Or, as he summarizes later on:

The stakes offered by semiology are these: that recognizing, elaborating, and articulating the three relatively autonomous levels (poietic, neutral, and esthetic), facilitates knowledge of all processes unleashed by the musical work, from the moment of the work’s conception, passing through it’s “writing down,” to its performance. In short, semiology makes knowledge possible of the phenomenon we know under the name of music, in its totality. (ibid., p. 92)

Poiesis and esthetic and the analysis of poiesis, esthetic and the *trace* are in that way separate processes, but related to each other, separated in these reflections only for analytical reasons. In which ways they can be related exactly, will be the subject of the following investigations.

5.4 *Kumbhaka* and *In the dark*

As already indicated, my focus shifted after the first individual experimentation on my own with *Circular Composition II* to expanding the experimenting to a series of experiments together with other human participants from different disciplines who engaged together with me in differently designed situations for co-creating pieces of music.

The first of these collaborative experiments happened in collaboration with singer, writer, theologian and researcher Chanda Rule³² whom I had gotten to know through Saint Peter’s Church in Manhattan as a regular artistic partner of the then cantor, bassist and composer Ike Sturm for a.o. the Jazz Vespers on Sunday afternoons, a weekly service where I had been sitting in as a spontaneous guest quite often between 2014–2016. Ike’s and her approach to improvised music and jazz as liturgical music,³³ as well as Chanda’s way of spontaneously creating lyrics and melodies for the congregation to sing along with and become part of the musical Geschehen has since then been a huge inspiration for my own work as saxophonist and composer.

Between 2018–2023, after Chanda Rule and drummer Gernot Bernroider had relocated to Vienna, we had been playing regularly together at the *InSpirit* series at Gedächtniskirche and would annually put together a new program of music to connect musicians from both Vienna and Berlin. Thus, I used the task to add new compositions for a performance during the *InSpirit* summer of 2022³⁴ where Chanda, Gernot and I would play together with bassist Lisa Hoppe from Berlin and pianist Martin Reiter from Vienna before also performing a part of the program at the New York

³²Our collaboration was a part of the project *Circular Composition: Erweiterung*, funded by NEUSTART KULTUR – DMR Stipendienprogramm 2022, by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, May–August 2022.

³³For an in depth-analysis and differentiation of these terms with the means of artistic research, see Uwe Steinmetz’s writings and music, e.g. (see Steinmetz 2021). It was through him that I had got in touch with these musicians and with working in that field after succeeding him as artistic director for the jazz series *InSpirit* at Kaiser-Wilhelm-Gedächtnis-Kirche in Berlin in 2014 before resigning from the responsibility in 2023 as well as in organizing, composing and playing for the congregation’s monthly Psalmon services from 2013–2024. Both formats were conceptualized originally by him together with then cantor Helmut Hoeft and priest Cornelia Kulawik.

³⁴August 11, 2022, *InSpirit*, Kaiser-Wilhelm-Gedächtnis-Kirche, Berlin.

City Musikmarathon in Mattighofen³⁵ in Austria with a band from the festival/workshop (including Ike Sturm on bass instead of Lisa Hoppe) as the next occasion to experiment and to collaborate for the first time with Chanda as a writer.

There were two different lines of work: on the one hand, Chanda would add lyrics to an already existing piece of music, on the other hand we would create a totally new piece of music together. Since we were living in different places, we worked remotely through sending each other files of music to work with. Concerning the piece to add lyrics to, *Sorrow* appeared as an interesting contact tool. As indicated above, despite its through-notated four-part setting, *Sorrow* could be read both as a polyphonic four-part setting and as a jazz lead sheet with a melody and a vertical harmonic course moving along with the melody. I had also begun playing it with my quartet and was interested to perceive how musicians outside of our specific quartet practice would deal with the piece.

Chanda prefers working by ear, thus she used an additional piano phone recording (Recording 406,³⁶ May 12, 2022) of mine to create the lyrics.

Recording 406, piano recording for Chanda

On May 17, 2022, she sent me the text in a WhatsApp message, together with a recording where she sang along to mine, and which she entitled *Kumbhaka*. “It’s called Kumbhaka (which is the word for the inspiratory pause.. or the pause between each inhale and exhale) It reminded me of circles or the circular [...] (Chanda Rule, WhatsApp message to author, May 17, 2022)”.

Just for a moment
 Between love’s song
 And eternal void,
 Behind the wave and
 Life giving water,
 Before the push -
 the fight for my glory
 After the tide rolls...
 Hold me
 (Chanda Rule, May 17, 2022)

Besides the fact that Chanda’s text and her singing to my recording and the new extrinsic-semantic meaning she had added to the piece were mesmerizing to me, it was most fascinating to experience how my own perception of the piece changed in many ways. Most interesting for my quest was the transformation resulting from how Chanda had heard the voice leading and rephrased and transformed what I had considered as the melody in a way I had not conceived of before. For example, the already mentioned D and D# in bar 2 on beat 1 and 4 that to me were a movement of one of the middle voices became part of her melody (and the second beat of the word “song”). She responded to that movement in the next phrase by also including the D and the F into the phrase on “And eternal” that I again had considered as other voices. Also, sometimes, the already transformed phrase shapes and accentuations would change in multiple ways such as in the very beginning of the song where I had considered the G# on beat 1 of bar 1 as the first stressed pitch after the pick up. In Chanda’s recording the A, the last eighth note of the pick up was stressed and was the pitch for the first syllable of “moment”, with the G# on the second syllable. The fact that I had recorded *Sorrow* in tempo rubato contributed to these perceptual differences and different artistic choices, but they are only natural when working with a recorded trace as an interface between us. While a notation can reveal “intended” melodic and harmonic relations through encoding them through e.g. bar lines, note values, spacing, accidentals etc., the recording encodes and transports *sound itself* and thus a result of the specific “narrative” or esthetic process that happened in the moment of recording. In sum, the recording *affords* other relations to the musical material than a notation since it encodes and thus translates information and meaning in a different way.

³⁵ August 17, 2022, New York City Musikmarathon Mattighofen, Stadtsaal Mattighofen.

³⁶ Interestingly, this recording has exactly the same length as the first piano recording (see Chapter 3, p. 52) for Andreas Schmidt, but though the recordings are similar in their phrasing, some emphases and even melodic-harmonic details are different.

Through her lyrics and the new melody, Chanda showed me a new way of hearing the voice leading that I would by and by also incorporate in my playing even when I would play the piece on my own. At some point, I would no longer use the lead sheet of *Sorrow*, but choose to play *Kumbhaka*, such as when playing it together with James Banner and Lina Nyberg³⁷ or even if it was a purely instrumental version such as with my quartet.³⁸

Kumbhaka, lead sheet

Kumbhaka with Chanda Rule, Ivar Roban Križić, Gernot Bernroider and myself, Artistic Research Lab, mdw, Vienna, 220603

Kumbhaka with the Birgitta Flick Quartet, Studio Boerne, Berlin, 20240604

Kumbhaka with *Flick—Nyberg—Banner*, Frauenmusikzentrum Lärm und Lust e.V., Berlin, 20240810

Thus, though we copyrighted *Kumbhaka* (Flick and Rule 2022c) with a strict separation of lyrics and music for reasons of practicality, writing lyrics to already existing sound necessarily transforms this sound and any dimension of that piece as well—if not in such explicit ways as in this example this happens indirectly through adding a new perspective or, in Krämer’s words, narrative, to an already existing trace of activity. Notation and sound as well as language and sound function here as creative tools for each other, affording and revealing aspects of each other that were not known before. This became even more obvious in our second collaborative song, *In the dark*.

The procedure was quite similar as for *Kumbhaka*, but there were major differences in how and with which objectives the traces were made and which influenced their affordances and their functions for the activities they took part in. The starting point was again a recording, this time a recording by myself with both voice and piano. As with the recording of *Sorrow*, it was equally a “staged trace” in the sense of not being the direct result of the specific creative situation that I considered as the beginning of the piece, but being made especially for the purpose of our exchange. Different was that at that point in our work, there was no notation that my recording was related to. The recording (shortened *recording 402* as I will refer to it in the following) I sent to Chanda on May 12, 2022, was indeed made inspired by two recordings of me playing and singing from April 27, 2022 (*recording 385* and partly also *384*) in the first situation that I considered as the starting point for that piece’s creating. I recorded several “re-improvisations” or *re-creations* since recording 384 and 385 were too private to share. As also 384 and 385, I did not consider 402 as an already complete song form, rather as some sort of sketch with—in contrast to *Sorrow* that had a completely notated musical course—not necessarily sorted, only loosely connected ideas. It was only meant to provide concrete musical material as a starting point for Chanda’s creating—that would in turn function as starting point or “neutral level” for my further creating.

Recording 402 (cut) for Chanda

Before examining what happened when Chanda had worked with recording 402, it is valuable to reflect more on its poiesis and also the creative situation that I considered as the starting point for *In the dark* (Flick and Rule 2022a). In my memory, there was a decisive moment of meaning-making, when I embedded and subordinated a certain chord (an “open” F chord that consists of the fifth between F and C, with an F3 in the left hand and C4 and F4 in the right hand, from there establishing a steady quarter note pattern with a bass line staying on F and C and the right hand moving at some point down a half step), within that situation on April 27, 2022, that inspired me and that therefore in combination with the sung #11, the B3, on top, became the foundation for the following explorations and eventually the *Geschehen* of my *recreation*.

³⁷Stockholm Jazz Festival 2022 at Scenkonstmuseet, Stockholm & InSpirit at Kaiser-Wilhelm-Gedächtnis-Kirche, Berlin, 2024.

³⁸A mistake occurred during my transcription of Chanda’s lyrics for the new notation of the new piece: instead of *wave*, I used the plural form *waves*. Since this mistake never got corrected, it became part of the piece and is thus neither corrected here.

Consequently, I began a new iterative cycle of playing piano and singing while recording, alternating this with recording voice memos with keywords, ideas, visions and reflections on the previous days, thus actually constructing a first narrative already *while* creating and *inducing* the idea of the, as I had experienced it then, “sudden” open F chord and the steady pattern with the bass line described above. From April 27, directly after having experienced the beginning of working on the piece, a transcribed excerpt of one of my voice memos reads as following:

Schmetterling, Leichtigkeit, unfolding,... Schmetterling Unterricht gestern, Unfolding im Nocturne, Helligkeit, der F-Klang, ...aber aus dem ersten Akkord, den ich gefunden hab[e] und dann irgendwie bewusste Entscheidung auszuprobieren was passiert, wenn ich fünf mache, und dann sind's sieben geworden. Und dann hat es sich irgendwie nich[t] rund angefühlt, aber beim zweiten Mal irgendwie doch [...] Und ich sehe irgendwie Chanda vor mir und ich hör[e] irgendwie so ne ganz volle Band die irgendwie super jazzig is[t]. Und das müsste irgendwie, der Bass, alles gedoppelt werden und ich könnte mir auch vorstellen, dass es 'ne Bigband is[t]. D.h., es ist einfach irgendwie orchestral. Das ist irgendwie anders als z.B. bei diesem dritten Satz von meinem Solostück. (Flick 2022a)³⁹

There is another voice memo about what I had practiced on the saxophone before, and on recent reflections about my duo partner Antje Rößeler's compositions that often had this doubled bass lines between piano and double bass and these kinds of chords and groove (Flick 2022h).

These notes give witness to how I had instantly embedded my situation in other creative situations. By consciously linking them with each other a new narrative evolved, referring both to intrinsic and extrinsic aspects of the musical *Geschehen* I created and experienced, listened-obeyed to. These reflections add yet another layer of narrative, differing from this first one because of listening back to my piano or piano/voice phone recordings between the premiere of *Circular Composition II* and April 27, 2022, and my reflections related to them.

Since shortly before working on *Circular Composition II*, I had for the first time my own piano whose sound and touch of the keys and especially its lower register, resonated strongly with me and thus afforded the more systematic and frequent exploration of playing piano for creating than before. In combination with a new phone that recorded sound well enough to discern more aspects of sound than pitches, this afforded that my practice of exploring and recording myself, developed methodologically during the creation of *Circular Composition II*, could “spill over” even to the activity of playing piano and singing. Not only could I use the procedural knowledge gained from the work with *Circular Composition II* as a tool for creating *In the dark* through playing piano-singing, but could also use this practice as a long-term experimentation set up to observe its development as a regular creative habit and skill, as done between February 2022 and August 2023.

Returning to the creative situation on April 27—despite my immediately constructed narrative of having “discovered” *In the dark*’s opening musical material, this “sudden” discovery must have been something I had unconsciously been preparing for weeks. In contrast to playing-singing-notating *Sorrow* where I sang and played something not traceable to preceding activities and their traces, this material turned out to have been *prepared*. While I indeed had “found” the open F chord with the sung #11, the B, on top as the pitch from where the melody unfolds for the first time on April 27, the chord as such can already be heard in the last third of recording 383 from April 22, 2022—where I had also tried out such a steady quarter note pulse with meandering voices below and above it as well as a passage in F minor very similar to the one played in recording 385 and *re-created* in 402 for Chanda.

When I go further back in my recording history of my phone, for example to recordings 367–369 from March 21, 2022, I hear explorations of some kind of unfolding F minor piece with transitions between F minor and F major with quite similar basic harmonic progressions as later on in *In the*

³⁹ “Butterfly, lightness, unfolding,... Butterfly lesson yesterday, unfolding in the nocturne, lightness, the F sound, ...but from the first chord I found and then somehow consciously decided to try out what happens when I make five, and then it became seven. And then it somehow didn't feel round, but the second time it did somehow” [...]

And I somehow see Chanda in front of me and I somehow hear a really full band that is somehow super jazzy. And that would have to be doubled somehow, the bass, everything, and I could also imagine that it's a big band. In other words, it's just kind of orchestral. It's somehow different from the third movement of my solo piece, for example (Flick 2022a, translated with DeepL, 250611).

dark that also has a minor intersection, the first time in F minor, then transposed to G minor. Although these three recordings' pulse feels different to *In the dark*'s, the pulse in 369 transitions and moves for a while into a repetitive eighth-notes-based pattern-groove with also a quite heavy bass line. Between April 15 and 17 (recording 380 and 381), there are more recordings with a.o. explorations around steady quarter note pulses and bass lines around them. These could be perceived as a testing of ideas for different repetitive patterns or grooves. The recordings even show similar or even more orchestral or "vertical" approaches to harmony as recording 385 and the *re-created* one of 402 for Chanda, preparing what I then reflected on as a jazzy sound or with a reference to big band in the above-quoted voice memo.

However, these reflections are current ones. In correlation with the already mentioned centrality of epiphany in autoethnography (see chapter 2, p. 27) that Carolyn Ellis et. al. observed (Ellis, Adams, and Bochner 2011), I only started reflecting consciously about the piece and its unfolding after the *epiphany* of feeling of resonance with this—seemingly—first musical material and probably therefore marked this epiphany of resonance as the piece's starting point. In other words, only after I had been moved and thus transformed by these elements and entered a relation with them did I begin constructing narratives, evolving into a series of nested narratives, each narrative unfolding from the previous ones, revising parts, keeping others, adding new layers of construction around new epiphanies, such as the new one constructed through these reflections. It is notable that I did that both in reference to their poiesis, thus archeologically—thoughts as "suddenly there was this chord, probably my ideas for the piece were related to that I had generally thought about Antje's compositions shortly before playing it and that I had practiced a jazz standard on the saxophone (in contrast to all sound exploring of mid-February to mid-March 2022) and so on"—and their esthesis, thinking also *ahead*—with thoughts as "there could be bass lines to that pulse that should be doubled by the left hand of the piano and the bass, I imagine Chanda's way of being and singing as a guidance for the piece's unfolding, it shall sound jazzy and so on."

Chanda's first text draft, created to the melody I had sung in the beginning of recording 402 and sent to me on May 24, 2022, reads as following.

In the dark

In the dark we are changing
chasing the unknown

In the dark
stretching wings unseen

In the dark
reaching farther than
we know

In the dark
Unafraid
an unstoppable
rhapsody

Praying for the dark to set us free
When daylight comes
(Rule 2022)

After receiving this text, my creative activities changed from exploring certain material quite loosely by ear to working on the concrete course of the song through engaging with a new creative iterative cycle listening to and transcribing material of 402 and 385 (384) in Finale. Then I developed this material further through alternating between notating in Finale and again playing piano-singing.

In contrast to *Sorrow* that was notated without any preconceived idea about form or an envisioned kind of notation and that therefore serves as a starting point even for formal exploration, I

aimed from the beginning on to write a lead sheet song with a fixed form. *In the dark* was supposed to function as a completely notated course of a musical Geschehen that we would indeed also follow structurally, differently to how we had performed *Kumbhaka* with the different groups.

5.5 Mutually transformed traces

For our first rehearsal on May 29, 2022, a first draft of the piece was ready:

First notated draft of *In the dark*

Before and in between the two concerts in August 2022, Chanda further adjusted the lyrics in relation to the melody, while I refined the harmonic progression and notational details of the piece's ending and other formal aspects such as repeats. It is interesting to look at how the traces of both Chanda's and my creative activities changed over the course of the work.

Firstly, as soon as I began working with Chanda's lyrics, both their semantic meaning and their formal structure began structuring my musical imagination and how I perceived the Geschehen on recording 402. In other words, the esthesis of her text led to a transformed esthesis of my own recording. The words *In the dark* as the structural motif that began every verse of Chanda's text made me aware of the formal structure that unconsciously had been evolving in my playing and singing on recording 402 and that might have had an influence on Chanda's language structure. What I before had conceived of as only loosely connected ideas could be described as the following formal course: after a short introduction with the 7/4 pattern, there were 4 parts that evolved from there and started melodically and harmonically similarly with the open F chord and the melodic fragment around the B (as the #11 of the F chord)—to which Chanda (as I reconstruct it) had associated the words *In the dark*. Each of these parts continued slightly differently, all moved to different harmonic places and became more and more dense in their accompaniment and sometimes also varied in meter. Eventually they would all return to a variation of the F chord and differently unfolding interludes or transitions between these sections (that belonged to Chanda's verses as I reconstruct it). The recording continued with a part in F minor with a change in meter resulting in a different way of accompaniment ("lighter") with a (sung) top voice with much more movement. It then again returned to the F chord and the pitch of B as the beginning of a melody (and where I had cut the recording quite abruptly, omitting a short sort of coda that did not add new musical ideas that I considered as valuable). The following form scheme summarizes the reflections made so far.

Form scheme recording 402:

Intro (4 x 7/4 bars)

A

Interlude

A' (shorter)

Interlude" (longer)

A" (shorter)

Interlude'" (longer)

A'" (shorter)

(Interlude just 1 chord)

B (very short)

Interlude""

A"" (but cut after first beat)

Chanda's text is structured in the same way as that recording, with four verses that respectively unfold from the line *In the dark* and with a concluding verse that brings both a grammatical and a semantic change: while the first four verses describe what is experienced in the dark and the dark functions rather as some sort of timeless condition with no other context than the dark itself where things are happening, the last verse could be read as a description of a plea, personifying the dark and setting it in the context of (the equally personified) daylight. The wish for the beginning of

daylight as a point of termination and liberation of these experiences in the dark is expressed. In that way, the last verse brings a change of directionality, setting a temporal context of what happens through transforming the *dark* from a mere condition to an addressee that is responsible for and has power over “us,” the text’s subject, thus relating the different participants in the text’s *Geschehen* with each other in different ways. I wonder if that change is in some way related to the change in accompaniment and the melodic and harmonic course in my recording when it transitioned at 2:26 to the part that I consider as F minor (in light of my previous recordings with a much clearer harmonic course in these parts)—but again, this is also a mere reconstruction and a narrative that I made up through my perception.

This semantic and formal structure thus structured anew the musical *Geschehen* and resulted in a notated song form that I developed from this form, still with the same three kinds of parts in similar succession as before.

- Transition parts that function as intro, outro or interlude, differ from each other harmonically and in length, and take up other elements from other form parts, but are based on that quarter note pulse and bass line from the original idea.
- A parts on the basis of the “In the dark” motif (though sometimes other text, such as “Underneath”)
- B parts

Firstly, in comparison to recording 402, the form parts of this notation are structured and delimitated from each other more clearly, in particular distinguishing the A parts from the B parts, working more explicitly with the means of exact repetition (motivic prolongation) and space, incremental harmonic and rhythmic transformation as well as contrast between the accompaniments and the kind of groove that prevails (heavy bass lines in transition parts such as E or the beginning of G in contrast to the 3/4 and 4/4 more floating accompaniment in the B parts in D and F).

Secondly, besides this structural level, melodic and harmonic detail also changed. While on the recording the main melodic motif around the B4 with an inserted graced C5 had some sort of tag with a descending legato A and G, the main motive of the resulting piece omits that tag and consists only of the movement B-C-B which was then incrementally repeated and prolonged, and thus developed throughout the four A-parts (rehearsal letters A (repeated), C, and H). While I, before knowing Chanda’s text, had sketched a quite legato melody without much articulation and accentuation, the sound of Chanda’s words and especially “In the dark” did form my melodic thinking, attuning my melodic imagination not only to the words’ semantic meaning but to their sound, also using their sound as a structuring tool for developing the piece’s melodic course.

The form scheme of the notated song in its first version from May 28, 2022, evolved thus as the following one.

Intro (3x7/4 bars)
 A (part A)
 A (part B)
 Interlude (= Intro)
 A’ (part C), shorter
 Interlude-Intro-Transition, longer
 A” (part D, shorter
 Transition”, shorter
 B (part E)
 Transition” (part F), open
 B’ (part G, transposed B)
 Transition”” (part H), longer, open, leading into Interlude-Intro, open
 A”” (part I)
 Transition”” (part J), open, leading into Interlude-Intro, open-fade

In retrospect, it strikes me that I, for some unknown reason, did not yet use all verses of the lyrics in my first draft on May 28, 2022, omitting the verse:

In the dark
Unafraid
an unstoppable
rhapsody

However, for the last, contrasting text verse,

Praying for the dark to set us free
When daylight comes

I had again used the “In the dark” melodic motif and the groove. However, with the beginning of “to set us free,” I had let these words repeat on the same pitch (C) and lead to a harmonic and metric transition from the steady harmonic structure and repetitive quarter notes, to a more functional harmonic cadenza as a two bar-vamp in 4/4 (through instructing to “start enriching chords”, then “go from quarter pulse to more free comp”) that was to be the basis for a collective improv, leading eventually back to the F pattern and an instruction to “fade out” (Flick and Rule 2022b). Thus, I had in some aspects followed the lyrics’ semantic and formal structure. However, after these changes Chanda adjusted and transformed her lyrics again, resulting in an even stronger correlation of semantic and musical structure, enhancing both lyrics’ and music’s expression through fusing them.

The piece’s lyrics evolved thus as following:

In the dark (revised)

In the dark
We are changing
Changing
changing the unknown

In the night
we are
changing
changing
Chasing the unknown

Underneath
we are changing
Changing

In the dark
stretching wings unseen

In the dark
In the night
Underneath
Shadow’s fire
Somehow
Reaching farther than we know

Blossoming into rhapsody
rising to a light unseen

Capturing the time beyond a dream
Praying that the dark

Will set us free

In the dark
 In the night
 Underneath shadow's fire
 Changing
 Chasing
 and praying the dark
 will set us free
 when daylight comes
 when daylight comes
 Ah

However, since I again slightly changed the form,⁴⁰ Chanda adjusted her lyrics once more and the final structure with the lyrics thus became as shown in Table 5.2, p. 75, and the notation linked below).⁴¹ The piece's poiesis thus indeed highlights the continuous entanglement of semantic and thus extrinsic and musical-intrinsic references.

In the dark, finished lead sheet

In the dark, recording New York City Musikmarathon Mattighofen, 20220817

It is also interesting to reflect on the lyrics' impact on the piece's structure and musical unfolding and thus on how my anticipations of a musician's role in the performance and their relation to the notated—thus also how I notated—were guided a semantically-structurally. Most significant here are the collective improvisation parts: all transition parts until part C had clearly defined lengths, but when the text changed semantically and structurally as described earlier, the transitions—part E between part D and F (the two B parts of the form), part G, the transition leading back to the “reprise” H (as the last formal A part) as well as the transition I that ends the piece—are marked as “open,” and their lengths are put in the ears and hands of the performers. In the case of part G, this led to creating a bar with a blank space in the top voice and an instruction to dissolve the meter, including the possibility to dissolve the pulse, as well as adding an arrow after the first two quarter note beats to underline the openness. In that way, part G gives space to reflect musically on the prior semantic and musical development. Thus, as it turned out, when we played the piece, I had rightly anticipated it as the piece's climax.

In the dark is thus the result of a complex interplay of different processes of esthesis that Chanda and I were engaged in again and again—making sense of traces of each other's and our own creative activities, and thus producing new traces in different material manifestations, some of which we exchanged. We created indeed a network of interrelated activities and traces: with non-human participants functioning as tools or traces, or both, and human participants equally becoming transformed and thus bearing traces as described earlier, becoming part of each others'

⁴⁰This is an example of how unintentional transformations through *mistakes* and misunderstandings can also lead to valuable artistic transformations. The basis for Chanda's new lyrics had been a Finale audio file that I had made for her from my score from July 22, 2022. However, there must have been an incongruence between the notation in the audio file, probably caused by not properly layouted repeat signs that caused the insertion of half a repeat of the first A-part (which I had not noticed before sending the file) and that Chanda also wrote lyrics to. However, Chanda agreed in the following rehearsal to my wish to keep the short form as intended and she thus adjusted her lyrics once more. This led to a new version of lyrics (where Chanda shortened the very beginning, before the inserted form part beginning with “Underneath we are changing, Changing”) and thus of the whole piece, that would have been different if not for my mistake. “Underneath we are changing, Changing” also returns in the last A part and the word “Underneath” also seems to be structurally important for the whole text.

⁴¹I did not change my intermediate versions of the piece before the last performance on August 17 (Version of July 22, 2022, with the new form and changes in the ending after the first rehearsal. Version of August 13, 2022, layout update and a change in a harmonic detail in part I.), thus making this final version only much later after having played it through both looking at Chanda's notation of her updated lyrics and transcribing her version from August 17 (before always playing with knowing her new lyrics by ear).

Form part	Rehearsal letter/bar	Lyrics
Intro	1 (3x)	
A	A	In the dark We are changing Changing changing the unknown
A	A	Underneath we are changing changing Chasing the unknown
Transition/Intro	18 (2x)	
A'	B (formerly C)	In the night stretching wings unseen
Transition'	bar 23-28	
A''	C (formerly D)	In the dark In the night Underneath Shadow's fire Somehow Reaching farther than we know
Transition''	bar 39-40	
B	D (formerly E)	Blossoming into rhapsody rising to a light unseen
Transition'', open	E (formerly F), open	
B'	F (formerly G)	Capturing the time beyond a dream Praying that the dark Will set us free
Transition''', open	G (formerly H), open (leading into Intro/Transition)	
A'''	H (formerly I)	In the dark In the night Underneath shadow's fire Changing Chasing and praying the dark will set us free when daylight comes when daylight comes
Transition''''/Outro, open	I (formerly J), open (leading into Intro/Transition, fade)	Ah

Table 5.2: *In the dark*, form and lyrics

poiesis and esthesis at the same time, entangling equally extrinsic and intrinsic referring.

Creating *Kumbhaka* and *In the dark*, in contrast to the first described creative situation(s) of *Circular Composition II* and its contact-making and evolving relations, meant dealing with traces made by others, and thus the sharing of a larger creative situation and poiesis of a piece of music. Additionally, the inclusion of language-based traces that not only carry semantic meaning on a metalevel such as playing instructions or voice-memos of reflections-on-action, but that connect the different musical *Geschehen* at several points in the course of creating to a new semantic dimension, shaped the relations between the creative participants in all situations of contact-making with the *Geschehen* in manifold ways. Nevertheless, since, quoting Nattiez again, “musical material’s play of forms is itself a semiological system, inasmuch as it functions and develops independently of the extrinsic meanings conveyed” (Nattiez 1990, p. 126), it should be kept in mind that what shapes these relations are possible narratives, thus reconstructions. While they wield crucial transformative power over what is created, this power nevertheless remains uncontrollable in terms of how it unfolds or to which processes of meaning-making the created trace gives rise. Even if strongly situated in a specific semantic meaning through its poiesis, a trace or the musical *Geschehen* it gives rise to can thus not *convey* a specific external meaning, not even program music. It can only promote a specific esthetic process that through similar or shared lived experience might connect to the poietic and esthetic processes and the semantic *Geschehen* of its creation—a process that is dynamic and in constant transformation through the sedimentation of the experiences that accrue over time. Thus, as the construction of epiphanies in the creation of *In the dark* has shown, even my own narratives of what I have created transform over time. Once more in Nattiez’s words, “Music is not a narrative, but an incitement to make a narrative, to comment, to analyze. We could never overemphasize the difference between music, and music as the object of metalanguages to which it gives rise” (ibid., pp. 128–129).

All these reflections made through scrutinizing the two pieces’ creation processes through Nattiez’s terminology yield important insights, both concerning a deeper understanding of Nattiez’s model and in regard to my research questions. Firstly, applying Nattiez’s terminology and looking in detail on *Khumbaka*’s and *In the dark*’s complex poietic process shows how poiesis and esthesis are entangled to such a degree that it seems as if not only poietic processes, but also esthetic processes as the processes of meaning-making are generative processes.⁴² Nattiez’s description of the process of meaning-making “in the course of an active perceptual process” (ibid., p. 12) can be related to my previous reflections on making contact to and interacting with one’s “*outside*” world, actively engaging in movement in order to listen-obey (see chapter 4). In reference to the reflections made on the two new pieces, two important insights emerge. First, gaining a new understanding of pitch relations through Chanda’s recording of *Khumbaka* generated a new way to relate these pitches through symbolic forms when notating them. This, in turn, shaped how to interact with them when playing the piece. Secondly, the semantic meaning derived from Chanda’s lyrics for *In the dark* in their different stages engendered a specific formal structure and notational choices, which in turn shaped how the musicians’ would relate to them.

Furthermore, comparing the two pieces’ notations leads to interesting conclusions—possible narratives—about their relation to the entangled poietic and esthetic activities. Firstly, both share the general layout and the conceptions as lead sheets—which was part of the experiment’s “assignment”—as well as a quite high amount of notated voicings and voice-leading considering they are lead sheets. This possibly might be connected to their differences regarding the kinds of cycles of piano playing (and singing) and *transcribing* that happened. *Kumbhaka* was never complemented by additional chord symbols or formal details—and it is in the choice of the verb *complemented* a possible reason is to be found. For *Kumbhaka*, these would indeed have been additions, since its poiesis consisted of only one cycle of mutual esthesis between Chanda and myself, with the objective of *adding* lyrics, resulting in the—unforeseen—transformations as discussed above. *In the dark* is a totally different kind of piece that, in contrast to *Kumbhaka*, from the beginning on functioned quite vertically with a clear separation of melody and accompaniment, including working differently with the means of repetition and in a different relation to time. Its different relation between melody and accompaniment could be attributed to its poiesis of singing

⁴²This relates to Frisk and Östersjö’s conclusion of how “Composition may be regarded as a complex interaction between esthetic and poietic processes” (Frisk and Östersjö 2006, p. 247).

an additional line to a piano accompaniment instead of doubling the top voice of my playing with the voice as in *Sorrow* and thus *Kumbhaka*.

However, secondly, even more interesting is to consider the temporal embedment of the exchange of traces in the creative processes. For *In the dark*, my esthesis of Chanda's first trace happened before having conceptualized a finished formal course while it in *Kumbhaka* began after having created a notation considered as finished and already interacted with it several times. Also, through the cycle of exchange's iteration in *In the dark*, much more intertwinement of our poetic and esthetic processes happened as in *Kumbhaka*. Hence, transcribing parts of our recordings was only a part of the process. Thus, *In the dark*'s notation is only partly based on it, allowing for more diversity in the notational means, resulting for example in different kinds of solo parts as described above, longer text instructions or harmonic encoding that entangled and switched between chord symbols and voicings. This is of course also connected to the anticipated future situation(s) of relating to the notational trace. To summarize, transcribing meant in the process of *In the dark* not to listen in order to *reconstruct* relations between musical material as in *Kumbhaka*'s situation, but to find starting points for transforming by different kinds of interacting, such as playing piano, notating by hand, taking notes, making voice memos or notating in Finale. As described earlier, the activities and also the poetic and esthetic processes fulfilled a diversity of functions for each other. Thus their traces permeated and transformed each other to a higher degree than in *Kumbhaka*.

This hints at another, crucial dimension of Nattiez's model: the entanglement of poetic and esthetic processes appears fractal, depending on the level of detail of the analysis. Both piece's poiesis is a good example for how a new composition's poiesis can be graduated and diversified in different degrees and thus affords different kinds of analyses on different levels.

Thus, to summarize, even more than the different movements of *Circular Composition II*, such traces as *Kumbhaka* or *In the dark* show that traces always are (i) compositions of traces that result from a complex interplay of poetic and esthetic processes that bring these traces in touch and that support my impression of a composition as "something ongoing," or, in Krämer's words, as something between object and activity (Krämer 2016a, p. 159). (ii) My earlier formulation of the composition as something "that through its enormous permeability is constantly in the process of becoming, with continuous transformation processes, stimulated by the connection and interaction with other components such as improvisation" (Flick 2020, pp. 30–31, my translation) could be reformulated as "that through its enormous permeability is constantly in the process of becoming, with continuous transformation processes, stimulated by the connection and interaction of the traces it has made, makes or will make contact to." (iii) To make contact with a trace—that then might be considered a composition—means thus to entangle past poetic and esthetic processes with present ones. (iv) Necessarily, these processes are to at least some degree uncontrollable, but their specific unforeseeable dimensions can be shaped through the trace's characteristics (such as solo parts, chord symbols etc.), something which has to be examined closer. (v) The relation to the creative human being's "*outside*" world could thus also be expressed as a trace of manifold entangled poetic and esthetic processes on manifold temporal levels, resulting from their interacting while creating.

All these reflections draw the attention to a dimension of traces and the activities they are involved in that has not yet been discussed. Krämer speaks of what she calls *Zeitenbruch* as an important characteristic of traces, "In the case of traces, there is always a break in time between the leaving of traces as a past and the deciphering of traces as a present execution. *Two time regimes thus intersect in the trace*" (Krämer 2016a, p. 164, translated with DeepL, 20250426).⁴³

This is true of when sending recordings and notations to each other as Chanda and I did it. This temporal fraction is for Krämer the reason for the trace's polysemy and also one of the main differences between a trace and an index (*Anzeichen* or *Indices* or *Symptome*)—she describes how "The indicating function of an index is rather based on the spatial and temporal simultaneity of objects (or events)" (ibid., p. 164, translated with DeepL, 20250426).⁴⁴ However, it is doubtful that this would be the only reason for traces' polysemy. If I would read along while Chanda would create lyrics, I could still never be sure about her intended meaning. If her handwriting

⁴³ „Im Falle von Spuren gibt es immer einen Zeitenbruch zwischen dem Spurenhinterlassen als einem zurückliegenden und den Spurenentziffern als einem gegenwärtigen Vollzug. *Zwei Zeitregime kreuzen sich also in der Spur.*“ (Krämer 2016a, p. 164)

⁴⁴ „Die anzeigenende Funktion des Index beruht vielmehr auf der räumlichen und zeitlichen Simultanität von Objekten (oder Geschehnissen).“ (ibid., p. 164)

would look a specific way, I could still never be sure what this would be a sign of. Thus, even the simultaneity of an index with the person *reading* it allows for polysemous narratives, in the same way as the trace does, just to a much smaller extent. Something that is experienced by another body is never fully tangible for me simply because it is the activity-interaction of another human being—something which is relevant also when improvising-interacting together with for example such a notational trace as *In the dark*. The trace makes a certain part of it present, but can nevertheless only *point to* the absent. Thus, in the same way, Krämer also describes with the discerning between natural and artificial traces serving as a starting point for her thinking, the trace that because of the *Zeitenbruch* points to something absent, at the same time transforms this absent into something present (Krämer 2016a, p. 165).⁴⁵ She speaks of the “*indexicalization of the trace*” (“*Indexikalisierung der Spur*”) (ibid., p. 165, my translation) to then describe—through the already mentioned analysis of Ginzburger’s and Levinas’ thinking—how both trace and index can bear traits of each other (ibid., 166ff.).

These reflections also hint at one more dimension of traces—it is not only “*two temporal regimes*” (ibid., p. 164, my translation) that a trace unites, but also a third one. Besides being directed at both the past and the present, traces are through their constitution through the activity of *reading* them in whatever possible way, also directed *toward the future*. They are thus, in trifold, directed backwards, to the present and ahead. Every narrative that is constructed through reading a trace therefore implies possible future consequences that follow from that narrative and the ascribed past and the present activities in which the trace is involved, and which is reflected in the already mentioned connection to the dimensions of expectation and prediction and leads to the above-described fractal entanglement of poietic and esthetic processes.

The next experiments examine this relation between a trace’s possible future and past(s) more closely by investigating the different kinds of affordances for interaction of various types of traces.

⁴⁵, „Die Spur wird somit gelesen als ob sie ein Index sei.“ (Krämer 2016a, p. 165)

Chapter 6

Notation

6.1 Forces

The next experiment was the first to examine this more thoroughly. The experimental setup was built around my quartet, focusing on the relations evolving while playing together, both between each other and to the notated, as well as the activity of notating as a tool for the relation between my individual creating with our collective creating. The new iterative working cycle put these two topics at the center of attention through “extracting” aspects from our usual practice that had formerly been tacit, creating explicit work cycles of what I had observed and what had been puzzling me, thus extracting movements between activities in “slow-motion” that otherwise happened quickly and at once.¹

First, a question arising from the previous discussion and the upcoming experiment must be asked and shall guide the reflections: what did I mean exactly when I earlier formulated “my anticipations of a musician’s role in the performance and their relation to what I had notated” (see chapter 5, p. 74)?

To begin with, it seems necessary to return once more to the term of *relation* which seems to be very vaguely used for any connection established between at least two partners. Some aspects of this relating have already been discussed, but it is still puzzling what actually happens when we establish a relationship with someone or a relation with something during creating. How can this term be specified more in order to understand more about specific relations?

As discussed earlier (see chapter 3.3, p. 37ff.), the means of all contact-making is movement, making tactile contact the basis for every contact, which leads to mutual transformation on many levels, depending on the variations of movement. As I quoted Noë earlier on:

The central claim of the theory of perceptual consciousness that I am laying out here is that it is not the intrinsic character of sensory stimulation that fixes the character of the experience; rather it is the way sensory stimulation arises as a function of movement in relation to the environment that does the important work. (Noë 2010, p. 63)

¹Here I find Robert R. Faulkner’s reflections on the practice of *shedding* useful and inspiring. The term of shedding is derived from the *woodshed* and is a term for practicing whose manifold dimensions he details, stating a.o.: “The shed is a place and an activity. It is a private place for practice. It is a solitary location for ‘getting it together.’ In ‘cool’ patois, ‘getting it together’ simultaneously expresses a work ethic, a way of going at the world, and a stance toward self as a musician in a world of other musicians” (Faulkner 2006, pp. 93–94). He especially highlights the ongoing interplay of individual and collective exploration that is a precondition for any creating and is so explicitly part of learning and practicing jazz. He describes how “Shedding is time. Shedding is also exploiting the known while being responsive to exploring the new and the difficult. Alone and together, it is intense and interwoven labor. My own work as a jazz improviser suggests that the distinction between culture producer and receiver or consumer is an analytic division that needs empirical investigation. Each ‘agent’ in the culture production process of improvised playing is capable of, indeed even constituted by, being both player and consumer. I am a consumer of the playing of others. All the listening to others, transcribing their solos, thinking about their approach, and imitating their ‘cultural work’ can be seen as incorporating or actively transforming the work of others into your own practices and persona. In plain language, shedding via imitation indicates the practical way recorded productions of ‘cultural objects’ by other musicians are ‘used’—or appropriated—by a jazz musician. As those solos or productions are thought about, worked on, worked over, imitated, and transformed, they become ‘new’ cultural objects [...]” (ibid., p. 105).

This is also reflected in the term relation itself: it comes from the Latin *relatus* which was “used as past participle of *referre* ‘bring back, bear back,’” which comes from re-, “back, again” and *lātus*, “borne, carried” (etymonline 2025g). Could one say that the English term of relation describes how meaning is borne through the constant movement of and between its participants?

The respective German term of the *Beziehung* seems to describe this movement differently. As already seen (see again chapter 3.3, p. 37ff.), the be- marks a transformation or the touch itself—which is on the first glance a tautology, on the second it does indeed highlight two different aspects of what is happening—thus in any case a result of movement. Also the root of the word that it specifies is derived from a variation of movement: *-ziehung* comes from the verb *ziehen* (DWDS – Digitales Wörterbuch der deutschen Sprache 2025)² which could be translated to drawing, pulling, dragging or even stretching something, or, as above-explained in the German etymology, move something toward oneself with force.

This term of *force*³ seems to be significant here and only together do the German and the English term justice to this complex and irreversible *Geschehen* that marks a relation or *Beziehung*. Involving in a relation is both an active and a passive undertaking and at the same time a forceful involvement that can not be avoided as soon as there is this movement toward each other, releasing forces that act in different directions and on different levels. The nature or characteristics of that *Geschehen* can be steered through the different dimensions of movement that spark that relation-*Beziehung*. However, as Rosa describes it for resonant relationships, no *Geschehen* can ever be fully known, a *Geschehen* is always uncontrollable. The different dimensions of movement thus spark this *Geschehen* as a complex forceful *movement Geschehen* that both carries and pulls the participants toward each other and transforms them, in line with Krämer’s formulation of the “‘blind compulsion’ of interacting bodies” (Krämer 2016a, p. 159, translated with DeepL, 20250423) that traces are connected to. It thus connects the involved participants, and bears—and at the same time stretches—meaning in different ways through the perceivable disruption of previous order (see again ibid., p. 160), disrupting order and establishing new order through creating potential traces. In that way, any contact-making establishes a relation between the participants, connects or binds them together through the meaning-making that results from there. And it is this equally transformable process of esthesis that characterizes this relation. A relation that is, however, equally dependent on the nature of the activities that have been shared and that constitutes and shapes the traces left (or rather: made) and thus individual and collective processes of *poiesis*.

In other words: activities such as listening, notating, playing saxophone or piano function as different variations of movement which, through the contact-making that they bring or are constituted of, unleash and at the same time steer different forces. They direct different dimensions of movement into different directions, thus wielding power over the involved participants, establishing different kinds of relations between them.⁴

² „mit Kraft zu sich her oder hinter sich her bewegen, zerren, zu ganzer Länge ausdehnen, aufziehen, züchten, sich fortbewegen‘, reflexiv ‚sich dehnen, in die Länge erstrecken‘“ (DWDS – Digitales Wörterbuch der deutschen Sprache 2025)

³With its origin in the Latin term *fortis* (through the bridge of Vulgar latin and French), the noun *force* was from the 13th century on used as an expression for “physical strength”, from the mid-14th century it was a.o. used as “power to convince the mind” (etymonline 2025f).

⁴Though this research here functions totally differently and follows a different quest, I nevertheless want to point to what Fredrik Hedelin describes as *life* in regard to a musical *Geschehen*, drawing on Deleuze and Guattari’s understanding of *signs* and *events* and applying their philosophical term of the ritornello as a research tool for this. “Put simply, the sign is something that generates force, and the event is the intersection of the relations and changes of forces. In this sense, both the sign and the event are immanent phenomena, that is, phenomena that are not determined by a relation to anything outside themselves” (Hedelin 2017, p. 9, translated with DeepL, 20250610)

”Enkelt uttryckt skulle man kunna säga att tecknet är något som alstrar kraft och händelsen är skärningspunkten för krafternas förbindelser och förändringar. Både tecknet och händelsen är i så måtto immanenta företeelser, det vill säga företeelser som inte är bestämda av en relation till någonting utanför sig själva.“ (ibid., p. 9)

From there, he describes the difference between relating *within* something, as immanent relating, in contrast to relating *to* something, as a transcendent relating (ibid., p. 9, my translation). In regard to what I am discussing here, I relate this to the difference between relating within the musical *Geschehen* in contrast to something considered outside of it, thus relating this reading of the sign to its potential of pulling-drawing participants into a musical *Geschehen*, relating them to form such a *Geschehen* that can include infinite participants depending on their interacting and relating. In other words, a sign as something that generates forces does this because of its relational potential within the entanglement of poietic and esthetic processes. As a multidimensional trace of creating, it turns into a point of intersection of such forces as a point of contact where such relations-*Beziehungen* are initiated, thus leading to what Hedelin refers to as *life*, “Life thus has to do with forces and relationships, and the vitalist is to be regarded as

This adds a more versatile or multifaceted understanding to the notion of what in reference to my piece *LYSSNA* had been denominated as *ytor*, and translated as contact “surfaces” (see chapter 1, p. 2): such an *yta* as a point of contact or *point of intersecting forces* does not function as a surface that provides a space for contact-making, but indeed as an *inter-face*, emphasizing the connective dimension of that notion and the transformative forces that encompass the whole interacting and contact-making participant through that inter-face as the first or introductory point of contact. Anything can function as a contact interface, shaping this contact in different ways through its character or quality, and affordances, functioning as a contact tool or even a catalyst.

In light of this, in order to understand more about the affordances of specific notational traces, the question regarding the musicians’ role in the performance and their relation to what I had notated could be reformulated: *What kind of contact interfaces do notational traces provide, in which ways do they function as a contact tool between the participants of a creative situation?*

6.2 *Circular Experiments I-III* and the *Birgitta Flick Quartet*

As a starting point for reflection serves the already mentioned experimentation with the *Birgitta Flick Quartet* that happened at different points during the research period, with the main part in May and June 2022 that led to *Circular Experiments I-III* (Flick 2022c; Flick et al. 2022a; Flick et al. 2022b).⁵

The quartet was founded in 2010 since I had longed for a group with an approach that would open up all parameters or aspects of a piece of music to spontaneous collective exploration, including literally any parameter or aspect, even the pieces’ formal course. Since 2016, the group consists of pianist Andreas Schmidt, bassist James Banner, drummer Max Andrzejewski and myself,⁶ the three of them being influential band leaders, performers and composers within the German and European jazz scene, and especially Max and James working quite diversely between different musical traditions. Since 2021, the equally influential drummer Roland Schneider works additionally with us as a “permanent substitute member.” Though there are often quite large breaks between concerts or projects, playing together and exploring notation through playing has during all these years been the artistic thread that formed the main ideas and questions of my professional practice as both a saxophonist and a composer. It was for this reason that it was especially important to include this group in my experimentation and to undertake the series of *Circular Experiments* with these musicians.

For these experiment series, I set up a new, twofold, iterative cycle, each round consisting of a combination of an individual work cycle of myself and one or two playing situations of the group, thus going back and forth between creating certain musical material individually and testing it through performances with the group. The notated material developed incrementally in each round of the cycle through myself listening once or maximum twice to a recording of each performance while notating—transcribing—what inspired me most in that recording, as well as taking this as a basis for my creating of the new notation. The complete working schedule evolved as shown in Figure 6.1, p. 82.

Circular Experiment I, the initial notation for the experiment, can be seen in Figure 6.1, p. 83 and is also provided through the following link.⁷

the ability to both establish and dissolve relations with one’s surroundings” (ibid., p. 9, translation aided by DeepL, 20250610). “*Liv har således med krafter och förbindelser att göra och det vitalistiska är att betrakta som förmågan att både upprätta och avveckla relationer med sin omgivning.*” (ibid., p. 9)

⁵This experimentation was a part of the project *Circular Composition: Erweiterung*, funded by NEUSTART KULTUR – DMR Stipendienprogramm 2022, by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, May–August 2022. The other resulting pieces, mainly *Color Studies #10 (For Leslie and Paul)* (Flick 2022e), *Color Studies #13* (Flick 2022f) and *Experiment IV* (Flick 2023b), will not be reflected on here since they mainly confirmed the findings discussed in this chapter. Nevertheless, notations as well as recordings from different points in their poiesis can be found in the Research Catalogue exposition as well (see appendix for separate link).

⁶While Andreas and Max were in the band from the beginning on, there were two changes of bassists in the first years, with Marco Chacón being a founding member on bass, but shortly after the ensemble’s start being followed by Andreas Edelmann who was with us from 2011–2015.

⁷The text instruction—that includes a typo and is a quickly written colloquial description—translates to English

Date	Occasion	Participant	Activities	Resulting trace
20220508	Individual work session	Birgitta	Playing piano, notating	Handwritten sketch, printed notation <i>Circular Experiment I</i>
20220508	Concert Jazzkeller 69 e.V./Industriesalon Schöneweide, Berlin	BFQ (Roland)	Playing piano	Recording
20220618-20	Individual work sessions	Birgitta	Listening, notating	Handwritten sketch and notes, Finale file <i>Circular Experiment II</i>
20220620	Concert A-Trane, Berlin (Andreas Schmidt & friends)	BFQ	Playing	Recording
20220626	Concert JazzBaltica, Niendorf	BFQ	Playing	Recording
20220628-29	Individual work sessions	Birgitta	Listening, notating, playing piano-singing	Handwritten music notation and notes, Finale file <i>Circular Experiment III</i>
20220629	Concert Donau 115, Berlin	Birgitta	Playing	Recordings (audio, video)

Table 6.1: Activities and traces during the quartet's *Circular Experiments*

Circular Experiment I, notation



→ der obige Akkord ist der Ausgangsakkord. Wir beginnen, ihn in dem vorgegebenen Rhythmus zu spielen. Nach und nach ändern wir einzelne Tonhöhen, ergänzen welche, entfernen welche. Nach und nach dürfen wir rhythmisch etwas hinzufügen oder verändern oder eine kurze „solistische“ Sache spielen – und nach und nach fallen all diese „Regeln“ weg und wir schauen, was daraus wird...

Figure 6.1: *Circular Experiment I*

In the table in Figure 6.1, p. 82, this notation is described as “text instruction, chord and rhythm in music notation.” Something was holding me back to classify it as a specific notation form. Also, its affordances seemed unclear. To understand this issue better, it is necessary to have a closer look at what function notation had for us as a group and for myself, how it differs from the other notations of this experiment and in relation to our usual repertoire as well as to reflect on the dismissed terms and their relation to the other *Circular Experiments*. However, a most general question has not been posed yet. What exactly do I mean by notation, what do I do when I notate?

6.3 Lead sheets

When I notate, I indicate, I mark, I brand, I signify, as the latin etymology shows. I identify, I record, thus I remember. I delineate and I describe. I note or observe something. Important is also: as any activity, notating never happens as an isolated activity. It is always connected to other activities and mostly to purposes other than the notating itself: I always notate *something* and *for* someone—and this something is on the one hand directly formed by the interaction of my body-mind unity with the tools of notating, on the other hand by all my lived experience that has led to the necessity to notate. Thus, the notational tool and the systems of symbols I choose and create to convey meaning about something to someone are shaped by my activities and embedded in the communities I interact with, even if I notate just for myself. In all notating, not only the participants of the specific creative situation of notating, but also one’s immaterial surroundings take part in notating, especially the cultural-semiotic background and all other dimensions of one’s personal web

as following: “the chord above is the starting chord. We begin to play in the prescribed rhythm. Incrementally, we change single pitches, add some, take away some. Incrementally, we are allowed to add or change something rhythmically or play something ‘solistic’—incrementally, these ‘rules’ are omitted and we see what happens with it.”

of artistic practice. This is equally true for the process of meaning-making of a notation. Thus, a shared esthesis of a notation can only take place if there is a shared lived experience of how to make contact with symbolic forms and thus also such a notational trace—such as when parts of that web of artistic practice are shared, through for example a shared experience of playing together and making contact to a trace together through playing together as in my quartet.

Thus, when notating *Circular Experiment I*, I chose symbolic forms that all of us were familiar with and that therefore led to a certain expectation or anticipation of how we would interact with them—not in regard to what we would exactly do, but in reference to how we in other situations make contact to such a notation and through that with each other. However, this notation was different from the ones we usually engage with in that group, while not different from what we encounter or create ourselves in other contexts of our practice. Usually, the notations we interact with together are different manifestations of lead sheets and it is the horizon of their appearance and affordances that the ones resulting from the experimentation need to be looked at. To give a starting point for our “usual” lead sheet practice and where it comes from, it might be useful to recall a few landmarks of the lead sheet’s development.

Philipp Teriete describes how the lead sheet notation form seems to exist since at least the early years of the 20th century when it was already used in “American Vaudeville” (Teriete 2020, p. 287). From the 1940s on, it spread as notation standard especially for small jazz ensembles; at first through George Goodwin’s *Tune-Dex*, a collection of cards that he had invented in 1942 as a tool for the music industry to gain a quick overview over then popular songs (ibid., p. 282), then through the cards’ frequent use by musicians and the *Fake Books*⁸ that developed from there (ibid., pp. 282–286). It is also the *Tune-Dex Cards*’ structure and information and parameters of a song that still prevail. Goodwin collected on one side all valid copyright information of popular songs, while on the other side he printed the melody and the lyrics of the refrain of the songs together with chord changes (Kernfeld 2006, pp. 2–5).⁹ If I am not mistaken this contributed also to why it is until today mostly the refrains of the songs that are used by the jazz musicians for improvisation.

It was then in the middle of the 70s the first Real Book came into being, made by two students from the Boston Berklee College of Music with transcriptions of recordings of well-known “standards” from the Great American Songbook (as this open canon of popular songs between the 1930s-60s is called) and original compositions of established jazz musicians began to circulate (Teriete 2020, pp. 286–287). Through this process from the *Tune Dex* and the—now multiplicity of—real books, some still actually illegal, but nevertheless applied and even provided through libraries officially anywhere in the world (ibid., p. 287), the notation form established by the *Tune-Dex Cards* unified and took on a life on its own. The ubiquitous books contributed largely not only to the unification and spreading of the lead sheet (ibid., p. 286), but also to establishing the repertoire considered as a worldwide canon in jazz today.¹⁰

Teriete describes the still ongoing practice cycle of reciprocal influencing—through transcribing scores and records to lead sheets, playing and recording them, transcribing anew these records to lead sheets and so on (ibid., p. 287)—that the above-described development of the real books had set in motion and that also I have been educated in.¹¹ Reformulating this description through the terminology established here could sound as following: A still ongoing iterative cycle of reciprocal influencing through going back and forth between processes of esthesis and poiesis was set in motion. Esthetic processes happen through reflecting *on* a notation *through* making contact with

⁸The saying “‘to fake it through a part’” existed already in 1878 in the context of acting in “Variety Shows” and “Minstrel Shows” (Teriete 2020, p. 288) and means “interpreting this [part] more freely” (ibid., p. 288, my translation) with that special (tacit) knowledge that is required when having to deal with a notation that only provides certain elements of the music that shall lead or guide the musician. “The term lead sheet originates, according to Christensen, probably in the ‘leader’ of the Vaudeville orchestra or the band who played the lead part and also was in charge of the arrangements” as Teriete explains, referring to Axel Waldemar Christensen (ibid., p. 289, my translation).

⁹Interestingly, but consistent with the cards’ original function, for Goodwin himself, the side with the copyright information seemed to function as the front,, and the melody and the lyrics side as the back (Kernfeld 2006, p. 21).

¹⁰There are initiatives to diversify this canon in reference to the authors that are represented (or not represented). An important contemporary contribution to name is for instance *New Standards: 101 Lead Sheets by Woman Composers*, initiated and collected by Terri Lyne Carrington (Carrington and Branch 2022). Another example is a current artistic research project of Monika Herzog’s at JAM MUSIC LAB in Vienna, *New Standards in Europe: Lead Sheets by Female Composers*, (see JAM MUSIC LAB Private University 2024, for more information)

¹¹For a broader, sociomusical reading of this cycle or oscillation, but nevertheless in regard to what is ongoing musically, see (see Born 2005, pp. 27–28).

it—playing it—and through transcribing as reflecting *on* a recording. However, these function at the same time as poetic processes happening through that reflecting *in* interacting with a notation as a player or reflecting *in* interacting with a recording through transcribing-notating. It is again a constant movement and relating between individual creative activity—transcribing or notating—and collective creative activity—playing and recording together—through the contact-making with these notations.

For further reflection on this cycle, Charles Seeger's differentiation between prescriptive and descriptive notation can be useful to apply and which Nattiez himself also links to the terms of poiesis and esthesis. Seeger understands prescriptive notation as a “blue-print of how a specific piece of music shall be made to sound,” while descriptive writing is “a report of how a specific performance of it actually did sound” (Seeger 1958, p. 184)—with prescriptive notation relating to the poetic and descriptive to the esthetic dimension (Nattiez 1990, p. 73). Through this creation process of the lead sheet “from the specific to the abstract-general back to the specific” (Teriete 2020, p. 287, my translation)—or, from descriptively notating to prescriptive notation and back to the descriptive—an ongoing process of translation is set in motion. The ability and ever-ongoing activity of *retracing* and performing codifications and de-codification is one of the most central (implicit) skills and practices that jazz musicians acquire through their practice.

Through this constant involvement in shared esthesis and poiesis and the individual activities being so deeply entangled with these collective practices as Faulkner describes it so vividly (see p. 79) certain specific shared practices of relating to these lead sheets of the Great American Songbook in their various shapes and thus also for any other jazz lead sheet have established and also form the roots for my and the quartet's doings.

One core element of this practice is to loop the form of these lead sheets. This is often a form of 32 bars in the shape of AABA, AB, or another established form such as some version of a blues form of 12 bars, or a 32-bar form with a prolonged last part resulting in 36 bars as in *All the Things You Are* or *I Remember You*. The first time the *head*, the melody of the form is presented (and is rarely taken literally, it functions rather as a starting point). Then, band members take turns in playing *solo*s over that melody's harmonic form with the knowledge of the melody as a tacit or explicit background for that—how tacit or explicit this is varies on an endless spectrum from occasion to occasion—followed by another presentation of the melody.

There are also specific common ways of beginning such a standard tune¹² or ending it. A tune can be counted off by an ensemble member and already begin in the tempo it then shall be played in (and traditionally, a tune played *in time* stays in that same tempo. A *ballad* could start rubato before establishing the time in the B part or at another prominent place, there could be introductions such as specific *turnarounds*, which are often comprised of the last bars of a song and looped. To end the song, the same or another turnaround or a ritardando before the last bar could occur—often “intro” and “outro” are the same. Especially in a ballad, a cadenza on an inserted fermata of the penultimate chord by a soloist could be added, as could any other established ending. Certain tunes are played with inserted interludes between the original form parts, for example between the soloists, exclusively after the solos, or before the head (such as the transition parts in *In the dark*). There is a certain standard for solo orders, and how to accompany them. For example, in a faster swing title, the accompaniment of the first solo by for example the saxophone of the band could start in a half-time feel, and at some point, the bassist would merge into a walking bass. A drum solo could consist of *fours*, each soloist taking turns to alternate four bar solos accompanied by the band with the unaccompanied drum solo and so on. Certain songs establish through that above described cycle of transmission even several keys as standard keys for performance (such as *Embraceable You* or *It Could Happen to You* that are common both in Eb and in C)—while the performer of such a tune in ideal case anyway has to know all tunes in all keys in order to be prepared for adjusting their range for singers, or because it is a good training to transpose them.¹³

¹²The terms of the song or the tune could be used interchangeable. However, they are referred to as tunes in the following, since that's how I know it from most American-speaking jazz communities I have worked in.

¹³It is also known that certain musicians preferred certain songs in certain keys and this could contribute to establishing such standards, although it is not always clear why certain keys were chosen. Sometimes, this seems to be related to a certain Spielgefühl—bassist Don Messina said that “Sal [Mosca] sometimes wrote lines in keys other than the original because he liked how the line sounded there and how it felt playing it in that key” (email to

To express oneself musically in that world of the Great American Songbook and all specific traditions which evolved from there and use lead sheets implies therefore always a certain classifying when coming in contact with the notation for the first time. This is of course true for the contact with any notation or with any symbolic form, since it always has to be given a horizon as Nattiez formulated it. In order to be able to connect to the specific tradition of a notation, all its signs have to be put in relation to one another and to a specific way of interacting with them. In other words, it is always necessary to construct or reconstruct interfaces for interaction through these relations, and to thus classify corresponding sets of interaction. However, in the case of the lead sheet this is quite extreme and stands in the foreground of engaging with it, since it—in contrast to notations such as scores or single parts of Western classical music—is “a form of musical shorthand that only depicts the melodic and harmonic framework of a composition” (Teriete 2020, p. 277, my translation).

A glance at how the melody is notated, and what kind of harmonic symbols are used will reveal the usual way of engaging with the lead sheet. This includes aspects such as the usual style or tempo, how “literally” the melody’s pitches and rhythm will be played, if eighth notes are swung or even, if the harmonic structure is a superimposed or a basic one, and which kinds of intros and outros, as well as accompaniments. In ideal case, one would know a great deal of recordings made of that song, but if not, this tacit knowledge of being able to “classify” the songs elements will serve as a basis for playing and functions as “formal propositional knowledge” that acts in synergy with all forms of the “artistic practical knowing” (Zembylas and Niederauer 2019, p. 105) (see *ibid.*, pp. 80–110). Nevertheless, it should also be pointed out that this knowledge also must be accompanied by a thorough familiarity of the specific interfaces of interaction of the Western classical music notation tradition. While most lead sheets apply signs for articulation, dynamics, or any kind of proposed expression only sparsely, the lead sheet is nevertheless embedded in this notation tradition and they thus belong to the repertoire of signs that potentially can occur. Also, as also my experimentation and artistic practice shows and it will be explored in the following reflections, musical and thus notational traditions intersect increasingly, thus, also notation conventions such as those from Western (contemporary) classical music and jazz inform and transform each other. While one does not necessarily operate according to these traditions, it is necessary to be able to decode these potential implications and use that knowledge as the background for interacting with others and recognizing each others musical behavior. Listening to the other musicians relating to the lead sheet’s parameters functions as a starting point for understanding how much or what elements of shared tradition there are between the members of the group—for then understanding the framework one can move in. In other words, reconstructing their esthetic in order to interact in a similar way with what has been recognized as the lead sheet’s interfaces.

A lead sheet thus affords interaction between the musicians and provides musical “material” and potential interfaces for that. But *how* to interact and how to make contact with the material, how to relate to the lead sheet’s interfaces and what is considered an interface is not afforded by the notation, but through complex tacit knowledge and familiarity, acquired through the involvement with its tradition. Important is also: since one only through extensive research can know if a tune from a Real Book (or also often with other lead sheets) is a transcription from the “original,” in the sense of the first version of that song, or has been made by the creator, thus in which way the notation functions prescriptively or descriptively, one can not be sure of the authority and the function of the notation in the tune’s creation. Thus, it is always necessary to listen to different recordings in order to get to know a tune thoroughly.

To express this through Nattiez’s terminology, the lead sheet of a jazz standard functions indeed

author by Carol Liebowitz in conversation with Don Messina, May 16, 2025). Messina and pianist Carol Liebowitz also “guessed maybe a famous musician (Billie [Holiday], others) played in a certain key and it just stuck that way” (*ibid.*). Lennie Tristano, Charlie Parker and Kenny Clarke would e.g. play *All of Me* in Ab instead of in C as when recording it in 1951 (*ibid.*, see also <https://www.youtube.com/watch?v=x382b62Ghrs> [accessed 20250603]) and this is still a very common preference, also concerning myself. Carol Liebowitz guessed that certain keys could also be related to certain well-known *lines* or contrafacts created in specific keys (*ibid.*) and I assume that all these possible reasons are probably quite entangled. Then, certain tunes were also played preferably in certain times, *Play Fiddle Play* is e.g. no longer as popular as it was in the 40s, but it is nevertheless transferred through functioning as the harmonic basis for Lee Konitz’s line *Kary’s Trance* in A minor or Ted Brown’s *Jazz of Two Cities* in G minor (*ibid.*). Finally, all this leads also to certain tunes being played preferably within certain scenes as specific communities of practice.

as what he called “neutral level,” a symbolic form’s “*trace* accessible to the five senses” (Nattiez 1990, p. 12) which is “not in itself the bearer of an immediately decipherable meaning” (ibid., p. 15). However, in the case of such jazz standards, the lead sheet should probably be considered as just one part of the neutral level, the other part being available recordings. A lead sheet is thus an excellent example of how poietic and esthetic processes are ideal types of a model and never separable.

To summarize, lead sheets are made to give an overview and thus must be as short as possible, but do not have the goal to be comprehensive. They convey basic structures of the tunes to musicians that preferably know the songs and are otherwise at least familiar with the practice of how to interact with the song’s parameters. The lead sheet is not a notation to be used as a blueprint for performance, it is a tool for documenting, for learning, or, for the situation of having to play a song when the internalization of the song is not yet fulfilled. Also, it is important to contemplate not only the lead sheet’s affordances for making contact, but to revisit how we as a human body-mind-unity with our personal web of artistic practice are formed by the activities and contacts through the “[l]anguage, tools, and collective practices” (Noë 2010, p. 67) that we make throughout our lives. Thus, how does using lead sheets form one’s artistic practice and perception?

A particularity of the lead sheet is the separation of musical parameters. To a much higher degree than other notation forms using the five-line staff, the lead sheet applies different symbolic systems for depicting different musical parameters. Common combinations include five-line staffs for the melody and different systems of chord symbols for the harmonic course of the piece, together with some key words as text instructions or descriptions for possibly a style or a tempo of the piece (“Bossa”, “Ballad”, “Med. Swing”), or—mostly in the “legal” Real Books, such as the three volumes of “The New Real Book”—giving hints at the arrangement, the instrumentation or the form of the piece.

I assume that this separation is also either partly responsible for, or the result of learning or playing practices of separation such as creating *contrafacts*, in my tradition called *lines*. In the 1940s, Charlie Parker and others had started to explicitly not only vary melodies or accompaniments, but also play new melodic lines as new heads of songs, sometimes also with superimposed reharmonizations.¹⁴ Both writing lines and practicing reharmonization stayed common practice throughout jazz history until today, resulting for example in the concept of Lennie Tristano’s and Connie Crothers’ *altered harmony* as an independently moving harmonic counterpoint (Crothers n.d.),¹⁵ their and others’ educational use of line writing, as well as repertoires of completely emancipated harmonic forms for improvisation, such as the 12-bar blues form or the harmonic form of Gershwin’s *I got rhythm*, that leads a life as *rhythm changes* which is mostly completely independent of the song’s melody.¹⁶ All these practices function as a creative and generative bridge between practices and repertoires of different generations and between individuals and communities, even contributing to preserving or keeping melodies of songs alive that have lost popularity long ago, such as the mentioned example of *Play Fiddle Play* (see again p. 86).

In combination with what is omitted in the notation, this described separation leads to a huge level of abstraction of parameters and musical material. It is thus the omission of information and the combination of symbolic systems that afford meaning-making and making contact between musicians. Thus, a lead sheet fosters musical learning and also practices that aim at the abstraction and separation or independence of musical material.¹⁷ This is connected to the overall goal of being

¹⁴See also the already quoted chapter by George Lewis (Lewis 2002, pp. 94–95) for a closer description of Parker’s and the other Bebop innovators’ doings, as well as a musical and sociocultural contextualization. Most important for my research is to acknowledge how “Bebop raised the stakes in the game of cultural thrust and parry to a new level of intensity, providing models of both individual and collective creativity that were adopted and extended during later periods in improvised music” (ibid., p. 95).

¹⁵*Altered harmony* is a concept she credited to Lennie Tristano and had started to introduce me to, a concept that does not substitute harmonic progressions and differs from that “because the point of resolution is bypassed. When the chord progression does not resolve when expected, it goes into an independent harmony line, following its own logic of motion until it results into the original harmony. This becomes harmonic counterpoint” (Crothers n.d.).

¹⁶Contrary to Teriete’s statement (Teriete 2020, p. 301), not all lines or contrafacts are written to these two forms, there are many such as the ones mentioned on p. 86 and there is an enormous number of lines written to other harmonic forms.

¹⁷This culminates for instance in the app *iReal Pro*, which, I think, for copyright reasons does not depict the melody of standards and solely shows chord symbols, and, if preferred, a selection of scales or tablature—all based on what is known as chord scale theory which systematizes relations between chords and scales and has become the

as flexible as possible in the moment of improvising and interacting with others.¹⁸ Or, if inverting the perspective, because all musical parameters of a jazz standard are open to improvise with, it is most effective to notate in a way that separates them and does not carry “unnecessary” information about the expression or course of the music.¹⁹ Teriete even points out the potential tendency to “vertical harmonic thinking” as well as the emphasis on the harmonic root—what he calls “*Grundtonlastigkeit*” (Teriete 2020, p. 295).²⁰ Thus, polyphonic thinking and proficiency in voice leading are not afforded by the lead sheet. Instead, they are part of the tradition of relating aurally to others within the tradition in which it is embedded in.

Thus, though many aspects of the lead sheet’s development remain unclear,²¹ it is obvious that it has influenced the musical thinking of generations and shaped whole genres of music, thus also my own thinking and the quartet’s shared practice.

6.4 The lead sheet as an artistic decision

With all of us sharing a rootedness in playing jazz standards, but equally being active as composers for both improvising and non-improvising groups also from other contemporary music practices, we are used to lead sheets and their tradition as well as experimenting with different forms of notation. Using the lead sheet notation as a foundation of notating for this band had thus quickly turned from a mere habit or necessity into an artistic decision. There is one important main difference between playing my original lead sheets with this band and when playing with those of jazz standards. In contrast to the lead sheets of jazz standards, the notation in my pieces functions as the sole explicit reference point and physical trace or “neutral level” for the piece. We tie in with the shared aural and oral tradition of lead sheets and the meaning-making of notation within that tradition as described before, but do not take with us the Platonist concept of a piece of music resulting from there. If there is a recording by ourselves, we can obviously not prevent ourselves from tacitly or explicitly referencing to it. Also there are certain tendencies of solidifying certain ways of playing certain aspects of certain songs that we allow or do not prevent to happen. Still, these tendencies are part of that concept of deciding in the moment of playing what will happen and that, at least explicitly, also includes repetition of established ways of making contact to the notation and each other.

In sum, we do not only vary the notated song forms with spontaneous intros, outros, or interludes or through varying the lengths of parts or the energetic course of a piece, but experiment even with

standard in jazz education worldwide—and that influences jazz learners with all described principles of lead sheet based thinking and learning as Teriete describes it clearly (see Teriete 2020, pp. 302–303).

¹⁸This is reflected also in most jazz education, as also my own at mainly Jazz-Institut Berlin (UdK/HfM “Hanns Eisler”), the Royal College of Music in Stockholm (KMH) and through studies with pianist and improviser Connie Crothers in New York City, although the studies with her functioned in quite different ways compared to my academic education. However, this education, at least as I have experienced it, includes therefore to a large part the practicing of independency and flexibility of handling musical parameters, such as playing melodies and harmonic structures in all keys, in different meters and tempos, rubato or with a regular pulse, adjusting melodic fragments through different chord structures.

¹⁹This is of course not only true for lead sheet notation, but also for other notation traditions that are embedded in an especially aural-oral tradition of practice.

²⁰This refers also more generally to the issue of hierarchy between pitches that chord symbols necessarily effectuate, in contrast to an array of vertically piled pitches, as I realized when talking to Peter Knudsen on April 18, 2024 (Knudsen 2025, pp. 2533178/3026579/0/0). For further immersion in the topic, I refer to his reflections on lead sheets in comparison to other notation forms and on chord symbols (see e.g. ibid., pp. 2533178/3024535/0/0, 2533178/3026579/0/0).

²¹Teriete raises important questions, when reflecting how “In vaudeville, the early ‘lead sheets’ were primarily intended for pianists to accompany the ensemble and/or soloists, who usually played or sang from notated parts. In small jazz ensembles, however, all musicians usually play from lead sheets. The question therefore arises as to when exactly this specific performance practice became widespread: in the 1910s and early 1920s or only with the ‘*Tune-Dex Cards*’ and the ‘*Fake Books*’? Were entire ensembles already occasionally playing and improvising to ‘lead sheets’ in vaudeville” (Teriete 2020, p. 304, translated with DeepL, 20250530)?

„Die frühen ‚Lead sheets‘ waren im Vaudeville in erster Linie für Pianisten gedacht, zur Begleitung des Ensembles und/oder der Solist*innen, die in der Regel aus ausnotierten Stimmen spielten bzw. sangen. In kleinen Jazzensembles spielen jedoch üblicherweise alle Musiker*innen nach ‚Lead sheets‘. Es stellt sich daher die Frage, wann genau sich diese spezifische Aufführungspraxis verbreitete: schon in den 1910er bzw. frühen 1920er Jahren oder erst mit den ‚*Tune-Dex Cards*‘ und den ‚*Fake Books*‘? Spielten und improvisierten möglicherweise schon im Vaudeville gelegentlich ganze Ensembles nach ‚Lead sheets‘?“ (ibid., p. 304)

a piece's form to such a degree, that the hierarchy of form parts and all musical parameters in a piece become subject to spontaneous collective decisions. Thus, although my notations propose a formal course and development, I expect us as a group to negotiate a piece's course each time we play. This results in a constant superimposition of new formal layers, and a certain alertness in listening to each other, as well as a relation between us, that is, despite the interaction with something notated, primarily an aural one.

As a result of this practice, I had over the past years begun varying different parameters of lead sheets, such as omitting or adding information that usually would be contained, leaving out information about a style or a tempo to omitting chord symbols, writing out a piano setting that we would all use, or writing single melodic lines plus added material in text or five-line staff notation. More and more, we would include other references and especially through-notated music, such as notations of Béla Bartók's *Mikrokosmos*²² or my septet versions of *Dalarna*,²³ and treat these notations as lead sheets as well. The writing and playing of my own or others' lines was also a part of our shared practice.

Thus, this previously shown first notation for *Circular Experiment I* (see Figure 6.1, p. 83) differs in two important characteristics from all aforedescribed notation so far made for the quartet and from how I have described lead sheets. Firstly, there is no through-written course of the notated material. The relation between the chord and the rhythm is only made through the text instruction that proposes to begin by playing the chord "in the prescribed rhythm" (Flick 2022c), the material needs the performers' exploration in regard to any thinkable musical parameter to become connected and to form a course. Secondly, it is new for this band to engage with a notation that was not based on a melodic line, in the simplest meaning of a series of consecutive pitches.

Interesting here is as well, that despite the sparseness of material and no preconceived relation between them, the piece's course seems to be much more defined than the one of a lead sheet. The text instruction marks a clear path, at least for the beginning, which is more than we usually know about a piece before we begin to play it. As was often the case, there was no further discussion on how to interact with the notation before playing it for the first time except for checking that we were in agreement about the notated tempo. It is of course not possible to deduct something causally from having made one notation and two recordings,²⁴ but what is possible to be done, is to become aware of and reflect on aspects of our playing in relation to how I usually experience it, as well as when experiencing the other two *Circular Experiments*, both as a player and as a listener of our album and live recordings over the past years.

What is it that catches my attention when listening again with a temporal distance of more than two years to the playing situation of the recording of the performance of *Circular Experiment I*?

Circular Experiment I, Birgitta Flick Quartet at Industriesalon Schöneweide, 20220508

Most interesting here for me is how the piece incrementally unfolds from the first two single beats that Roland, the drummer, begins the piece with by playing twice the notated rhythm, choosing two different single sounds (beat 1 on the snare rim and beat 3 on the floor tom). When James enters at the third time with an accentuated and bowed long pitch of F, Roland begins enriching the groove, while James after two times varies the placing of the next F by putting it on beat 3 instead of beat 1, making the period two beats longer. The next of his long pitches is then two more beats later, the period thus becoming two bars. That's also the period that we keep for a short while, when Andreas and me enter after one more time (me with another long F and him with an arpeggiated sound of F and F#). As soon as Andreas and I enter the musical Geschehen, I hear these first bars of the piece in retrospect as an introduction and begin structuring what I hear through the varying instrumentation. The notated starting point is so sparse and repetitive that even such small changes in instrumentation or variations of period lengths or pitch, as I create after

²²Major & Minor (Birgitta Flick Quartet 2018)

²³*Dalarna* is music I composed based on recordings and notated transcriptions of traditional music from Dalarna in Sweden and that was assembled to a suite for the album of the same name that appeared in 2016 (Birgitta Flick Quartet et al. 2016).

²⁴Though not so important for my reflecting here, it should for the sake of completeness be mentioned that we did a short test of playing the material of *Circular Experiment I* before performing and recording it, thus I did actually work with two recordings, even if I reference mostly to the performance recording.

two periods when changing from F to the C#, contribute highly to the piece's form. It seems as though we are listening quite tentatively to one another and the *Geschehen* that we create. Also, we begin varying what is notated from the very beginning on. James seems to decide for varying the relation between the notated chord and rhythm, with the chord not being played on each notated beat, but only on some, and also to not enter immediately as Andreas and I do. Andreas seems to decide not to begin by playing the whole chord, but chooses single voices. Roland seems to explore how to embellish the notated beats. I seem to adjust to different layers and play around with my intonation, and also seem to take the decision to join James on the F and not play it in the notated rhythm as a very first action. Also, we open up the pitch range quite early and move away from the notated chord to e.g. adding a G, which Andreas takes up and uses as the origin to juxtapose a superimposed new pulse that all of us engage with in different ways.

It is not of interest for this research to go into more detail concerning our doings here, but when reflecting on the whole recording, it sticks out that we develop and shape a musical course that can be perceived as some kind of (half-)elliptic shape: a large building up and densification of sound and melodic, harmonic and rhythmic new material that we develop incrementally for a while before dissolving it into something new, and at the very end returning to single pitches from the chords and the single beats from the rhythm and the sparse instrumentation. Within that elliptic course, we stay motivically and soundwise in all these explorations close together—never building more than three different musical layers and keep the originally notated rhythm and pitches as a thread through the piece, always juxtaposing or referring in our new material to it. In that way, we create some kind of transparent contrapuntal web, relating to each other as four single voices where rarely more than two musicians act homophonically or work on the same material—and often, only a duo or trio plays. I do indeed recognize behaviors and ways of making contact that often happen in our practice, such as James and myself exploring pitch and sound unison relations and deviations in flageolet register together. Occasionally, we assume the traditional roles as members of a jazz band, such as when Roland begins with the notated rhythm, or I leave James' and my unison explorations and try out longer (flageolet) melodic motifs toward the piece's end on top of his long notes which could be understood as a top melody, thus as something that a saxophone traditionally would play. However, we never establish the structure of a band with such roles in the long run—though Roland begins setting the pulse and the rhythm as a drummer often does, we all contribute to the rhythmic web and do not *accompany* each other by the means of our traditional roles. If roles crystallize, they change constantly and do not establish simultaneously.

Also, though this breaking of musical roles has been long a part of the band's characteristics, the absence of role-inducing relations within the notation could be one of the contributions to intensifying this behavior that happens here. The notation uses the piano grand staff which traditionally is associated with the division of voices between the hands or specific functions of material, such as reading the material in the upper staff as something that is accompanied by the material in the lower staff. However, since the group includes three instruments that normally do not read from this grand staff, this does not evoke strong role connections either. Thus, returning to the issue of the dismissed terms for this piece's notation, because of that non-existing division, or parting, of voices, the term of the *score*—that in English depicts a *wholeness* in the sense of a trace of a piece and in German emphasizes the overview over the *division* of voices or parts and thus is a *Partitur*—is not appropriate either. Neither wholeness nor parts exist.

Lastly, and this is the main contrast in the notation of *Circular Experiment I* compared to a lead sheet, the text instruction embeds the notated musical material in an ambiguous context and thus makes us, despite the sparseness and simplicity of that material and all our explorative behavior with it, be much more *texttreu*²⁵ and faithful to the instruction than usually. It therefore functions prescriptively.

It is interesting to return the term of the sketch or draft in light of the above-made reflections. A sketch is etymologically something that is “made suddenly, off-hand” (Wiktionary 2025), which is definitely true for *Circular Experiment I*. However, despite the sketch's temporal dimension of pointing toward an unfolding in the future, it does not seem to be the right term here since a sketch is usually made to outline a wholeness without too much detail, alluding implicitly to the

²⁵Texttreu here in the sense of explicitly including the notated *Text* into the explorations and even when associating freely and meandering into other musical realms to always bring these other explorations in contact with that text.

Platonist idea of an original version of a piece of music. In contrast, the notation of *Circular Experiment I* shows details, but does not hint at a specific preconceived wholeness. When listening to the performance's recording, it does in some way show one possible course or development of that notated material, but our playing was so much about details and contact-making between material and through that the relating between the musicians, that a sketch does not seem the appropriate term here. It is for this reason that neither the term *draft* as the “rough copy of a writing” or the “preliminary sketch from which a final copy is made” (etymonline 2025a) seems to be appropriate.²⁶ It thus stays ambiguous how to classify the notation form of *Circular Experiment I*.

After this first part of the experiment, I explored the above-analyzed recording through a combination of listening and notating, a *transcribing*, that functioned as the bridge between the collective parts of our creating and my individual creating with the collective trace(s). The combination of these activities as a transcribing seemed to have functioned as both a poietic and esthetic activity. Having myself been part of the recording's poiesis, its esthesis is obviously influenced by my general knowledge of how it feels to play in that band and how I experienced our doings while playing in the performance on May 8th, 2022. At first glance, this activity of *transcribing* that marked the starting point for creating a new notation for the next performance could be understood in the literal sense of the latin origin as an activity of copying. However, looking again, it is a copying as to “write again in another place, write over, transfer” (etymonline 2025k), or, if thinking of the German equivalent *übertragen*, as carrying something across, over or beyond something. In sum, trans-ferring something somewhere from somewhere, resulting not in a sameness—if that would ever exist—but in an activity of *translating*. This implies also the dimension of *transforming* through the continuous dimension of decoding and the encoding. In other words: I carried aspects of meaning that I made from the recording beyond their respective symbolic encoding—here a specific audio file. I decoded from one medium—here sound—and encoded what I had decoded to another one—here language-based notation in the form of single key words or music notation. I used thus both the activity of listening-notating, decoding-encoding as well as the resulting notation itself as an interface and a tool for contact-making to that recording. This emphasizes how transcribing is a creative activity in itself. In light of the earlier-discussed broadened sense of listening-obeying-transforming (see chapter 4, p. 44ff.), it could be understood as a listening to the encoded material as an *obeying* to it that leads to a specific way of transforming a form of media to another one.

6.5 Transitioning between the *Circular Experiments'* notations

After one or maximum two such listening and transcribing sessions, I created a new notation as quickly as possible and repeated this cycle once more, resulting in the notations of *Circular Experiment II* and *Circular Experiment III* (see also again the table in Figure 6.1, p. 82). What can be said about the function of these new notations, their notational form, and their affordances for interaction? What can be said about the relation between the three notations of the experiment?

Firstly, returning to the transcribing activity, notating while listening serves obviously a quick documentary purpose. Internalizing the recording completely before creating with its “material” would have been a probably more thorough process but a totally different kind of working process with other goals.²⁷ However, as in *In the dark*, I looked for starting points for transformation instead of trying to reconstruct something as closely as possible when working on *Kumbhaka* (see chapter 5, p. 77). Also, it is the contact-making with and through notating that I was interested in here. Thus, the aspect of movement and *answering* in Rosa's sense (see also chapter 4, p. 45) should not be neglected here.

²⁶It would be interesting to think more about the etymological relation between such a sketch, and the movement of drawing, something that I as a left-handed notator do rarely experience. In relation to the earlier made observations about the musical *Geschehen*, this drawing could be connected to the forces between this *Geschehen* and its human participants and how their whole being is drawn into and directed by it through their listening-obeying.

²⁷This would have moved in the direction of Live Maria Roggen's and Ingfrid Breie Nyhus' earlier mentioned project *(un)Romantic / Improvising Interpretation* where they explored processes of handing down and interpreting music through improvisation (Roggen and Nyhus 2024).

Both in the making of *Circular Experiment II* and in the next round when making *Circular Experiment III*, I enjoyed both the *pleasure-inducing touch* (see chapter 3, p. 39) of the both affect-causing and affect-presenting quality of making tactile-acoustic contact with the evolving musical *Geschehen* and when touching the pen and the paper and occasionally the piano. All activities were again reflective activities in themselves while at the same time functioning as reflections on each other, creating an entangled web of *esthesia* and *poiesis* and of constant translation processes or *Übertragungen* between reflections and different media, notating prescriptively and descriptively at the same time. That all these doings, were enjoyable, also tactiley, and thus even an activity such as the transcribing related this enjoyment directly to what I was creating musically, highlighted once more the *Spielgefühl* and the body's function as a gauge and initiator of creating on manifold levels simultaneously (see chapter 4, p. 49). Also, through notating, a participant of the creative situation was created that was not temporally fleeting, as sound, but that could be perceived and transformed whenever desired. This afforded structuring my imaginations and reflections differently than when engaging with an acoustic trace.

Before looking closer at the notations of *Circular Experiment II* and *III* it is interesting to see what caught my attention when transcribing from the recording of *Circular Experiment I*. As can be seen in my notes (see Figure 6.2, p. 92), there are specific pitches or sound colors, rhythmical perceptions (“vorgezogene Noten”) as well as specific material which specific players had created (the bowed fifth between F# and C# by James or Andreas’ rhythmic model on G) and also combinations of sounds and musicians (“James + Birgitta”) or the notated pitches in the last line.

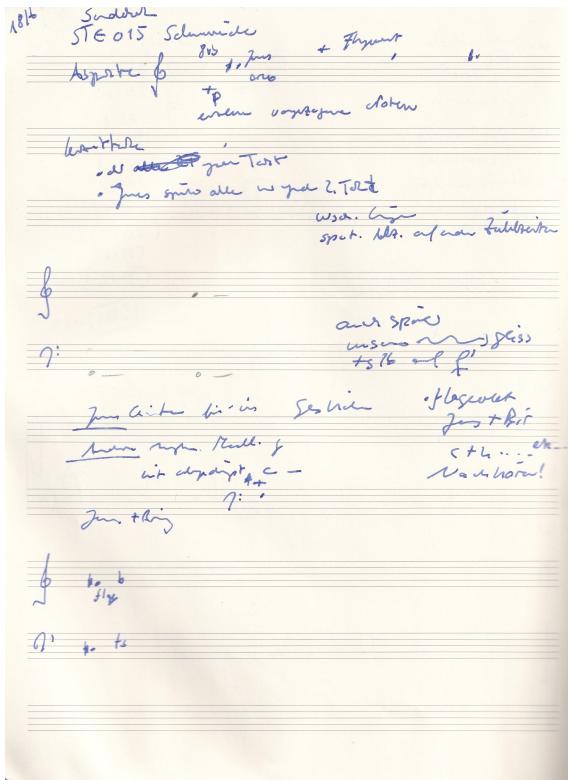


Figure 6.2: Transcription of recordings of *Circular Experiment I*, June 18, 2022

Some ideas for how to proceed emerged from there, shown in Figure 6.3, p. 93. The new notation, made on the next day and the following day through singing-playing-notating, looked as shown in Figure 6.4, p. 94 before transcribing it to Finale.

Transcribing this to Finale was on the one hand necessary for practical reasons. On the other hand, this was a means of structuring and clarifying this notation as a reflecting-on-action and my intentions with the chosen symbolic forms. A notation software such as Finale through its structure that requires complex workarounds as soon as the notated material is for example not metrically

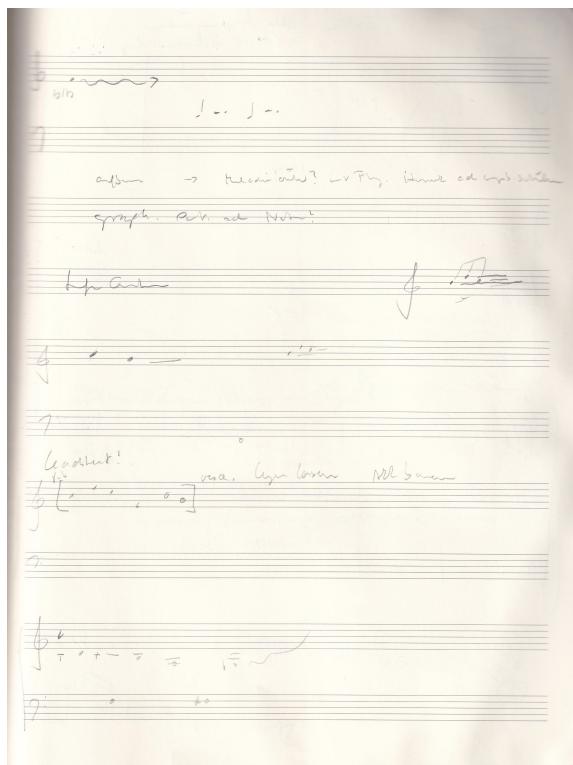


Figure 6.3: First version of ideas for *Circular Experiment II*, June 18, 2022

structured or when using chord symbols,²⁸ obviously forces decisions on for example spacing, meter, or if some material is part of a certain voice or another that could be left open when using my notebook. For the creating, notating in Finale does thus afford and prevent other aspects compared to when writing by hand.

Circular Experiment II, notation

When comparing the notation of *Circular Experiment II* with my notes from transcribing, many elements from the transcription can be found there. Part A and B are based on that separation between the looped rhythm and the long pitches that started with F through James and myself. The idea of the steady pulse and rhythm, at least in notation, was kept, but the note of “einzelne vorgezogene Noten” and the different lengths of periods is reflected in the new vamp or groove in part B that I made from the original one, now starting on beat 1 and consisting otherwise of irregular and differently anticipated beats. The 5th of the original chord between F# and C# is kept and becomes a basic part of the piece—and in part F, the pure fifth of F and C is notated and “can become a basis for something” (Flick et al. 2022a, p. 1). Also, the pitch of F seems to be important, with F2 being the lowest pitch of the notation and also the lowest “allowed” pitch for the pitch variations in part B, which is certainly derived from the variations happening in the recording. I did not take up the flageolets again, but the aspect of sound manipulation as a means of contact-making to other band members is reflected in the glissando arrow that the first F of the piece—the top voice in part A and B, and the G in part D comes with. This relation between F and G is also derived from my notes (from the inserted superimposed G motif by Andreas). The long single melody lines in C and E might be answers to the flageolets and the motifs from the recurrent unison contact with James.

²⁸It is probably not for no reason that after Finale 27.4, there will be no new developments anymore. As of September 2024, when makemusic announced the program's termination, all users were consequently advised to change to another software, something that I had planned anyway in order to find workflows that would fit better to my notation preferences, but not begun yet.

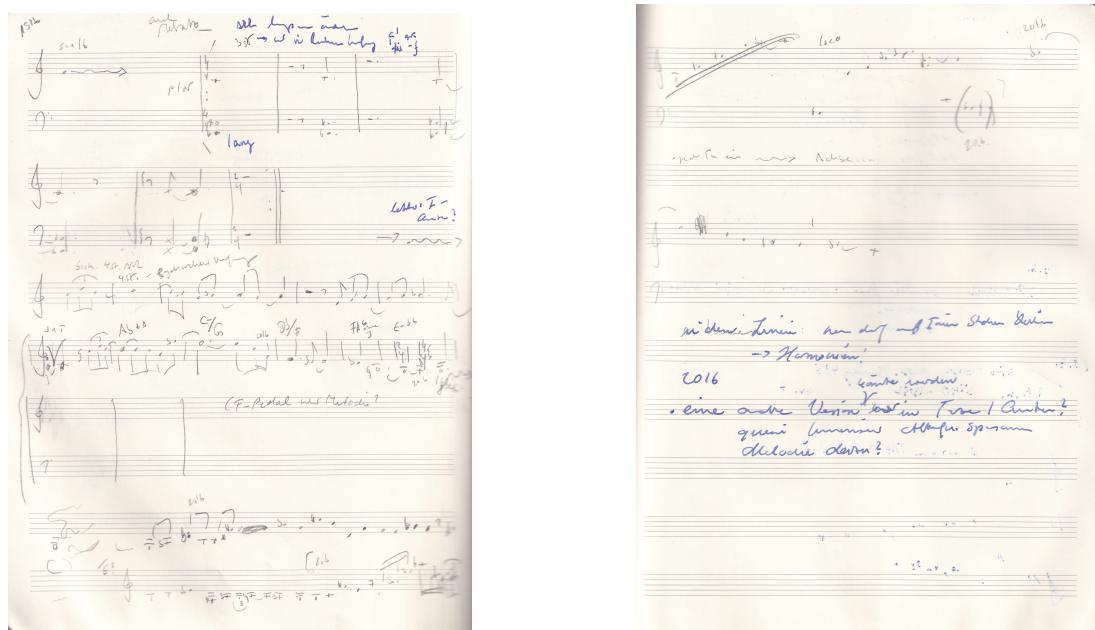


Figure 6.4: Handwritten first version of *Circular Experiment II*, June 19/20, 2022

Besides all those details, how can I describe its overall structure? Most obvious is probably the fact that it begins with a grand staff plus an added single staff on top. The number of staves varies depending on the number of layers that are juxtaposed and the range of the material depicted, but through that new top staff, the first impression is that of a partition of voices and thus more role indications than in our usual repertoire (that either use a single staff or grand staves) and in *Circular Experiment I*. However, through the overall variation of which staves are visible, this impression gets muddled and the impression of a practical solution for depicting superimposed material remains. What is also new in comparison to our other notations are the insertion of visual elements, such as the arrow, and text instructions on what to do and *how* to play or transform musical elements, which support each other. For example, in letter B, the top staff instruction reads, “continue with gliss. or play a counterpoint with long notes based on the quarter-/eighths note pulse,” the one for the grand staff, “After a while, start varying pitches, one by one. At least for a while not more than 3, max 4 pitches. Range between ‘large F’ and c.” (Flick et al. 2022a, p. 1). Under the staves on the second page, there are also some general remarks, such as “If pulse: 68-72 bpm can be good, but also other tempos. Even eights are preferred. As always: parts can be played on top of each other (especially C over B), in any order, pulse/non-pulse. or not played at all [...]” (ibid., p. 2). The whole notation seems to be a combination of lead sheet elements—a melody with chords in C—and notational means from Western contemporary classical music notation—arrows, text instructions, no bar lines—but nevertheless functioning as a lead sheet through the layout with the constant reduction of staves and concentration on pitch, harmony and rhythm. Also, the predominance of separated parameters, such as text that is not connected to specific signs, but to form parts or functions as general “arrangement” ideas stated under the notation contributes to this impression. Also, in contrast to *Circular Experiment I*, most of the notated material is already brought into a relation—pitches that form rhythms and melodies—with all other elements quasi enriching the lead sheet. This makes, for the first time, kinds of musical behavior of the band explicit that so far had only been an implicit part of its sound, such as developing new harmonic courses from single chords as in part F, pitch modulations and other sound exploration, as in part A or D.

The first interaction with *Circular Experiment II* was on June 20, 2022, when we visited Andreas Schmidt at his series Andreas Schmidt & friends at A-Trane, Berlin, the second one happened at the following performance at JazzBaltica on June 26, 2022.

Circular Experiment II, first performance, A-Trane, Berlin, Andreas Schmidt and Friends, 20220620

Circular Experiment II, second performance, *JazzBaltica*, 20220626

The notation of *Circular Experiment III* functions similarly to that of *Circular Experiment II*—with even more elements from Western contemporary classical music notation such as the box notation or the omitted stems and slurs added to the pitches in part C, or omitted staves such as in the notation's last part in E.²⁹ Generally, there is less instruction on how to relate to material than in *Circular Experiment III*. The two texts in the notation read “– verfremden” (Flick et al. 2022b, p. 1), thus “to defamiliarize” in part B before the C part with the box notation, and “improvise” on the arrow that concludes the notation in part E (ibid., p. 2). New here is that the quartet's implicit practice of combining material from different pieces has become part of a notation and thus turned into an interaction partner, since it is made explicit in the general text below the music notation: “All repetitions are potentially open. The order of all parts is also open. Experiment II can also be used” (ibid., p. 2, translated with DeepL, 20251030). Peter Knudsen's term of the *extended lead sheet* (Knudsen 2025, pp. 2533178/3026579/0/0, 2533178/3028503/0/0) could be applicable to both *Circular Experiment II* and *Circular Experiment III*, with different balances between the elements from different notation forms and the first notation of *Circular Experiment II* in my notebook as an outline and thus indeed a sketch or draft for the final notation made with Finale.³⁰

Circular Experiment III, notation

What could be said as a summary for both *Circular Experiment II* and *Circular Experiment III* when referring to Seeger's terminology—because of the iterative cycle between notating individually and improvising collectively, the notations describe our sound and interactive behaviors and at the same time prescribe these aspects as new, transformed *propositions*. Through the classification as a lead sheet, what is notated does not function prescriptively, new relations between symbolic encodings are created anew with each interaction. Thus, these text propositions, as all other material, were notated in order to document and explicitly state important relative behavior and thus propose interfaces for interaction. However, there was no specific expectation of how to interact with them, which correlated with how the band related to the notations, treating them differently with each interaction. Nevertheless, through the experiment, some parts of our shared implicit sound and behavior repertoire became explicit, as well as at least a few aspects of my normally hidden individual creating. The experiment highlighted what kind of interactions have been important in our practice in the time of the experimentation such as displayed in the notations of *Circular Experiment II & III*. Thus, while the notations did not change our practice of relating to them, they did make explicit the entanglement of the group's and my individual poietic and esthetic processes and thus foster these ways of relating. The notations exemplarily induced a new iterative cycle between implicit and explicit behavior, as other recent “glimpses” of our work show, when for

²⁹This time, some material even results from a creative technique originating from there, when the pitch of F that has become even more important for this piece than the one before, is in part C combined with an 11-tone-line that uses the F as a 12th pitch, combining it with the still important G through simply transposing the whole line one step up.

³⁰The quartet experiments are also connected to an experimental setup between February and April 2023 in which I worked with Antje Rößeler, pianist, composer and also a duo partner of mine, in a collaborative composition project *Innen-Außen*, funded by FEB-III, Musikfonds e.V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme. Besides two pieces we created together—*Adventurous Groove* (Flick and Rößeler 2023) was created by myself using a notated groove by Antje and *Bild* (Rößeler and Flick 2023) through Antje using a recorded sung melody by myself—I created *Pulsations*. Drawing on the experiences of the quartet experiments, I explicitly experimented with combining two forms of notation instead of mixing elements. The musical material in the lead sheet notation meets linguistic instructions in the form of text/box notation normally used in Western contemporary classical music. These instructions frame the two lead sheet parts and are also used for the transitions between them—which has strong formal implications. Since the lead sheet parts became inserted in a notation that despite its undetermined parameters has a clear temporal course, the text/box notation “prevents” explorations of the form. The contrast between both forms, and the framing function of the contemporary Western classical music notation, seems to dominate the performers' relation toward the form, at least in my so far made experiences when playing *Pulsations* with Antje and other musicians. The notations and recordings from Antje's and my project can equally be found in the *Research Catalogue* exposition (see appendix for separate link). The recordings originally published on the album *Sending a Phoenix* (Birgitta Flick & Antje Rößeler 2024).

instance looking at the further quartet experiment's notations and listening to our comprehensive recordings of both experiments that was made on June 4, 2024, as well as to the first recording of *Circular Experiment III* from 2023.

Circular Experiment III, first performance, Donau115, Berlin, 20220629

Experiment II & III, Filmed by Ear by BERTA.Berlin, Berlin, 20240604

Interesting also is the huge part the involvement in a piece's poiesis seems to play in the individual esthesis of that piece. To me, making contact with all the three pieces of our experiment feels very different in comparison to the ones from our "usual" repertoire because of all notations' formal openness without a pre-structured formal course. When playing, I hear what we do in reference to how I experience the relations between the notated materials, intra- and intermusically between the pieces, or form parts and how I experienced them while notating. However, this is an impression that is not shared by Max or James (interview with author, September 13, 2023). Since they can never know about the meaning that I as a creator give to certain relations between certain materials, they make new relations in any case. Also, it is noticeable that after the premiere on May 8, 2022, I never proposed to play *Circular Experiment I* again—while we keep playing the other two pieces regularly, mostly explicitly linked together as one piece as done when recording the pieces in the above-linked video in June 2024. It was probably simply not interesting enough for me to relate to the notation again, since it is either interesting with more and already somehow related material to relate myself to such as in the following experiment pieces—or none at all. *Circular Experiment I* had thus indeed been a tool for learning about how we relate to each other and to the notated and to get the experiment going, but otherwise it does not seem relevant enough to use as a reference for playing.

This had also consequences for decisions on if and to what extent the new notations of our experimentation would be tested with others. Some of the experimental pieces, *Color Studies #10 (For Leslie and Paul)* and *Experiment IV*, created after *Experiment I-III* that were not discussed here (see p. 81) were played with other groups, especially with the Stockholm-based Henning Ullén trio with Henning Ullén, Mauritz Agnas and Konrad Agnas during the Stockholm Jazz Festival 2023 (see appendix for details). Firstly, since the interview with Max and James had already shown that the two of them did not experience a difference between interacting with the *Circular Experiments* or others of our quartet repertoire, despite having been part of their poiesis, it was a conscious decision not to include the three *Circular Experiments* in the repertoire with Henning's trio, nor to test them with other groups. When interacting with the remaining notations in a similar way as we did with the quartet, i.e. without specific instructions or oral discourse on how to interact, it was fascinating how, even in this context, all symbolic encodings functioned as propositions, not prescriptions, turning into different kinds of interfaces each time we played, resulting in very different musical Geschehen. This shed light on a previously tacit assumption. Instead of choosing notational traces based on a preconceived notion of how other musicians would interact with them, interacting with any notational trace could serve the purpose of learning how these musicians make contact with notation—in other words, to find out if and to what extent there is a shared web of artistic practice as a basis for shared modes of interacting. It would certainly be illuminating to test the different kinds of extended lead sheet notations with other groups in a more systematic way and find out more about the correlation between previous webs of artistic practice and interaction with these notational traces. However, the quartet experiment appeared to have sufficiently answered the initial questions that had prompted it without taking this step, so the experimentation moved on to explore other kinds of poetic processes and different kinds of traces.

Reviewing all these reflections, some insights crystallize that appear important for the further course of my research. Most importantly, the experimentation emphasizes how esthetic processes necessarily include comparison and classification. On the one hand, this adds new dimensions of understanding to Nattiez's terminology that have not yet been discussed. On the other hand, this has interesting consequences for an understanding of commonly used terminology for different ways of relating to traces and how to conceptualize a shared practice.

To begin with, the necessary contextualization of a trace's neutral level with (potential) recon-

structed esthetic and poietic processes—i.e. the traditions of practice that it is involved in—for relating to it individually, leads to a negotiation of one's individual spontaneous esthesis in regard to both these collective traditions of esthesis and one's individual earlier esthetic processes. This leads to potential tacitly or explicitly pre-structured “sets” of esthetic processes, i.e. experience. Also, this necessarily implies to discern between various pre-structured sets of specific relations between symbolic encodings when interacting with a notation, i.e., forms of notations such as lead sheets. Hence, what has shaped our way of relating to the “*outside*” world and, consequently, to a notational trace, including its non-representable features—to use Coessens' terms, the cultural-semiotic dimension and the personal knowledge connected to one's personal web of artistic practice—necessarily leads to a pre-structuring of relative categories, on the basis of which the specific relations of a specific situation are negotiated. This hints at the previously proposed fractal movement of esthesis and poiesis—an esthetic process as a fractal process of relating to previous pre-structurings, dependent on the scope and the level of analytic detail.

These reflections do shed light on the behaviors and relations that evolved when playing *Kumbhaka* and *In the dark* with the different bands—for example, why both Lisa in Berlin and Ike in Mattighofen would together with Gernot and all others immediately interpret the bare half-notes notated in part E of *In the dark* as the heavy groove I had wished for, giving me incredible energy and contributing to the Spielgefühl for playing as I always experience it anew when listening to the recording from Mattighofen (see provided link in chapter 5, p. 74, 03:02). The previous reflections explain also how this very basic lead sheet of *In the dark* could become the basis for, though not a big band piece as my voice memo of that first creative situation mentions it (see chapter 5, 69), but nevertheless a thoroughly structured instant multi-part horn arrangement which the other horn players from August 17, trumpet player Simon Plötzeneder and saxophonist Thomas Kugi, together with guitarist Mickylee expanded the quintet version into.

Thus, what is considered an interface for contact-making and in which way, is shaped by this interplay between individual and collective and present and past esthesis and the resulting esthetic classification. A language-based instruction in a notation that is classified as a lead sheet such as “continue with gliss. or play a counterpoint with long notes based on the quarter-/eighths note pulse” (Flick et al. 2022a) in *Circular Experiment II* can instead of functioning prescriptively rather turn into a hint to be explored. However, while this classification of a notational trace definitely is connected to the knowledge about its tradition as described extensively in regard to lead sheets, such a classification based on one's own web of artistic practice must not necessarily be congruent with the esthetic process in the moment of interaction. Any notation can *function* as a lead sheet as it became obvious when interacting with *Circular Experiment I-III*. This also highlights that how to relate to one's individual pre-structurings is equally a negotiation based on the esthesis of others as predecessors, as well as immaterially or materially present peers such as my fellow quartet members.

In this way, a shared practice within a group such as my quartet can emerge that forms the background for negotiating the individual esthetic-poietic process. The affordances of a notational trace are thus dependent on this complex interplay of individual and collective, spontaneous—uncontrollable in their interrelation between all creative participants—and pre-structured negotiations of possible pasts, possible futures and the present of a trace. Explicitly entangling the quartet's collective exploration of my notations and my notating-transcribing-listening to specific versions of these interactions, showed to which extent my general esthetic pre-structurings regarding interaction with notation have been formed by this group's practice.

Then, it is interesting how this aspect of negotiating classification as an underlying function of esthesis influences not only how one makes meaning of a neutral level, but how one considers something a neutral level. As especially the comparison between the lead sheets of my quartet and those of the Great American Songbook showed, considering something a specific type of notation also involves considering the piece's *full* neutral level. This confirms not only traces as composed “from a complex interplay of poietic and esthetic processes that bring these traces in touch” (see 5, p. 77), but leads to entangling the different neutral levels constantly anew, influencing also what is considered as intermusical or intramusical.

This also provides an initial understanding of the term interpretation as a negotiation—it's no coincidence that the term is etymologically related not only to the notion of *between*, but also

to activities of explaining, of translating, and even of selling (etymonline 2025c). To interpret something means to relate in a specific creative situation with specific participants, with their lived experience, through which they make contact with the notated and each other, ascribing that notation affordances that in turn steer these relations. Thus, anything can be constructed as an interface of interaction in a notation and generate a diversity of creative activities, in other words, unleashing different creational forces that engender and *constrain* each other.

Thus, a shared practice of a scene of music or an ensemble such as my quartet could thus not only be described in terms of how the group sounds or with what kind of notational traces it interacts, but through a shared subset of shared negotiations of shared pre-structurings, leading to shared subsets of interfaces for interaction.³¹ In light of this, also the previously discussed absence or variability of pre-structured musical roles in regard to the recording of *Circular Experiment I* makes sense. Musical roles could be understood as applying preconceived sets of relating in specific ways to specific symbols or preconceived combinations of symbols—such as recognizing something as a melody to be played by the saxophone, or as a groove to be established and nurtured as discussed above. Expressed in Nattiez's terms, the esthetic and poietic processes leading to a trace's poiesis are pre-structured by a framework of preconceptions for their partition. As soon as such pre-structured subsets of relations between symbols and relations to these symbols are negotiated anew, so too are traditional partitions such as musical roles.

Thus, shifting the focus from the traces back to the interplay of creative activities, the experiment has shown how consciously applying an activity as reflection on each other does shape the notion of this activity in a new way—and thus in turn transforms the activity as such. Transcribing as the main activity of reflection turned from a mere reconstructing into an activity that structured the transition-transformation between the notational traces in a specific way through its specific focus. It also appeared as connected to the tactile notion of the *Spielgefühl*. The activity of transcribing as an at the same time esthetic and poietic activity could thus be applied as a specific tool of translation and thus transformation between activities.

To summarize these findings in relation to my research questions, the experiment has shown how (i) it is possible to describe the entangled creative activities that such a notational trace is involved in as an unleashing of forces that results in specific functional relations and thus specific affordances and constraints for each other that in turn shape the resulting traces. (ii) Describing creative activities means to not only trace their interrelations and transformations, it is the interplay of performing activities and describing them semantically that engenders their transformation, confirming the activity of describing as a creative activity in its own right. (iii) As the esthetic process that leads to interacting with a notational trace is always connected to negotiations concerning pre-structured esthetic processes, also the interacting human being's relation to the “*outside*” world is steered by negotiations with presets of relating. It is the relation between pre-structured and spontaneous, individual and collective negotiations in interacting with a trace that shapes both a trace's and a human participant's relation to the unforeseen. (iv) This implies that a trace is constantly in the process of becoming also in regard to what is considered the neutral level, depending on the negotiation with these pre-structurings. (v) Furthermore, this implies that a practice could be described through relating to traces and specifically through the negotiations in relation to the dimension of the unforeseen that are at play.

What all experiments so far had in common, was that participation as a player was undertaken by me in all cases, and notation practices that all participants shared were used. In order to understand more about the relation between individual and collective poietic and esthetic processes in a shared poiesis of a trace and its connected affordances, it was necessary to conceptualize situations with different kinds of combinations of individual and collective poiesis and esthetic. Also, it seemed important to separate between my own and a group's interacting with the traces and to explore other types of traces than made so far, both notated and eventually other ones.

³¹This explains why the quite different shapes and possible classifications of notations that the *Circular Experiments* are comprised of, did not change how we as a group related to them or to each other. Our shared practice of treating all notations as lead sheets and exploring all their parameters spontaneously in the moment of playing “overrules” the notations' specific classifications and related traditional sets of interacting with them.

Chapter 7

Shared poiesis

7.1 A new experimental setup in collaboration with *Musa Horti*

A first experimental setup that was based on the described insights and addressed these questions concerning shared poetic and esthetic processes in relation to the notation form of the score was a collaboration with the choir *Musa Horti* from Leuven, Belgium, conducted by Peter Dejans, undertaken between June 2023–February 2024. Different to the previous experiments was on the one hand that the collaboration partner deliberately was chosen as a group that I was neither part of nor knew beforehand, on the other hand that the aim was to create a through-written score instead of a lead sheet. Despite sharing a practice in engaging with scores of Western contemporary classical music, thus the same kind of *neutral levels*, we had different practices of engaging with them.¹

Musa Horti is a renowned and extraordinary accomplished lay choir, with a focus on contemporary (Flemish) Western classical repertoire and had before our collaboration never worked with improvising or any spontaneous and self-organized creating without a notated reference before. As in most Western classical choir music, their music-making is usually organized through the interaction with a score and a conductor. Changing the choir's shape of activity and establishing new tools for interacting without the creative situation necessarily pre-structured by a score or a conductor was therefore bound to result in other contact processes than in *Musa Horti*'s usual practice and thus in other kinds of relations between the singers and to the musical *Geschehen*. Hence, becoming aware of these and taking advantage of them as a creative tool would have to be the focus of our collective and my individual work.

The collaboration's goal was therefore to “write a new piece for *Musa Horti* with a focus on the contact and the transitions between written and improvised parts,” a piece that would originate in “improvisation exercises and experiments with the choir” which we would do in an initial improvisation workshop (Flick 2023d, p. 1). Table 7.1, p. 100, and Table 7.2, p. 101, give an overview over the whole project's structure. In order to approach my quest, it seems useful to first examine the workshop as the most important collective part of the experiment, to then look closer at the relation between workshop and score.

For the choir, the workshop was a starting point for “getting to know me, getting introduced to some ways improvising, finding inspiration for own improv exercises (or with other people), becoming involved in the composition so that the composition will be ‘custom-tailored’ for *Musa Horti*” (Flick 2023j, p. 1). For me, too, the workshop served as an occasion for “getting to know the choir,” but offered also the possibility of “finding inspiration for the piece” and, most importantly, of “getting an impression of how the singers in the choir interact.” I would be “getting ‘material’ to work with when composing.” Also, when conceptualizing the workshop, the artistic basis for our work evolved, with the goal of “Trying to base the piece on an awareness of the own corporeality and

¹While *Musa Horti* worked with such scores as performers, I did for the most part read and produce such scores as a composer or researcher—with my esthetic processes of notation otherwise deeply shaped by working as a saxophone player who mostly dealt with lead sheet notation.

Date	Occasion	Participant	Activities	Resulting trace
20230609	Online meeting	Birgitta, Peter Dejans	Discussing the project	
20230609	Individual work session	Birgitta	Designing the experimental setup	Project proposal
20230618	Chorbiennale 2023, Aachen	<i>Musa Horti</i> & Birgitta	<i>Musa Horti</i> singing, Birgitta listening	Handwritten notes
20230801-31	Individual work sessions	Birgitta	Notating, singing	Workshop script
20230901	Online meeting	Birgitta, Peter	Discussing workshop concept	
20230903	Workshop, Leuven, Park Abbey	Birgitta, Peter, <i>Musa Horti</i>	Listening, sounding, moving	Recordings (audio, video), typed notes
20230908	Online meeting	Birgitta, Peter	Discussing (workshop/further planning)	Typed notes
20230909-30	Individual work sessions	Birgitta	Listening-reflecting (workshop recordings)	
20231009-31	Individual work sessions	Birgitta	Listening—notating—transcribing—reading	Handwritten and typed notes
20231101-30	Individual work sessions	Birgitta	Singing, notating, playing piano—singing, listening, moving	Handwritten and typed music notation and notes, recordings, first score draft
20231201	Online meeting	Birgitta, Peter	Discussing (score draft)	Handwritten and typed notes
20231202-03	Individual work sessions	Birgitta	Notating	Revised score
20231203, 20231210	Rehearsals	Peter, <i>Musa Horti</i>	Rehearsing	
20231217	Rehearsal	Birgitta, Peter, <i>Musa Horti</i>	Listening, discussing, notating	Handwritten notes, recordings
20240101-31	Rehearsals	Peter, <i>Musa Horti</i>		
20240201	Concert Sint-Pieter en Pauluskerk Grimde	Peter, <i>Musa Horti</i> , Birgitta, Dries Verheyen	Singing—sounding—performing (Peter, <i>Musa Horti</i>), listening, recording, filming (Birgitta, Dries)	Recordings (audio, video)
20240226-20240315	Individual work sessions	Birgitta	Notating	Updated score

Table 7.1: Activities and traces while creating the score of *The Enchanted Forest*

Date	Occasion	Participant	Activities	Resulting trace
20240508	Personal meeting	Benjamin Geyer, Birgitta	Mixing (Ableton)	First mix version <i>The Enchanted Forest</i>
20240508-09	Individual work sessions	Benjamin, Birgitta	Mixing (Benjamin), listening (Birgitta), discussing (both)	Finished audio mix <i>The Enchanted Forest</i>
20240525-20240625	Individual work sessions, email, WhatsApp	Dries, Birgitta	Editing video (Dries), Listening, watching, notating (Birgitta), discussing (email/WhatsApp)	Finished and intermediate video versions <i>The Enchanted Forest</i> , notes

Table 7.2: Activities and traces while creating the video of *The Enchanted Forest*

using that as starting point for creating" (Flick 2023j, p. 1). The starting point for the workshop became therefore the awareness of the own body's interaction with the surroundings.

Figure 7.1, p. 101, shows a simple chart of the creative situation's and its participants' topography. Seen from the individual perspective, a human participant makes contact, interacts, with their "*outside*" world, consisting here materially of other human participants, material tools used in the workshop as well as the church room of Leuven's Park Abbey with its specific acoustics. The immaterial surroundings could be characterized through their embedment in the framework of my workshop concept and the previously outlined project goals, the overall context of my research, all participants' roles in the workshop and outside of it, as well as each participant's *web of artistic practice*. Through their interacting with all these dimensions of their "*outside*" world, the musical or in any case a creative *Geschehen* is initiated and shaped.

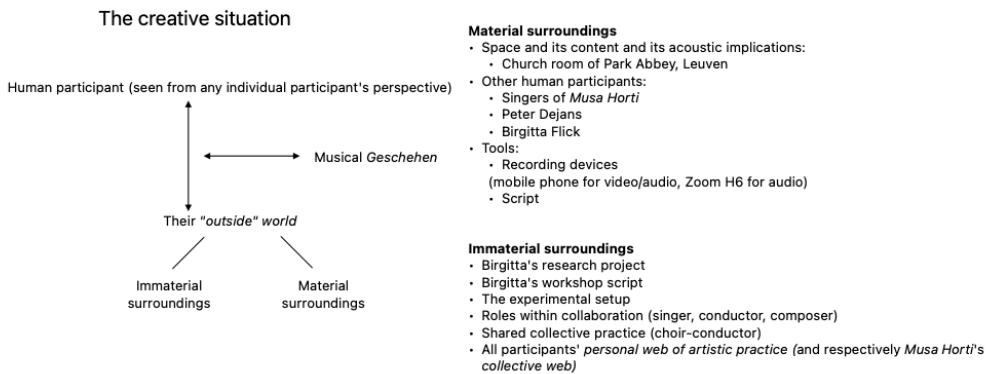


Figure 7.1: Topography of the creative situation of the workshop

The workshop began with a series of exercises,² the first of which read as follows:

Perceive yourself breathing. Listen to your breathing; the inhalation or inspiration, the exhalation, the pause or rest before the next inhalation. Perceive if you exhale through the nose or the mouth. If you have a preference, follow this for a while, but start then testing how it feels to change to the other option. How does your breathing sound? Do all parts of the breathing cycle make sound? Do the sounds differ? (ibid., p. 2)

"Perceive yourself breathing," the first instruction, invites to become aware of the previously discussed contact process that the human body is constantly performing; through the breathing the

²Some of the exercises from the introduction are inspired through teachings by Kristín Guttenberg and Ingo Reulecke that I experienced mainly between 2019–2021 through interdisciplinary workshops and meetings for artists working with sound or/and movement, organized by the Berlin-based *The Moving Academy*. Another source of inspiration was my audio score *Human Bodies in Motion* (Flick 2023c).

whole body-mind-unity interacts with the surroundings in constant movement, and thus becomes tactilely entangled with it. Through perceiving our breathing, we gain the most basic knowledge of how our own corporeality is related to the surroundings, is in constant touch with it.

The next instruction, “Listen to your breathing,” specifies this general perception and invites to making contact and building relations to selected participants in that creative situation. Through the activity of listening as the selective and intensified perceptive activity as described as earlier, the singers are invited to become aware of the dimension of transformation that any perceiving, noticing, listening-obeying brings (see chapter 4, p. 44). The subsequent instruction then referred again to a more general perceptive activity: “Perceive if you exhale through the nose or the mouth.” The dimension of analyzing is added, for which we need to already have gained knowledge about what we analyze through perceiving and listening to something.

After a while, the questions and instructions widened their scope from attending to changes through movement within the body to eventually moving the body through the space and making sound. While moving, the singers were invited to pause from time to time while continuing to listen, as well as to especially seek contact with something or someone through humming, thus sounding (*ausloten* in German) the space and the own position within their “*outside*” *world* tactilely, tactilely-aurally.

Following the introduction, we continued trying out different kinds of contact-making and relating through sound. One exercise was collectively improvising a unison melody—with originally one singer leading the group and all others following, but transformed through the choir so that anybody could introduce a new pitch. The singers developed a sounding togetherness, becoming a tentatively moving unison *Klangkörper* through the ongoing activity of listening-obeying-following, *attuning*, in reference to sound color and pitch. This listening-attuning also afforded new spatial explorations—in the abbey with its huge reverb spatial closeness was required to be able to hear well, leading to doing this exercise in smaller groups standing in a close circle, facing toward its center. We then explored further spatial constellations when we combined the unison with other interaction modes. The recording shared through the following link is an example from one unison circle and one half-circle of conducted “instant chords”³ transitioning into another unison circle as shown in Figure 7.2, p. 102.

Two groups attuning in the workshop of September 3, 2023



Figure 7.2: Two groups attuning

Another important part of the workshop was the experimenting with contact-making through language. I had chosen the topic *forest* as a context for our exercises. One of them, besides exercises that connected rhythm and timing with language explorations, had been to create a story through adding incrementally, in clockwise order around the circle we were sitting in, the first word or group of words that came to mind and fit grammatically with the preceding ones. This resulted in a quite humorous story about the disastrous life of a witch in the forest. The exercise pre-structured the interaction through organizing the order of expressions and a new set of rules (grammar) as well as a semantic context (forest). However, it was again the tool of listening that the singers shaped in yet a new way and that enabled relating temporally and semantically both

³With *instant chord* I refer to the structure that evolves when a group of singers or instrumentalists sings or plays, either conducted or self-organized, homophonically with individual spontaneous choice of pitch.

to the musical *Geschehen* and to each other. In this exercise, it had become especially obvious how meaning-making through listening is automatically directed backwards—and the tension between the not yet accessible “possible meaning” (Nancy 2007, p. 6)⁴ and the resulting tacit or explicit expectations which any listening must bring, were indeed part of the exercise’s fun. This tension is especially relevant when considering the translation and transformation processes between the collective and individual parts of our creating that the creative work’s design implied.

7.2 Transitioning–transcribing–translating

Only when beginning the individual process of creating the score, I realized that I obviously had had tacit expectations of how *Musa Horti*’s text creation in the workshop would automatically resonate with me; that I had assumed my task would mainly consist of setting already given text by the singers to music, including transcribed musical material. However, despite loving the choir’s story, it was uncontrollable for me as a composer. I had expected to become transformed in a specific way through listening to *Musa Horti* which did not happen.⁵ Seeking for resonance, I started my work by doing similar awareness training as *Musa Horti* had done, sounding the musical space they had created, trying out different contact modes through different ways of transcribing.

When I as one of the first individual activities after the workshop had been transcribing the choir’s story about the witch as well as some words of a language-timing exercise,⁶ this had been a transcribing between two different media—recorded spoken text to typed text—and thus between two different symbolic encodings and with a documentary purpose. However, these new transcriptions were different. On November 1–2, 2023, I engaged in several ways of transcribing within the *same* media and the *same* symbolic encoding—from the notated story as a typed text to other forms of typed text—through the activities described as follows.

(i) Firstly, I structured the already typed-up story visually through beginning each sentence in a new line.⁷ (ii) Then, there was the making up of new words, or phonemes. “In my book” (*Musa Horti* 2023) led for example to playing around with the sound transition between nn-mm, leading to chains of transforming consonants and vowels such as

“n-m-n
en-m-y-m-y-o-u-n
en-m-u-m-y-n-

en-my-o-e-wa-ss”

(iii) The next step was to find new structures, such as when testing—and quickly dismissing—the task of choosing one word per sentence and building a new semantically related text from there. (iv) As a fourth step, I sorted all words by part of speech, (v) some of which were then sorted by different semantic categories (see Figure 7.3, p. 104). (vi) Afterwards, I collected the forest elements of the story and the words from the above-mentioned language-timing exercises (see p.

⁴ “[...] to listen is to be straining toward a possible meaning, and consequently one that is not immediately accessible” (Nancy 2007, p. 6).

⁵ It should be clarified that I was indeed very happy about what had happened in the workshop and about listening to the choir members creating and relating to each other. Taking the “risk” of possibly conflicting implicit expectation of certain musical “results,” it had been both a self-commitment and artistic-pedagogical-ethical objective to create a material and immaterial space that would welcome any artistic expression whatsoever. It had been incredibly inspiring to experience that this, at least from my point of view, had indeed worked out and led to a musical outcome that was so different from my expectations.

⁶ Another introductory task in the workshop had been to establish a steady and groovy quarter note pulse structured in 4/4 through in turn saying a word associated to the topic of forest with only one syllable—so that there would be one word per person per beat in the order of the circle we were sitting in that together and which would comprise the beat or groove.

⁷ For these text explorations, it was necessary to change the text processing program from Latex—which I originally had wanted to use for working with the text, but which at that time was still too new for me to be used intuitively—to Microsoft Word that I was familiar with. For this transcribing, I used a sans-serif font.

102).⁸ (vii) Assembling phrases or groups of words I liked such as “In my book there was,” “The enchanted forest,” “She woke up from a very nice dream in which she was dancing,” “read on the sand,” “Found in the sea,” “the people discovered huge animals who ate the world after they transformed,” became the next step (see also Figure 7.3, p. 104), followed by (vii) making anagrams such as of the word “beautiful” (Musa Horti 2023). (viii) Creating a list of “Seemingly important words”, based on the number of repetition, was then the last activity.

Activities/verbs from text:	Missing (was missing) (2)	Phrases I like:
There was (be) (oft)	Went on	In my book there was
Shouted	Meant	There was a beautiful sunrise
translated	taste	The enchanted forest
Woke up	Wrote	She woke up from a very nice dream in which she was dancing
Took	Not to forget	she was dancing
Running	Discover	All that poets went on with her and read on the sand
Put	Understood	read on the sand
Stood (2)	Go	Found in the sea
Fell down	Believe	She learned to eat a long time ago
Hate	Love	the people discovered huge animals who ate the world after they transformed
Decided	learned	the people discovered
Marry	eat (27)	huge animals who ate the world
Fell in love	(eigenlich: learned to eat)	the world after they transformed
Know (didn't know)	traveling	after they transformed
Trying	was murdered	
Kill	rising	
Make	transformed	
Became	lived	
Dancing		she wrote several letters

Adjectives from text:	Lovely	
Cruel	Happy (2) (adv. Happily)	
Beautiful (5)	Enchanted	
Nice (2)	Cloud-clamped?	
Old (2, older)	Tall	
(yellow)	Huge	
Red (2)		
Pretty		

Figure 7.3: Transcription examples

The sound exercises (ii), the sortings by part of speech (iv), as well as the list of favorite phrases (vii) became very inspiring (see also Figure 7.3, p. 104). Gradually, a faint vision of a musical *Geschehen* (see chapter 3, 36) accrued and called me and a resonant relationship to some of these materials had evolved. Transcribing functioned here as a structural translating and lead thus to both a structural and semantic transforming. It had become a tool for establishing new relationships between the participants of the transcribing situation, both between the materials and between myself and their interplay. However, it was not only my relationship to the material and my idea of the piece to be created that were transformed through the transcribing.

Unexpectedly, also my role in the creating changed. Despite having worked extensively with text as a composer, I so far had not recognized my tacit expectations referring to the hierarchy of semantics and sound, and my own function between those two dimensions. Despite having experimented in various ways with both the semantic and sound aspects of texts and their fusion, there had nevertheless always been the tacit assumption that my semantic esthesis of a text would be the guiding principle for the piece's poiesis. Now, instead of setting a given text to music and working with the impression of having to *fulfill* something that had begun in the workshop, I could play around in whatever possible way with *Musa Horti*'s material and thus develop sound and semantic dimensions from scratch.

Also, a new awareness of my relation to the choir and the hierarchy in our collaboration grew. While it explicitly was that which the singers had created in the workshop that I meant to work with, it nevertheless was my personal web of artistic practice that everything would be filtered through—I would not finish transforming *Musa Horti*'s material until it resonated with me in such a way that it was possible for me to continue creating. My role in the overall design of the project and as taken in the workshop—the one of initiating, facilitating, preparing and offering guidance for a relating—could be kept through these decisions. Hence, despite the project's collaborative basis and my utmost respect to *Musa Horti* as a creative partner, it would be my individual esthesis of the workshop's happenings that would constitute the piece's poiesis.

Two further aspects became clear when engaging with *Musa Horti*'s text material. First, as Nattiez's symbolic animal (see chapter 5, p. 59) that my human body-mind-unity functions as, it seemed to be impossible to not give semantic meaning to the material. While the original semantic meaning dissolved through my doings, every newly created structure lead to the creation of a new narrative. It was inspiring to observe how, through my transcribing, the semantic meaning would

⁸There had for example evolved a groove consisting of the four words “moss dark wind tree”.

grow along with the new text material's structural and sound dimension. This lead, secondly, to a crucial decision for the further creating: instead of finishing my text work before conceptualizing the piece more clearly, I wanted any aspect of sound and semantics to grow simultaneously. The piece's sound "world" and formal structure would thus grow along with all language-based elements of the piece, something that was—strangely enough—new to me. Nevertheless, there was the practical aspect of de-synchronicity that appears in any dynamic work, not all material would develop in the same extent and proportions at the same time. I noticed how—and allowed for—some text parts to solidify before others. First, some kind of poem evolved from a selection of preferred phrases or parts of them, and that was supposed to become entangled with other groups of words from my lists.

The next step was to try out a polyphonic, spoken, introduction draft with verbs and their additions from the list, distributed meticulously between 12 singers. This introduction, as shown in Figure 7.4, p. 105, was guided by the two verbs *transformed* and especially *dancing*. It consisted of an interplay of the fairy-tale like opening phrase of *There was* with the verb and preposition of *went on* that would incrementally be combined with different other verb forms of activity that evolved toward the guiding verbs, i.e. activities, of *transformed* and *dancing*. This would happen through at first incremental addition, and then through an incremental reduction of verbs, until eventually *dancing* was left as the verb where all 12 singers would “land” on. From there, they would make the transition from speaking to singing.

Figure 7.4: The first draft of *The Enchanted Forest*'s beginning, November 3, 2023

I remember oscillating between this introduction—that later on would be transformed—and the above-described word lists and sound ideas, which contributed to a solidification of further (rough selections) of this huge array of word groups and structures. Through my notes, it is also possible to retrace the idea of how text and sound should spatially move through the choir and thus in the space, thus creating sound movement through distribution between singers instead of through movements by the singers in the space.

In my memory, it was only after these first solidifications and decisions, that I began to explore the phrase "In my book" through piano playing and singing. From my playing and singing, a resonant, very simple, melodic motif evolved that moved between the minor 6th and the 5th of some kind of pedal tone and that I suddenly, together with the introduction table, considered as an "anchor" for the continuation of my work. However, when reconsulting all saved notes and files from the project, it was obvious that something similar to the proceedings around recordings 384/385

and 402 of *In the dark* had happened (see chapter 5, p. 68). Already on November 1, the first day of transcribing and indeed *before* working on that above-described and displayed introduction, I had made two short piano explorations (see below, *Recording 574* and *Recording 573 Chor*)⁹ that anticipate the atmosphere, the melodic movement and the intervallic structure of the recording of November 3, 2024 (*Neue Aufnahme 573 chor 20231103*). The beginning of my work was thus even less linear than assumed, and included a greater diversity of activities than remembered.

Piano exploration, 20231103

Recording 574, piano explorations I, November 1, 2023

Recording 573 Chor, piano explorations II, November 1, 2023

It is noticeable, how prominent the ethic and practical aspects of fidelity to the musical *Geschehen* and the material from the workshop were during that transition period. While being glad about that newly found resonant melodic motif, I was insecure, if it was appropriate to work with musical material that only had a tacit associative connection to the workshop material. Thus, it was illuminating to understand how narrow the scope of my tacit notions of what fidelity to a creative situation meant had been; notions that would eventually have kept me from creating such a piece at all, and that would not have been brought to light without the experiment with *Musa Horti*. Apprehending how relations between creative materials and fidelity to another creative situation were not restricted to dimensions that could be traced by the means of more or less traditional jazz or Western classical music analysis, it became clear, how any dimension of creating could form the creative link between situations and creative participants. Even the activity of relating as such between participants of a creative situation could function as the connection between two such situations and musical *Geschehen* created there, and thus between the workshop and the score. Again, the notion of listening-obeying-following-attuning to a musical *Geschehen* is helpful, here referring to the holistic extended notion of listening (see 4, p. 46) that surpasses what is audible and is connected to the activity of listening’s “immanent complex transformative qualities” (chapter 4, p. 46).¹⁰

The continuous emergence of different dimensions of relating between the singers became the basis for the piece and the link to the workshop. Peter Dejans’ and my formulation of this relational basis for the piece as it evolved in the joint rehearsal on December 18, 2023, became later on even part of *The Enchanted Forest*’s preamble. “Everything you do is a result of your listening to yourself in relation to each other. Thus, what is made audible from each singer is of course important, but most important is your listening relationship and attitude towards the group” (Flick 2023g). In the following, some characteristics of the score as the piece’s neutral level will exemplarily be shown and scrutinized through their poiesis in relation to my esthesis of some of the workshop’s happenings.

7.3 The score of *The Enchanted Forest*

Eventually, this neutral level comprised three related elements, i.e., the a cappella score for choir SSAATTBB, a complementary commentary providing information on the choir’s positioning, a legend of signs and information on other specifics of the score, as well as—preceding to commentary and score—the “lyrics page” with an overview over the piece’s five language parts that are presented

⁹Unfortunately, my system of file denomination was not very systematic, trying halfheartedly to repair the phone’s order that would repeat a file number as soon as I had added a specification to a number. Thus, the date a file was made is more reliable than the file name.

¹⁰Also Peter Knudsen discusses the topic of fidelity regarding the original compositions he explores through improvising, , although in a narrower sense. Though approaching the topic differently, his conclusions are partly similar to mine, especially when he establishes, amongst others, the already mentioned metaphor of the *room* of a composition (see chapter 4, p. 45) as one of the keys to fidelity (Knudsen 2025, pp. 2533178/3027086/0/0), in combination with what he formulates as “a healthy dose of disrespect,” an expression coined by Pat Metheny (ibid., pp. 2533178/3027086/0/0). Both of these concepts could be related to my holistic notion of listening, in that sense a listening-obeying to, thus an awareness of and a relating to the—in his case, original—score, that includes the own explorative impulses as an esthetic process of interacting with that score or any other trace of creative activity (For more details on Knudsen’s findings on fidelity, see ibid., pp. 2533178/3028503/0/0, 2533178/3027086/0/0).

in their different spatial and structural appearance. These include the already mentioned poem, a somewhat triangular form that the above-discussed introduction table eventually had transformed into and three cloud-like shapes. The piece starts quite similar to how we began the workshop, evolving from a common sound of all singers in individual tempo, this time through a sound made through rubbing the palms together in circular motion. This functions as a sound-movement that directs the attention simultaneously to oneself, the others and the space. While it is put together through individually explored sound and movement that is dependent on each body's affordances and preferences, it always emerges in relation to others.

Sparked by the structuring that happened through the unison exercise, also the idea of structuring the choir through movement as already mentioned earlier was kept—instead of the singers moving through the space, the sound moves through a constant restructuring of the choir's groups. The formation of an inner and an outer choir as a structural basis for the piece emerged as Figure 7.5, p. 107 shows.

T₂ T₁ B₁ B₂

S₂ S₁ A₁ A₂

conductor

Figure 7.5: The choir's basic formation in the score of *The Enchanted Forest*

The starting point for the piece's spatial and sound structure is thus a setting of a double choir—SATB—SATB—instead of SSAATTBB. A rough overview over the constant transformation of groupings looks as displayed in Figure 7.6, p. 108.

Also the unison attuning in its own right became an important musical element and tool of listening-relating within the piece. In bar 2–3 of choir it es for example applied as a tool of transforming the spoken polyphonic beginning of choir I into the intense first through-notated sound part of part A based on the sound of “dan”—derived from the word *dancing*—that the language polyphony in bar 1 narrowed down to. Thus, two differently working unison textures follow on each other and envelop constant polyphonic micro-movements. The unison in bar 2–3 is in constant movement through spontaneous decision taking of individual singers, which leads the overall movement to a new pitch and the continuation of the unison through some sort of *flock movement*. It is a unison that moves the group as a whole between pitches. The following unison in part A is equally in movement, but structured through the incremental accentuated entries of the different voices, as well as the occasional chromatic or microtonal deviations, steered by the score's notation as well as by the pulse and the im-pulses it demands and that the conductor and the singers establish together through the conductor's esthesis of the score and the ongoing musical *Geschehen*. In bar 23, this unison eventually moves to a new pitch as well, when also singers of choir II have joined and both groups merge into two new groups, i.e. A/S versus T/B instead of choir I versus choir II. However, this progression toward the new pitch is much slower than the one in bar 2–3 and, different from that, also pre-structured through the score.¹¹

Concerning the piece's text, all words and phonemes are indeed derived from *Musa Horti*'s story, but transformed and structured very differently through my own associations, resulting in the already mentioned poem and several other *word shapes* as shown on the afore-mentioned score's “lyrics page,” displayed in Figure 7.7, p. 109.¹²

Besides of the *poem*, the upper left-aligned shape, all other shapes consist of a collection of verbs

¹¹The transition between these two unison parts is shaped by choir II who takes up the polyphonic speaking of choir I in bar 1 in bar 2–3 and merges from whispering a selection of their words to murmuring a narrowed down selection of these, all in individual tempo. This builds up dynamically into part A, but decreases from the end of choir I's first pitch (bar 5–6) until bar 8 where it disappears in bar 8, thus shortly before the next accentuated entry of T1 in bar 9.

¹²“Lyrics” is no longer an appropriate denomination, since, as explicated earlier, the piece's language parts are not some pre-created text convolute that has been set to music or written to pre-existing sound, but a result of joint creating. However, I kept the term and can not explain the reasons rationally, besides that it could have been for the lack of an appropriate alternative.

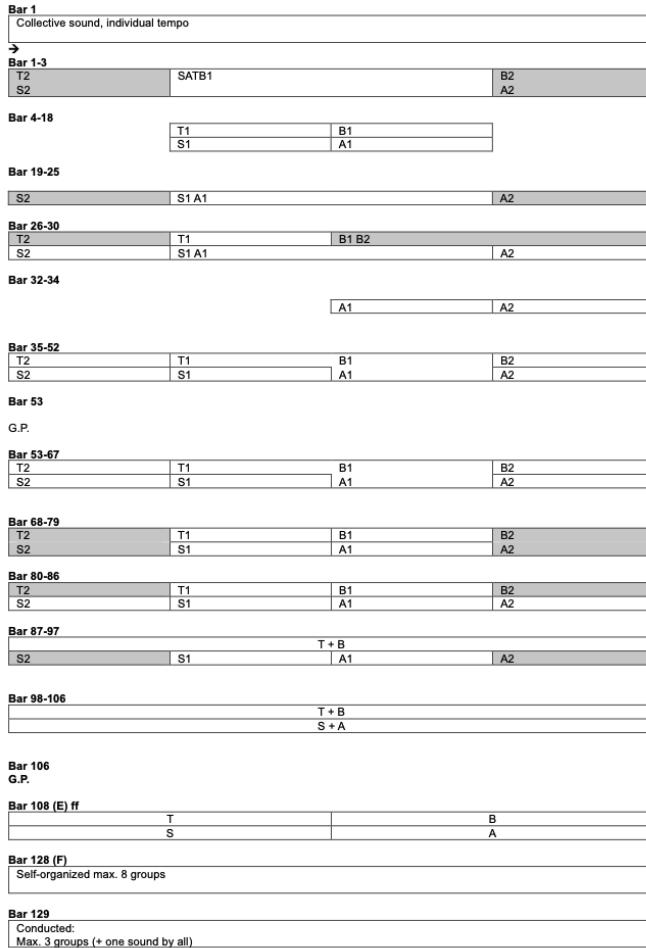


Figure 7.6: The choir's continuous restructuring within the score of *The Enchanted Forest*

in different temporal forms and modes of expression, sometimes connected with additions, objects or forms of negation. Concerning the *clouds*, as the cloudlike shapes on the top (no. 1), on the right (no. 2), and directly under the poem (no. 3) could be denominated, each verb with its possible additions appears only once in one cloud. However, some—“Went on”, “Trying”, “Dancing”, “Rising”—are part of all clouds and also the roughly triangular shape that in the following will be referred to as the *triangle*,¹³ some of them appear only in a part of the shapes, such as “Not to forget” (cloud 1 and 3 and the triangle), some only in some shapes and the poem, such as “Transformed” (cloud 1, triangle and poem), some only in one shape and the poem, such as “Read in the sand” (cloud 2 and poem) or “Discovered” (triangle and poem). Cloud 3 could be seen as a subset of cloud 1 and the triangle. All the words’ different spatial positions in the clouds seem quite random. This is different in the triangle that consists of different vertical columns of words that incrementally add or remove words—until only “Dancing” and “Rising” are left. The only verb that only the triangle and the poem share is “Discovered.”

It was the triangle that replaced the previously discussed and depicted first draft of the piece's introduction from November 3, 2023. In our first joint score reading on December 3, 2023, Peter reminded me of the dangers of specifically assigned tasks to individual singers in such a large group as *Musa Horti* within a project with limited rehearsal time. Transcribing the introduction's table into the triangle structure and its specific concept for interacting as described in the score (Flick 2023g, p. 1) lead to a much more satisfying alternate notational solution, both in regard to practical aspects—reduced length and complexity, as well and flexibility with the number of

¹³The small case letters in cloud 2 of the otherwise uppercase letters W, T, D, and R, are typos.



Figure 7.7: The word shapes of *The Enchanted Forest*

singers—as well as artistic ones, since it requires a broader span of attention and listening within the group than the table. Interacting with the triangle requires spontaneous self-organization in regard to all parameters, with the exception of the proposed order of words—and even here the transitions between columns need to be organized spontaneously.

It was through such discourse between Peter and me with reciprocal inspiration and advice that the score's neutral level was shaped after its first period of individual poiesis. Through Peter's expertise as a conductor, his esthesis of the score's neutral level was necessarily a different one than mine. The discourse between us, asking each other questions such as "why" a certain notation symbol was chosen (Peter) or *how* the esthetic process of involving with a certain notation symbol would most likely feel from the perspective of the choir's practice (myself), turned out to become an additional basis and tool for creating a revised neutral level of the score. A score whose poiesis was now partly a shared one and had lead to a shared understanding of such symbolic forms that were new to all of us, such as the symbols for relational strategies that the choir and me had so far applied only aurally as for example the instant chords or the unison attuning. The discourse that Peter and I engaged with from the project's beginning on was thus not only a necessary communication for undertaking the project, but indeed an additional shared creative tool.

Returning to the reflections on the text shapes, it is also noticeable that their distribution on the lyrics page does not convey much about their connection and the issue of an overall narrative. However, there must be a correlation between the construction of meaning and the spatial structure of a shape, not only in the poem, but within all shapes, as well as between shapes. When looking at the cloud shapes, I perceive how I don't construct a time-based order of the activities symbolized through the verbs, as it would automatically be the case when reading "traditionally" from left to right or top to down as it the poem and the triangle invite to. Rather, I automatically try out different ways of connecting the words and thus different ways of meaning-making, an activity that is a continuous one and which renews each time I look at the cloud shapes. Thus, clouds of randomly or only spatially organized words must shape a different semantic meaning-making process than shapes such as the poem or the triangle that sort and repeat words in specific ways in vertical

columns or in vertically piled and left-aligned horizontal lines. Also, a mere collection of the same part of speech as in the clouds and the triangle in contrast to a series of at least elliptic phrases or sentences as in the poem additionally pre-structures the semantic meaning-making differently.

When reflecting on how this correlates with the appearance of these shapes in connection to sound notation in the score, it is probably for the above-described reasons that the shapes whose components are not structured grammatically, but only spatially—thus the three clouds and the triangle—keep their spatial appearance and are shown in their original spatial form in the score. They are always encompassed by a box that symbolizes a stretch of self-organization concerning the partaking voices, which is mostly combined with an instruction that highlights parameters to explore within that time stretch. Thus, the semantic relation between the words, as well as how the section sounds in its entirety, is established through the individual singers' meaning-making and interacting in the moment of performance. In contrast, the poem's words, or phonemes which are derived from a word, appear in connection with a notationally exactly pre-structured temporal and sound relation, moving linearly forward. Nevertheless, through the continuous interplay with other text parts that apply the different word shapes and are thus structured spontaneously, also here the process of meaning-making is dependent on the singers' interacting in the moment of performance. The connection between all word shapes and the poem and thus also the poem's meaning must be negotiated anew in any performance. This results in nested *Geschehen* of both individual and collective semantic meaning-making of the shape's elements that influences also their spatial distribution between the singers and thus their spatial movement and their semantic relations in the moment of performance. In other words, the spatial distribution of material in the score contributes to the esthetic process' uncontrollability and the connection to the unforeseen dimension in all evolving relations between all materially present participants in the creative situation—singers, conductor, potential other listeners—and to the musical *Geschehen*. The following link leads to a recorded and video-taped excerpt of bar 1–3 of the piece's premiere on February 1, 2024, in Grimde at Sint-Pieter en Pauluskerk, where some of these phenomena discussed above can be observed.

The Enchanted Forest, bar 1–3, performed by *Musa Horti*, February 1, 2024, Grimde, Sint-Pieter en Pauluskerk

The Enchanted Forest, score

One more important, implicit, aspect of the piece's score in relation to the workshop has not been discussed yet. The biggest difference between the different musical *Geschehen* evolving in the workshop and the ones evolving when interacting with the score, is the reappearance of the conductor's function. Since the piece's self-organized parts with the spontaneously shaped relations are embedded in a completely through-written course, Peter Dejans' overall role does not change compared to the choir's usual repertoire. Still, the constant regrouping and the entanglement of conducted and self-organized *Geschehen* leads to a continuous emerging of varying modes of the conductor's relating to each singer which need to be scrutinized on another occasion. Only in the very end of the piece, after all groups have united into one big self-organized one in part F, bar 128, is Peter involved in the groupings of the choir and is invited to decide, how to proceed from there and how to end the piece in bar 129, i.e., if, how and with whom to insert sound and text material in the collective palm sound that ends the piece (see Figure 7.8, p. 111).

In that way, the piece's conclusion and thus its whole musical and semantic course is shaped by Peter's spontaneous conducting and thus is a specific one within a specific *Geschehen* at a specific occasion, shaped through his listening-obeying-following to the singers' spontaneous listening-obeying-following to each other and the ongoing musical *Geschehen*. When the piece was premiered, this sounded as the video shared through the following link demonstrates.

The Enchanted Forest, part F (bar 128–129), performed by *Musa Horti*, February 1, 2024, Grimde, Sint-Pieter en Pauluskerk

The full video of *The Enchanted Forest* can be found through the following link.

The Enchanted Forest 11

Part F: Senza misura

128 ritenuto [128] ca. 25' **overlap with box for 2-3'**

S1 **A1** **T1** **B1** **S2** **A2** **T2** **B2**

128 **distantly** **128** **fo - rest**

129 **8-12" or longer** **Box I-III could also start before the preceding part has ended, conductor decides**

all add **morendo**

129 **Box I-III can be interpreted separately by the conductor who decides if, how and when a box happens and shapes its expression. No hierarchy of the boxes and no specific assignment to certain voices. Conductor appoints groups and uses roman numerals for communication of the boxes.**

129 **whisper or sing these words in glass movements:** **rising, dancing**

129 **they trans-formed af - ter**

Instructions:

- All improvise together through repeating one of the following elements. Not all of them have to happen. No order or hierarchy of elements (numbers just for communication purposes if necessary).
- overlap with box: you can murmur, whisper, sing or do whatever you want with the text in the box.
- You can also play around with the sound of words or parts of them - and with the form of your lips.
- try to find a unison pitch with the same sound! with someone close to you and keep repeating it
- no hierarchy of the words, no order
- after they transformed
- after
- produce sounds that you think happen in the enchanted forest.
- (any voice, any pitch, you can also vary this melodic fragment)
- they
- transformed
- rising, dancing

more and more sparse

Figure 7.8: *The Enchanted Forest*, part F, the conductor-shaped ending

The Enchanted Forest, performance by *Musa Horti*, February 1, 2024, Grimde, Sint-Pieter en Pauluskerk

It's interesting, too, that the conductor's role also steers the composer's relation to the choir and its singers. When creating a conducted score, I as its creator am obviously not only imagining and anticipating the group's and with it also the individual members' sound. I imagine also the conductor's meaning-making and here specifically how Peter's esthetic process would go in touch with the singer's esthetic and conduct the group's esthetic through the way he relates to the individuals as part of the whole. This also shapes my listening while creating the score. To shape a relation between myself—as an initiator, a facilitator, or preparer of the creative situation of performing the score—and the musical *Geschehen* to be created by the choir as well as to grasp as much as possible of the score's affordances for the relations it can foster, my own listening-obeying while creating the score also needs, besides imagining the singers' listening, the inclusion of listening *through the conductor's listening*. It exceeds my professional competence to delve broader and deeper in that field. Thus, these reflections will be reduced to the observations possible from my perspective and are far away from being comprehensive ones.¹⁴

¹⁴Concerning a deeper understanding of these issues from the conductor's point of view, I refer to Halldis Rønning's artistic practice and research for further inspiration and highly interesting reflection: "[...] Halldis Rønning proposes a whole new role for the conductor and how this inevitably shapes the roles of the musicians and the audience. Listening is the central part in this process, creating a new dimension in an already established concert-listening-participating process and giving a new perspective for everyone involved in it," as a quote by a peer review from

Nevertheless, it seems especially relevant to emphasize that, as all matters concerning the esthesis of a symbolic form, also the dimension of the shaping of potential musical roles, is completely dependent on *all* participants' shared practice and experience. In our project, the experiences of the workshop in combination with the constant discourse between Peter and myself on the artistic and practical procedure of the project established a specific shared subset of our different practices. Thus, in retrospect, the workshop initiated and shaped the poiesis of a new score that applied the activity of relating between the participants of performance not only as a means of artistic expression, but also as a tool of shaping the choir's inner workings. After the premiere, Peter shared his observation of how this new way of interacting and shaping relations within the choir and the constant training of different ways of listening seemed to have been beneficial also for the rest of the concerts' repertoire and "the choir's DNA" (personal communication, February 1, 2024).

In other words, confirming what also the quartet experiment had shown, the shared practice of an ensemble is shaped by shared poetic and esthetic processes of traces that in turn shape the relations of an individual participant of creating to their "*outside*" *world* such as the other ensemble members and a notational trace. Similarly, a group's relation to its "*outside*" *world*, such as a notational trace or a composer, and at the same time the notion of what is considered the "*outside*" *world* is shaped. It is in that way that interacting in the workshop and then over a longer rehearsal period with the score of *The Enchanted Forest* could have consequences for the singers' interacting with other notational traces, i.e. the choir's further concert repertoire.

Thus, reflecting on the experiment with *Musa Horti*, it refined and extended the quartet experiment's findings, especially in regard to transitioning between creative situations and the modalities of esthetic negotiations in connection with sets of relating between creative participants. First, it showed that establishing relations between participants in a creative *Geschehen* could be applied as a creative tool not only within a situation, but also as a tool of transitioning, of translating, and thus transforming between creative situations. Thus, the notion of transcribing as a thread that leads through all experiments was further explored and extended. Transcribing was used as both a structural and a semantic means of transforming, affording the transformation of my relation to *Musa Horti*'s traces and building a bridge to my individual creative situation of the score's poiesis. Thus, while the quartet experiment contributed to the awareness of transcribing's transformative potential, here it could be applied systematically as a creative tool and tested in various ways.

Then, the experiment also led to further considerations on how musical roles in collaborative creation are related to interacting with traces, both the roles *while* interacting with an already existing notational trace and in regard to this trace's poiesis. Chapter 6 described musical roles "as applying preconceived sets of relating in specific ways to specific symbols or preconceived combinations of symbols" that are negotiated in connection to the relations between symbols and to these symbols (6, p. 98). The collaboration took its beginning in such a situation of clearly separated roles as they have grown in the past 200 years in Western classical music. Despite lively music scenes that challenge and dissolve them artistically, as well as increasing funding structures that promote creative work between genres and the intersection of roles of creating such as German Musikfonds e.V., these nevertheless form the background for the sociocultural and legal framework around notational traces also in my art worlds. Since *Musa Horti*, Peter Dejans and I shared the piece's poiesis at different stages, our work could, on the one hand, exemplify how musical collaborators influence each other and roles necessarily intersect through contact-making by listening and discourse, as well as a creative situation that originated in the performers' creativity and their activities. On the other hand, our pre-structured roles for the notation's poiesis were kept because of when and how we intersected individual and collective poiesis only sporadically. *Musa Horti*'s collective poetic process of the workshop was prepared by my individual preparation of it, Peter's and my discourse happened in between the workshop and notating the score and then again after the first full score draft's poiesis. This was in some way quite similar to when working with the quartet and with Chanda in that the activity of engaging in discourse as a form of interaction with the traces was mostly omitted. However, in these collaborations, the topic of roles and potential hierarchies within a trace's poiesis was subordinate, since all of us shared a similar practice of both composing and improvising. Thus, we shared a similar approach to esthetic-poetic situations of performing-interacting with traces without pre-structured roles or hierarchies of esthesis—which

necessarily must be different in situations with a highly pre-structured partition of activities such as when a choir like *Musa Horti* is led by a conductor and performs-interacts with the notational trace without the composer being part of the ensemble.

However, even in a traditional jazz practice, social roles such as bandleader often influence basic musical roles, such as composer or performer, which pre-structure the notational trace's poiesis. These roles also influence those situated within the interaction such as soloist or accompanying rhythm section. Nevertheless, this is not the case in these groups. While the group with Chanda did not have a bandleader, the quartet separates the practical musical and social roles as much as possible. Thus, although we developed shared subsets of how to interact, they are based on *together* negotiating the roles ascribed to our instruments in the jazz tradition and how to relate to a trace.

The preconditions for the experiment with *Musa Horti* were obviously very different. On the one hand, the workshop's pre-structuring centered the singers' spontaneous, unforeseen, creating and made it a building block for the new piece as it is reflected by the score's notational specifics. On the other hand, even when the singers interacted on their own in non-conducted passages, or when Peter, as the conductor, shaped the piece's ending instead of me, as the composer, it happened within the framework of the notational trace's affordances that I, as the composer, had shaped. Also, this is a trace that was written for a conducted choir of singers that began training to relate to each other without a conductor only when engaging in our shared poiesis. Traditional roles were thus intersected, entangled and thus often blurred, but never dissolved. The roles during the score's poiesis transferred to the situation of interacting with the score; the score continued to function as prescriptive notation—prescribing even the necessity of unforeseen relations between singers through the score's structure, applying variations in displaying, spatially relating and omitting information, or through instructions such as the one to Peter to shape the end of the piece. The decision to work this way was probably partly due to practical time constraints, but it was equally a result of the art worlds that shaped my personal web of artistic practice. There, these hierarchies of a trace's poiesis rarely have consequences for the musical *Geschehen* of interacting with the trace, as described above.

To summarize, the experiments with the quartet and *Musa Horti* shed light on how (i) fixed roles and the resulting fixed hierarchies between creative participants, i.e. collaborators, could be understood as previously negotiated relations between symbolic encodings, traces and individual or collective esthetic and poietic processes. (ii) Thus, applying the lens of Nattiez's tripartition to describe the musical roles connected to differently structured creative situations that result from musical necessities, education, and the sociocultural pre-structurings of an art world, reveals how a trace's past and future and thus its affordances for interaction are connected to the negotiation of pre-structured individual and collective poietic and esthetic processes within and between creative situations. (iii) Hence, asking for the relation of a trace to the dimension of the unforeseen is innately connected to an examination of how and also *when* individual and collective poietic and esthetic processes interact. In other words, as Peter's remark on the choir's DNA and the reflections on the quartet experiment have shown, also the future relation of a trace to the dimension of the unforeseen is shaped through its past relation to it. (iv) Thus, this shapes the partaking creative human's future relation to their "outside" world, also in regard to the unforeseen.

Keeping the focus of the shared poiesis of traces and of examining their affordances for interacting through transitioning between individual and collective creative situations, the next step was thus to work in a somewhat similar setup, but to entangle these situations even more and in different temporal orders. I wondered what would happen if notating and relating purely aurally and orally were not separate in the piece's poiesis, but constantly used to reflect on each other's doings and traces. Thus, I was, on the one hand, interested in a *Geschehen* of creation that constantly oscillates between individual and collective esthetic and poiesis. On the other hand, it was interesting how this would influence not only the relations between composer, conductor, ensemble, and trace(s), but also the trace itself and all participants' notion of it.

Chapter 8

Scores as transformers

8.1 The *PlanetWoman* project as a new experimental setup with *VoNo*

A possibility to delve deeper into experimenting with a poietic entanglement of individual and collective creative activities regarding a notational trace's affordances for interacting was offered when the Stockholm-based vocal ensemble *VoNo* and its conductor and artistic director Lone Larsen were seeking a composer to collaborate with for a project called *PlanetWoman*.

VoNo and Lone had become involved in the international choral project *PlanetWoman* by visual artist and writer Zsuzsanna Ardó that was based on her poem *PlanetWoman* and series of visual art and poems of the same name to the topic of human creativity and the visibility of female creativity.¹ Furthermore, one of Zsuzsanna's inspirations were the doings of medieval polymath Hildegard of Bingen. *VoNo*'s and Lone's goal was to develop a new piece in close collaboration with a FLINTA* composer—given the project's topic—to one of Zsuzsanna's texts and to then create an artistic music video together with Josef Sjöblom where *VoNo* would also add scenic and choreographic dimensions to the music.

VoNo, conducted and founded by Lone Larsen, has over the past 25 years developed a unique working method based on improvisation and creative co-creation. Their goal is “to develop and renew vocal performing arts in a way that affects the listener on an emotional and personal level” (*VoNo* 2025a). They describe their working method as follows.

We work from two different perspectives. The notated choral repertoire represents the perspective of “know first - do then”; we study and refine the music with the greatest possible respect for the composer's intentions. Group improvisation, on the other hand, is based on embracing impulses, saying YES, spontaneity and interaction: “do first - know then”. We play our way to something we didn't know existed, and which only exists in that moment. It is a great and exciting challenge to switch between these working methods in the same concert. But we also work on letting them color each other. To have a beautiful symbiosis between brain and body in everything we do. (*VoNo* 2025b)

They also emphasize the individual's importance for and its relation to the whole for their ensemble sound. “Working with these two ‘mindsets’ and having great artistic responsibility for the individual has created a close-knit ensemble with empathy, humor and a strong common musical expression” (*ibid.*). It was exactly for those reasons that I was fascinated by *VoNo*'s and Lone's work and we found each other in the objective to jointly create a score that would be based on *VoNo*'s improvising in the creative process, and afford and require improvising for performing it.

The project became thus a creative collaboration between *VoNo*, Lone, Zsuzsanna, Josef and myself, working together in different ways and different constellations in the project's five periods:

¹See (Ardó 2025) for more context and information on the project and her huge body of diverse artistic work in general.

(i) An introductory period of individual work of mine from January 6–18, 2024, prepared (ii) an iterative cycle between myself providing notated musical material and proposals for improvising and *VoNo* experimenting with them from January 19–February 13, 2024, resulting in a preliminary version of the score. After workshopping this in (iii) two meetings together in Stockholm between February 15–18, 2024, we developed (iv) a new iterative cycle from February 21–May 27, 2024, between me reworking aspects of the score, Lone and the ensemble testing and exploring these and Lone and me discussing. This period included the piece’s premiere and a workshop at URUK-fest at Folkoperan on April 19–20, 2024 (see Folkoperan 2024) in Stockholm, and was followed by (v) the audio and video recording and post-production by Josef Sjöblom and the ensemble as well as additional collaboration with another one of their long term artistic partners, Micaela Gillenberg. During most of the process, Zsuzsanna was in contact with us via email or oral discourse. The following reflections focus on the four phases of preparing the score.²

8.2 New dimensions of transcribing

After first readings of a selection of Zsuzsanna’s writing and discussing aspects of it together with her, Lone and I chose the title poem of Zsuzsanna’s project to work with. *PlanetWoman*’s interplay and synthesis of the repeated energetic and forceful exclaim “Here I come” with the different sensual perceptions that the poem’s assumed subject, a woman, experiences in her contact with nature and her surroundings resonated strongly with me. Especially interesting was how I as a reader seemed to be able to re-experience her perceptions through the sound of Zsuzsanna’s words.

It was then my first individual creative activities and their traces that led to the first dossier of material and ideas for interaction for *VoNo* to explore, thus directing the collaboration’s path.

I began through a close reading of *PlanetWoman*, looking both at the words’ sound and the text’s structure through sound and semantic meaning, using my experiences from *The Enchanted Forest*. Then I sorted all words by sound in different (overlapping) *word families* (see Figure 8.1, p. 116).



Figure 8.1: Sound relations—sound families in *PlanetWoman*, January 2024

Since the connection to Hildegard’s work was supposed to become part of the piece, it seemed important to include my esthesis of a tiny fragment of what had passed down through quasi centuries of others’ esthesis of her work into the iterative exploration cycle with *VoNo* so that I would not just quote something in the finished piece. Instead, I wanted to see how it would transform through our activities—and shape them in its own right. Thus, I chose a fragment of Hildegard’s song *O quam mirabilis* from the facsimile edition of the *Riesencodex* (Hildegard et al. 1998), one of the two larger collections of her songs, and began by notating it in contemporary music notation, consulting

²It would exceed the framework of this work to reflect on the interplay of the different artistic expressions and media that lead to the film. Also, while I was part of its development in the very beginning of its making, I did not contribute to the concrete scenic and choreographic concept and staging that *VoNo* finally chose and realized together with Micaela Gillenberg and *VoNo* singer and dancer Tove Fagius.

a transcription in square neumes by Pudentia Barth et. al. (Hildegard von Bingen 1969, p. 133) (see 8.2, p. 117). My own notation then looked as shown in Figure 8.3, p. 117.

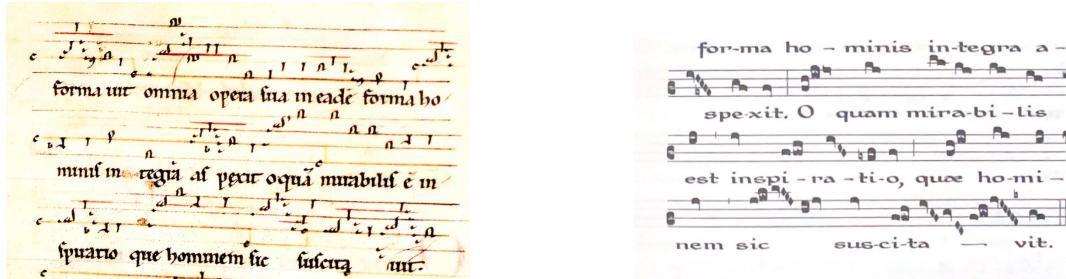


Figure 8.2: *O quam mirabilis* fragment from the Riesencodex (l., Hildegard et al. 1998, 466a) and in Barth's transcription (r., Hildegard von Bingen 1969, p. 133)

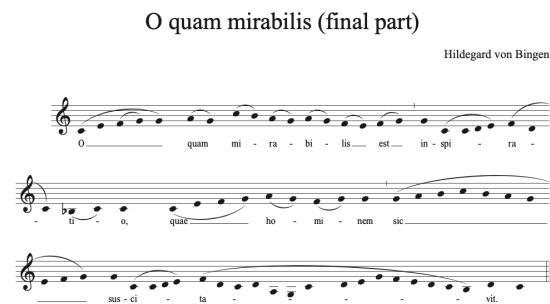


Figure 8.3: *O quam mirabilis* fragment in contemporary five-line staff notation

Again, I had used transcribing as a means of relating, again within the same media as in *The Enchanted Forest*, but this time with two different starting points and partly between different symbolic systems. Concerning the sound families and relations of sound and semantic meaning, this brought again, as with *The Enchanted Forest*, structural-semantic transformations to the text material. Different was however, that I was already in a resonant relationship with that material. Thus, instead of looking for resonance I needed to move from that general relation of resonance to the detailed dimension of creating single relations to single words and phonemes or meaning dimensions. It was a kind of reciprocal process in comparison to *The Enchanted Forest*. Concerning the Hildegard fragment, this was different. I needed the transcription in a very basic way as a precondition to be able to work with it at all since I lacked the training to read neumes as effortlessly as contemporary notation and had to make a memory aid in a familiar symbolic encoding.

After having begun the chart of word families, it became clear that it was not sufficient to imagine VoNo's sound exploration with my material, but necessary to delve into sound exploration myself, similar to what I had done with *Circular Composition II* with the saxophone. The difference was that I now used my voice to explore sound associations to Zsuzsanna's words and phonemes. This was born by the wish to turn the sensual experience of the poem's subject into a starting point for creating and indeed explicitly use the already much described tactile-aural-oral relation to my surrounding as a basis for preparing VoNo's creating and not only my imagination of VoNo's relating. As an instrumentalist with a so far exclusively pitch-related and phoneme-related practice of using the voice as a mediator to the instrument or to what I was creating, this was a new experience, at least in terms of its extent and explicitness.

Thus, another dimension of transcribing was added, the one of describing the newly discovered sounds and all melodic and harmonic material in such a way that VoNo could take them as a starting point for their creating. Transcribing as a structuring and transforming activity was even broader and more systematically applied to both transform traces and prepare other creative situations.

The dossier for their first exploration session on January 19, 2024, was thus a collection of all so far described elements, consisting of a text document with attached music notations as the following list summarizes it and as it can be seen through following the links.

1st dossier, part I for *VoNo*'s first exploration session, 20240119

1st dossier, part II (score) for *VoNo*'s first exploration session, 20240119

1. Written proposals for interacting with Hildegard's fragment in my transcribed version
2. Written proposals for sound colors or structures to explore, including a cloud of words derived from the sound family chart
3. Material that could be combined or applied on the activities of part 1 & 2, including small fragments quoted or developed from the Hildegard fragment and an attached 4-part choir setting
4. The—completely unnecessary since they would do that anyway—invitation to explore the material through improvisation in whatever way preferred
5. An invitation to give feedback

8.3 New dimensions of transformation

Since my interest lies in how *VoNo*'s and my activities transform the participants of the creative situation and their relating, including ourselves and the traces resulting from our activities, the following reflections will bring some of the activities and traces from the different nested iterative cycles of activities and situations of creating and their transformations into focus. They examine them in relation to the score as the resulting trace or neutral level of the overall creative situation, scrutinizing the different poietic and esthetic processes the score and all other exemplary traces were involved in.

To the first dossier for *VoNo* belonged the proposition to experiment with *whistle tones*, which I originally knew from the flute, but had also stumbled across on the saxophone in the first creative situation of *Circular Composition II* (see chapter 3, p. whistle tones). Now, the whistle tones had turned into a sound produced with the teeth in a certain tongue and lip position, inspired by the poem's first line, "Wind between my teeth." The first dossier proposed the following to achieve the sound, or, in Seeger's terms, it *described* what I had found in my explorations and *prescribed* for *VoNo* how to achieve that sound: "[M]ake a soft, unvoiced ss-sound and experiment with the form of your lips which is a circle, but can become smaller or larger. Find positions where you can play around with high, whistling pitch that emerges on top of the s-sounds. Together, but in individual tempo" (Flick 2024, p. 1).

This sound accompanied us through the whole creating process, meandering between descriptions of how I had heard myself or *VoNo* forming it as well as proposing or *prescribing* new variants and exploring combinations with other musical elements. In the second round of the cycle, the whistle tones were combined with other musical elements in a score draft and assigned to only the basses as shown in Figure 8.4, p. 119 and the linked score draft.

2nd dossier, part I for *VoNo*'s 2nd exploration session, 20240126

2nd dossier, part II (score) for *VoNo*'s 2nd exploration session, 20240126

When Lone in our workshop in February 2024 proposed to add the element of overtone singing through *VoNo*-singer André Hasselgren in order to make the whistling more audible in the live performances, I realized that these sounds were not only potential components of a new piece, but tools for *engendering* new behavior, new sound, or any such component.

Figure 8.4: Whistle tones in the second score test for *PlanetWoman*, January 25, 2024

In the final score (Flick, Larsen, and Ardó 2024), whistle tones and the overtones, mostly in combination but also separately, were kept as a basic element that carries through the piece, for example in part B or in the very end where the overtones close the piece as shown in Figure 8.5, p. 119 or the linked final score.

Figure 8.5: Whistle tones and overtones, examples from the final score of *PlanetWoman*

Transformations like these formed the score on more levels than the purely material-related ones. This became most obvious through a transformation that was provoked when *VoNo* in the first session on January 19, 2024, tested my first draft of a four-part choir setting as part of the dossier—and added improvised outbursts with the text of *Here I come*, the already mentioned refrain or *core* of the poem. To incorporate and *describe* and *prescribe* these outbursts in the score, I designed an additional staff, denominated “variously assigned”. This staff was then also used for any individual activities or groups surpassing the usual vocal groups. It also inspired similar improvisatory action, such as the added solo in part H. The first version of the new staff looked as shown in Figure 8.6, p. 120. For the final score it transformed as shown in Figure 8.7, p. 121 and the final score (see p. 120), being always embedded in the middle of the accolade, which now has

six parts.

PlanetWoman, final score

PlanetWoman, video bei *VoNo*

Figure 8.6: The development of the new staff: four part setting (20240119) and new stave in the second score test of *PlanetWoman* (20240126)

The new staff afforded and inspired thus new ideas both for the structuring of the score and the ensemble. Through its sheer existence as a simple and effective notational solution for mixing groups or featuring individual activity, it set in motion a constant regrouping of voices and became a working tool for the piece's essential characteristic of exploring the interaction of individual and collective activity—thus mirroring also the project's overall artistic visions on a structural level.³

When creatively exploring the *O quam mirabilis* fragment as described earlier, it had been most interesting to create concepts for the singer's interacting with each other. With my ideas partly also inspired by Susanne Rosenberg's *Kurbits-Koral* (Rosenberg 2013), my own experiences within different improvising bands, such as the quartet or Holly Schlott's *Unique*,⁴ the dossier for *VoNo*'s first exploration session proposed experiments with aspects of time, improvised or notated simultaneity, leading and following and in general individual versus collective action as shown in Figure 8.8, p. 121. Listening to *VoNo*'s exploring of their interacting and "stretching" and developing further what I notated became an invaluable tool for familiarizing myself with the group's sound and interacting and for inspiring new notions of my notation. Gradually, new notation tools evolved that afforded both accuracy in proposing musical material and space for the individual performers' creativity.

When sketching the piece's end, I reused the *O quam mirabilis* fragment in a passage of in-

³An interesting account on the creative interplay between prescriptive and descriptive notation and in relation to a creative collaboration with intertwined working cycles of improvisation and notation can be found in Karin Hellqvist's writings, for example in her article *Circular Bowing, Cyclical Work* on her collaboration with Henrik Strindberg (Hellqvist 2022). Based on reflections on the relation of the score and the performer and the dimension of embodiment, she points to similar relations between the creative activities and notational experimentation while creating as well as the structural consequences for the new piece (ibid., pp. 1457282/1457283/1453/5827).

⁴See (Schlott n.d.) for an impression of this ensemble's practice.

Figure 8.7: Beginning of the final score with outbursts and part H in its final gestalt with other individual activity inspired through the new stave

1 Hildegard melody fragment „o quam mirabilis est inspiration“ (see file):
 #1a Singing in unison (senza misura): sing this melody together in unison and experiment with theagogics and dynamics, both self-organized as group or conducted. Do it without the text with an own sound (or a word), or use the text.
 #1b Singing together in individual tempo: Do the same, but with individual tempo, repeat that a few times, you can end together or you decide about the number of repetitions and everybody finishes in their own tempo. Try to hear each singer of the group while singing your version.
 #1c Spontaneous bourdons: Some people can at some point stay on one of the pitches of the melody and hold it while the other continue → when the pitch reappears they join in the melody again or find another way how to get back to the group
 #1d Combinations: Add another layer to either #1a or #1b by choosing one of the following materials/techniques or by combining #1a and #1b

Figure 8.8: Proposals to interact with *O quam mirabilis* fragment for *VoNo*

tensification through applying it as an improvised canon while slowly transforming its intervallic structure that in combination with other Geschehen prepared a collective improvisation part. In this part, the poem's last lines, "Dancing through Thunder, dancing through roaring rain", and "A wise live wire A woman"⁵ appeared for the first and only time (see Figure 8.9, p. 122, and score link on p. 120). Only in conversation with Lone I realized, that this was indeed the piece's climax which afforded space for *VoNo*'s full potential of sound richness that we had both been missing so far (see Figure 8.10, p. 123 and score link on p. 120).

Thus, the next phase in our project was characterized through an intensification and continuation of conversation. When making a revised version after our workshop in February 2024, Lone and I entered into a new iterative cycle based on constant oral or text discourse: Lone would share her reflections resulting from rehearsing the newest score version with *VoNo*, together with some recordings of these rehearsals, and I would propose a revised notation on the basis of my esthesis of these recordings and our discourse. Occasionally we would also be in contact with Zsuzsanna and at some point also Josef to reflect together on the poem's semantic meaning as well as the music's

⁵This order reverses the original order of verses where "A wise live wire A woman" is the first verse of what I consider as the second part of the poem and the two consecutive verses "Dancing through thunder" and "Dancing through roaring rain" close the poem (see Flick, Larsen, and Ardó 2024).

Figure 8.9: The intensification passage with the *O quam mirabilis* fragment in its transformations and as a means of different contact-makings in the score of *PlanetWoman*

relation to our individual and shared esthetic of the text. Thus, first ideas of how to transform our ideas to the visual, spatial and movement domain of the film evolved.

Practicing reflecting *in conversation* on our creating, enabled creating *in conversation* with each other and had thus developed the oral discourse into a powerful tool for creating. This afforded not only, at least to a large part, a shared esthetic process which enabled us to conceptualize the passage's and the whole piece's final structural form together, but also made Lone and *VoNo*'s creating explicitly part of the piece's poiesis during the whole period of its creating.

8.4 A shared practice

Reviewing these comparisons of the notational traces from the different stages of the score's poiesis, in regard to how we entangled our activities, as well as in comparison to the previous experiments, provides interesting insights concerning the score's affordances and its function for creating, as well as all participants' relating. To begin with, it is striking how closely the transformations and increasing entanglements of musical material, structural characteristics and affordances for interaction correspond to how *VoNo*'s and my ideas through the increased intersection of my notational exploration and *VoNo*'s spontaneous vocal exploration of musical material became increasingly entangled. The resulting continuous interplay of prescription and description in the notation has, on the one hand, led to a score with meticulously elaborated details regarding sound and expression, connections between form parts and the semantic context of the poem, how and when to transition between material, as well as in regard to the roles in the musical *Geschehen* or the singers' relating. Also, as in *The Enchanted Forest*, the piece's course is very clearly designed and structured through the notation. On the other hand, there is a constantly transforming layer of notational parts that function as interfaces for exploration that require spontaneous and both individually or collectively shaped exploration of sound or semantic material—a layer which constantly moves between individual voices, differently assembled parts of the ensemble or, once in part K, the whole group.

Thus, on the one hand, the piece pre-structures very clearly its contact with the unforeseen dimension of both the singers' and the conductor's interaction with the score and each other, suggesting a hierarchy of the notation for prestructuring the collective esthetic. On the other hand,

PlanetWoman

11

build, more and more intensely

Soprano (S), Mezzo, Alto (A), Variable Alto (var. alt.), Tenor (T), Bass (Bar), Bass (B)

Seza misura (Blossoming, rejoicing)

calming down

improvise collectively with these words

Dancing

Dancing (through thunder)

Dancing (through tearing rain)

(1 A + 1 T)

Here I come

solo spoken

A wo - ram

Figure 8.10: The intensification passage leading into the improvised climax in the score of *Planet-Woman*

the continuous layer of these variously designed interfaces for spontaneous exploration constantly brings the singers and the conductor in new and unforeseen relations to each other and the score. Nevertheless, it seems that there is an equilibrium between the unforeseen esthetic and poietic dimensions of the performance and the pre-structured esthetic afforded by the notational course. This is underlined by how part J leads (see again see Figure 8.9, p. 122) to the climax of K (see again Figure 8.10, p. 123). It propels the piece forward by changing what was, for the most part, a notated course in constant conversation with spontaneously created materials, shifting it more and more toward the spontaneous dimension. Thus, the transition into the spontaneous poiesis of the climax is pre-structured by pre-structuring the type of material to be explored as well as by transforming the density of the ensemble sound through suggesting approximate points of entry. It does not happen by pre-structuring the contact of materials as in previous score parts, nor by *how* to explore materials and their exact coordination as in *The Enchanted Forest*. While J begins with the Hildegard fragment in (mostly) unison in tenor and baritone, by and by further explorative parts that relate spontaneously to all other are added. First, soprano and mezzo begin improvising melodies with the poem's lyrics (bar 70), then the bass starts a reading of the poem (bar 72). After that, the "variously assigned" voice adds overtone singing, with the proposition to "experience (1 bass) yourself as contrapuntal to all other sounds and melodies" (Flick, Larsen, and Ardó 2024, p. 10). As soon as the overtone singing begins, the baritone pauses. In bar 84, the alto joins the tenor unison and the baritone reenters in a spontaneously shaped canon to the tenor. Thus, alongside the melodic-harmonic transformation of the Hildegard melody, it is the incremental addition of spontaneously interacting voices that prepares the climax in K. There, only two phrases of the lyrics remain as pre-structuring parameters that serve as a basis for interacting. Thus, it is by providing and omitting specific information that the notations in J and K both afford and require specific ways of listening and relating between the singers and the conductor and turn into differently shaped interfaces for spontaneous exploration. Since there is no designated pulse and the order of the

different parts' entries is only partly pre-structured, even the temporal relations must be negotiated in the moment of performance, including the singers within unison groups. To summarize, even more than in *The Enchanted Forest*, the score of *PlanetWoman* affords a continuous interplay of pre-structured and instantly shaped musical material and modes of relating between the singers, the conductor and what is notated. Thus, it becomes clearer that what is notated is constantly transformed through by the unforeseen musical material with which it interacts. This correlates with the piece's process of poiesis, which was continuously shaped by the interplay of pre-structured and instantly shaped relations instead of only at times.

Thus, the score functions quite similarly to the previously discussed lead sheets for Chanda and the quartet, since the notation leaves many of the relations between symbols open to negotiation at the moment of interaction. However, these lead sheets apply other interfaces for such interaction. Even the one of *In the dark* that pre-structures the piece's course, does, in contrast to *PlanetWoman* not pre-structure the interplay of notated and spontaneously created material. However, similarly to a lead sheet, the score of *PlanetWoman* is a dynamic notation. *VoNo* keeps exploring it and thus also varying its parameters, continuously adding or omitting material or changing the notated interplay of parts. Thus, while what is notated bears all notational characteristics of a score, our poietic process has imbued it with traits that resemble those of a lead sheet. In other words, our process has transformed the traditionally prescriptive function of a score in Western classical music, making it a participant in creating that invites negotiation of activity.

Also, quite similarly to *Circular Experiment I-III* in which the activity of notating and transitioning between the experiments and the resulting stages of notation tied my notation and our playing together, the notational traces of *PlanetWoman* functioned as a generative tool for the process. It became the pivot of our collaboration, at the same time documenting and engendering creative activity. Nevertheless, the relation between the creative participants was very different in the projects with the quartet and *VoNo*. With *VoNo*, the activity of transcribing—that obviously had a much more diverse and systematic scope than in *Circular Experiment I-III*—was performed over a much longer time span and structured the transcribed material in a more varied way. However, the most important difference was that in *PlanetWoman*, the activity of transcribing was accompanied by discourse and joint negotiation on the choice of symbols, relations between symbols and, most of all, the piece's envisioned musical course. Although it was part of my role to propose the piece's course and taking notational choices, the notation and thus all aspects of the piece's course were nevertheless negotiated together by Lone and myself in between my notation periods and by Lone and the ensemble in their working periods, something that was different even from the poiesis of *The Enchanted Forest*. To summarize, the score of *PlanetWoman* in its transitions could function as a pivot of creating sound or encoded sound and musical behavior, since it is the result of combined activities that secured a *continuous* interplay of individual and collective poietic and esthetic processes. Through their interrelation they could form and transform each other and transformed all participants' practice of relating to notation.⁶ A shared practice of relating to notation across our very different artistic experiences and webs of artistic practice could emerge. A shared understanding of the score as a facilitator of relating evolved, a facilitator that never is “rendered” or has an original version of a preferred musical *Geschehen*, but that has to be discovered and negotiated anew each time it is interacted with. The poiesis of *PlanetWoman* made the relation between a trace's past and its future, its continuous embedment in entangled individual and collective processes explicit.

Necessarily, this influenced also the relations and thus the roles between the human participants of creating. In comparison to when creating *The Enchanted Forest*, the traditional roles of especially the composer, the conductor and the ensemble were much more intersected and dissolved, as also the copyright of *PlanetWoman* shows which is shared between Zsuzsanna, Lone and me (see appendix for details).⁷ Also, despite our work being highly intertwined and the responsibility for the piece's

⁶This is also reflected in Karin Hellqvist's observations on the transformation of her practice and the resulting transformations in relation to notation when she notices, “With the transformation my practice has undergone over the course of this project, my relationship to notation and the score has changed. As I have become involved in the compositional process, sometimes notating the music myself, the score changes its status and meaning. The long history I have with the notated material makes each score a unique site, filled with meaning” (Hellqvist 2025, pp. 2225687/2225699/977/2957).

⁷Nevertheless, this is only a practical and to a large part symbolic partition between the rights that does neither

poietic course being shared between the composer and conductor, the pre-structuring of the piece's poiesis through traditional separation of responsibilities for specific activities, such as notating, which was solely done by myself, certainly contributed to maintaining pre-structured roles and responsibilities.

What has been discussed so far highlights a specific twofold dimension of a score, the simultaneity of abstraction and personalization that is innate in the term score itself.⁸ A score like *PlanetWoman* that is highly personalized through notating for specific singers and their specific way of expression and combination of skills, can thus nevertheless be performed by other groups that have not been part of its poiesis as the recent performance of *PlanetWoman* with *ProCoro Canada* and Lone Larsen in Edmonton has shown.⁹ This confirms also what especially the work with the quartet has shown—though the past of a trace is related to its affordances for future interaction and its relation to the unforeseen, it is nevertheless an interplay of the trace's poiesis and the negotiated *ascribed* or narrated poiesis of a trace that forms this interaction.¹⁰

To summarize, the following insights emerge when formulated through the lens of my research questions. (i) It is not only the trace as such that is “constantly in the process of becoming, with continuous transformation processes, stimulated by the connection and interaction of the traces it has made, makes or will make contact to” (chapter 5, p. 77), but also the concept of a trace that transforms through engaging in the entangled activities in which the trace is involved—in line with the mutual transformation between performing activities and describing them semantically as discussed in chapter 6, p. 98. (ii) Thus, also the creative activity of engaging into discourse as a shared semantic describing contributes to developing shared concepts of traces, leading potentially to shared practices of understanding and relating to traces. (iii) The trace's affordances for contact-making and the resulting relations to the “*outside*” world of the interacting human participants are also shaped by the notion of a trace's affordances. It is in that way that engaging with traces leads to pre-structuring processes of esthesis and poiesis as described in chapter 6. (iv) Hence, describing the entangled activities in which a trace is involved not only functions as a tool for understanding more about this trace in relation to the activities, but offers insights on how a shared musical practice of relating to traces even between participants with very different webs of artistic practice can evolve and be shaped.

Much has now been said about different kinds of notational traces and the multiplicity of their complex involvements, since all so far discussed experiments deal, although in different ways, with notation in different stages of their proceedings. However, nothing has so far been said about creative situations that do not involve music notation and solely deal with aural traces. A closer reflection both on a broader variety of traces and different kinds of relating as well as different orders of relative *Geschehen* between individual and collective creative situations seems necessary, something that the experiment discussed in the next chapter focused on.

depict the ensemble's nor the individual singers' contributions. Also, obviously, as soon as the ensemble is an improvising ensemble, also the relation between conductor and ensemble changes. However, discussing this in more detail would exceed the framework of this work, see also 7, p. 111.

⁸This becomes very obvious when looking once more at the etymology of the German equivalent to the term of the score, the *Partitur* (see also chapter 6, p. 90), which is connected to the aspect of dividing, sharing and distributing this multiplicity that the English term of the score is related to. The *Partitur* thus also connects the score to the topic of identity as it also shines through in the German term for the parts, which are not just parts of the whole, but *Stimmen*—voices whose potential relations are encoded in that score through its different *Stimmen* and their interplay.

⁹September 28, 2025, 3:00 pm, McDougall United Church, Edmonton, Canada.

¹⁰“Since art works are involved in a continuous process of happening, we should think about them in a way that shows how all the steps in the process manifest themselves inside the work. The work contains and embodies all the things that happened in its making” (Becker, Faulkner, and Kirshenblatt-Gimblett 2006b, p. 5).

Chapter 9

Oral–aural interacting as transforming

9.1 *Proberaum* and *Trails of Traces I*

Proberaum is the name of both a specific artistic project and the artistic collective working with it, initiated by Nina Perovic in 2023. It brought together four artists from different disciplines, resulting in the joint creation of an audiovisual performance for the Moderna Galerija in Podgorica (Muzeji i galerije Podgorice), *Reconnecting (with) Traces*. I had met Nina in 2022 during a creative residency of hers in Berlin where she had worked on applying sociopsychodrama theory and methods on musical collaborative creating. Although I had no prior experience with sociopsychodrama, Nina's take on the topic and her interdisciplinary approach as a composer, pianist and artistic researcher with a large interest in improvising was highly inspiring. After some changes of ideas and in the setup for our work, a project framework as sketched in the following evolved and the project was supported by JU Kulturno-informativni centar "Budo Tomović" Podgorica and Muzeji i galerije Podgorice.¹

The four main participants were Nina Perovic, composer, pianist, improviser and pedagogue residing in Podgorica and Berlin, Mina Novčić, painter, visual artist and art pedagogue in Berlin, composer, architect, visual artist, (jazz) guitarist and pedagogue Thomas van Walle from Antwerpen and myself. Our actual project began in August 2023 and lasted until November 2023, with two phases of work—the remote collaboration from August 2023–October 2023, and an intensive collaborative week together in Podgorica between November 4–10, 2023, where we on November 9 presented our work. In Podgorica, some of Nina's students from the Music Academy in Cetinje worked together with Nina, Mina and Thomas in a workshop to prepare the performance and create their own traces in the workshop.² Hristina Merdović, Kristijan Lalović, Branislav Prorocić then also became performers within our piece. Our tools were our physical and electronic instruments and software as well as the visual materials we developed for the performance. Also, our material surroundings consisted, on the one hand, of our usual surroundings and working spaces in mainly Berlin, Podgorica and Antwerp or wherever we would find ourselves between August and November

¹Nina's original concept had been to work with two duos—one with me and one with visual artist Mina Novčić—to create together a few experimental "simple tunes" with electronics and possibly our instruments. Nina's project description that served as a starting point for our work became the following one. "The 'Proberaum' project includes meetings of four artists and the application of socio-psychodrama techniques with the aim of connecting the group and creating a unique concept - an art form that will be presented to the Podgorica audience in November 2023. With a light, sarcastic, and ironic flair, this project will study the importance of personal content in private life (from dealing with the issues of security, violence, self-indulgence, to questioning conformism to reality, as well as what is beyond that limit, i.e. the world of fantasy) and transposes this into an artistic form in the form of group dialogue. Through joint work, applying socio-psychodrama techniques, as well as relying on the established rapport of the artists, a series of rehearsals will be realized in Berlin and via the Zoom platform within the project 'Proberaum' (the German name for the rooms where rehearsals are held). After the prepared content (music tracks, audio-visual installations, 'audio comic'), this work as a unique music-visual form will be presented in the form of a concert to the audience in Podgorica, and then in Berlin. " (Nina Perovic, private document shared with author, 2023)

²Due to illness this workshop was held without me.

2023—on the other hand, the spaces we worked in Podgorica, including the museum space of the performance from November 5–9, 2023, as well as our virtual-material surroundings of the monthly Zoom meetings. The immaterial surroundings were mainly structured through the museum's commission including its time scale, our evolving working topics and our ongoing discourse and the references we included in our work, our webs of artistic practice, our tacit expectations and for myself also the research focus.

All of us were partly familiar with each other's work, but none of us had collaborated earlier, thus, the only preset framework was the material and immaterial implications of our performance commission and all practical aspects connected to it. The aspect of sociopsychodrama theory became an implicit background for our project, but in different degrees of intensity and explicitness for each of us. I did not deepen my quite restricted knowledge, but took with me the main inspiration of the focus on the *role* of each participant in a situation and its contact-makings and interactions.

The regular online meetings became the core of our collaborative work. From there, our individual creative work evolved and we shared the results of our activities in a cloud folder. This exchange of created traces as a means of creative communication was similar to how I had worked with Chanda, or with *VoNo* (see chapters 6 and 8). However, different here was that there was no other pre-envisioned artistic methodology for collaborating and that we from the beginning on had established an iterative cycle based on collective reflection on what we created. Also, in contrast to previous experiments, there was quite little specification on the creating's outcome, i.e. the performance, besides that it would be audiovisual. Specified was only the exhibition room in the museum where our performance should happen, as well as a date and a starting time for performing, and it was clear that the starting point for creating had to be to use our own artistic resources, in short, to perform without more additional instruments than our own and no other additional devices than a synthesizer and a PA system. Otherwise, *how* we would work together, and *how to* specify the performance and its parts in regard to its topic and its artistic expression had to be clarified through collaborative decision making by all four of us.

During the first meeting, it became apparent that we shared an interest and experiences in exploring sound through movement and vice versa. We established two first key words for our work, *trails* and *traces* or, *Trails of the Traces*, as it was phrased at first. The starting point for our understanding of something as a trace was to consider the trace as the result of interacting bodies and minds through movement that would lead to a transformation, existing in between presence and absence, anticipating and preparing artistically the further contextualization made through Krämer's notions (see chapter 5, p. 58ff.). At that point, the terms of the trace and the trail as a collection of traces served on the one hand as the jumping-off point for an envisioned, larger topic yet to be narrowed down for our performance, and, on the other hand, as a tool of getting to know each other artistically and personally.

We began the work by collecting first questions to approach the key words of the trace and the trail and established a shared online text document (Perovic et al. 2023)³ and the already mentioned cloud folder for sharing traces in our different artistic media and in written language (see Figure 9.1, p. 129). During the project's advancement, this text document and the related folder became not only a means of documentation, but functioned also as a collective diary and thus a contact tool. Exchange in oral and written language and again through notation became thus the first means of making contact with each other, alongside traces of audio and visual art works that we had made earlier or that we found inspiring. Reflection-on-action was in that way not the result of joint artistic doings, but the starting point for further activities as a first shared creative activity in its own right.

In retrospect, it is worth noticing how the term of the trace began to resonate with me as an artistic tool at the same time it unfolded its potential as a research tool. In order to rely on their implicit effects on my work and to begin something new as "fresh" as possible, I had so far rather avoided thinking consciously of my past work and the traces that it had left within myself or that were tangible in the forms of sheet music or recordings. However, it was inspiring to use the term

³This document is a *Google Doc* that was last modified on November 8, 2023. Google Docs enable tracing back all modifications in combination with their point in time and the originator, therefore it is not a linear document such as a usual text document. If referred to page numbers, they refer to the newest layer in time from November 8, 2023, saved as a downloaded pdf file.

Trails of the Traces

I. QUESTIONS

What are the first words that come in your mind when you think about "trails" in your art work?
...and your personal life?

Which traces did you witness during the previous last days (yours or people around you)?

Are there some traces you left behind you that you would like to disappear?

Do you have a vision for trails that you want to continue or start anew in your future?

Which trails do you like at the place you live ?
Are there certain materials that are characteristic ?

Did you ever try to delete or to hide or "mask" trails?

Do you have certain artistic methods to purposely become "marked" by certain traces?

Are there some specific traces you see at the painting on the wall in the room where we will perform?

Are there invisible traces?

Are you aware of how it feels when you become aware of considering something as a trace?

Is there a timeline for traces?

Which five objects as traces would witness your life timeline till this moment?

Figure 9.1: *Proberaum*, first questions as a starting point for exchange and creating (Perovic et al. 2023)

of the trace as a lens to communicate my interests and musical preferences to others and to bring to mind the momentary artistic and personal interests and circumstances when beginning a new work. The very broad application of the term of the trace in the beginning of our work, focusing on its relational and transformative quality, must have been important for its reflective application as a research tool and the conceptual transformations aided by contextualizing it with Nattiez's and Krämer's writings.

Also, it was interesting how our questions, despite—or maybe because of—the so far so fleeting and flexible quality of our collaboration and the diversity of geographical and cultural backgrounds and webs of artistic practice led to concentrating on exactly these specific individual work experiences and working circumstances in order to find shared experiences or interests. The questions made me connect with my momentary individual artistic interests and living circumstances, focusing not only on the momentary artistic work, but including an explicitly holistic look at all dimensions of the interactions my creating was embedded in. Unlike the other experiments, reflecting on my interactions with my “*outside*” world became a creative tool in its own right and preceded other creative activities. In which way and with which consequences this happened will be the subject of the following reflections, bringing one of my most comprehensive contributions of mine to our performance into focus, the electroacoustic piece *Trails of Traces I* (Flick 2023h).⁴ It

⁴Equally relevant was the second electroacoustic piece I created for our performance, *Trails of Traces II* (Flick 2023i)—created as a multilayered contrapuntal weave of semantic reflection and voice exploration that was inspired by, and also inspired the further exploration of the notion of the trace, both artistically and in relation to my research. It is based on a variety of text parts from our GoogleDoc, particularly a longer section of mine that was inspired by a line of Thomas', as well as the final stage of my work on *Trails of Traces I*. However, though it plays a crucial role in both my personal artistic development and was important for our performance, a closer discussion is omitted here. It seems to me that the following reflections based on *Trails of Traces I* sufficiently support my line of reflection and the point I am trying to make. Nevertheless, it is part of the research project's artistic documentation and can be found in the *Research Catalogue* exposition (see appendix for a separate link). Unfortunately, the sound quality is quite poor since I did not take the time to set up my recording equipment and just recorded through the microphone of my headphones, a decision resulting from being afraid of loosing the feeling of resonance and the urge to create that had led to the piece's spontaneous and quick creation. Nevertheless, despite considering *Trails of Traces II* rather as a test for what could be done, that should be recorded with proper technical means and a more trained

is on purpose that it is a singular individual project contribution that is put into focus, and not the whole performance. On the one hand, a comprehensive reflection on our performance and the whole working process would exceed and miss the purpose of this text. On the other hand I simply do not have the knowledge to speak about the “full historical and social context” (Becker 2006, p. 27) of our collective endeavors; on the basis of my chosen research methodology, I only can reconstruct and reflect on my own poietic and esthetic processes.

9.2 Recording

My notes after our first meeting on August 9, 2023, read:

Starting point for me:

Record sax improv zu fragen, work with that with ableton

Textantwort schreiben zu Fragen, auch aufnehmen mit meiner Stimme, auf ableton verfremden oder filter drüberlegen und schauen, was übrig bleibt?

Spuren in Kompositionen von mir sammeln und aufnehmen? Zb Stimmführung aus neuem Stück oder Color Studies #9, mit sax spielen, einsingen?

Etwas für Stimmen schreiben??

Since the physical instruments we could use for the performance were basically my saxophone and our voices, I had from the beginning on planned to use this project as an occasion to experiment with *Ableton Live*. Ableton as a very versatile DAW (Digital Audio Workstation) and tool or sur-inter-face⁵ for contact-making had fascinated me for a long time. However, I had had very little experience with it so far; mainly using it as a tool for com-posing and manipulating prerecorded saxophone sound.⁶

The above-quoted notes referred therefore mostly to recording saxophone and my voice for use with Ableton. However, my main activity with Ableton became a different one. Besides recording a few such saxophone explorations in my shared rehearsal space (my *Proberaum*), the *Frauenmusikzentrum Lärm und Lust e.V.* in Berlin, I immersed myself in recording the sound of my everyday life surroundings. The first activity was recording outside the rehearsal space in the yard, recording the sound of my surroundings, mostly consisting of sounds from passing cars and other traffic. Then, I recorded the surroundings from inside, placing the phone in the space of the open window. After nevertheless having recorded some saxophone explorations with the windows closed, the next activity was to record traffic in other places throughout the day. I kept recording in the following days and weeks whenever waiting somewhere or when passing familiar or regular places. It was interesting to perceive myself becoming more and more interested in the diversity of acoustic surroundings that usually were better to ignore or rather to endure instead of to listen to, thus experiencing them while trying *not* to listen. Now, I listened while holding my phone that was recording in proximity to the location where what I was listening to was most prominent—for example, the usually totally enervating variety of pitches by the kitchen fridge or a very similar and, equally enervating, but much louder pitch of an industrial vacuum cleaner from the house opposite, which I could hear through the open windows in my working room at home. In a first trial, Ableton served to combine the traffic sounds with these pitches and the fragments of my saxophone practicing from within the rehearsal space as well as small bits created with Ableton’s preset midi sounds. Using the computer keyboard, I recorded first simple melodic-harmonic structures “live”

voice, it felt right to keep the piece in its provisional state. In the performance it was combined with other live sound and movement.

⁵Interface would be the more appropriate term that had been introduced for reasons explained earlier. However, since an interface is in this context the proper term for an apparatus that functions as a *translator* of signals between the DAW and external devices to produce or capture sound such as microphones, electronic instruments, speakers, and similar devices, I chose to stay with this kind of neologism in contexts dealing with DAWs.

⁶It had been in that way that in the spring of 2023 my first electroacoustic piece came into being, *Circular Composition III* (Flick 2023a), as some kind of derivation and reflection on *Circular Composition II* through using saxophone recordings made during the creative work on *Circular Composition II*, which I then played to live when performing it at EPARM conference in Copenhagen (see chapter 4, p. 55). *Circular Composition III* is available through the *Research Catalogue* exposition (see appendix for separate link).

to an assembly of my field recordings, and also experimented with panorama, frequency filtering and volume relations on and between all recordings to form a whole.

My fascination with the activities themselves and their result, which were so different from the traces of my earlier experiments in terms of their means and materials, led to the decision to continue working in this way and create a collage symbolizing my perspective on the traces made around and within me. Thus, the recording was continued with a twofold focus, on the one hand with the goal of collecting loosely what interested me, on the other hand aiming to embed the selected-listened to-recorded material in my evolving piece. For a few weeks, this became some sort of obsession, making me listen for something to record and recording nearly everywhere. There was a constant readiness to begin recording, to engage into this double movement of recording what suddenly caught my attention and actively directing my attention to my acoustic surroundings to find new sounds. I did not record more saxophone, but experimented with manipulating and cutting my already recorded bits in different sizes and tempos, transposing them as well as creating stereo effects and contrapuntal settings with the differently processed bits, also in “rewind.” I captured the sound of water running through the pipes under the ceiling of the dressing room of one of my usual swimming pools in Berlin, the sound of accelerating and decelerating trains from Berlin’s S-Bahn, people speaking or rather yelling when making contact with each other and trying to drown out the passing, squeaking trains and the sound of birds in the park around Park Abbey, where *Musa Horti* rehearsed. I recorded a diversity of vehicles passing by on a variety of traffic routes, I recorded some mysteriously drifting traces of music that finally could be traced back to the stereo of a car that drove at different speeds ahead of me on my hiking route of a winding road. I recorded the sound of perceived metrical modulations of paired traffic light beeping cycles—and many many more sounds. Both recording and manipulating the recordings in their co-action in Ableton felt like hunting. My attention was sharpened and focused. Directed through the *Geschehen* of my piece, I filtered out traces of sound from my surroundings, capturing them through the filter of my phone microphones and storing them on my phone’s memory—“snatching” these sounds from their source of emission and their usual *horizon* of meaning and giving them an ever-changing new one by placing them in a new context, composed of a conglomerate of many different contexts. My fixation was even extended to capturing audiovisual traces, such as when collecting endless moments of water surfaces moving, my feet moving on peaceful small trails along the waterside, or cars moving on an autobahn.

Not all of this ended up in my Ableton session—and actually none of my audiovisual material did in the end—and even when it was quite sure that this first piece had enough *material*, the activity of recording continued. It took months before this obsession faltered and it did actually never falter completely, still flaring up again and again, having become a regular activity of my artistic practice since something had inevitably changed in my perception. Collecting and working with traces for *Trails of Traces* had left a substantial disturbance-trace-transformation in myself. How can this change be described? How does this recording activity differ from recording myself on the saxophone or when singing or playing piano—or does it at all? What was actually done when recording, i.e., how could the interacting with my surroundings including the recording device *while* recording be described? What implications does my experimenting in Ableton with my recordings have for my and others’ listening and aural meaning-making?

When describing my obsession with recording above, it was formulated as a “double movement of recording what suddenly caught my attention and actively directing my attention to my acoustic surroundings to find new sounds” (see p. 131). There is a tension noticeable in this, the already mentioned tension between listening *for* something and not knowing what to listen for, the connected expectation to experience something unknown as resonant and to be transformed by it, thus involving consciously in Li’s earlier quoted 4, p. 46) “pre-auditive” formation of the ear” (Li 2022, p. 9, my translation).⁷ The previously-discussed German verb *lauschen* or hearken in English is probably the most appropriate dimension of the dimension of listening that is at play here (see also chapter 4, p. 44), hearking-listening for something to listen to that transforms and thus implicitly steers all future listening experiences. This transformative dimension of listening is also responsible for a change in my perception. It could be formulated as a result of training the ability to listen to my everyday surroundings, placing what was listened to and for in front of another horizon and

⁷See also chapter 4, p. 46.

thus training my perception by shifting the meaning of what was perceived—and probably also heightening my awareness of ongoing sound, thus also widening the spectrum of perception. The sounds of my everyday life transformed into a soundscape that could be related to as if it was an intended soundscape instead of residual sounds of interaction of human beings with their “*outside*” world. Listening implied not only creating a relation between certain sounds and myself, but led also to relating sounds that otherwise would not be perceived as related. In other words, a narrative evolved together with the listening.⁸

New to me was not only this enjoyment of a heightened state of attention and sometimes resonant relationship to the surrounding soundscape, but also the interest in singular sound *Geschehen* as well as the perception of all these *Geschehen* as a musical *course* of sound, a development. The passing of time was suddenly explicitly part of my auditive focus as a basis for listening to the unfolding of specific sounds and as a means to relate sounds to each other. Suddenly, it had a function in my meaning-making.⁹ New was also this additional tension of being on the lookout and listening to everything perceived through the potential relation of that sound to my piece. This time, listening *through* something was not listening through my imagination of someone else’s potential listening such as when creating the score for *Musa Horti* (see chapter 7, p. 111), but listening through my perception of and relation to the evolving musical *Geschehen* of my piece. Thus, my everyday surroundings were embedded into my imagination of the piece’s musical *Geschehen*, connecting it also virtually to my everyday life, and making every day life and the evolving *Geschehen* traces of each other, entangling them inevitably with each other. It was both a purposeful and a non-directed activity of listening, simultaneously connected to potential other activity resulting from the recording and to the enjoyment of this state of constant alertness and constant involvement in sound *Geschehen*. Also, there was an additional dimension of that listening *through* something—listening through my imagination of how my recording device—my phone—would capture the sound, “listen” to the sound. Listening while the phone was recording was at the same time an imagining of how it would record the sound, thus also listening through an imagined spatial position and an imagined filtering and *tracing* of the sound, relating myself in that way to my temporal and spatial surroundings.

Also, the following seems significant concerning the differences between recording my everyday life surroundings in comparison to recording myself playing an instrument. Both are at least *while* recording inevitably connected to the recorded sound’s function within the “*outside*” world. However, in contrast to recorded instrument sound, a recorded everyday life sound refers both to an external and an internal, inter- or intramusical, dimension of meaning (see also chapter 5, p. 65ff.). When playing saxophone or singing or playing piano such an external referring would only be possible as a metaphorical one or when *imitating* everyday life sound through the instrument. Also, concerning such everyday life sound, instead of interacting with my surroundings in order to produce new audible traces of new sound created in the moment of recording, I interacted with my surroundings to capture already existing sound where my own interactions were not part of that recorded sound’s poiesis. Here, Krämer’s earlier quoted reflection about the concurrence of traces as “unintended residue” (Krämer 2016a, pp. 160, translated with DeepL, 20250423) and the “deliberate investigation” (ibid., pp. 161, translated with DeepL, 20250423) as a necessity for the emergence of traces and their unfolding becomes especially relevant again (see chapter 5, p. 58).¹⁰ In that sense, the random encounter of myself with a sound such as the squeaking of a passing train became at the same time an object and a tool of investigation. The squeaking was

⁸This experience reminded of a experience while being in New York City in 2014/15 and studying with Connie Crothers, when for the first time in my life having been involved in both listening and playing *free improvisation*—as Pressing’s *referent-free improvisation* (Pressing 1984, p. 346) is called within the jazz communities I work in—systematically and extensively over a longer period, instead of only from time to time. Once, when leaving Connie’s studio shortly before travelling back to Berlin, my relating to my “*outside*” world became an experience of sharpened attention, all auditive and visual perception being intensified and everything perceived automatically becoming related while perceiving. After this first experience, this turned into a state of being or perceiving that could even be steered and consciously and flexibly applied as a mode of relating to my surroundings. Nevertheless, if indeed a resonant relationship to something or the perceived wholeness would emerge, was still uncontrollable.

⁹In the afore-experienced state of heightened attention this was no conscious part of the experience.

¹⁰„Unabsichtliche Hinterlassenschaft und absichtsvolle Ermittlung, das ganz und gar Unwillkürliche und das in höchstem Maße Willkürliche müssen zusammen treffen, damit Spuren entstehen und eine Wirkung entfalten.“ (Krämer 2016a, p. 161)

unintentionally there, but because of the unique coinciding of myself with the squeaking in its specific qualities in that specific instant of time, a sudden resonant relationship between the sound and myself developed. Recording it confirmed that it had become meaningful for me, adding a new layer of meaning through translating-transferring-transcribing-inscribing it into the memory card of my phone and thus to a new physical and symbolic form of existence.¹¹

When this relationship developed, the squeaking was placed in front of the horizon of my Ableton piece and the overall topic of engaging with the traces of my everyday life. It was confirmed as a trace because of engaging with that recording through remembering it, listening to it, or involving it in other activities. The recording as a trace in its inbetweenness between presence and absence functions thus as a memory aid or a witness of that now absent sound of a specific situation, and at the same time as the present residue of the absent sound *Geschehen*—whose complexity in both sound and contextual immaterial and material embedment while ongoing can by no means be depicted. As the original sound’s witness and thus participant in the *recorded* sound’s poiesis, my esthetic process will obviously be different from someone who was not present. In this way, the recorded sound functions as the polysemous starting point for manifold narratives about that original sound. However, at the same time, it leads a life of its own. As all other traces of creative activity discussed so far, it comprises a musical *Geschehen* in its own right and independently of the creative situation of its emergence and also triggers new ones.

As Georgina Born’s reflections on nonhuman sound and her conceptualization of “sound, including nonhuman sound, as an inherently relational and ‘mediational’ phenomenon that overcomes dualistic understandings of subject and object” (Born 2019, p. 198) highlights, extending the activity of listening-relating to sounds that are not genuinely “musical” opens up for new relatedness to the human’s “*outside*” world, moving away from anthropocentrism. As she writes:

One implication of this stance, fueled by my autoethnographic vignettes, is to insist that we notice and valorize the affective and aesthetic experiences afforded even by nonhuman sound. Another is to move beyond the privileging of musical sound as *the catalyst* of the engendering and transformation of subjectivity. (ibid., p. 198)

Sounds originally annoying or merely a background can become a participant in creating, become “musicalized” and thus even crucial in forming the relation between humans, as Born’s autoethnographic report of the hum of a bed as a participant in relating to sound through humming with the bed for and to her dying mother shows. When attuning, as she proposes, to the “multiple relations constituting an event” (ibid., p. 202), we enter into a new relation to such sounds and thus to the world. Born has applied her autoethnographic reports of her experiences with such nonhuman sound, such as the sound of rain and the hum of a bed and their embedment in “‘all-encompassing relations,’” as she quoted Whitehead, “in order to highlight and affirm their potential and that of other nonhuman sounds as participants in novel events yet to come” (ibid., p. 202). So it has shone through all my reflection made so far and becomes even more crucial for the following ones: any sound has the capacity to inspire, to initiate, or to become part of a resonate relationship, to spur entangled creative activities, or to be perceived as a trace of creating—but also to be perceived as repulsive, or to disturb resonant relationships, in short, to overwhelm. Again in Born’s words, “What will become obvious in pursuing this assemblage-ecological sense of sound is how powerfully and pervasively sound acts *on* the human rather than merely being modulated by the human” (ibid., p. 187).¹²

¹¹I like that this dimension of recording and the metaphoric relation to the heart that any resonant relationship must necessarily imply, is mirrored even in the term’s etymology itself—with recording stemming originally from the Latin *recordor*, which means “to remember, call to mind, think over, be mindful of,” (etymonline 2025i) and is probably also related to *cordis*, the heart in connection with the prefix *re-*, locating metaphorically the seat of the memory (ibid.). This is mirrored as well in the English expression of *knowing something by heart* that in German or Swedish is rather connected to the relation between the inside and outside, and the transformation of something between these dimensions (*etwas auswendig können, att kunna något utantill* or *att känna något/någon utan och innan*). From about 1300, *recording* was also used in relation to the aspect of testimony (ibid.).

¹²Scrutinizing the sociological, philosophical and historic links of my doings and these references deeper, would exceed the scope of these reflections, but it shall be mentioned that an important foundation to further these reflection could be to contextualize them with, for example, Pierre Schaeffer’s concept of acousmatic listening and the sound object (see Schaeffer 2017).

After reflecting extensively on the immense changes in meaning-making resulting from transformed relations to a sound through recording and placing it in a new creative situation, what can be said about *Geschehen* of meaning-making and the evolving relations between sounds, the activity of listening as well as aural meaning-making when working with them in Ableton and creating *Trails of Traces I*?

9.3 Ableton

The following reflections consciously use a beginner's perspective as yet another lens through which to observe, describe, and to analyze the transformations of the complex *Geschehen* between my body-mind-unity's actions and perceptions as well as the resulting traces. When I chose Ableton as a software for experimenting with a new tool of creating, it was not only for its flexibility, which musicians from very different musical realms seem to value, but also because I was curious what the working sur-inter-face—which functions differently than other DAWs I knew a little bit, such as GarageBand or Logic Pro—would and wouldn't afford compared to the working tools of my previous experiments.

The distinct feature of Ableton that sets it apart from GarageBand or its ancestor Logic Pro is that there are two interrelated, but differently functioning working environments with different affordances and constraints. While a document in the DAWs I knew can be viewed in different ways that function similarly to a linear timeline, a document created within Ableton—which Ableton calls *Live Set*—consists of two linked working environments that offer two different ways of relating to time.¹³ A *Live Set* is part of the *Live Project*, the

folder that collects related materials [...]. The basic musical building blocks of Live are called *clips*. A clip is a piece of musical material: a melody, a drum pattern, a bassline or a complete song. [...] A Live Set consists of two environments that can hold clips: The *Arrangement* is a layout of clips along a musical timeline; the *Session* is a real-time-oriented “launching base” for clips. Every Session clip has its own play button that allows launching the clip at any time and in any order. Each clip's behavior upon launch can be precisely specified through a number of settings [...]. (Ableton 2025, p. 50)

It is possible to switch between these working environments at any time because they are connected through the same what Ableton calls *tracks* which “host clips and also manage the flow of signals, as well as the creation of new clips through recording, sound synthesis, effects processing and mixing” (ibid., p. 51). Thus, Ableton Live consciously offers possibilities to create fixed media and to create live, and to even entangle those modes of working.¹⁴

When working on *Trails of Traces I*, I kept to the Arrangement View since I aimed for a fixed media result with a predefined linear timeline. However, being able to toggle between the views and working with a sur-inter-face that was in its core organized around clips as cells of sound that could behave and coact in whatever way, and not necessarily linearly, felt incredibly inspiring. Of course it is equally possible to work nonlinearly when creating a score in Finale or by hand, but because of the nature of the phenomena to be dealt with here, there were significant differences in how to interact with these sur-inter-faces.¹⁵

¹³There is a certain blurring of terms here, since Ableton is officially the name of the company that creates the program *Live* and not the name of the program, thus all quotations of the company refer to *Live*. However, since *Ableton* or even *Ableton Live* is the colloquial and most usual denomination for *Live* in the communities I work in, I keep referring to *Live* as Ableton.

¹⁴“The Arrangement View and the Session View interact in useful ways. One can, for instance, improvise with Session clips and record a log of the improvisation (page 145) into the Arrangement for further refinement” (Ableton 2025, p. 51).

¹⁵This design and structure of Ableton which affords, in contrast to Logic's or GarageBand's never-ending balk of sound, such a musical thinking that is built around cells that can be moved anywhere and change their gestalt nearly completely flexibly, and also interact very differently with each other, is experienced very differently, such as conversations with Brigitte Haas and Almut Lustig show, both sound artists-composers, percussionists and drummers. While Brigitte characterized it as “kästelig”—what would probably correspond to *checkered* in English, thus a structure that is divided into small sections—and that she sometimes finds constraining, Almut often experiences the endlessness of possibilities and described to me how she sometimes as a working method explores how to find constraints (private conversations with the author in the spring of 2025).

When creating music notation that uses Western classical five-line staff notation as a basis, the elements that comprise that notation are signs that *symbolize* different properties of a sound unit such as pitch, duration, dynamics, or attack. Together, these form larger units and eventually a musical course that is symbolized through the progression of symbols organized within staves from left to right, with staves from top to down. As elaborated extensively in the so far made reflections, such a notation's poiesis is a complex musical *Geschehen* of many entangled *Geschehen* of interactions, or contact-makings; a *Geschehen* which happens in a complexity between ever-transforming human and non-human participants, and even continuously newly created participants. The aspect of *translation* and also of *transcription* between media and even within the same medium has equally been discussed extensively and has been crucial in all so far described experimentation. This is true also for my experimentation in Ableton Live, though different concerning how, where and when it happens. In the case of *Trails of Traces I*, there were two major *Geschehen* of translating—firstly the transcribing-translating-transforming from the sound to the recorded sound, thus a translation between media. Secondly, a multitude of translations-transformations of meaning that happened when working with the sound, when cutting it, relating it to other sound and manipulating it.

My relation to Ableton's symbols was a different one than to notational symbols manually notated or Finale symbols. In these cases, the symbolic encoding and the sound it represents are so closely related that they are essentially interchangeable in my imagination. In Ableton, due to the not yet established connection between symbolized sound clips and their actual sound, it was necessary to rely much more on my listening than my visual perception of the symbolic encodings, when, for example, automating parameters of sound through drawing lines with the mouse, or glueing together clips. Also, the symbols used in Ableton were already predesigned and their placement or their design would have a direct influence on the sound itself. The symbols notated by hand or in Finale did not always have such a direct link to the sound, there was much more design "margin" for translation in between symbol and sound—such as when placing a fermata a little higher or a little lower which would not change its meaning. Also, notating would often include my own creating of symbols and imbuing them with meaning, such as when dealing with non-linear or specifically structured text parts such as in the beginning of *The Enchanted Forest* (see chapter 7, pp. 107ff.). Noticeable was also that a working sur-inter-face such as Finale or Ableton would prescribe different orders for decision taking. Finale would for example force me to decide about meter before notating something and working with senza misura parts, as done extensively in the two presented scores, leading to *faking* and hiding for example bar lines or time signatures. When in Finale, decisions on previous sound would also crucially influence decisions about the following symbols, for example when changing the time signature in a single bar. This would always have consequences for the layout in the bars around them, in the smallest extent only on the position of symbols, but sometimes even on the structural level. In contrast, working in Ableton allowed me to step into the work at any point in the course of the created. My interaction with Ableton showed exemplarily how the design of a working tool shapes not only the actions that can be taken, but the whole creative course as well as the creative human being's imagination, fostering or constraining specific activities of translation.

In regard to the translational *Geschehen* another aspect is equally important. When transcribing recorded sound, the sound would always be *translated* and transformed into a notational symbol that in its polysemous nature would never again lead to a reconstruction of exactly that sound, but only potentially to similar sound or sound behavior. The symbols in a notational trace achieved in each of the previously described projects would thus never be identical with the sound they encoded, it was indeed a polysemous trace. In contrast to such a notated piece, the symbolic representation in Ableton is definitely subordinate to the sound itself and not—at least in my case—used as a creative tool that through its design and the activity of notating and designing generates new ideas. It has come into existence through Ableton's automatic translating of the sound into a standardized symbol, such as a wave form, and not through creative decisions, i.e. ethetic negotiation, by the creative human being. In this regard, and only in this regard, it could be understood as a result of the objective of creating—or rather inducing or fabricating—a monosemic trace.

When creating a piece through using actual sound recordings, new relations between those and myself evolve. It is especially another listening relation that evolves when creating through

manipulating a sound recording's properties and through combining these recordings. Similar to the experimentation described so far, is the dimension of listening *for* potential relations and transformations of something, and the necessity to deal with expectation and imagination of sound. Different is, that the sound unit itself is perceivable in real time in the same gestalt as it shall take part in the piece—and this unit is represented additionally through symbols such as a rectangular clip in a certain color with a picture of the clip's waveform and possibly different horizontal lines representing an automated parameter's course such as volume or panorama. Thus, one relates to both the sound itself and its representation.

It would lead away too much from the subject of these reflections to continue reflecting about such matters of representation, referrals, relations and sameness in reference to Ableton or Finale in the abyss of symbols and representations that a digital sur-inter-face opens up.¹⁶ What is more interesting here is to examine yet another aspect of the relation between myself and the sounds concerning the midi samples. Interestingly, creating new samples from the preinstalled midi sounds placed me in the same role as in the previously described experiments when creating through interaction with a physical instrument or the voice. In contrast to when recording sound of my everyday life or my saxophone playing for later use in my Ableton Session, recording these midi-sequences happened *while* working in the session and thus simultaneously with the musical *Geschehen* of the piece to be listened to-obeyed to-followed. Creating these midi samples reminded of overdubbing an improvised saxophone solo. However, it was different in that I was not interacting with something that was already finished, but rather with something that was evolving as well. Thus creating samples was more like an “inter-dubbing,” and created a link between two *Geschehen*.

It is interesting to consider the corporeal dimension of creating these clips and if the notion of the *Spielgefühl* can help to shed light on these clip's relevance for the *Geschehen* of creation. Most prominent was the immersive quality of this inter-dubbing, the enjoyment of intersecting another layer of sound in real time that altered my experience of what was already ongoing and that was at least partly steered by my contact with the keys of the computer keyboard. Also, applying the setup's affordances to be interacted with harmonically and melodically without the obstacle of transposing-translating pitch, in contrast to when playing saxophone, contributed to the experience of a resonant relationship and the *Spielgefühl*'s quality. I had access to the dimension of potentiality, “the experienced certainty that I could answer to what calls me in a way that would feel resonant” (chapter 4, p. 48). I could indeed experience how my choices of pitch and their lengths were connected to being moved by my aural perception and of being engaged in an all-encompassing *Geschehen* through listening and making tactile contact to the keyboard. In short, this interplay of attention, directionality, movement and tactile awareness was necessary in order to interact. Nevertheless, it was a different kind of *Spielgefühl* compared to playing acoustic instruments or singing. Since I was not yet familiar with using a computer keyboard for temporally coordinated movement, nor with connecting to sound through a single movement impulse—pressing the key—and in a setting where tactile contact had no influence on the sound other than its placement's microtiming, the feeling of *mutual tactile* response was missing. Thus, one important parameter of the *Spielgefühl*'s affordances for creating was only rudimentary accessible.

In retrospect, my choice of sounds with specific preset frequency interactions such as the *Noisy Pad* that resulted in constant—at least to me at that stage of familiarity with Ableton—uncontrollable audible transformation was certainly a compensation for this experienced deficiency, providing me with the illusion of tactile interplay. This obstacle in relating would certainly dissolve through training how to interact with digital controllers, especially those with a larger variety of contact modulators, thus through expanding my repertoire of tactile-aural experiences. Also, as the transposition issue in regard to my saxophone, as well as the many years of familiarization with Finale showed, the feeling of potentiality is not only related to the tactile dimension as such, but also to the symbolic dimension ascribed to the touch. Both relate to each other in a dynamic balance that is both trained and negotiated anew with each movement or each imagined movement of the body-mind-unity. For example, when applying a keyboard to control and to interact with a sur-

¹⁶ “An audio clip contains a reference to a *sample* (also known as a ‘sound file’ or ‘audio file’) or a *compressed sample* (such as an MP3 file). The clip tells Live where on the computer's drives to find the sample, what part of the sample to play and *how to play it*” (Ableton 2025, p. 54). The file of the sample is therefore a reference in itself that refers in turn to other data—as the sound in itself refers to other listened-to sound and so on.

inter-face such as Finale or Ableton, the tactile dimension of the key is connected to its affordances within that sur-inter-face. Thus, it is connected to the potentiality of answering through relating symbolically-visually-audibly to transformations within that sur-inter-face—transformations such as new relations between symbols in Finale or new sound together with the resulting visually encoded symbolized sound in Ableton. In Polanyi's words, this potentiality can not be experienced if that symbolic dimension of the tactile dimension does not yet function as the proximal term of knowing (see also chapter Contact making, interacting and relating, p. 43). Creating these clips showed how the *Spielgefühl* as the creative tool of applying one's tactile-symbolic relation to one's "*outside*" world and the symbolic-imagined or actually sounding musical *Geschehen* one takes part in, is based on a continuously negotiated balance between the tactile and symbolic dimension. Both dimensions can compensate each other and contribute to the body-mind-unity's activity of *gauging*. Thus, the *Spielgefühl* is also connected to a constant *Geschehen* of translating between the tactile and the symbolic affordances—which explains why also such seemingly exclusive symbolic transcoding activities such as transposing, simultaneously shape the relation to the "*outside*" world corporeally. Thus, creating these clips showed also, to which extent my interaction with a musical *Geschehen* is shaped by this urge for the tactile interaction of my instrument and my body, and how this urge has been formed by my practice of playing acoustic instruments and especially of applying my breath for creating resonance—certainly one of the main reasons for the love to the saxophone despite all transposition issues.

Noticeable is also that these midi clips did not become samples in the usual application of the term. Sometimes these clips were shortened, sometimes doubled with another midi sound, sometimes, the microtiming of a pitch was changed. However, in contrast to the saxophone sample and the everyday life samples, they were all unique, since no component was reused elsewhere in the piece.¹⁷ Also, since these *live-recorded* clips were created while listening to the ongoing *Geschehen*, they were directly related to it and its interacting components in terms of harmony, meter, melody, energy, and any other aspect. For example, as soon as the first midi clip begins emerging at ca. 02:10, it is not only a new sound dimension that enters and transforms the ongoing *Geschehen*, also a new harmonic perspective to the prevailing saxophone sample is added. It frames and confirms the saxophone's, as I in retrospect hear it, F minorish melody¹⁸ that ends with a large leap from C3 to E5, through the underlying C1 and Db1 pedal with its constantly audibly interacting overtone bundles and sound components. Then, as soon as the pitch of B2 is added, this transforms the *Geschehen* in retrospect into some kind of enriched Cmaj7 chord or a noise-cluster with the pitch centers of C3, Db3, B3, E5, since the saxophone's E is still sounding. Then, this even contextualizes the subsequent D2ish pitch of one of the pitched samples (the earlier mentioned sound of the fridge) at ca. 2:25, that otherwise only would have been heard in the context of the previous saxophone reference. At about 2:50, the sample ends with the addition of the pitch of F#, leading later on to the decision to add pitched versions of the fridge sound, a.o. with the pitch of F# an octave below the midi clip's F#.

Thus, these clips bore a specific function already while being created. They functioned not only as explorative contact tools between the evolving *Geschehen* and myself, but also as some kind of sealant that not only glued together different samples "vertically" in their parallel interaction, thus leading the evolving *Geschehen* to a new realm. They also led to structuring the piece in different sections through gluing together interacting samples and midi clips horizontally.

While listening to and working with the sounds themselves while creating *Trails of Traces I*, the piece's making was nevertheless embedded in the more and more refining context of our overall project. This brought several additional dimensions to my esthesis. Firstly, listening to my growing piece also happened *through* imagining Nina's, Mina's and Thomas' listening, combined with listening to their oral descriptions of how they listened and what they perceived and found meaningful. Secondly, this brought an incremental shift of my listening and meaning-making to the perspective of listening through the explicit external reference of the audiovisual performance's evolving topics and storyline and all connected individual works. Thus, when finalizing the piece,

¹⁷ Obviously, my clipping, sound manipulations and other transformations of the samples which was different each time a sample was used, made all resulting clips unique. However, they often shared the same "root" material.

¹⁸ Minorish since it is not one clear mode of minor, changing from melodic minor to harmonic minor and passing also several intermediate harmonic vertical structures.

this again included a twofold listening focus—listening to a sound sample newly added to the piece was both a listening to the sound in itself, but also listening to it as a contextual link to our performance. This could be used as a lens for listening both for inter- and intramusical as well as external references. What had happened that had caused this change?

9.4 *Reconnecting (with) Traces*

After beginning our collaborative work by observing and collecting the traces and trails from our everyday lives and discussing the artistic traces of our involvement in Zoom meetings and the shared Google Doc, we started entangling each others' artistic traces with our individual doings. There were many cross-inspirations and applications of our traces, such as my three-part canon inspired by an improvised recording of Thomas. Thus, the aspect of repetition became an important element of our discourse, initially spurred by one of Mina's works of art.

Early on, when we were reflecting on *[p]ossible materials that hold traces* (Perovic et al. 2023, p. 9) Mina had shared an embroidered picture as an inspiration for how to interact with a certain kind of translucent fabric. The picture showed two female faces that reminded us of *grandmothers*. It was from there on that we began discussing our experiences and feelings related to elderly women and actual or possible grandmothers—grandmothers of ourselves or possible grandmothers of others—bearing headscarfs that were present in different ways during our very different childhoods in mainly Belgium, Montenegro, Serbia and (Southern) Germany.¹⁹

We mostly remembered them working and, seemingly, living according to clear rituals, thus with a focus on repetition. They appeared to be fixed to certain ascribed roles, along with all their connotations, affordances and limitations that came with them, leading to the impression of a fixed physical, functional or metaphorical position, not only in their families, but in their overall surroundings, and that often overruled the perception of their individual identity. This is of course an overly simplifying analysis of a complex phenomenon and reality and does not take in account the both huge and subtle differences in our individual and cultural backgrounds, and neither the manifold intersecting sociocultural and political phenomena and problems these impressions and reflections are related to. Nevertheless, our discourse evolving around these “grandmothers” led by and by to the performance topic of the traces that connect us to our ancestors, and how these traces form our relation to our surroundings. The grandmothers became a useful metaphor for developing the structure and the aural and visual elements of our performance and brought the dimensions of repetition and movement, and from there both the repetitive, structuring and mythological dimension of the ritual as the connector to our everyday life to our work. Incrementally, they even turned into the main characters of our performance.

Concerning the structure of our performance, the basic idea was that every participant of the creative situation of our performance was ascribed agency through the potential of taking different roles, even the performance itself. The following reflection of Nina's, made during October 2023, gives a good impression of our starting point:

Four Babushkas hold the roles of 4 of us individually, but at the same time, they give perspective of society, all of us.

Their is presented through the timeline of their existence, which is their “life” (or roles) created in Podgorica and carried out through every day dynamics (Babushkas in car, nature, cafe bars etc.). Final performance of the piece includes the end of their life with the goal to present necessity of disappearing and changing (panta rei, panta rei). The aspect of collective they are giving through different rituals they are repeating, such as all of us do (since the existence of society) and the one which may relate also to basic

¹⁹During our work, the internal nickname of the *babuske* (or, in our document sometimes also referred to as *babuskas* or *babushkas*), the grandmothers evolved for these figures. This was not a term that Mina had used originally, but it probably evolved—as a term that is originally a Russian one, but in this form used in BCMS (Bosnian-Croatian-Montenegrin-Serbian) and thus is a term from Mina's and Nina's native language(s)—because of their appearance and our topic of the ancestors and the traces that gave them a strong mythological connotation. Thus, though it might sound disrespectful or “unceremoniously,” we used it as some kind of affectionate term that certainly also contributed to transform the reflective motif of the grandmother to a strong metaphor for the manifold dimensions in relation to the subject of the traces, and finally as the bearing figures in our piece.

psychosomatic roles (breathers as we all breath, sleepers as we all sleep, eaters, cryers, laughers, showeringers and many others).

Some of the goals (or non music idea) in the piece is to talk about the traces, to understand how we are one, part of a bigger society that is repeating the same rituals ever since, how it is important to be aware of all our positive and negative traces we are creating (from breathing to ruining the planet), so that is why - reconnecting (with - among us) traces. (ibid., pp. 13–14)

The “grandmothers” had become figures in our piece (see Figure 9.2 on p. 139) that would move and perform rituals. Thus, when in Podgorica, we created *babuske* figures: four artificial abstract figures made through drawing, collaging or embroidering on a transparent fabric on a moveable clothes rack. Besides these four artificial abstract figures, we had also conceptualized “living” grandmothers figures that Thomas and Mina, as well as Hristina, Kristijan and Branislav, Nina’s students from Cetinje, incorporated, hidden from head to feet under a long black garment, moving backwards through the space, but with a mask on the back of their heads and thus pretending to move forward.



Figure 9.2: Grandmothers in the performance of *Reconnecting (with) Traces* on November 8, 2023, photos by Damir Murseljević

By and by, we constructed some kind of abstract narrative that connected our audio or audiovisual material and decided on how the moving “grandmother” actors and Nina and me as instrumentalists would interact. More details about the performance itself would distract from my research focus, but it is interesting to look at a pivotal moment within this process of developing the notion of the grandmothers; to on the one hand study how it inspired the link between the above-described conceptualizations and *Trails of Traces I*, and to on the other hand reflect on the resulting change in my listening toward a twofold focus of inter-and intramusical listening in combination with the external reference of the performance.

In early October 2023, some time after I had considered *Trails of Traces I* as finished, Nina had introduced Živko Nikolić’s film *The window* to the group, depicting the “silent daily routine of a peasant woman in a secluded village,” shaped through “suppression in her patriarchal society” (Filmfestival n.d., my translation). Engaging with the film’s visual and acoustic means, and its scenes depicting the family’s bedridden and heavily breathing grandmother that is taken care of by the younger woman, enhanced our focus on the psychosomatic roles of our performance’s “grandmothers” and thus especially the activity of the breathing. By and by, we also developed a concept for introducing the background of our performance and the resulting agency of all participants, including the performance as such. This resulted in the idea of the performance introducing itself. It “spoke” through Nina live-typing the text we developed together for that purpose from Nina’s first draft, which is partially quoted below, and through projecting the typing on a screen. The text was in English but was translated by Nina to Montenegrin for the local audience.

Hi,

I am Audio-Visual Performance and my title is “Reconnecting (with) traces”.

I am created from four artists from different countries, language areas, art disciplines. They met and wanted to work with each other... so they created me. I am the result of their encounter. I am a trace they left.

I was made without any given task and for these four artists this was a whole new way of communicating... without hierarchy and across the boundaries of all differences.

At their first meeting, they found a theme that was in common: traces.

They all had different understandings and experiences on this subject which they shared...
(...)

Some parts of it became part of myself.

Contained of traces, I include a lot: everyday movements, environments, relationships, thoughts, habits, rituals, traces of your grandparents, your homeland, your stories, history...

In every moment of your existence, you are leaving a certain trace, even through your breathing! Even while you eat, sleep, laugh, dance, cry, fight or while you are being scared. All of this leaves some traces...

(Perovic et al. 2023, p. 19)

It was after this long reflective work of focusing our performance that *Trails of Traces I* moved back into focus, and the work on it was taken up again. It was finished through recording and adding a new sample with the explicit external reference of the breathing in order to link it both contextually and soundwise to the evolving performance and the others' doings. The breathing sample was thus different from all the other so far made midi clips and samples. Also, in contrast to them, its approximate placement and function in the piece was clear beforehand—which was the very end of the piece. It fades in and out three times, first in combination with the end of a pitched saxophone sample and the beginning of the already mentioned trains and a live-recorded midi clip, then within the midi clip, and, lastly, it concludes the piece when finally, one of the traffic sounds sample reappears and fades out, and leaves for the piece's last seconds only the breathing audible.

In comparison to all the other sounds, the volume of the breathing is set quite high. The breathing is positioned in the middle of the panorama, with no transformation of panorama during its course and thus no spatial change of sound. The recorded breathing was a slow breathing cycle, achieved through breathing in and out through the mouth with an open throat to enhance the volume and adjust it to the sound of the grandmother in Nikolić's film. Making the sample had been my first time recording a sound made myself with my body and without the sounding voice, or an additional instrument-tool, as well as the first time focusing on sound quality and not on pitch. The ability to detach the breathing from a connotation to my own body while working with, seems in retrospect to have been prepared through the intensive period of listening and recording sounds.

While recording and working with the breathing sample in Ableton, the changes in my listening focus along with the performed activities could be perceived exemplarily “en miniature.” To begin with, my choice of sound was influenced by the external reference of the grandmothers, and all connotations associated with them. Then, while recording, the concentration was exclusively on the sound quality and the features to become audible within the piece. This focus on the sound itself stayed when embedding and manipulating the sample in Ableton. However, and in contrast to the other samples, the manipulations were made with the goal to convey an external semantic reference. Thus, differently to all other decisions made before the performance's conceptualization, concluding the piece with this specific kind of slow, heavy breathing, was an artistic decision related to an interplay of external and intra-, and intermusical meaning. As expressed in the reflections applied for my other electroacoustic contribution to our performance, *Trails of Traces II*, “Breathing, I both connect to my own and others' traces while leaving new ones, connecting my body to the world around me, letting the world leave traces in my body” (ibid., p. 20).

Trails of Traces I

Finishing the piece in that way functioned thus both as reflection-in-action and reflection-on-action, and was again an entangled *Geschehen* of esthesis and poiesis: reflecting through creating and listening to sound, relating through sound to the ongoing musical *Geschehen* of my piece as well as relating this *Geschehen* to the semantic-musical *Geschehen* of our performance creation that

directed my body-mind-unity and all decision taking. Through working with the breathing sound, I reflected on all past actions and actions to come and prepared relations—doing individually what we were also doing collectively.

To conclude these reflections, it is interesting to examine how we included *Trails of Traces I* in the performance's opening *Geschehen*, and reflect as well on the resulting *Geschehen* of transformation. The performance began with a multi channel loop of the grandmother's breathing sound in Nikolić's *The window* by Nina, which sounded while the audience gathered for the performance. We added *Trails of Traces I* to it, and after a while, the performance began with the envisioned communication of the performance itself to the audience, that Nina operated through life-typing. The live *grandmothers*, Mina and Thomas together with four of Nina's students, were sitting amongst the audience while I was regulating the breathing loop's volume, according to how I perceived the movement and the sound in the room, and Nina's typing both in reference to the course of the semantic meaning and the typing sound itself.

Reconnecting (with) Traces: excerpt from the performance's beginning with *Trails of Traces I* and the breathing

The typing and *Trails of Traces I* as both semantic and musical *Geschehen* unfolded together as one entangled *Geschehen*. This served as a transformer, connector and pivot point between the “outside” world and the immersive experience of the performance, between the space around the museum hall and the museum hall's inside, between my and our surroundings and experiences during creating the piece, and the surroundings and the experiences made during the performance and in Podgorica, between the traces experienced by myself that the piece referred to and the joint experience of these references while listening, between our preparatory period of creating, and creating within the performance, between everyday life and the special gathering and rituality of the performance.

Thus, *Trails of Traces I* as a fixed media piece constantly transformed through being embedded in such a diversity of entangled *Geschehen*. It transformed, on the one hand, in its materiality and thus in its *neutral level* through its interacting with the space's material characteristics, as well as Nina's and my aural manipulations through typing and organizing the breathing recording. On the other hand, it transformed in its symbolic dimension through its interaction with other semantic and sound layers, entangling again processes of poiesis and esthesis, and their individual and collective dimensions through these activities.²⁰

Interesting to note is thus, that it is not only the neutral level as “the symbolic form [that] is embodied physically and materially in the form of a *trace* accessible to the five senses” (Nattiez 1990, p. 12) that is continuously transformable in regard to what is considered the neutral level as chapter 6 showed, but this concerns even its materiality. Its interaction with the surroundings has, depending on that neutral level's nature, different kinds and degrees of consequences—if a score such as the one of *PlanetWoman* is printed on different kinds of paper or sizes of paper, the symbols may appear with different contrasts or sizes, and thus make different aspects of that score more or less readable. Nevertheless, this will mostly not affect the esthesis of the score's symbols in a major way, since this does not or only partly affects the symbols' relation, as described earlier in regard to the design “margin” for translation in between symbol and sound. However, if an electroacoustic piece such as *Trails of Traces I* is played through different kinds of speakers in different kinds of spaces, both the materiality of the sound components and the relations between them change. Thus, what is perceived by the five senses changes as well, proving indeed how any musical object “eschews any absolute state as it is repeatedly relayed and transformed across time, space and persons” (Born 2005, p. 28).

²⁰This relates also to Born's reflections on digitized media and their sociomusical relative potentials that she unfolds when reflecting on the distribution of creative agency within her analysis of music and meditation, “In light of this brief genealogy, it is possible to assess how digitized music both compounds the jazz assemblage and is distinctive. Even more than its precursors, with music's commodity form rendered liquid as code, digitized music encourages an open sequence in which the closing down of a musical object and its circulation are followed by its potential re-opening and re-creation. [...] The conceptual dualism of authenticity or artificiality is obsolete; there is no original and no copy, only rapidly proliferating, variant versions (or materials). The musical object eschews any absolute state as it is repeatedly relayed and transformed across time, space and persons” (Born 2005, p. 28).

Summarizing these reflections in light of my research questions and circling back to the previous chapter's insights, two aspects seem especially important. First, it is not only the notion of a trace of creative activity which transforms along with the trace's transformations as chapter 8 showed, but the same is true also for the notion of the "*outside*" world that changes through the transformations in relating to it. When recording, the new directionalities, intentions, and expectations, that my listening relation to my "*outside*" world was imbued with, transformed not only my relation to the sounds and their recordings. It also made me experience and understand my perceptions as meaningfully connected and turned them into a course of sound. My "*outside*" world could turn into a meaningful musical *Geschehen* that, in Born's words, acted *on* me, resulting in an ecological stance of relating to the "*outside*" world that could be applied as a tool for creating as well. Furthermore, for the first time, the aspect of time was not only an important factor when performing and entangling individual and collective creative activities, but it also became explicitly part of my perception and a conscious aspect of my esthesis while listening. Thus, recording evolved as a tool for transforming my listening. Also, while the establishment of a listening relation had become more controllable, the quality of this relation and the meaning that eventually would come with it, stayed uncontrollable.

Second, it is striking how my semantic relation to the "*outside*" world and the context of meaning in which specific creative activities were embedded, influenced my notion of these activities, as well as the specific sounds and the wholeness of *Trails of Traces I*. For the first time, it was the reflective and practical exploration of the relation to the "*outside*" world as such that had spurred the creative course of my work. Also, for the first time, the collective reflection as an esthetic point of reference for all other collective and individual poietic and esthetic processes spurred the experimentation and thus shaped the relations of all participants. Collectively describing the entangled creative activities in which a trace is involved, led to engaging with the trace's external references and a continuous negotiation of its semantic relations to their "*outside*" world.

What concept of the trace of *Trails of Traces I* and its relation to its "*outside*" world evolves when once more examining their interplay? What can be said in regard to my earlier statements of (i) that the future relation of a trace to the dimension of the unforeseen is shaped through its past relation to it, thus shaping the partaking creative human's future relation to their "*outside*" world (see chapter 7, p. 113), and (ii), that the relation of a trace to the unforeseen results from an interplay of the trace's poiesis and its *narrated* poiesis (see chapter 8, p.125)?

Concerning the first question, a new dimension is added to the reflections. Working with sounds that are sounding musical *Geschehen* in the moment of relating to them and do not exclusively relate to an encoded or exemplified future, but to the same *Geschehen* in an earlier stage of transformation, makes a difference to all traces looked at previously. Not even in *Circular Composition II*, it was the sounds as such that became part of the new piece, but symbolically encoded-translated-transformed and then reconstructed and rediscovered sounds. This *sameness* obviously results in a trace that is made to be related to aurally and not through anticipations of aural relations while in its poiesis.²¹ However, much more important is that it links past, present and future of a trace differently. When transforming the trace com-posed in Ableton, it is the same symbolically encoded trace that transforms toward its future—obviously, this includes many translation-transformation processes, but there is no translation between different media or encodings.²² Thus, despite utilizing Ableton's capacities for entangling a trace's past, present and future only to a small extent when creating fixed media in the Arrangement View, a trace of working in Ableton nevertheless typifies Krämer's conceptualization of a trace as something between object and activity (Krämer 2016a, p. 159) as discussed in chapter 5.

Second, concerning the interplay of the trace's poiesis and its *narrated* poiesis, this issue of same-ness or at least simultaneity of the trace's musical *Geschehen* and its symbolic encoding highlights the difficulty of describing a trace's relation to its "*outside*" world in its uncontrollable and unforeseen dimension in language or in a temporary order. While having examined and analyzed specific

²¹ Obviously, someone experienced in creating music electronically can also work exclusively with the representations of sound, i.e. all visual encodings in Ableton's sur-inter-face, but for me as a beginner, this was only partly possible.

²²This is most tangible when considering the activity of creating midi clips that are created "live" while Ableton transcribes-transcodes them—similarly to when exploring something on the saxophone and recording it on the phone and transcribing it, but also differently, since it becomes a part of what is com-posed while it is created and not at a later instant in time.

instants or characteristics that stick out with the help of the interface metaphor, the sameness is in some way a fractal *Geschehen* of relating that is unforeseeable in different ways. It happens between different temporal transitions and dissolves into fractal details of translation-transcoding, depending on the level of detail of the analysis.²³ For example, the “sameness” between different temporal stages of the Ableton trace dissolves as soon as the different circumstances of interacting are considered. It obviously sounds different when played through different speakers, and when entangled with other *Geschehen* such as the one of the live typing and live regulating of a breathing sample.

A dimension resulting from such transformations within oneself, or rather, the evolving awareness of such changes and their characteristics in relation to time, has been an implicit thread through these reflections and especially this chapter, but not been examined closer so far—the dimension of *learning* that comes with any such transformation and that Zembylas and Niederauer describe as central to a creative practice.²⁴ All transformations within myself and the resulting changes in my activities led to different entangled kinds of new tacit and explicit knowledge and skills that were acquired, *learned*, through my interactions. In Zembylas and Niederauer’s words, “Artistic practical knowing comes from learning *by* doing and *while* doing” (Zembylas and Niederauer 2019, p. 96). Interestingly, even the *learning* is etymologically connected to both the terms of the trace and the trail, apparently being related to the Proto-Indo-European root **lois-* that stands for “furrow, track” (etymonline 2025d). The “base sense of ‘to follow or find the track’” that *etymonline* lists as an origin of the term of learning (*ibid.*) expands therefore what has so far been described on focusing on and iterating specific combinations of activities in order to perceive change and gain new knowledge. In retrospect, what so far has been discussed in manifold ways is how activities and traces had been combined to *learn* new aspects about these activities, traces, and the resulting relations. However, how to relate and to transform in order to achieve specific ways of relating and transforming was never expected or prepared explicitly through my experimental design and instead intentionally been left open. Thus, the next chapter reflects on an experiment that served as a basis to investigate this explicit aspect of learning.

²³A further philosophical discussion of sameness would be interesting, but would lead astray from my research purpose and is therefore omitted here.

²⁴They state, when describing transformations in composer Marko Ciciliani’s practice, “Sensory experiences change with his increasing experience as a composer. The catalyst is not some theoretical knowledge, but a form of learning that is fully integrated into practice and results in ability. Thus, when we observe composers while they are creating music, we also notice how they are implicitly learning to create music” (Zembylas and Niederauer 2019, pp. 95–96).

Chapter 10

Aural–notational interacting as transforming

When setting up the next experiment and the practical goal to work toward a new solo piece for my friend Mehdi Hesamizadeh on viola, the creating’s main purpose was to learn to distinguish and allocate microtonal pitch more than I was capable of at that point—and thus to widen both my instrumental and notational practice to realms that I had already begun to be part of as an improviser by for example working with *Circular Composition II*, but that needed more training in regard to notating music. I was curious what additional insights venturing into a creative situation with a clear intention of how to transform myself would yield in regard to my research quest.

10.1 The learning project *Mikrotonale Erweiterung*

Learning about microtonality and intonating, and finally writing *Stundenblume* (Flick 2023f) happened in the framework of an artistic development grant by German *Musikfonds e. V.* by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme between December 2022 and May 2023 with the goal of improving my skills in the field of intonation and microtonality to develop my expression both in improvisation and composition.¹ Before delving into both improvising in a broader context and creating notations, the first focus was on ear training through listening, singing and playing saxophone through mainly studying tonalities of older Swedish folk music—which had initially sparked my interest in intonation variants many years ago²—and the second part focusing on notation.

The practical learning began through listening to, singing and playing along with the saxophone to one of my favorite recordings by Swedish violinist Björn Ståbi, the *Vallåtspolskan* from his album *Orsalåtar*, mainly with songs from the village of Orsa in Dalarna, a place rich in tradition. I consciously did not notate and thus not *transcribe* in the literal sense of the term. Nevertheless, I tried to translate the exact intonation of any pitch and his exact phrasing to my voice and from there to the saxophone, applying an approach to sing along something by ear until it would fall naturally to play it, taught to me by Connie Crothers. Translating this singing and playing along with important jazz solos to singing and playing along with anything else, had often proven very effective. However, it was new to me to apply it with such an explicit focus on intonation. From earlier listening, and reading, I was roughly familiar with some “typical” intonation variations and Sven Ahlbäck’s concept of how intonation in music from that tradition often is related to scale

¹STIP-III, Musikfonds e. V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme

²This happened in self-study and without a teacher. Additionally I took part in a workshop on just intonation led by Marc Sabat on January 19, 2023, at Berlin School of Sound (Berlin School of Sound 2023), and did some theoretical reading on intonation, focusing on texts by Sabat (Nicholson and Sabat 2018; Sabat and Schweinitz 2005) and Sven Ahlbäck’s compendium on intonation in older Swedish folkmusic (Ahlbäck 1989). This also included introducing myself to Netta Huebscher’s development of “modality as an *open concept*”, rejecting scale-degree theory for reasons of it giving “rise to dichotomous, evolutionist and organological definitions of mode as a marker of ‘musical otherness’” (Huebscher 2022, abstract).

positions (*tonplatser*) and their function or movement direction of the melodic lines (Ahlbäck 1989, 15ff.).³ Listening with an open focus on variation on any pitch at any point in time and imitating it as closely as possible, I slowly gathered a tacit knowledge of Ståbi's intonation for each individual intonation delicacy. Since the *Vallåtspolskan* is a tune very familiar to me, it was not necessary to start from scratch. However, as was clear already beforehand, the time frame reserved for working with the song was too short to expect an internalization that would be deep enough to "naturally" influence my improvising; in Polanyi's terms, to integrate the pitch nuances that were now possible to discern, anticipate, and reproduce on my instrument into the proximal term of knowing. However, after a few weeks of practicing it had become possible to consciously at least pick a few pitch variations and neighboring pitches, and explore these through creating my own melodies, thus creating small presets for spontaneous etudes. Since the saxophone is based on a system of keys and fingerings, requiring a new fingering for each new pitch, and is only roughly tuned in any case, one is in a constant *Geschehen* of tuning when playing. Thus, it was interesting to experience the integration of the new fingerings, as well as to observe how my embouchure and my airflow adjusted and tacitly followed my more and more refined anticipation of a tone's nuances in sound and pitch.

These explorations happened at the same time as when playing more regularly with viola player Mehdi Hesamizadeh whom I, as well as Thomas van Walle from the *Proberaum* project, had gotten to know at the *Towards Sound Festival* (see chapter 3). I adored his solo piece at the festival, but our musical relationship began earlier while rehearsing for Lucía Hinojosa-Gaxiola's interdisciplinary and hybrid performance *synchrony (or language as a living system)* for which we were paired as an improvising duo.⁴ When hearing Mehdi's first sound, I felt such a strong resonance and inspiration as rarely experienced.

Mehdi, who is a multidisciplinary composer, performer, researcher and pedagogue in the field of music and photography, and who also builds his own musical instruments and works with analogue electronic music, is a.o. interested in music "played by musicians in quotidian social settings, especially folkloric microtonal music" (Hesamizadeh 2025). Consequently, he has a.o. a profound knowledge of the early music of the Middle East and experiments broadly with scordatura and different tuning systems on the viola. When we began playing more regularly, it was this shared interest that soon became the main topic of exchange, both through playing and oral reflection. It was exciting and challenging to suddenly improvise together in a context that not only integrated microtonal elements as inflections into an otherwise more or less tempered tuning context, but where the tuning system changed with each piece and scordatura.

The sound we created together was intriguing to me and unfamiliar and familiar at once. Unfamiliar, because I was not familiar with Mehdi's musical roots and his unique way of playing. Also, interacting with him made me play and sound different from other occasions. Familiar, because it seemed to be possible to connect my experiences of my so far only rarely collectively explored and indeed only superficial contact with the beloved non-tempered music from Sweden—tying the experience to the one of listening, singing and playing along to the archived recordings of passed down pastoral music or hymns, the recordings from people's everyday life settings at home or in the mountains.

It was intriguing how I as a body-mind-instrument-unity was tacitly directed by this *Geschehen* that evolved through Mehdi's playing and our interacting, how it felt to follow Mehdi's melodic lines and to attune automatically to his interpretation of a pitch's intonation, both through adjusting my embouchure and airflow, but also through the new fingerings acquired through working with the *Vallåtspolskan* as well as the spontaneous fingerings evolving while playing. In sum, it was a rare feeling of unity through a variety of disturbance-free relations developing at once between us and the manifold *Geschehen* we created. Therefore, when I felt prepared enough to take the second step of my learning project—exploring intonation and my imagination of pitch through notating—and at the same time became aware of the necessity to experience the activity of notating without combining it with applying the saxophone, it was exciting that Mehdi accepted my proposal to write a piece for him.

³See also (Ahlbäck 1989, 24ff.) in regard to what he denominates as *vallåtsmodus*.

⁴See also the festival's video documentation at 4:15, <https://www.youtube.com/watch?v=q110Q02vYTU&t=254s> [accessed 20250528].

Since I was interested in focusing on the exploration of notation in relation to my perception and imagination of pitch, it seemed important to experiment in a creative situation that, though inspired by and embedded into the overall situation of our joint improvising, was not explicitly part of it. Also, I wanted to work on such a piece on my own and not use specific musical traces of Mehdi's creating as a starting point. Nevertheless, though this was not obvious to me when creating the piece, this was also a collaborative undertaking—just in a different way with different Geschehen of translation and between different media and materialities than in the other experiments. However, the tacit traces of Mehdi's, and our joint playing with the transformations in my perception of pitch were only one starting point for my writing.⁵ It was also a newly built viola by Mehdi that sparked ideas for the piece's initial scordatura as well as its tonality. Since I had never written for viola, Mehdi had given me this viola to test out certain sound qualities, fingerings or bowing techniques, supplemented through a cheap bow obtained from Thomann. Also, we would from time to time discuss notational issues in regard to pitch or specific extended techniques, such as circular bowing. Furthermore, Mehdi gave me the opportunity to listen to him demonstrating extended techniques or trying out parts of my piece with both his main viola and the one he had built, as well in comparison with the different bows.

10.2 *Stundenblume*

The topography of the creative situation of *Stundenblume*—as the piece was eventually named after Michael Ende's flowers of time in his book *Momo*—can be sketched as shown in Table 10.1, p. 148.⁶

Though aiming to write a piece through purely or at least mainly notating, in retrospect it becomes clear that the piece's beginning, despite the initial and quickly discarded notations that initiated it, still evolved through making actual sound and not mainly the imagining of sound while or through notating. On the one hand, there was the somehow continuously ongoing creative situation of Mehdi and me playing together, on the other hand, there was also a specific combination of actual sound Geschehen that finally got me going.

Mehdi's viola was still tuned in one of his scordaturas, when he lent it to me.⁷ The lowest string was tuned down to A instead of C and the G string was tuned down to F. The sound of the A-string, both the pitch and the viola's sound, were mesmerizing, making me play the A again and again, at first only pizzicato, then mostly arco. On May 10, 2023, a the beginning of a melody popped into my head with exactly that minor 6th interval between these strings, an A as an anacrusis to the F above, which landed on the E after going a minor second down. When developing it further through singing and recording it, the second motif answered through again beginning on the A, but moving slightly higher, going to a tempered G, then landing again on the E as the pure fifth of A. There was a very strong feeling of resonance and it felt self-evident that this melody or at least its beginning would become crucial for the piece. Several aspects of the transition from this very first recorded melody to its becoming the heart of the piece are of importance here.

Firstly, when listening to the recording, it is striking how cautious I was with the intonation. Even when singing without accompaniment, it had usually not been a part of my attention how to intonate a pitch if it was not explicitly an exploration of my voice or of sound in relation to my saxophone. Intonation simply used to be something that was to be negotiated when performing the piece. In Marc Sabat's words, "It is assumed that the *intonation* of any given interval is determined by various contextual factors, and thus left open to *interpretation*. Harmonic implications of the

⁵There is no other recording of our duo playing available, but it is possible to listen to how we play together in the trio with Lisa Hoppe we founded in the beginning of 2024 and that gives, though opening up yet another sound world, nevertheless an impression of our joint playing (see also <https://hesamizadehhoppeflick.bandcamp.com/album/live-in-berlin> [accessed 20250609]).

⁶It is difficult to reconstruct the creative situation comprehensively and the different "branchings" it took. We both worked on the piece in quite deferred time intervals and there were many changes after that initial period of writing between April 10–May 28, 2023, until Mehdi recorded the new piece in the summer of 2024 in the church of the ancient Sanahin Monastery in Armenia. Also, it is a table made from my point of view, including parts of Mehdi's activities, but not all of them. However, the purpose of the displayed schemes and information is only to give an overview as a context for my reflections.

⁷The first recording is from May 8, 2023, and this was probably my first day playing it, but it is not clear anymore, if I already had changed the tuning myself or if it was his. The scordatura was A2-F (lowered)3-A3-E4, a tuning quite similar to the one I later on chose for the piece's ending

Date	Occasion	Participant	Activities	Resulting traces
20230410-11	Individual work	Birgitta	Notating, micro-tonal saxophone exploring	Typed notes, Finale file, recording
20230411	Jam and trial meeting	Mehdi, Birgitta	Discussing	Handwritten notes
20230510	Individual work	Birgitta	Singing-recording	Recording
20230512-16	Individual work	Birgitta	Singing, viola exploring, notating	Recordings, handwritten sketches and notes, Finale score drafts
20230517	Trial meeting	Mehdi, Birgitta	Playing-recording (Mehdi), listening (Birgitta), discussing (both)	Handwritten notes, recording
20230521-25	Individual work	Birgitta	Singing, viola exploring, notating	Recordings, handwritten sketches and notes, Finale score drafts, preliminary score
20230526	Trial meeting	Mehdi, Birgitta	Playing-recording (Mehdi), listening (Birgitta), discussing (both)	Handwritten notes, recordings (audio, video)
20230527-28	Individual work	Birgitta	Notating	Preliminarily finished score
20230531	Individual work	Mehdi	Recording	Test recording <i>Stundenblume</i>
in between	General discourse meetings and jams, trio meetings	Mehdi, Birgitta, (Lisa Hoppe)	Playing, discussing	
Spring 2024	Individual work	Mehdi	Practicing	
20240408	Trial meeting	Mehdi, Birgitta	Discussing	Handwritten notes
20240414	Trial meeting, jam	Mehdi, Birgitta	Playing	Handwritten notes
20240429	Individual work	Birgitta	Notating	Revised score
20240706-07	Individual work	Birgitta	Notating	Finished score
20240706-15	Email exchange	Mehdi, Birgitta	Notating	Email files
20240706-20240802	Individual work	Mehdi	Practicing	
20240802	Individual work	Mehdi	Recording	Recording <i>Stundenblume</i>
202411	Individual work	Mehdi	Mixing	Finished recording <i>Stundenblume</i>

Table 10.1: Activities and traces while creating *Stundenblume*

music, the tuning or temperament of instruments, historical performance practice etc. influence decisions made about the actual pitch of written notes" (Sabat and Schweinitz 2005, Introduction). Thus, sung pitches in such a creative situation used to be merely symbolic pitches, that referred and related to my imagination of the pitch, which was probably a rather tempered version of it, as well as the intonation to be negotiated in the future piece. The sung pitch as a trace of my imagined pitch was thus, as all traces are, connected trifold to time—to a potential past (my imagination), the present where I was witnessing its sound and being transformed by it, as well as a possible future with possible new relations to sound and musical material.⁸

It is worth noticing that my melody shares certain intonation specifics with Björn Ståbi's *Vallåtspolskan*, amongst others the interval of a 7th that varies somewhere between the minor and major 7th, which had been the basis for many exercises—although mine does not exactly follow Ståbi's intonation variants. It seems as if this first part of my learning project with its very narrow focus on one piece while at the same time exploring the activity of intonating as a means of making contact and relating to Mehdi's playing, had somehow focused my so far unsystematic training in microtonal listening. In Polanyi's words, the incremental transformation from the distal term of knowing to the proximal term (see chapter 4, p. 4.1) was initiated for at least some specific intervals and pitches. Also, it is interesting to consider this relation between the *Vallåtspolskan* and the new melody through the interfaces of specific pitches and intervals as a long movement or translation-transformation *over time*.

Obviously, this is a reconstruction and a narrative developed on the basis of my first-person experience of my perceptive transformations, and through comparing my perception of Ståbi's recording and the one of my melody in regard to pitch relation. In other words, a narrative constructed based on my esthesis of these two recordings, as well as my knowledge of my own recording's poiesis, including the shift in focus from how to produce or reproduce a certain pitch-height⁹ to expressing a series of imagined pitches that resonated while singing. Again in Polanyi's words, a focus shift as the change of suddenly being able to attend from the pitch-height toward a musical *Geschehen* and its exploration instead of attending from imagining or listening to a certain pitch-height to producing or reproducing it (see again chapter 4, p. 4.1). At least a part of the distance to my envisioned goal seemed to have been covered and a new tacit knowing of microtonal pitch and intoning had evolved—I had learned something through systematic repetition and variation of interactions over a certain period of time. What transformational-translational *Geschehen* happened when changing from my activity of singing and recording that melody to developing the piece from there through notating? How did my relation to my recorded melody and its pitches change during the creation of the piece?

10.3 A new symbolic system to relate to

Three different activities of notating shall be examined exemplarily in order to understand more about these questions. On May 12, 2023, the continuation of the work began, as so often, by transcribing the first part of my melody by hand. Since it was a rubato melody without a regular pulse, it seemed easiest, to only notate pitches with varied size, distance and with breathing signs between phrases, sometimes emphasizing or extending a pitch through a horizontal line on or beside the pitch. The staff was a regular grand staff, not yet applying the viola key. Arrows served to indicate if a pitch was supposed to be higher or lower than in the tempered system, or, if its intonation was to be fixed absolutely.

⁸It exceeds the capacity of verbalization how it possible to imagine or sing a pitch without caring about its intonation—similar to the mystery of *how* an imagined pitch sounds if not imagined or listened to *through* a certain imagined sound such as Mehdi's viola. It could probably be explained, at least in part, by its subordinated priority and the fact that I still referred to my familiar intonation system which I, despite the increasingly disturbing discrepancies between different playing contexts, had never questioned as such. Intonation and other microtonal exploring had before the learning project never found its way into my melodic-harmonic imagination—when creating *Circular Composition II*, experimenting with microtonal intervals had been a result of a combination of imagining and playing at the same time.

⁹"The sensation of pitch-height is directly related to *frequency of vibrations*, measured in vibrations per second or Hertz (Hz)" (Sabat and Schweinitz 2005, Definitions).

The melody developed then through a repetition of the first 1,5 phrases, with a slight harmonization through double stops, created mainly through keeping the anacrases with the pitch A ringing while proceeding to the next pitch. The denomination of strings was annotated for certain pitches and the idea of the bow circles with insertions of pizzed short impulses with the viola tuned to D–A–C (lowered)–A evolved. For the melody's first appearance, the scordatura was supposed to be different from the one of the bow circles. Thus, it was probably already in this very beginning of the work that it became clear that the piece would explore scordatura transitions throughout the whole piece's course, with the return to the open A-string for the piece's last section. It would thus include the tuning as an important artistic expression and not only as a practical necessity to deal with. Continuing this beginning, making handwritten notes allowed me to quickly connect material through arrows or lines nonlinearly and also to notate directions of pitches without the immediate need to specify more yet. After my work session on May 14, the first page of my notes looked as shown in Figure 10.1, p. 151. Transcribing from my recording had resulted in a notational trace that afforded overview and forced me to take or confirm first symbolic decisions regarding pitch-height and thus to the relations between pitches, even if my notation was not yet very precise. When for example notating the pitch between the two Ds in what became bar 15 in the final version (Figure 10.3), bar 38 in the first Finale file (Figure 10.2), and the third phrase in the handwritten notation (Figure 10.1), it was confirmed to be a lowered C# and not a lowered Db. Thus, it related as an assumed 7th degree and some kind of leading tone to the two surrounding pitches of D. A translation between media—imagined sound, audible sound, recorded sound, notation—and between symbolic systems had taken place. While the activity of notating in this case only fixed the already assumed interrelations and mutual function of pitch-heights for each other through encoding them by notation, it did nevertheless change my relation to them. It embedded them in possible future interactions as well as possible future sound by, for example, proposing a scordatura and designating the strings. My imagination of the pitches, which previously had alternated between abstract pitch imagination and a rough imagination of Mehdi's overall sound on the viola, was now specified. Or, expressed in Nattiez's terms in relation to my research questions, notating helped me to pre-structure my poiesis and esthesis of a pitch and thus the poetic process it already gave or potentially would give rise to. Thus, notating pre-structured my imagination of my relation to the "*outside*" world in specific ways.

I also typed-transcribed this beginning as a rough draft into Finale and from there began developing my material mainly in Finale, but still accompanied by handwritten notes. Occasionally, I recorded myself "testing" my material through singing. Figure 10.2, p. 152, shows the file saved when terminating my first working period in Finale on May 14, while Figure 10.3, p. 153, displays the first score page of the piece's final version from July 2024.

When transcribing-translating and continuing to develop the piece to Finale, this implied the previously discussed characteristics in regard to its specific way of pre-structuring the interplay of activities and especially their temporal order (see chapter 9, 135). As can be seen in the notation in Figure 10.2, p. 152, the notation has in comparison to my handwritten one become a linear course and thus temporally structured: a new introduction with clearly specified intonation has been added to introduce the originally introductory bow circles. Then, the melody follows and is at least roughly structured metrically and prolonged. Thus, the different components of the evolving piece have been brought into a preliminary temporal order. There are accompanying text descriptions that either specify intonation as in bar 32, sound color as in bar 31, or that reflect on general aspects of the piece or specific parts such, as the general proposition of "Durchlässigkeit behalten", "Keep permeability" on the top of the first page. Transcribing and developing the notation in Finale led thus to establishing more and different relations between pitches (and all other musical parameters). Fixing metrical relations led to new hierarchies between pitches, turning for example the A, the first melody pitch, now bar 31, into an anacrusis to the F, the downbeat in bar 32, that dissolves to the shorter E in bar 33. The fact that the notation finally applied the alto clef instead of the violin clef is then probably also a sign that my imagination gradually adjusted to the viola symbolically as well.

Interesting is, that, while my handwritten notation provides a much clearer impression of the future piece's overall sound world and movement through the interplay of pitch notation as well as the different kinds of lines and text notes, the first draft in Finale actually provides much more

information on the detail level. However, since Finale's user-interface demands extensive layout work in order to not provide information on temporal relations—for example, bar lines and bar numbers need to be hidden or modified while nevertheless having an influence on the spacing of material—the very agogic and flexible spacing that I imagined and that requires negotiating pitches' length anew with each interaction was not yet visible in the score. However, as also in the handwritten notation, notating served to negotiate what was not known yet, but what was necessary to be known in order to take further decisions on the piece's course. Thus, while it was not necessary yet to refine the metrical layout of the original melody, since the score merely depicted it descriptively from my imagination, this was different regarding the new introduction that had been created solely through notating and within the file. Here, while the sound color I imagined was known to me, both the exact pitch and the basic metrical relations and thus the phrase lengths were yet unknown and needed to be negotiated pitch by pitch in order to proceed with the poetic process—notating and at the same time imagining them, negotiating the exact pitch-height in relation to the previous and the following one, singing them. My relation to each pitch could only evolve through the necessity to take decisions on relations and visualize them symbolically.

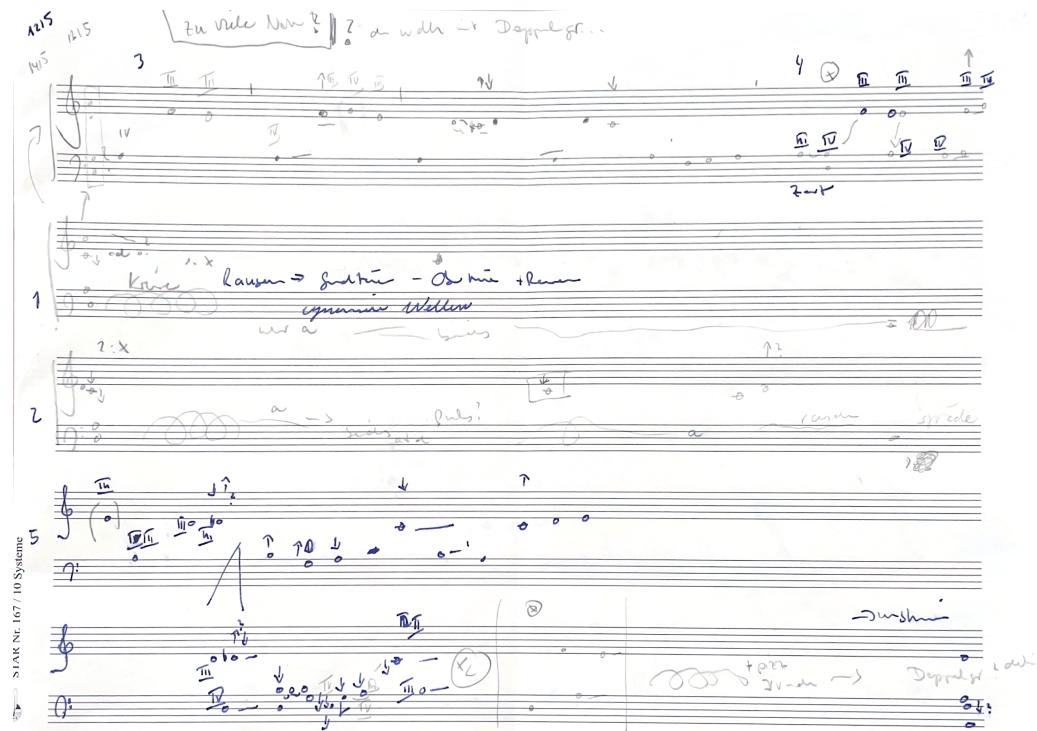


Figure 10.1: *Stundensblume*: first page of handwritten notes with the melody transcription, May 12-14, 2023

While, in my handwritten draft, arrows indicated lower and higher intonation in reference to the specified half tone, it was already clear then that it would be important to use a more precise system of pitch notation and explore its affordances. As can be seen already in this first Finale notation, my decision had fallen on the comprehensive notation system of the *Extended Helmholtz-Ellis JI Pitch Notation* (HEJI) by Marc Sabat and Wolfgang von Schweinitz, in its revised version of 2020 by Marc Sabat and Thomas Nicholson et. al. (Sabat and Nicholson 2020), since it “enables exact notation of all intervals that may be tuned directly by ear (natural intervals). It provides a method of writing any pitch-height in the glissando-continuum as a note on the five-line staff, and of specifying, in the case of any natural interval, the harmonic relationships by which this note may be precisely tuned” (Sabat and Schweinitz 2005, Introduction). It “combines two ways of describing intervals (linear and proportional), using signs derived from traditional staff notation” (ibid., The notation).

Score Verzierungen einfügen... Durchlässigkeit behalten. Klar mit Intonation sein und Gestaltung. nicht zu viel. Dynamik, Intonation, Rhythmus, Begleitung, Satz.

Senza misura

Bogentechnik? senza vib? ganz leise? Dynamischer Verlauf?

7

return string IV to this pitch through gliss.

II

how circles...

24

wie erstes Motiv lösen?

II

oder noch davor? ohne e?

oder nur a und h auf Zahlzeit 3 über ein

Ende der Phras?

37

irgendwo hier Bogenkreise dazwischen und Flageolet, quasi nach oben hin öffnen, oder Kreis öffnen (deleuze?)

2

41

49

53

60

65

74

81

91

99

balz ins obere Register wechseln. Melodischer werden?

pizz zu tief c

zu tief...

zu tief...

zu tief...

vibrato auf nachbarsaiten licht

wird leiser, ohne vib oder mit? dann, wie von neuem, helles Gefühl...

wie kommen wieder die Klingfarben dazu? pizzet bald flageolet.

Figure 10.2: *Stundenblume*: the first Finale file after the end of the work session on May 16, 2023

The decision had thus fallen on a system that “has been devised for the composition and performance of new music using the sonorities of Just Intonation” (Sabat and Schweinitz 2005, Introduction), at a point in time when my acquaintance with the theoretical preconditions of Just Intonation was only a very basic one. Applying the HEJI for depicting and pointing to pitch-heights and relations between pitches was thus solely based on my intuitive decision taking for intonation and not connected to HEJI’s poiesis. Nevertheless, a systemic approach to intonation within my piece evolved through singing and notating, though not connected to a specific tradition or theoretical system of tuning.

It was interesting how my relation to the HEJI symbols changed during the work. While the piece grew and transformed, also my imagination and perception of the exact notated pitch-heights in the piece changed. Through negotiating the choice of symbol for each pitch, trading off deviations of cents against each other, and through repeated reading through and thus imagining-listening and sometimes singing-sounding of the notated as described above, the furrow or track that had already been carved out in my consciousness deepened, and was linked closer to the new symbolic system of notation extending through these activities. Thus, new relations between my pitch-height perception-imagination and imagination of their visual symbolic representation emerged, transforming the affordances for pre-structuring my poetic and esthetic processes in relation to pitch. That way, my skills of pitch perception and pitch imagination both generally and in reference to my piece transformed, I learned something that touched my artistic practice both as a whole and specifically.

This had two noticeable effects. Firstly, despite the simultaneity of, on the one hand, my precise notation and its necessity for creating relations to and between pitches, and, on the other hand, my original assumption that the precision stood for purely approximate symbolic relations, it was noticeable for both Mehdi and myself how *Stundenblume*’s melodic-harmonic course and the overall evolving musical Geschehen felt more meaningful if imagining and playing the notated pitch-heights as exactly as possible. Despite the lack of an explicit system that organized the relations between the pitch-heights, a tacit system of relations between pitches had been created. Secondly, despite this recognition of the notated symbol’s exactness, this exactness lost importance when Mehdi got to know the piece better and recorded it in 2024. On the one hand, a shared esthesis of *Stundenblume* had established between Mehdi and myself. On the other hand, Mehdi had created an individual esthetic-poietic relation to how pitches, sounds and melodic-motivic courses related

Figure 10.3: *Stundenblume*: the final score's beginning, July 7, 2024

to each other. The exactness of pitch-height seemed thus to have served some kind of scaffolding function for establishing an individual relation to the notated material, which, as soon as it was established, moved the activities of tuning and *intonating* back into the realm of interpretation (see chapter 6, p. 97ff.).¹⁰ The pitch-height was thus not notated to be *reproduced*, but to provide a specific interface for individual esthetic and poetic interaction, thus a pre-structure to negotiate and create individual relations to each pitch and the piece's overall intonation system.

With the growing importance of pitch negotiation, also the dimensions of movement and time came more and more into focus. Instead of only being curious about the audible results of Mehdi's pitch negotiation, thus the resulting pitch-heights in their specific tone color, it became increasingly interesting to hear pitch-height and pitch evolving and moving. Gradually, this lead to more discourse and resulting notated details on dynamics, vibrato, and timbre as interfaces for interaction. This is especially apparent in the introduction in the final score (see Figure 10.3, p. 153) with remarks such as "allow for overtones to be heard" in bar 1, a specific vibrato symbol with a remark on its tempo—"un poco vib. (slow)"—in bar 3, or the many glissando movements throughout the whole piece. In the same way, also the bow circles' symbolic translation to notation evolved. In bar 7 and 8, for example, the bow circles provide the basis for interaction in order to transition from the introductory section to the melody's first appearance in bar 9. They changed from an interesting way of exploring the emergence and interplay of different overtones and pitch combinations to an interface that reappears in different shapes throughout the piece. In this interface, the notational trace opens up to specifically explore its temporal situatedness in its "outside" world. In other words, they provide an interface for Mehdi to explore and structure his relation to his "outside" world through exploring pitch movement.

This new focus also changed the notion of the scordatura exploration and its function for the piece in a similar way. From a mere background that influenced the viola's sound and thus all pitches' timbre, the manifold *Geschehen* of tuning and re-tuning moved to the foreground and became an important thread of movement through the piece. Through transforming the viola by listening, in negotiation with the notated pitch-heights and their relations, also the notation's

¹⁰Once more, it has to be emphasized that all these reflections form theoretical models of what happens and thus highly simplify all ongoing *Geschehen*. Even if tuning and *reproducing* a pitch-height as exact as possible in reference to its notated symbol, there is always a dimension of interpretation since it is the relating by ear that validates the relation between symbol and audible pitch-height.

tuning sections became interfaces for situating Mehdi, the notational trace, and their relation to each other at the specific instant in time and space of interaction.

Listening to Mehdi's recording from Sanahin is very inspiring. It is so obvious how the church's acoustics and physical characteristics formed how he related to the viola, the score, and thus also to the *Geschehen* of tuning and any other aspect of sound. It is this *situatedness* of tuning that becomes tangible when listening and reflecting on the piece's development.

Stundenblume, played by Mehdi Hesamizadeh at Sanahin monastery, 2024

Final score of *Stundenblume*, 20240707

Thus, the piece was written in order to hear Mehdi interact with it in the specific playing situation he chooses, not to hear a certain version of this piece. It was the *Geschehen of tuning and transforming pitch and timbre* as a specific movement *Geschehen* that was fascinating for me. This was an insight that grew incrementally throughout the course of my learning, as it is also traceable in the course of my notation adjustments. For example, this could be related to how the tuning passages were gradually modified by both specifying more movement between strings, and allowing for more flexibility concerning the exploration of this notated movement and its duration through added boxes—thus, specifically hinting at their situatedness in the specific interaction of human creative participant, the viola, the notational trace, space and time. Thus, Mehdi could adjust them creatively to his artistic and practical needs and the requirements of each specific creative situation of performance, as shown in Figure 10.4, p. 154.

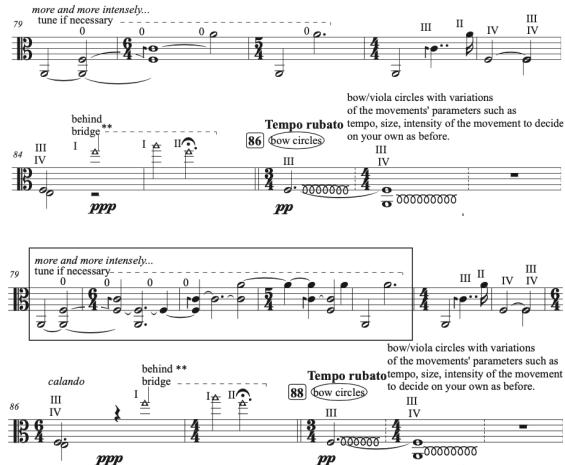


Figure 10.4: *Stundenblume*: space for retuning after a tuning section in the score versions from 20240429 and 20240707 (final score)

In this way, the notation's interfaces for interaction allow for the piece's temporal and structural course and its relation to time to be negotiated anew each time it is interacted with. Formulated in regard to my research questions, (i) the transformations in Mehdi's and my perception and the related transformations in notation and the resulting above-described interfaces enhanced the notational trace's situatedness in its respective “*outside*” worlds. (ii) In this way, these interfaces enhanced as well the unforeseen dimension of interacting with this trace—or, if expressed reciprocally, enhanced both the trace's and the interacting creative participant's unforeseen relation to their “*outside*” world. (iii) The concept of a trace as a tool for exploring temporal and spatial situatedness emerges, which is related to the interplay between the trace's poiesis and the resulting specific interfaces, as well as the creative human participant's individual, situated, esthetic negotiations.

Returning to the issue of learning, both the activity of notating, and the notated as such, had become tools for learning and creating as interrelated activities. Through notating, my perception was furthered, as well as my relating to abstract pitch-height, but also to pitch and timbre of

Mehdi's way of viola playing and to the instrument of the viola in general. Creating the score in combination with especially the musical and aural-oral exchange with Mehdi taught me details about pitch and pitch in relation to the instrument of the viola and especially his viola playing. This forced me to take decisions on how to *represent* pitch and sound or how to pre-structure their transformation. Thus, through interacting virtually and physically—through my own simple tests of tuning and bowing Mehdi's viola, but mainly through the mediation of his demonstrations of playing—with an instrument that had only been generally familiar to me before, it was possible to learn to relate the dimension of pitch closer to sound, to *timbre*, as well as to its poiesis—thus, to perceive it as movement. Learning included thus to transform notions of phenomena and activities, such as transforming tuning from a necessary precondition for making music that needed to be controlled, into a tool of expression and interaction that the notating person could invite into and pre-structure, but that because of its situatedness would always stay uncontrollable. Thus, learning equally included to develop methods to pre-structure the unforeseen dimensions of interacting, in other words, to develop poietic tools in order to pre-structure sites for negotiating esthesis.

10.4 Grids

It is interesting to once more dwell in this notion of the esthetic process “as a fractal process of relating to previous pre-structurings,” as a process of negotiation between these pre-structured relative subsets and the present specific esthesis of the moment of interacting, i.e., between entangled individual and collective as well as present and past esthetic processes (chapter 6 p. 96).

It is not only dealing with specific musical “problems” such as tuning or intonation that form our “shape, body, and mind” (Noë 2010, p. 67) and the resulting tangible traces of creating. “Language, tools, and collective practices make us what we are” (*ibid.*, p. 67) on such a fundamental level, that these languages, tools and collective practices function like metaphorical grids which, when applied repeatedly—learned—over time, form the general perception and meaning-making of sound, as well as the connected symbolic systems and all relating to it. In other words, these continuous negotiations with such esthetic pre-structurings form us as body-mind-unities on a deeper level. During the course of my learning project it became for the first time palpable, how not only my perception of pitch, but all my musical imagination and perception, had been so deeply formed by the grid of the five-line staff system and the 12-tone equal-tempered system, as well as generally by interacting with notating, that all my perception and musical imagination would be placed in front of the horizon formed by these parameters. All thinking and imagining was a thinking and imagining *through* this grid that so far had been tacit.¹¹ Nevertheless, this grid seems to function on different levels. For example, in the beginning of creating *Stundenblume*, it was easiest to notate in violin and bass clef, since it was faster to imagine and symbolize sound through their grid (see Figures 10.1, p. 151, 10.2, p. 152 and 10.3, p. 153).¹² However, after only a few days, the alto clef which so far had only been familiar enough to read fluently, began to afford imagination. Nevertheless, it took much longer to be able to imagine pitch outside of a grid of 12-tempered pitches or deviations of such pitches, and instead in a continuum that contains these pitches and can be divided differently through different grids. Only a year after my learning project, it was possible to perceive a pitch-height as such and not only as a degree of deviation from these 12 tempered pitches.¹³

It would deviate from the purpose of this research to examine the psychological and physiological conditions that engender and render possible such learning and transformation more closely.¹⁴

¹¹ “What is this Western scale that conditions our whole perception without itself being perceived? It is a structure as well, obviously, but a *reference structure*, at the moment implicitly suggested in the abstract” (Schaeffer 2017, p. 217).

¹² Though this was not as crucial as when, because of the pre-structuring of the key mapping grid, changing from saxophone playing to piano when creating *Sorrow* (see again chapter 5, p. 51), the situations are comparable.

¹³ However, since applying HEJI implies to still interact with the symbols on the basis of the five-line staff system and its traditional symbols and not a totally new system, this nevertheless contributed to fixing the relation between pitches and this notational system.

¹⁴ However, I refer to, for example, Eckart Altenmüller's research on the transformations of the brain's neuronal network through practicing (Altenmüller 2006)—thus, learning, transforming—and the plastic adaptions of the nervous system, especially in the case of professional musicians. This probably contributes to the evolution of

Important is to acknowledge how the interaction with the “*outside*” world influences us as body-mind-unities to such a degree that all our interacting with a musical *Geschehen*, including all related processes of poiesis and esthesis, is dependent on these metaphorical grids. In that way, also our personal web of artistic practice is shaped by and forms these underlying grids. Through creating and thus interacting in different ways, these grids, as also the web of artistic practice, become subject to transformation, can be re-organized or dissolved. However, if so, and how, remains to some extent uncontrollable, since this transformation is a situated *Geschehen* in its own right and depends on all its participants.

Crucial here is the dimension of time as a precondition for the evolution of these grids. My learning project demonstrated how the relation of a transformative activity to the passing of time can become a creative tool in its own right. As Vijay Iyer, for whom the “the trace of the body in music” is a central theme, and who has explored “the role of physical embodiment and socio-cultural situatedness in music cognition” in his work (Iyer 2014, p. 2) remarks, “A fundamental consequence of physical embodiment and environmental situatedness is the fact that *things take time*. Temporality must ground our conception of physically embodied cognition” (ibid., p. 4).

In line with my argumentation in the preceding reflections, he emphasizes, “The central idea that music is an embodied, situated activity means that music depends crucially on the structure of our bodies, and also on the environment and culture in which our musical awareness emerges” (ibid., p. 3). Earlier he explains how, “Music is then understood as the sound of human bodies in motion; to listen to music is to perceive the actions of those bodies, and a kind of sympathetic, synchronous bodily action (i.e., dance) is one primary response. Of course, this is mediated by culture” (ibid., p. 3). While this summarizes very well much of my reflections in regard to the situatedness of creating as the ground for the human body-mind-unity’s manifold relations, Iyer’s highly important further reflections on how “[t]he idea of embodiment can also bring the field of music perception and cognition into a healthier dialogue with the music humanities, which has in recent decades seen robust critical engagement with ‘the body’ in terms of race, gender, and sexuality” (ibid., p. 3) will be left aside, as well as all of his further explications on the topics of embodied rhythm perception, empathy, expectations and listening to music as listening to moving bodies. What is interesting here, is to examine my reflections through the lens of his remarks concerning *music’s temporal situatedness*.

An important starting point for Iyer’s conclusions here is Tim Smithers’ differentiation “between processes that occur ‘in-time’ and those that exist ‘over-time.’ [...] In-time processes are ‘embedded’ in time; not only does the time taken matter, but in fact it contributes to the overall structure” (ibid., p. 4). Iyer states then, “Over-time processes, by contrast, are merely *contained* in time; the fact that they take time is of no fundamental consequence to the result” (ibid., p. 4). He relates this distinction to the one between process-oriented activity and product-oriented activity, linking in-time processes or “process-oriented” activity to examples such as speech or walking, while—strangely, choosing “writing a novel or composing a symphony” (ibid., p. 4) as examples for over-time processes or “product-orientated processes”—and explaining such over-time processes mostly through the example of computation where the passing of time is not crucial to the performance of computation itself (ibid., p. 4). “However, [and it is this argument of his reflections that seems crucial here,] this is not what the mind does when immersed in a dynamic, real-time environment; rather, it exploits both the constraints and the allowances of the natural timescales of the body and the brain as a total physical system. In other words, Smithers (1996) claims, *cognition chiefly involves in-time processes*. Furthermore, this claim is not limited simply to cognitive processes that require interpersonal interaction; it pertains to all thought, perception, and action” (ibid., p. 4).¹⁵

tacit knowledge and to the *Spielgefühl* (see chapter 4, p. 47ff.) functioning as a creative tool, when trained. Interesting is equally, that “It is not only by listening, but also by observing musicians, that the sensorimotor skills are automatically trained, given that one already has previous knowledge of the instrument” (Altenmüller 2006, p. 58, my translation). Thus, also imagining a musical *Geschehen*, i.e., various modes of symbolized sound, changes the human body-mind-unity on a physically tangible level, or, on the level of the grids that structure all perceiving-interacting-meaning-making.

¹⁵It is interesting to think about this time grid and in-time and over-time processes in relation to phenomena such as rhythm and groove. Both could be understood as temporal grids that structure the human body-mind-unity. A thorough reflection on this topic exceeds the framework of this text, but some very basic thoughts should be conveyed here. To begin with, both rhythm and groove inscribe certain patterns of structured time into the body and both phenomena have to be experienced holistically in order to get an understanding of them. Especially the phenomenon

The passing of time “contributes to the overall structure” (ibid., p. 4) of what is created and how the participants of a creative situation transform, thus, which traces evolve from creating. Obviously, there are activities where the passing of time in itself seems not to influence the traces of creative activity and the interacting as such. In line with Iyer’s reflections, these are mostly such activities and interactions that involve computational ones, such as when transcribing a handwritten sketch into Finale. Nevertheless, as soon as a human being as a body-mind-unity who can develop a *Spielgefühl* is involved, the passing of time and the interactions during or ahead of that passing of time, influence the choices taken. Also, even within computational interaction, such as when Finale processes my entries, or when Ableton is performing activities such as rendering or bouncing—or, when LaTeX is compiling this document—the fact that a certain duration of passing time is necessary, influences the nature of the resulting trace or its sheer existence.

Thus, applying the passing of time as a tool in creating by, for example, performing or repeating, but also interrupting or concluding interactions in a certain order, over a certain time span, or at a certain point in time, can be considered as a constitutive part of what Zembylas denominates as *Arbeitsprozesswissen* (knowledge of work processes, my translation) and explains, how “This practical knowing about the conditions and peculiarities of creative work processes is linked to the person who has made certain relevant experiences themselves” (Zembylas 2020, p. 68, translation aided by DeepL, 20250529),¹⁶ thus is something that can only be acquired through lived experience.¹⁷

Zembylas and Niederauer describe comprehensively how the human body is not only formed by such experience that evolves through the practice, but also how the composer’s subjectivity (and I would add: any artistic subjectivity) is formed through the “shared musical tradition and rehearsed practices of composing”, emphasizing thus the aspect of learning that comes through shared artistic practice, and stating, “Drawing on Etienne Wenger (2002: 86), we view practices of composing as results of ‘shared histories of learning’” (Zembylas and Niederauer 2019, p. 90). As quoted earlier, they emphasize how, “Artistic practical knowing comes from learning *by* doing and *while* doing” (ibid., p. 96). And, this should be emphasized, the knowing body-mind-unity as a “synaesthetic, knowing, sentient and engaged living organism” (ibid., p. 87) is a body-mind-unity that is embedded in the passing of time and is formed by it. Only through the passing of time it is possible that the body functions as a “knowledge-generating organism”, in German “wissensgenerierender Organismus” (Zembylas 2020, p. 73, my translation), only in relation to time the transformations that come through all interaction and all musical *Geschehen* they are involved in, can these be perceived as traces within the body,¹⁸ establish an embodied memory, and thus both bodily skills and knowledge, or the *Spielgefühl* as a creative tool. These are skills and comprise knowledge that is sometimes even ascribed certain specific body regions, such as how Zembylas and Niederauer quote and describe Karlheinz Essl’s and Michael Kahr’s experiences (Zembylas and

of the groove would be difficult to describe to someone who has never experienced it—one could, for example, mention that it is a rhythmic pattern or period that is repeated, and might be varied, but has a certain repetitive framework. Nevertheless, this is not enough, it is related to a certain *Spielgefühl* and a resulting musical *Geschehen*, that not only directs the human body-mind-unity, but seizes it and structures it, such as I experienced it when playing *In the dark*, as described in chapter 6, p. 97. Only through repetition, the human body-mind-unity can learn to establish such grooves and find the right *Spielgefühl* or, as Hellqvist expressed it, the right *body-mind set* (see chapter 4, p. 47ff.). This is also reflected in the etymological root of the term of the groove. It is related to the verbs “to dig, bury, scratch” and was used around 1650 in the sense of a “long, narrow channel or furrow, especially as cut by a tool” (etymonline 2025b). Interesting is also, that the term of the furrow seems to be one of the etymological roots of learning, though from another language (see chapter 9, p. 143). This could also be metaphorically connected—a groove is established over time, but is simultaneously an in-time process, since the passing of time structures the rhythms played in the groove. Also, rhythms are both in-time and over-time processes, they are temporal structures in their own right. To what extent and how to relate them to in-time processes could be discussed, but they could definitely be understood as over-time processes, since a rhythmic structure—despite obviously being experienced very differently each time it is played, sung, or imagined—is nevertheless something that can be measured, and thus functions similarly at different points in time.

¹⁶ „Dieses praktisches Wissen über die Bedingungen und Eigenheiten von kreativen Arbeitsprozessen ist an jene Person gebunden und bestimmte relevante Erfahrungen selbst gemacht hat.“ (Zembylas 2020, p. 68)

¹⁷ For further explication in regard to artistic practical knowing, see also (Zembylas and Niederauer 2019, pp. 82–93, 98–101), or, the German version that Zembylas himself refers to, (Zembylas and Niederauer 2016, pp. 104–117, 124–127).

¹⁸ “Because of the central role we attribute to experience, we have repeatedly referred to John Dewey and emphasised, as he does, that past experiences leave traces and have an impact on the way people cope with present-day tasks. This form of knowledge is revealed, for example, in the way the composers organise their work processes.” (Zembylas and Niederauer 2019, p. 87)

Niederauer 2019, pp. 88–89) or David Sudnow (Sudnow 1999) does when learning playing jazz piano and looking at his learning through the lens of his hands (see Zembylas and Niederauer 2019, p. 101)—or, when I let my fingers wander on the piano and accompany my voice to find harmonic and melodic development of a fragment in *Circular Composition II* (see again chapter 5, p. 51), or let them lead the way and transform musical material when creating *In the dark* (see chapter 5, p. 68). As Zembylas and Niederauer formulate it, “However, a body that constantly makes experiences and thus has already learned a large amount can do more than just reproduce what it has practised. The body can be creative” (ibid., p. 88).

Interesting here is also, that the passing of time can not only function as a creative *metatool* to intentionally acquire a new skill or tool for creating such as a new perception of pitch-height or to accomplish a creative task such as creating a new piece, or when entangling other activities in a purposeful way with the passing of time. The embeddedness in time and the body-mind-unity’s capacity to experience this passing time can tacitly or explicitly turn into a creative tool in its own right,¹⁹ such as when Zembylas and Niederauer describe Karlheinz Essl’s development of an “internal timing” for performing a composition of his, where he explicitly trained to experience the piece’s length (ibid., p. 89). A similar experience would be the judging of the appropriate length of a *set* in a concert with for example the quartet, by not only attuning to all participants, including the audience’s behavior, but also by relying on the experience of having played such sets of 45, 70, or 35 min over years, and thus the skill, or tacit knowledge, to feel their length and apply it as a tool of expression. Iyer’s conceptualization of a “presupposition of ‘shared time’ between the listener and the performer” (Iyer 2014, p. 4) is interesting here—he accounts it to the “sense of mutual embodiment” in intersubjective activities such as speech and music making (ibid., p. 4). It would distract from the scope of this research to go into more detail, or to look closer at current research on musical intersubjectivity, embodiment, or even resulting notions of togetherness and empathy in reference to musical interaction (see e.g. Kaiser 2023). What is interesting here is how this subjective experience of shared time shapes the contact-making between participants of a creative situation, when taking part in a musical *Geschehen*—how it is also the perception of the shared temporal space that allows for tactile relating, joint reflecting-in-acting, decision taking, and influencing each other’s *Spielgefühl*, thus also the perception of the jointly created musical *Geschehen*.

Iyer argues for the specific relation between performer and audience that results from the experience of shared time, claiming the notion of “the listener’s ‘musical co-performance’” as a requirement for the experience of music (Iyer 2014, p. 4). Nevertheless, it seems necessary to emphasize that, although it might for practical reasons be useful to distinguish between performance and audience, it is in a creative situation impossible to not participate. Nobody is purely a listener or a doer, or a member of an audience and a performer, as also Iyer argues²⁰—and this is why the notion of an audience in all these reflections has not been considered in these reflections.²¹ In that way, all listening as both an obeying to the musical *Geschehen* and a listening *through* and a listening *for* something or an imagined something or someone, must be a co-creating. This co-creating and also the notion of the shared time must be based on *constructing* or *re-constructing* an imagined perception and experience of the other, since all perception and experience of the other, all the other’s esthetic and even poetic activity is, even in a situation of an utmost experienced attunement, a result of one’s own esthetic in relation to the polysemous traces whose presence is shared in that situation, or the traces as experienced transformations in oneself (see also chapter 5, especially p. 57ff. and p. 77ff.).

Thus, also the following needs to be concluded and added—this co-creating is not only based on the experience of shared time, but also on the anticipation of an experience of shared time. As seen before, all expectations and imaginations of sound and relations become entangled with what is actually listened to in the moment of creating. Hence, through this entangled listening and thus experiencing different temporal relations at once, co-creating is not reduced to the moments of

¹⁹ “Alongside the embodied gestalt perception, there is also an embodied memory and an established sense of time for processes and chronology, which develop through repeated rehearsing” (Zembylas and Niederauer 2019, p. 89).

²⁰ “The point here is that the embodied improvising agent, situated in a real-world physical and cultural environment, is most often the listener *and* the doer in the equation” (Iyer 2014, p. 7).

²¹ This entanglement is exemplified by traditional jazz jam sessions where it is not possible to clearly distinguish between players or singers and audience.

shared physical presence in a creative situation. As Zembylas and Niederauer phrase this relation between present and absent bodies when creating for another creative situation, when composing something, “Composers try out things using their own bodies and have a common musical practice, so they develop a shared bodily implementation of experiences. This *common body* enables composers to anticipate the body perspective of musicians whilst they are composing (see Gebauer 2009: 97–101)” (Zembylas and Niederauer 2019, p. 101).²² Hence, this dimension of co-creating is connected to all temporal directions, and is never a linear, or only forward-moving process, but rather a *Geschehen* that entangles both memory and anticipation or imagination of other bodies, as well as temporal relations, entangling what is known with the unknown, what is foreseeable with the unforeseeable.

²²Nevertheless, it does make a difference if a body is present at the moment of listening or not, as Iyer reflects and speculates even around the social and political dimension of absence and presence (see especially Iyer 2014, p. 6).

Chapter 11

Closing the circle—spiralling toward a conclusion

The entanglement of temporary and imaginary layers and the listening *through* and listening *for* their traces became especially obvious, when my experimentation was concluded in the summer of 2024 through becoming part of a project that dealt with the extramusical inspiration of different layers of time and memory. Taking part with a very different role as in all previous experimentation led to a creative situation that allowed me to draw a line back to the beginnings of my work and offered a comprehensive picture of what had happened in those three years of experimenting.

11.1 Trails of traces: constructed pathways and narratives

The project was one of composer Yilin Yang's, aiming to create a new electronic piece on the basis of samples of my saxophone playing with both fixed media elements and improvised interaction by herself on synthesizer and me on the saxophone. When she chose music from an array of recordings of mine, her preference fell interestingly on the electroacoustic piece *Circular Composition III* (see chapter 9, p. 130)—thus beginning her work by using my saxophone recordings of a.o. whistle tones and multiphonics from this very first creative situation of my first experiment from 2022 for *Circular Composition II*. Out of my samples, she created during the winter and spring of 2024 a patch that facilitated interaction between fixed media, synthesizer, saxophone, and live video.¹ In this system, the volume of the fixed media and synthesizer, along with the performer's movement, influenced the behavior of the live video. Also, my movements shaped the audio processing applied to the saxophone microphone. The score consisted of three parts and was organized in three staves, Tenor Saxophone, Synthesizer and Computer. These were structured meticulously in relation to a timeline, each of it consisting of a series of boxes that contained different amounts and organizations of symbolic lines and dots in different sizes, heights and distances from each other, symbolizing dynamics, pitch-height² and sound, accompanied by verbal comments on specific sounds for the saxophone and technical parameters for the synthesizer and computer—thus shaping the course of the piece and also proposing in a quite detailed way the spectrum of sounds that Yilin had, in regard to my part, developed in conversation with me.

The setup for *Winter Slices* (Yang 2024) when we premiered it on June 7, 2024, at the concert of Karlheinz Essl's electroacoustic composition class at mdw,³ was as follows. Yilin controlled one synthesizer and one MIDI controller through *Max/MSP* and had also connected her setup via *TouchDesigner* to a projected black and white photograph of a tree that moved, which was *sliced* in three different ways: linear slicing, piece slicing and point slicing, each corresponding to a part of structure and its associated emotion. These movements were steered through a *genki* sensor

¹I thank Yilin Yang for aiding me with the description of the technical details of her set up.

²The lowest line and number 0 symbolizes the low register, the middle line with the number 2 the middle register and the upper line with number 4 the high register.

³BLURRED BOUNDARIES. Studienkonzert Elektroakustische Komposition, Studierende von Karlheinz ESSL. Klangtheater, Future Art Lab, University of Music and Performing Arts Vienna (mdw), June 7, 2024.

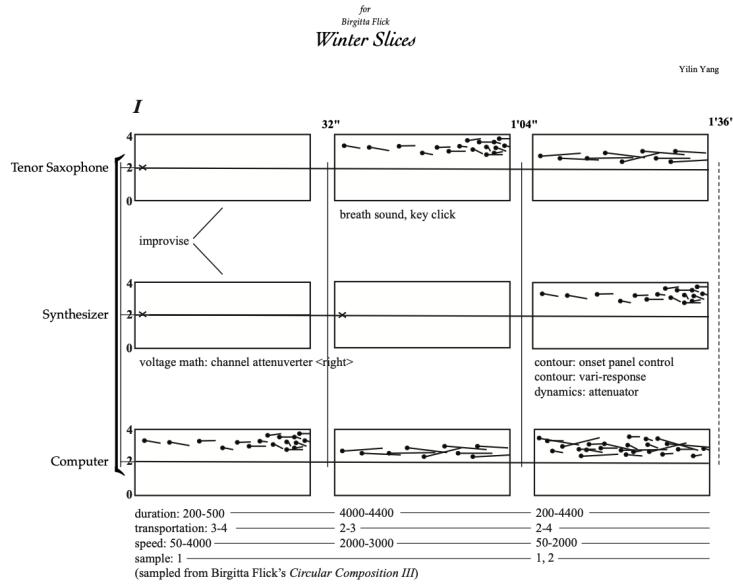


Figure 11.1: *Winter Slices*, beginning of the score (reprinted with the kind permission of Yilin Yang)

that picked up the movements of my saxophone horizontally and vertically and was fixed at one of the axes of my instruments' mechanics. I stood and played in the middle of four loudspeakers that made her synthesizer sounds audible and distributed them spatially, and that also played back my sound distributed between the loudspeakers, with my sound processed through her setup and her spontaneous manipulations. My playing was thus audible in two layers, on the one hand, the acoustic sound and my sound as projected from the speakers in its manipulations through her spontaneous creating, on the other hand, through a preset manipulation that was triggered by the movements of my instrument. The different dimensions of my playing were picked up through using two condenser microphones: one fixed to the bell of my saxophone, which mainly picked up sound from the corpus and the keys; and one stationary microphone close to my mouthpiece for all the sound details produced at the tip of my mouthpiece such as air sounds or whistle tones.

We were thus interacting in a complex conglomerate of fixed and spontaneously created relations between our sounds and body-mind-unities, relations that evolved from both our doings but that were steered differently. For example, it was not possible for me to steer how Yilin would manipulate and process my sound but since some of the fixed presets⁴ were known and the effects of her doings audible to me, it was nevertheless possible to adjust my way of playing to it—which would then feedback again into Yilin's reaction. While playing, the tree photograph's movements were not visible for me since the screen was behind me, but since its movements correlated with the audio effects that were produced through my instrument movements⁵ and I had watched the picture moving in a rehearsal, it was possible to imagine the tree's slicing.

I thus found myself involved in relating simultaneously to Yilin's and my present creating of sound and movement, our past creating of sound and moving visuals, memories of our interacting and thus already created sound and visuals, as well as our imagination and also anticipation of sound⁶ and visuals, relating to anticipation and memory as well as present experience of movement that in turn created an experience and an expectation of an experience of spatial and visual movement around me.

While interacting, I was at the same time taking my own artistic decisions. However, it was not

⁴For example, a horizontal movement of my saxophone across the space in front of me picked up by the stationary microphone would e.g. move my sound in the same direction through the speakers and multiply it through adding a reproduction with certain other frequencies to it during the movement.

⁵Yilin used four effects for the saxophone: delay, impulse, particles and freeze.

⁶We knew the piece's energetic course and the envisioned sound transformations that we were to achieve through spontaneous interaction.

only a listening-obeying to what spontaneously resonated or sounded “right,” but also listening-obeying-following *for* the specific envisioned course of sound transformation and energy that Yilin had set out for us through her score and through conversation—something that was different from interacting with my own notational or recorded traces of previous experiments. While nevertheless creating sound spontaneously in the framework of an already set course of sound and material,⁷ my creative doings were also connected to a clear role and function in the piece’s course, a course that resulted from Yilin’s and my shared esthesis. Thus, although the concrete relations would obviously be established anew each time we would play the piece, we were explicitly *refreshing* (*aktualisieren*) different kinds of relations of sounds that we had already previously tested.

When Yilin had begun creating, I had only known about her inspiration of falling snow for the piece. However, when shortly before the premiere reading her program note for the piece, it struck me how much her inspiration, actually an extramusical idea, correlated with how I experienced being *inside* and immersed into the musical *Geschehen* we created through her piece. Especially her description of how her “senses are fragmented and magnified in these disjointed recollections” (Essl 2024) resonated with me. Her description of *Winter Slices* became a metaphor for the above-described experiences made when playing the piece and for being within that situation, emphasizing not only the entanglement of transformed perception and transformed material that took place but the constant entanglement of different layers of time, as she elaborated it more recently in a longer work commentary.

Winter Slices is an improvised duo for saxophone and synthesizer, enhanced with fixed media elements sampled from Birgitta Flick’s Circular Composition III. This work unfolds as a spontaneous dialogue between live instruments, interwoven with pre-recorded sonic fragments that evoke the memories of a long-vanished winter. It feels as if I have wandered into Flick’s memories, where the cold wind rushes relentlessly, snow falls endlessly, and solitary footsteps echo through frosty air. The performance also includes an interactive video component. Sensors capture the performer’s movements in real time, translating kinetic data into dynamic visual transformations. This integration of sound and image creates a fluid, immersive environment where live improvisation, fixed media, and responsive visuals merge into a cohesive narrative that bridges the realms of memory and the present. (Yang 2025)

Standing and playing literally in the center of a whirlwind of a constantly evolving and transforming sound and movement *Geschehen* that immersed and directed me and that I contributed to through relating to my surroundings in the shape of material components such as the space and tools such as my and Yilin’s instruments, relating to the inspiring doings of Yilin as well as to all immaterial and virtual participants of that “*outside*” world surroundings, being physically in the center of a situation with a *Geschehen* where I so obviously was both “the listener *and* the doer in the equation” (Iyer 2014, p. 7) and where I both explicitly and implicitly connected with the traces of my and others’ past doings while also relating the traces of my and others’, namely Yilin’s and the sound engineers’, present doings and the anticipation and imagination of future doings and traces—this situation could also be understood as a metaphorical *Geschehen* symbolizing what I had tried to unearth through all previous experimentation.

Video of *Winter Slices* performance, June 7, 2024

When listening and interacting with Yilin’s and my multidimensional creative *Geschehen* that made me interact with my own traces in their manifold disguises and transformations—such as the “remnants” of my then freshly discovered whistle tones from 2022 with the enhanced air sound around them, transformed and also embedded into Yilin’s dynamic “clouds” or “dots” of sound—I suddenly saw the course of my research’s unfolding as a *multiplicity of pathways through that complexity of entangled participants and activities and the traces as their inbetrweens*. It became clear

⁷A course that had been created through transforming another already set course of sound and material and which had equally been derived from spontaneously created sound when considering its relation to *Circular Composition III* and *Circular Composition II*.

that “the application of metaphorical lenses for watching the system” that “can *filter* or manipulate my perception and its focus in certain ways” (chapter 2.3, p. 19) can not only be applied as a research tool when reflecting on a certain section or dimension of that web in reference to a specific creative situation, but that such lenses, either conceptualized beforehand or evolving during the experimentation, would also be a versatile tool to look at that web as a whole and thus to get an overview over what had happened and in which way, and also the conclusions drawn from the research’s course. Although it had been necessary to discard the original methodological idea of the compositional seed whose transformations could be watched during the research, my refined methodology with its focus on the fleeting complexity and its transformations instead of singular events had nevertheless yielded such a complexity or network in its new conceptualization as as the research had aimed for.

Thus, if this complexity would be imagined as an experimental system, consisting of a web of all that is taking part in the creating, and that which is going on—activities, participants and traces—one can give impulses to this system and thus shape this web in different ways and watch what happens. On the one hand, changes in my activities and position in relation to or within it will produce changes in my perception and my notions of them resulting from said movement that can be used. (chapter 2.3, p. 19)

Depending on the applied lens and the chosen position, it was now indeed possible to see different *trails of traces* through that complexity, marking out differently shaped aspects—or sectors, dimensions—of that network. In contrast to my very first and quickly dismissed idea when envisioning this research, there was indeed no such single trace as “the” seed (see chapter 1, p. 3), as that “‘frozen’ instance” that would engender that network, as Roels had also dismissed it (Roels 2014a, p. 234). Nevertheless, depending on the applied lens in its specific affordances for uncovering and (re-)constructing specific relations between participants—traces—activities in all their manifold forms of existence and thus marking out a diversity of *trails of traces*, lines of connections as lines of relations between them can be (re-)constructed through that network. Thus, anything could be considered as such a seed that leads the way through the network’s different sections or dimensions on such pathways, from anywhere, anytime and in any way. This results indeed in a delineating of the components of this network in the alternate understanding of the term proposed in connection with the research shift and the reformulation of my research questions, “Not circumventing something with a line and delimitating it through that, but a *de*-delineating in the sense of ‘to mark out in lines,’ or ‘to sketch out’ (etymonline 2025e). Delineating thus still acting as an activity of ‘drawing lines,’ but lines of connection instead of circumvention; delineating as sketching and developing a clearer picture of these entanglements and its different qualities, of looking for co-actions and connections instead of definitions or delimitations” (chapter 1, p. 7). And, as it should be added now—delineating indeed understood as an activity of *marking*, an activity of discovering, *marking out, of tracing, re-tracing and tracing back*, within all the temporal dimensions of the past, the future and the present that a trace is involved in.

When listening to and playing with the musical *Geschehen* of *Winter Slices*, the first such lines, or rather sets of *multi-branched trails* perceivable, were the trails of musical material and expressions that could be retraced throughout my whole research project. Beginning with the so frequently mentioned whistle tones and air sounds that had become transformed in manifold ways when wandering from the first recordings for *Circular Composition II* via the piece itself, to my first Ableton piece *Circular Composition III* as well as the pieces for *Musa Horti* and *VoNo* and from there into *Winter Slices*. The trail meandered via the many situations of playing with Chanda, the quartet, and with all others who tested my lead sheets with me, into my saxophone practice, to playing with Mehdi and into that moment of playing *Winter Slices*—where my live whistle tones and air sounds came into contact with their recorded and transformed remnants controlled by Yilin and became entangled again the quartet’s playing when we recorded our video documentation in between rehearsals and the premiere. A trail of breathing sound traces that sometimes even meandered and was transformed through the external references that formed this research, such as Chanda’s notion of the breathing cycle in *Kumbhaka* and Nikolić’s *The window*, became distinguishable. A trail that thus literally could be followed through all pieces and all activities, and that had become an important part of my practice and any activity there. New

means of expression such as air sound and whistle tones had transformed from the distal term of knowing into the proximal one.

In that way, discovering these lines of sound, expression, and behavior through my material was at the same time a discovering of *trails of traces* left as a transformation within myself as a body-mind-unity and in how and what what had been created, tangible only in comparison and in relation to the time that had passed—with these trails presenting themselves as the disturbance of an order that “must be transformed into a new order and reintegrated” (Krämer 2016a, p. 160, translated with DeepL, 20251015), as explicated in chapter 5, p. 5.2. This yielded new relations or potentials and possibilities for relations, experiencing the effects of a diversity of knew knowledge that is situated in relation to myself, the effect of which is traceable even in my artistic activities happening after completing the experimentation.⁸

However, not only I myself as a practitioner and my doings in my practice had changed. New language tools had also evolved and become transformed. Thus, also trails of language traces can be made out and it is possible to also follow specific terms’ transforming, expanding and the entanglement of meaning in a growing entanglement with the activities within the different experiments—such as when for example following the terms of listening, transcribing, or also the *Geschehen* through each project, or, when perceiving how the notion of the trace developed through both reflecting in and through language and artistic experimentation as it became most obvious in the project *Proberaum* (see chapter 9). Interesting is that along with the development of these language tools, my attempt to denominate my doings as such vanished. This might also be, on the one hand, due to their increased entanglement with each other and even the developed language tools through my experimentation, on the other hand, all such entanglements had become more obvious. By and by, the distressing puzzlement subsided and gave way anew to fascination and amazement in the face of the marvelous abundance and variety of transformative-relative forces unleashed in such creative *Geschehen* as described here—an abundance that, as the new insights my research had yielded and made me acknowledge, will never be fully graspable and describable and also, at least partially, always stay uncontrollable. However, some of its dimensions can still be described and conceptualized, as the reflections that have been made so far show.

Thus, before concluding these reflections, an instant of *Innehalten*-pausing seems valuable. Stepping back from my position within the both actual and metaphorical whirlwind of experienced lines-traces-transformations-relations that *Winter Slices* had become; instead, reflecting *on* that whirlwind, applying my position *in* that whirlwind as a lens to observe myself observing and reflecting *on* the artistic-exploratory complexity of my experiments as well as on the resulting observations and reflections.

11.2 Innehalten

After redirecting my research as described in chapter 1, I had rephrased my research questions and placed my research in front of the horizon of its artistic and artistic-scientific context and the research’s methodological premises in chapter 2. I then had used the first experiment, the creating of *Circular Composition II*, to, on the one hand, reflect on creative situations and their participants as such and, on the other hand, drawing on Zembylas and Niederauer, to chart a modified topography (see Zembylas and Niederauer 2019, pp. 13–56), that “can function as a tool to reflect about the evolving relations between the participants *while* interacting and *in relation* to the evolving sound that is created” (see chapter 3, p. 34). Through developing such a topography, notions of this situation as a whole and also of its participants evolved that could be described through bringing my observations in dialogue with established terms and concepts such as Coessens’ *web of artistic practice* (see chapter 3, p. 34) but also through establishing specific new concepts

⁸This became especially tangible when writing a new score for the *Schweriner Vocalensemble* and one for and with the *Jugendkammerchor* of *Schwerin’s Goethe-Gymnasium*, a girls’ choir, between November 2024–February 2025. Both scores were in different ways based on a fragment of 16th-century composer Thomas Mancinus, commissioned by *Tage Alter Musik Schwerin 2025*. It was noticeable how some of the findings of this research’s two choral projects could be applied as “ready-made” tools for interacting, for example when conceptualizing the improvisation workshop for the girls’ choir and inviting them into their own creating and into experiencing different ways of relating to each other, or, when conceptualizing ways of relating to Mancinus’ source and in shaping the Vocalensemble’s spontaneous interacting through my notating.

for both the participants and the results of creating. Most important here is the notion of the musical *Geschehen* for the evolving sound that is created and experienced as a “holistic experience” (chapter 3, p. 36) in “some kind of fluid directionality and its potential to direct all that are in contact with it” (Chapter 3, p. 40). The concept of my topography allows examining the creative situation from the human participant’s point of view, and use experience of their own body-mind-unity’s transformations to understand more about the evolving relations within a situation to all other participants and what is created, directed through this musical *Geschehen* as a participant in its own right. This musical *Geschehen* seemed to shape the human creative participant’s way of making contact and thus their relation to the “*outside*” world. Also, by looking at my experiences through the lens of Michael Polanyi’s concept of *tacit knowledge* and Alva Noë’s enactive approach to cognition, a notion of the human body’s contact-making as a tactile *Geschehen* arose—and thus as a physical-sensual interacting with the surroundings through *movement* as the basis for relating that as such evolved as necessarily explorative and thus improvisatory (Meelberg 2022, p. 26). The term *Geschehen* broadened incrementally and its application was tested in relation to all such movement and contact-making. All these reflections confirmed the importance of semantic considerations as a basis for my research. It became clear how describing the participants of a creative situation through their doings means to describe how they relate to each other. These relations could be turned into a tool to describe the situatedness of a trace of creating.

Hence, the following chapter 4 focused on specific dimensions of such movement, contact-making-relating, and the inherent dimension of transformation. The focus shifted from the human body-mind-unity to the performed interactive doings and their affordances for creating relations between the participants. The creative activity of listening in its diversity of functions and directionalities, such as the most basic dimension of a listening-obeying, but also as a connector between the actually sounding *Geschehen* and an expected or imagined one as a listening *for* something proved to be the foundation for any relating. Listening functions therefore on the one hand as a tool to gain awareness of the self—in the sense of Jean-Luc Nancy’s conceptualization—and on the other hand as a tool to relate to others or other (see chapter 4, p. 44ff.). Listening evolved as a precondition for experiencing resonant relationships as Hartmut Rosa had conceptualized them and in an extended understanding. This lead to the concept of the *Spielgefühl* as a powerful tool of creating in its own right and in relation to any creative activity and interacting with any trace—offering the possibility “to evaluate not only how something sounded, but how I experienced what happened in a holistic way, acknowledging and using intentionally the awareness and growing understanding of my body-mind-unity’s complex interacting with other participants of creating” (chapter 4, p. 49). Applying this as a constantly gauging and re-gauging measurement device meant also to embrace and apply the immanent dimension of uncontrollability in one’s relation to one’s “*outside*” world.

In chapter 5, a necessary change of activities in my creating became a turning point for my research and showed how even the different modes of reflection as Donald Schön describes them (see Schön 1984, 49ff., especially 56, 276) function as creative tools, either understanding and reflecting within the situation *through* the doing or afterwards or in between situations *on* the doings—resulting in what he denominates as the *transactional relation to the situation* (see chapter 4, p. 53 ff.). Having observed many correlations between activities and the resulting traces, the focus switched thus in chapter 5 to the traces themselves. The lens of observation became a symbolic one, with a conceptualization of the trace as a polysemous *construction* resulting from movement and transformation, drawing largely on Sybille Krämer’s reflections (Krämer, Kogge, and Grube 2016; Krämer 2016b) and focusing on a trace’s inbetweenness in regard to time, space and to the dichotomies of presence and absence and object and activity (see e.g. chapter 5, p. 58). Jean-Jacques Nattiez’s tripartition and his view on a musical work or a “total musical fact” as comprised not only of its “text,” but also of “the procedures that have engendered it” as well as “the procedures to which it gives rise,” thus, what he denominates as the neutral level, the poietic and the esthetic level (Nattiez 1990, p. ix), as well as their modes of relation became crucial for all further reflection. The experimentation was extended from individual creating to explicitly entangling individual and collective poietic doings. When creating *Kumbhaka* and *In the dark* together with Chanda Rule, looking at the entangled poietic and esthetic processes and how the pieces’ neutral levels were thus related to the activities in which they were involved, opened up a new perspective on such notational traces as *contact tools* (see p. 66) between participants of

a creative situation. The processes of poiesis and esthesis appeared as entangled to such a degree that not only poetic processes, but also esthetic processes appeared as generative ones. Also, their entanglement seems to be a fractal one, depending on the analysis' level of detail. Thus, a concept of traces as com-positions of traces that result from this interplay of poetic and esthetic processes evolved. Activities of transitioning between traces, such as transcribing, came into focus, as well as the relation between a trace's possible future and past(s) in connection to the trace's affordances for interacting.

In which different ways such a notational contact tool could afford interaction and relations between the creative participants became the focus of chapter 6. Through the lens of notating and the specifics of my different kinds of lead sheets for the *Birgitta Flick Quartet* the focus switched to the relating itself and thus to combinations of activities in which the lead sheets were involved. The aspect of the *Beziehung* that connected the dimension of force to my notion of the term relation was introduced. However, especially important was crystallizing the dimension of *transcribing-translating* as a means of transformation between the activities. The notion of the *interface* that any aspect of the network of participants, traces-participants and activities could turn into was introduced. The interface became a tool for shaping the contact and thus affording specific relationships in creating and to possibly functioning as a catalyst for relating (see chapter 6, p. 80). Thus, describing became a creative activity in its own right, with the interplay of performing specific activities and describing them semantically spurring transformation. The process of esthesis emerged as a process of negotiating individual with collective, present with past esthesis. This led on the one hand to new aspects in understanding the contextualization of interaction with traces such as tradition, experience, interpretation and musical roles. On the other hand, the notion of the shared practice through a *shared poiesis* and *shared esthetic negotiations* emerged. Also, the creative human participant's relation to the "outside" world and thus also to the dimension of the unforeseen emerged as steered by negotiations with presets of relating. These negotiations and the relation between individual and collective poetic and esthetic processes in a shared poiesis of a trace and its affordances became the focus of the next experiment undertaken together with the choir *Musa Horti*, investigated in chapter 7.

Different kinds of relations between the participants of creating and the collective creative situation as a transition tool to shape these relations were investigated here. Thus, the importance of transcribing-translating-transforming was reinforced and it emerged as a relative-transformative tool on different levels, such as structural and semantic ones. The activity of listening was conceptualized in yet another way—listening not only *for*, but also *through* something and as a spatial relating—which turned into a tool that “enabled relating temporally and semantically both to the musical *Geschehen* and to each other” (see chapter p. 7, p. 102). Additionally, the element of reflection through engaging in discourse was new and pointed to the potential of transforming from a necessary means of communication into a creative tool and thus an engendering activity. Above all, it was interesting to see how both the emerging relations and the roles in creating depended on when and how poetic processes intersected. Thus, fixed roles in creating could be understood as based on previously negotiated relations between symbolic encodings, traces and individual or collective esthetic and poetic processes, shaping also the relation to the dimension of the unforeseen. A trace's past and future and its affordances for interaction emerged as connected to the negotiation of pre-structured individual and collective poetic and esthetic processes within and between creative situations. Thus, also the trace's future relation to the unforeseen is shaped by its past relation to it.

The following chapter 8 explored thus a constant oscillating between individual and collective esthesis and poiesis and the combination of activities between the individual and collective situations when creating the piece *PlanetWoman* together with the vocal ensemble *VoNo*. There seemed to be a close correspondence of transformations and increasing entanglements of the different stages of the notated trace's musical material, structural characteristics and affordances for interaction with *VoNo*'s and my actions. Transcribing-translating-transforming in combination with our oral discourse functioned as structural tools that transformed the notion of the score away from a notation that prescribes activity toward a notation that offers differently shaped interfaces for negotiation of interaction, a facilitator of differently shaped relations and for exploring and shaping the score's relation to the dimension of the unforeseen. A shared practice of relating to notational traces across

genres and professions evolved—all collaborative creative activities and their traces seemed to have functioned as generative tools that reflected on one other, thus, trace and practice developed and transformed together. Thus, not only the trace as such is constantly in transformation, but also the concept of a trace transforms through the interplay of performing activities and describing them semantically.

The notion of the trace as such a relator-transformer was then extended from a purely reflective tool to an artistic one. It functioned simultaneously as a lens of research and an artistic lens when observing the shift in investigating the so far described phenomena while engaging in new creative activities, as with the project *Proberaum* in chapter 9, once more placing myself in a creative situation that transitioned between individual and collective creative work. This time, the stepping into discourse as a creative activity evolved not only from relating to already created traces, but was a basis for creating collectively from scratch. Through the lens of both the creative activities and the neutral level of the electroacoustic piece *Trails of Traces I*, reflections on recording as a tool to transform my perception and thus my relation to the “*outside*” world evolved. Notions of creative tools as relators with different affordances were once more extended and entangled. Thus, also the notion of the “*outside*” world changed through the transformations in relating to it. Dealing simultaneously with actual sound as well as imagined and symbolized sound, thus both listening to and imagining sound, listening for and through other actual and imagined participants of creating, relating as a body-mind-unity not only through internal referring to the evolving musical *Geschehen*, but also through explicit external references—all this highlighted new symbolic dimensions in regard to the musical *Geschehen*, the notion of *Spielgefühl* and transitory-structuring activities such as transcribing. Contact-making and thus relating could be understood as a fractal *Geschehen* of relating that dissolve into fractal details of translation-transcoding, depending on the analysis’ level of detail.

The so far only marginally touched dimensions of the creative activities’ relation to time and to transformation understood as learning opened up as new topics of reflection in chapter 10. Through observing my interactions embedded in time when doing activities-interactions and creating traces of sound or symbolizing sound through both the lens of an intended transformation over time and the lens of the created symbolic trace, their mutual transformations could be examined. On the one hand, a concept of a trace as a tool for exploring temporal and spatial situatedness emerged. On the other hand, I conceived of my body-mind-unity as a “knowledge-generating organism” (Zembylas 2020, p. 73, my translation), an organism that could purposefully apply the passing of time in combination with purposefully using iterative cycles of activities in their combinations as a tool for intended, although never controllable, transformation and thus for learning. Learning emerged as a skill of developing methods to pre-structure the unforeseen dimensions of interacting, in other words, to develop poietic tools in order to pre-structure sites for negotiating esthesis. It became clear how the continuous negotiations with esthetic pre-structurings form the body-mind-unities on a deeper level and lead to metaphorical grids that shape all perception. Creating evolved as necessarily a co-creating in regard to the notion of shared time, shaped in different ways through present or anticipated human bodies. It appeared thus as “connected to all temporal directions, and is never a linear or only forward-moving process [...] entangling what is known with the unknown, what is foreseeable with the unforeseeable” (10, p. 158).

11.3 Spiralling reflection-in-action and reflection-on-action

After this recap, it is time to step back once more. When beginning my experimentation, I had stated,

A shift to investigating what is *happening* and what is *done* within a practice through looking both at the practices and at the traces *in a cycle of experiments* that forms an incremental process, seems to be necessary to say something about the practices of composing and improvising and thus about a composition in relation to these practices and the “*outside*” world that it is existing in. (Chapter 1, p. 8)

Creating an incremental series of experiments in combination with an autoethnographic methodology that afforded “[e]mbedding knowledge of both the process and the product” (Donin 2015,

p. 353) (see also chapter 2, p. 27) has proven to be a valuable method for understanding more about my practice, opening up a hermeneutic cycle of understanding. Each new experimental cycle seems to have taken up the findings of the previous one—new notions or new aspects of the overarching ones—as new lenses to focus on new problems or questions arising from them. Applying Nattiez’s tripartition model led to a focus on the relations and entanglements between the three levels of what is created as a starting point for meaning-making.

As seen in the above summary, the circular movement between the focus on the activities and their traces lead to a spiralic movement of reflecting *in* and *on*, *from within* and *from outside*, *while* and *after* performing relevant activities and combinations of activities of my artistic practice as an improviser and composer. This yielded layers of incremental understanding which resulted in new concepts and notions of the preconditions and participants for creating and their interrelations. Depending on how far I step back from the whirlwind-network of entangled reflection, more or less detail of the reflective-translative spiral trail’s sinuosity and these movements of focus can be observed. Taking yet some more steps back and looking at my lenses, a twisted trail meandering in fractal serpentines between *Geschehen* of translating between activities appears. By applying the constantly shifting lenses and foci of the body’s transformations, the created traces, or the activities, it is possible to zoom in on the trail’s different aspects. Seen from even farther away, I recognize a permanent oscillating between the lens of the body and the symbolic dimension, taking the respective other into focus.

Gradually, my reflections adopted the concept of a *Geschehen* instead of the one of a process to describe these spiral meandering movements. As it’s clear from all previous reflection and the conceptualization of my research, I agree with Zembylas and Niederauer’s notion of “the concept of process in terms of an ‘ontology of becoming’ (Pickering 2008: 12),” thus as something “that contains the idea of duration,” (Zembylas and Niederauer 2019, p. 58) and also, how they emphasize in reference to composition processes the already discussed goal-directedness instead of being driven by goals (ibid., p. 58). I agree equally with their description of how “[t]he composed piece thus represents the result of focused work, whose progress we view as neither linear nor rational” (ibid., p. 58) and how this process—as a nonlinear and nonrational progress—can nevertheless be formed through certain events that in retrospect are denominated or constructed with the help of “metaphors as ‘forking paths’ (Becker, Faulkner & Kirshenblatt-Gimblett 2006: 5) or *turning points* (Schwarz 2014: 13f.)” (ibid., p. 58)—and to which I related Ellis et. al.’s already discussed notion of *epiphanies* (Ellis, Adams, and Bochner 2011, p. 6) and Krämer’s notion of traces as disturbances of an order (Krämer 2016a, p. 160, translated with DeepL, 20250425).

My research has also confirmed Zembylas’ and Niederauer’s concept of processes as “dynamic and incremental” (Zembylas and Niederauer 2019, p. 58) with the prominent feature of complexity (ibid., p. 59), with every experiment showing how “[c]omposers undertake various activities, which are practically interconnected. They are set in motion *in order to* advance work on the composition and *in order to* bring it to completion. [...] Partial activities are always connected with each other and only attain their full significance in their unity and interrelatedness” (ibid., p. 63).⁹

Nevertheless, the term of the *Geschehen* that gradually superseded the term of the process was necessary to conceptualize creative activity as one of contact-making and relating since it highlights the resulting aspect of intense involvement.¹⁰ The *Geschehen* also underlines the *forceful* character of such an interacting as well as the aspect of *complexity*, especially in regard to its temporal character with the constructed past and possible future as immanent dimensions. However, the ongoing present opens up some kind of being that is “time-dettracted” and thus in some way timeless.¹¹ A *Geschehen* is thus not denominated in contrast to a process, rather as either a part of a process, or as a term that emphasizes a process’ ongoing in a different way. Thus, it is sometimes used interchangeable with process. *Geschehen* and processes can also be nested in each other or entangled

⁹For more details see Zembylas and Niederauer’s above-quoted chapter on the composition process (Zembylas and Niederauer 2019, pp. 57–79), especially concerning the interrelatedness of various partial activities, which they organized in four (interrelated) categories (ibid., p. 63).

¹⁰It should be added, that while Nattiez’s *esthesis* and *poiesis* could equally be understood as *Geschehen*, I nevertheless refer to them for most parts as processes, since that is how Nattiez conceptualized and denominated them. The term of the process is thus in some way a part of these terms’ denomination.

¹¹The duration of that *Geschehen* is obviously relevant for the evolution of the traces left within the interacting, but not necessarily while experiencing the creative situation.

with each other.¹²

This dimension of multidimensional involvement is what that turned the concept of the trace into such a potent research tool, emphasizing, as also the term of the *Geschehen* does, the dimensions of transformation and relating through forceful movement and thus contact of bodies. Thus, it functions as a connector between the participants. The term of the trace also highlights, through its polysemy, the aspect of construction or re-construction as an innate characteristic of any analysis of creative *Geschehen* or creative process, as I have attempted to demonstrate throughout all reflection on my experimentation. Only through constructing a narrative, does a perceived *disturbance* or *transformation* become considered as a trace of creating. Only through constructing relations between such movement and sound-movement, symbolized sound, imagined sound, or expected sound, traces of musical creating can unfold their connective powers between participants of creating and become the pivot of a performance, a practice, a community of practice or a tradition of practice. Only through the activity of re-constructing, can aspects of such a trace's past and possible future be learned—only through such re-constructing, can aspects of a creative *Geschehen* and its situation be understood.

The *Proberaum* project in particular became an example of how research methods and results, thus also the reflective and artistic trails of my research, became more and more entangled with each other. As I was both researcher and research object, research method and artistic method, reflecting-on-action and reflection-in-action were blurred, not only within the artistic and the research realm, but also in between the different sections of my research project that had been so neatly separated in the beginning of my work. I was simultaneously engaged in both reflection-on-artistic doing through reflecting-in-theoretical conceptualizing or vice versa, and reflecting-in-artistic doing as a reflecting-on-theoretical conceptualizing. I was no longer a practitioner of art taking part in reflection on my art, but established over the course of the research a transactional relation (Schön 1984, p. 150) not only to the manifold creative situations of my research as described before, but to the creative artistic research situation of my project as a whole.

In summary, the trace of creating as either a “symbolic form [that] is embodied physically and materially in the form of a *trace* accessible to the five senses” (Nattiez 1990, p. 12)—such as a score, a lead sheet, an electroacoustic sound entity, or a perceivable transformation-disturbance of an order within one's body-mind-unity—is part of this complexity that I understand

as an experimental system, consisting of a web of all that is taking part in the creating and what is going on—activities, participants and traces—one can give impulses to this system and thus shape this web in different ways and watch what happens. On the one hand, changes in my activities and position in relation to or within it will produce changes in my perception and my notions of them that result from that movement that can be used.

On the other hand, the application of metaphorical lenses for watching the system can *filter* or manipulate my perception and its focus in certain ways. Each stance or focus yields specific practical, methodological and epistemological insights and sheds light on a certain dimension or section of the network. (chapter 2, p. 19)

Any participant of that network could thus function as a lens for observing the network, anything could be put in the focus of observation, anything could be considered as a trace of contact-making—

¹²An excursion that might be of interest here is how Steve Reich wrote about music as a gradual process (Reich and Hillier 2004). His reflections begin by stating, “I do not mean the process of composition but rather pieces of music that are, literally, processes. The distinctive thing about musical processes is that they determine all the note-to-note (sound-to-sound) details and the overall form simultaneously. (Think of a round or infinite canon)” (ibid., p. 34). This is linked to his interest “in perceptible processes. I want to be able to hear the process happening throughout the sounding music” (ibid., p. 34). He explains also, “Although I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded it runs by itself” (ibid., p. 34). And after more observations about for example how a musical process can “facilitate closely detailed listening” (ibid., p. 34) and how musical processes “can give one a direct contact with the impersonal and also a kind of complete control” (ibid., p. 35) he then formulates, “The distinctive thing about musical processes is that they determine all the note-to-note details and the overall form simultaneously. One can't improvise in a musical process—the concepts are mutually exclusive” (ibid., p. 36). Hence, though it might be tempting to assume that composition processes to Reich are such processes that he describes as musical processes, I read his reflection on musical processes as an understanding of the occurrence of a musical process as a special case of a musical *Geschehen*.

interacting-creating, thus, anything could function as a tool of creating-reflecting, be it a perceivable transformation or disturbance of an order within my body-mind-unity, my relating as a body-mind-unity to another body or to the musical *Geschehen* or to a symbolic trace such as a score, or be it a symbolic or otherwise tangible trace as such and as a new participant of a creative situation, be it a certain activity or combination of activities or even a creative situation—each yields *specific practical, methodological and epistemological insights and sheds light on a certain dimension or section of the network* as described above. In that way, even the distinction between activities, participants and traces of creating is indeed a purely analytical tool since they can never be totally separated from one another. Thus, reflecting on such a network or complexity is also part of that network—which is also reflected in the entanglement of semantic and musical *Geschehen* as discussed in chapter 5, p. 76. Of course, this network's symbolic, spatial or temporal extent is completely dependent on the lens and the focus of observing.¹³

What it all boils down to is that, when stepping back once more and regarding this evolving network as a symbol for the artistic practice as a saxophonist-improviser-composer, this practice could be described as a multiplicity of *practices of relating*. A relating through movement and contact-making in which the contact interfaces and the characteristics of this relating yield and shape specific transformations-traces whose characteristics are connected to the nature of that relating itself. A relating that can be observed or analyzed from different perspectives through different lenses, each of which highlights specific aspects of this relating and the resulting transformations.

How can this conclusion and all previously made reflection and new terminology shed light on my research questions?

11.4 Composing and improvising, composition and improvisation

As it was a methodological part of my search for “a new language as a creative tool in its own right and as a trace of creating that co-acts with all other traces and sheds light on them and vice versa” (chapter 2, p. 20), the terms of composition and improvisation, composing and improvising vanished nearly completely from my reflection after the methodology had been presented. It was a conscious attempt to describe my doings as a composer and an improviser aside from this conceptual dichotomy that had led to the fractal problem of delineation. However, it is about time that my reflections are retied to them through the lens of my research questions’ formulation. I had asked three questions. (i) How can it be possible to describe the entangled creative activities that a musical composition is involved in? (ii) What concept of a musical composition can be gained from this? (iii) Which new artistic and other insights and consequences arise about the creative human being’s relation to the “*outside*” world, including all other participants and that which is created?

When I had rephrased my first research question as described in chapters 1 and 2, the formulation of my first research question that asks how it can be possible to *describe* the entangled creative activities that a musical composition is involved in, was a first research result in its own right. It shifted the focus to *what is done*, leading to the necessity of structuring the preconditions for creating and examining also the participants’ contact-making and relating. Approaching this new basic question through describing these doings and investigating my observations and puzzlements through the various lenses with different foci, yielded new semantic and artistic conceptualizations, most centrally the notions of the *trace* and the musical *Geschehen*. It also yielded terms such as the *Spielgefühl* that described relative modes and preconditions for engaging with traces. Bringing these into contact with each other and with established terminology, such as primarily Nattiez’s tripartition model, provided the necessary tools to scrutinize my practice and its fleeting versatility—to get a clearer picture of how and why its participants transform each other in specific ways.

¹³An analogous way of reasoning is found in Latour’s actor-network-theory. “As I said above there is not a net and an actor laying down the net, but there is an actor whose definition of the world outlines, traces, delineate, limn, describe, shadow forth, inscroll, file, list, record, mark, or tag (sic!) a trajectory that is called a network. No net exists independently of the very act of tracing it, and no tracing is done by an actor exterior to the net. A network is not a thing but the recorded movement of a thing. The questions AT [actor network theory] addresses have now changed. It is not longer whether a net is representation or a thing, a part of society or a part of discourse or a part of nature, but what moves and how this movement is recorded” (Latour 1996, p. 14).

The starting point of simply considering a composition as a trace of creative activity and investigating its affordances for interacting and relating in different kinds of creative situations, as well as through different material-symbolic manifestations, proved fruitful. This approach allowed to both consider its material-symbolic reality and its fleeting continuous state of becoming, or, in Krämer's words, its existence between object and activity (Krämer 2016a, p. 159). The lens of Nattiez's tripartition, embedded in the artistic, reflective, and semantic interplay of my reflections, made it possible to examine such a trace's transformations by examining the contacts-interactions-relations that resulted from and gave rise to it, especially in regard to the dimension of the unforeseen while involved in interaction and transforming. The trace emerged as a necessarily composed trace, a complex multiplicity. It became clear how the dimension of the unforeseen necessarily operates in different ways and degrees in all stages of a trace's existence, translating-transforming between its temporal stages and between its components—in short, between all parts of the complex network in which it is embedded and which it gives rise to, simply because it is created by human beings who exist by interacting with their *“outside” world* and thus situate all creative doings. As my experiments have shown, this unforeseen dimension can be prepared, balanced, or steered in manifold ways. However, since poiesis and esthesis function as separate—though entangled—processes, even a trace's interface for interacting with the unforeseen dimension is dependent on (re)construction.

Interestingly, despite rejecting the findings of my master's thesis (Flick 2020) in which the notion of permeability had served as a scaffolding technique to gain an understanding of how a composition made contact with its improvising *“outside” world* through surfaces of contact (see chapter 1, p. 2), my reflections in the present work did eventually return to the master's thesis' understanding of a composition as “something ongoing, that through its enormous permeability is constantly in the process of becoming” (ibid., pp. 30–31, my translation) and imbued it with a more granular and multidimensional understanding that no longer needs the scaffolding tool of permeability. The concept of a composition as something that despite its continuous state of becoming potentially can be delineated—resulting in the continuous experience of friction and puzzlement in the face of the experience of its endless elasticity—gave way to an understanding of a composition as the pivot of a network of creating. Interacting-exploring-improvising with the composition means “docking” and relating to it through constructing or reconstructing interfaces of interaction and thus entangling one's creative activity in-the-moment with the composition as a composed trace in its material, temporal, and symbolic multidimensionality. This means to interact with the composition as a multidimensionality and complexity that is never fully representable (see chapter 6, p. 64)—i.e., turning oneself as a creative body-mind-unity into a component of the trace's network, or rather, activating the network through considering the trace as such and thus, entering into the *Geschehen* of relating and mutual transforming.

In this way, the entangled creative activities and a composition as their trace afford and shape the creative human being's relation to the *“outside” world* and thus to the unforeseen and vice versa. The *“outside” world's* specifics and its extension are continuously negotiated anew and dependent on the lens, the focus and the position one takes in relation to the network of creating. Thus, it is what the creative participant chooses as a partner of interaction in a specific *Geschehen* of interacting in a specific moment in time, for themselves, or the trace they examine that functions as an *“outside” world*. Through interaction, however, it ceases to be *“outside.”*

Since the omission of the terms of composition and improvisation or composing and improvising allowed me to investigate my doings and their traces at such a granular level, it seems, at first glance, to confirm that the terms were unnecessary to develop an understanding. With the new knowledge of how participants in creating interact and transform each other, I have created tools to embrace a creative situation's specifics, be it a situation conceptualized by myself for the pure interest of exploring a specific creative topic or problem, or be it a composition commission with a specific material and immaterial framework that puts specific constraints on what is to be created and which adds the necessity to negotiate and synchronize esthetic processes in specific ways. There is no longer a conceptual friction between, on the one hand, creating situated traces and, on the other hand, experiencing these as starting points for *Geschehen* of transformation, often in different creative situations. Also, the deepened knowledge of mutual transformation turned specifically into a tool that facilitated new collaborative working methods and led to a deeper understanding of the collective dimension of the traces.

However, although other terms needed to be created in order to develop the understanding I have been pursuing in this thesis, the terms of composition and improvisation and composing and improvising are nevertheless the terms that have engendered my quest and have a history of negotiation and of establishment in my communities of practice. Thus, they nevertheless have affected my work and my research quest in specific ways. As discussed extensively, semantic notions take part in the network of creating as creative tools in their own right and co-act with what is done in that practice. If a shared practice can be described as a shared relating to traces through shared poietic and esthetic processes, or, as expressed in chapter 6, p. 98, as a “a shared subset of shared negotiations of shared pre-structurings”, it is in that way that terms like composition and improvisation evolve as esthetic-poietic categories—*as epistemologic and semantic grids that summarize and conceptualize experiences and notions of traces and the Geschehen of relatings they are involved in.*

In this sense, composing and improvising are important as notions of practices that lead to the development of specific ways of interaction in order to create music. Thus, seen from this perspective, it makes sense to understand the practices of composing and improvising such as mine as practices that in their manifold variations and entanglements are part of a spectrum of creative practices that apply notions of composing and improvising, each conceptualizing differently in which way, to which extent, and at which point in time in a trace’s poiesis the dimension of the unforeseen is fostered. Notions of practices shape the network of creating through highlighting specific modes of relating, thus fostering and affording specific kinds of relative experiences and knowledge.¹⁴

At this point in my reflections, it should once more be emphasized that conceptualizations of such practices or negotiations of their components are, as the whole complex network of creating, both musically and socioculturally shaped and situated. Therefore, if something is considered a specific practice, categorized as a specific kind of trace, and placed into the respective network of esthetic categories of relations depends on such socioculturally shaped categories of negotiating esthesis and poiesis. Thus, interacting with one’s “*outside*” world through creating means to negotiate not only what is ongoing musically, but also its sociocultural embedment. Therefore, if I attempt to gain understanding of a creative Geschehen through observing its effects from a musical perspective *within*, but then attempt to make meaning of it through applying and scrutinizing categories that are socioculturally shaped, this will tend to confuse categories of thinking and will, if I am not aware of this, necessarily lead to a dead end of reflection as the beginnings of my research have shown. It is through this confusion that frictions between, on the one hand, not necessarily congruent sociocultural notions or even norms of creating and its traces, and, on the other hand, the individual or collective artistic experiences appear.

It is in that way that also the notion of style as a category of intermusical referring “through which we associate a particular music with a larger musical universe, to which it belongs” (Nattiez 1990, p. 117) takes part in creating, both as a result of creating and as a sociocultural prefiguration that shapes it. However, since the notion of style in all experiments was a tacit participant that was not consciously applied or referred as a creative tool, not even in interdisciplinary experiments where different stylistic webs of practice met, it has not been discussed explicitly in my reflections. It is for the same reason that a further discussion on genre-related specifics of relating, aside from exemplarily examining interactions-relations in regard to traces that originate in specific genres such as the lead sheet in jazz, has not been part of the research. With the category of genre as an equally tacit background and participant for experimenting on the one hand, and one’s personal web of artistic practice’s diversity and versatility on the other hand, it seemed for the purpose of this research much more fruitful to investigate basic principles of interacting and look at the preconditions for creating instead of applying categories of embedment based on the resulting trace’s characteristics.

Nevertheless it is important to take one more step back and watch the Geschehen of a composition’s transformation through the lens of its sociopolitical surroundings that its related practices and manifold art worlds are situated in. Again, as “the recognition and appreciation of artistic achievements is highly dependent on contingent social factors” (Zembylas and Niederauer 2019, p. 96), the topic of researching the contact of a composition with improvisation and the “*outside*”

¹⁴This is also stated by Rose: “The terms we use to conceptualize practice are important as they lead to how we perceive, support, teach, situate and fund musical activity” (Rose 2017, p. 68).

world is potentially highly political. Artistic achievements, including, most basically, modes of artistic interacting-relating, as well as categories of traces, are thus also negotiated through pre-structured sets of esthesis that depend on the evaluations of a practice and its particulars within the society they are embedded in. Thus, they are dependent on hierarchies between practices and their modes of relating. This is especially relevant when being educated as a jazz musician, which implies being educated in a musical tradition that did not only evolve in an entanglement with an “*outside*” *world* of discrimination, racism and delegitimization, but that has, at least in Germany, still to “prove” its legitimization as an art form. Also, it is a tradition of practice that still, and increasingly, has to deal with discrimination, racism and delegitimization, sadly enough both within the practice itself and from the outside. As a practitioner of this art form, despite not being affected by this personally, I see it as my responsibility to acknowledge these structural and non-artistic social and political entanglements of my art form and to actively work toward their dissolving. Thus, also as a researcher, this can’t be ignored, especially, since I myself, and with my *grid* of musical perception and notions, am shaped by such structural entanglements with the “*outside*” *world*, as it must have become clear by now. Thus, observing for example the grid of 12 equal half steps that my perception and notion of sound is filtered through or even asking about the concept of a musical composition are phenomena and artistic-social-political needs that arise from this sociocultural-political context that all my creative work can never be independent of—and that in my case, though being a professional and active jazz musician, is shaped by the specific Western classical music notions that have shaped my personal web of artistic practice.

Also, reflecting on the concept of a composition in the context of a society shaped by Western classical music necessarily opens up connections to the discourse on musical works that has formed this society’s perspective on a composition and hierarchies of symbolic encodings in the past 200 years, as mentioned already in chapter 2. Again, despite the fact that this debate argues on the basis of the musical *Geschehen* and the relations emanating from the trace, it is nevertheless a mainly sociocultural and also political debate that is connected with historically and sociologically-politically grown notions of music and art and its practitioners, and ultimately with power structures. Thus, an extensive discussion of this dimension of my research objects would exceed the scope of these reflections as already announced in the beginning of my reflections and reinforced here (see chapter 2, p. 17). Nevertheless, it is necessary and urgent to relate my findings to this debate, since it touches on the practical conditions of creating art, especially in regard to educational issues, conceptualizations of art funding, copyright questions in their hierarchies of symbolic encodings, materialities and the related poietic and esthetic processes. While legal frameworks never can depict the entanglements of reality, they nevertheless lead to tangible financial and hierarchical structures of evaluation, recognition, and support within art worlds¹⁵ and influences crucially who takes part in creating and what is created. This touches particularly also the practices and constraints of acknowledging contributions of other musicians in compositional traces and the legal and social frameworks for copyrighting collective traces of creating. For example, neither in jazz, nor in Western contemporary classical music, it has in the past been conventional to copyright contributions of performing-collaborating musicians to compositions, be it improvising and “instantly-arranging” band members that contribute to a lead sheet song with a specific groove, way of voicing harmonies or structural ideas, or musicians who explore their instrument and specific extended techniques in close collaboration with a composer as a part of a new score’s poiesis. However, along with the increasing focus on composer-performer relations in Western contemporary classical music, or, the increasing focus of the jazz scene in Germany on its interrelation with sociopolitical realities, the topic of distributed copyright and also the topic of ownership both from an artistic and legal

¹⁵The concept of the musical work is indeed a useful example to demonstrate this entanglement of sociocultural and political notions with musical categories, leading to questions such as the already mentioned one regarding the existence of musical works in jazz or improvised music or concerning assessment criteria within copyright organizations such as Germany’s GEMA where composers’ works so far have been classified as “Ernste Musik” (E-Musik) or “Unterhaltungsmusik” (U-Musik). This creates hierarchies of orally transmitted and notational music that can not be separated from social and political realities. However, as this text is written, GEMA has made a proposal about a new way of categorizing music, debating a proposal called “Antrag 22a zur Mitgliederversammlung am 13.–15. Mai 2025 mit dem Thema ‚Reform der Kulturförderung‘” (Diederichsen 2025) for the member assembly from May 13–15, 2025, and about a reform of this system. It exceeds the scope of these reflections to scrutinize the proposal, the ongoing discussion and if and to what extent a reform will change payouts and GEMA’s general cultural support system, but it will be interesting to follow and take part in the process (ibid., see also).

perspective seems to be in movement (for an interesting perspective from Western contemporary music see also Hellqvist 2024, pp. 1865089/2952273/0/0). Thus, I propose to in the future pursue this task of relating my findings to this debate in an appropriate framework, ideally within an interdisciplinary team of participants of art worlds.

Also, while I still believe that a fascination and puzzlement that arises from internal musical *Geschehen* has to be approached by musical means, as manifested by this research project, my findings nevertheless revealed some aspects about these *Geschehen* in their entanglement with the social and political “*outside*” world and phrased them in a specific way from the inside-perspective of the artistic doing. While my research results contribute to the broad and ongoing discussion on sociocultural and political categorization as described above, they do not contribute by delineating practices as dismissed in the beginning of this research; rather, they contribute by delineating ascribed notions of practice from the doings within these practices and offering a framework for understanding their co-action. The new knowledge thus gained can shape the practice from within and incrementally contribute to building and supporting communities of practice and communities of knowledge about this practice.

Bearing this in mind, I take a step forward again into the realm of creating and researching. An interesting next undertaking could be to apply my new knowledge and shift the focus from the traces in their transformation through transitioning between individual and collective creative work to exploring the collective transformation of traces. It would also be interesting to research how such collective creating could be shaped into a methodology to develop communities of practice with artists with very different webs of practice. Another step for the future would be to apply my insights on mutual transforming and the musical *Geschehen* and engage them in a closer dialogue with specific notions of composing and improvising and of music’s inner workings. This would thus be such research that I share the rather systemic view on creative practices and music as such with, such as, on the one hand, Hedelin’s frequently mentioned investigation of “the life of music itself” (Hedelin 2017, p. iii) and his understanding of music as “an assemblage of components and environments that create connections with each other” (ibid., p. 186, my translation),¹⁶ and composing as constructing “a machine that captures, connects, and organizes” (ibid., p. 187, my translation).¹⁷ On the other hand, it would be interesting to return to Cobussen’s already discussed theory of *The Field of Musical Improvisation* (Cobussen 2017), as well as Christopher Dell’s notion of improvisation as technology (Dell 2015, p. 220, my translation) in combination with what he describes as the “willingness to improvise” (ibid., p. 222, my translation). As they all draw in different ways on Deleuze’s and Deleuze and Guattari’s work, this would invite to bringing my research results into a closer dialogue with it as well.

It remains to summarize that it is precisely this spiral path of reflection that has allowed for deep-diving into these researched phenomena and for understanding. Only through addressing the same issues again and again, looking at yet another detail from yet another angle, adjusting the lens of examination in yet another way, looking with yet another focus, through yet another etymological association or concept of thinking, it was possible that such a dynamic complexity of entangled research objects could be investigated in a way that simultaneously acknowledges the entangled complexity as such and details of phenomena that move in front of its fleeting horizon. The resulting understanding of practices of creating as composing and improvising as relative and transformative practices that highlight specific modes of relating offers not only an understanding of what and how something is created, but also how a creative practice is a means to relate to the world and a tool to shape that relationship and thus ourselves. A relationship based on listening-obeying-relating and thus, while it can be shaped through our doings, eventually stays *uncontrollable* and thus always relates to the unforeseen, the improvised. An improvised relationship to any interacting and to anything resulting from that interacting, to a trace which is thus composed in manifold ways and created in manifold forms of existing, which I put together as a relating-creating human being and that, as such composed, turns into a specific trace of a specific mode of relating to the world.

I hence step forward once more, curiously re-entering and immersing myself into the whirlwind

¹⁶ “Musiken är där inte följen av någon övergripande struktur, utan en anordning av komponenter och miljöer som skapar förbindelser med varandra.” (Hedelin 2017, p. 186)

¹⁷ “Komponerandet konstruerar en maskin som fångar upp, binder samman, anordnar.” (ibid.)

of creating, surrendering-listening-obeying to its fascinating transformative forces. As Deleuze and Guattari expressed it in one of the most inspiring phrases I have ever read and that has also promoted these reflections, “But to improvise is to join with the World, or meld with it” (Deleuze and Guattari 2007, p. 311).¹⁸

¹⁸“Finally, one opens the circle a crack, opens it all the way, lets someone in, calls someone, or else goes out oneself, launches forth. One opens the circle not on the side where the old forces of chaos press against it but in another region, one created by the circle itself. As though the circle tended on its own to open onto a future, as a function of the working forces it shelters. This time, it is in order to join with the forces of the future, cosmic forces. One launches forth, hazards an improvisation. But to improvise is to join with the World, or meld with it. One ventures from home on the thread of a tune. Along sonorous, gestural, motor lines that mark the customary path of a child and graft themselves onto or begin to bud ‘lines of drift’ with different loops, knots, speeds, movements, gestures, and sonorities” (Deleuze and Guattari 2007, p. 311).

« *Comme si le cercle tendait lui-même à s'ouvrir sur un futur, en fonction des forces en œuvre qu'il abrite. Et cette fois, c'est pour rejoindre des forces de l'avenir, des forces cosmiques. On s'élance, on risque une improvisation. Mais improviser, c'est rejoindre le Monde, ou se confondre avec lui. On sort de chez soi au fil d'une chansonnette. Sur les lignes motrices, gestuelles, sonores qui marquent le parcours coutumier d'un enfant, se greffent ou se mettent à bougeonner des “lignes d'erre”, avec des boucles, des nœuds, des vitesses, des mouvements, des gestes et des sonorités différents. »* (Deleuze and Guattari 1980, p. 383)

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Appendix

Related presentations of intermediate research results

Conferences

- Flick, Birgitta (2024). *Entangled tools and practices: Reflections on the creative collaboration for PlanetWoman*. 4th International Network for Artistic Research in Jazz (INARJ) conference. JAM MUSIC LAB Private University for Jazz and Popular Music, Vienna.
- Flick, Birgitta (2024). *The Enchanted Forest: Exploring the development of relations in artistic collaborations that combine individual and collective creative practices*. Forum Artistic Research: listening for beginnings. Gustav Mahler Private University for Music (GMPU), Klagenfurt.
- Flick, Birgitta (2024). *Circular composition experiments and the Great American Songbook: Artistically researching the relation between older repertoire and contemporary creative practices through notation*. European Platform for Artistic Research in Music (EPARM), Ljubljana.
- Flick, Birgitta feat. Maja von Kriegstein (2024). *How can artistic research contribute to exploring the contact processes and relations that arise in creative situations of improvising with a notated reference or the interaction of improvising and notating?* Musicians' Perspectives on Improvisation Symposium. Exploratorium Berlin.
- Flick, Birgitta (2023). *Sinnliche Wahrnehmung und leibliche Erfahrung als Grundlage für Praktiken des Komponierens und Improvisierens*. 12th conference by Forschungsnetzwerk Implizites Wissen (FORIM). mdw, Vienna.
- Flick, Birgitta (2023). *Circular compositions for saxophone solo: Following a composition's transformations through improvisation and collaborative creating*. European Platform for Artistic Research in Music (EPARM). RDAM, Copenhagen.

Academic guest lectures

- Workshop for Hunter Jazz Ensemble student group, Hunter College Music Department, New York City, December 6, 2022.
- Guest lecture for the class *Jazztheorie und Arrangement 01.9170*, Department of Composition Studies and Music Production, University of Music and Performing Arts Vienna, December 18, 2024.

Artistic experimental projects and participants

- *Circular Composition II* for tenor saxophone solo, commissioned by *Towards Sound Festival*, performed there by myself, March 13, 2022, beginning of the composition process part of the project *Zirkuläres Komponieren & Digitalisierung*, funded by a scholarship of GEMA in the framework of Stipendienprogramm der Verwertungsgesellschaften in NEUSTART KULTUR

by means of the Federal Government Commissioner for Culture and Media, October 21, 2021–February 19, 2022

- First circular collaborative explorations, as part of the project *Circular Composition: Erweiterung*, funded by NEUSTART KULTUR – DMR Stipendienprogramm 2022, by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, May–August 2022,
 - Circular exploration with Liron Yariv (cello), Berlin¹⁹
 - First tests for a circular creative method based on improvising with Urban Agnas from HfMT Cologne with the then students Christian Sharpe (tp), Ferdinand Potthoff (tb) and Younghun Chang (tuba)
 - *Circular Experiments* with the *Birgitta Flick Quartet* with Andreas Schmidt (p), James Banner (b), Max Andrzejewski (dr), Roland Schneider (dr), followed by more experimentation on lead sheets between 2022–2024
 - Circular collaborative exchange project with Chanda Rule, leading to (i) Performance at Artistic Research Lab at Artistic Research Center, mdw, June 03, 2022 with Chanda Rule (voc), Ivar Roban Krizic (b), Gernot Bernroider (dr). (ii) Vienna Berlin Exchange ensemble for August 11, 2022, InSpirit, Kaiser-Wilhelm-Gedächtnis-Kirche, Berlin, with Chanda Rule (voc), Martin Reiter (p), Lisa Hoppe (b), Gernot Bernroider (dr). (iii) Gernot Bernroider's Culturessence for August 17, 2022, at the New York City Musikmarathon, Mattighofen, with Chanda Rule (voc), Simon Plötzeneder (tp), Thomas Kugi (sax), Martin Reiter (p), Mickylee (git), Ike Sturm (b), Gernot Bernroider (dr).²⁰
- European tour with Carol Liebowitz, September 9–October 1, 2022: Noordwijk aan Zee (Buutkerk, Oude Jeroenskerk), Berlin (Sowieso, Kaiser-Wilhelm-Gedächtnis-Kirche w/ Jana Czekanowski in the Psalmton series), Zürich (WIM), Hannover (Seitwärts at Kulturpalast), Leipzig (share leipzig @ Luru Kino in der Spinnerei), Pohrsdorf (Saxstall), Stockholm (Khimaira w/ Anna & Eva Lindal), Göteborg (Brötz), Zierenberg (ARTPraxis)
- Artistic exchange/experimentation during study and concert trip to New York City, November 29, 2022–December 12, 2022, supported by Goethe-Institut e.V.
 - Dec 2, 2022, Neighborhood Church of Greenwich Village: Andrew Hartman (git), Ike Sturm (b)
 - Dec 4, 2022, Hunter College, Lang Recital Hall: Norine Castine (p), Ragnhild Kvist (viola), Alan Ferber (tb), Ike Sturm (b)
 - Dec 8, 2022, ibeam: Carol Liebowitz (p)
 - Dec 9, 2022, Soup & Sound: Carol Liebowitz (p), Adam Lane (b), Andrew Drury (dr)
 - private sessions with (i) Virg Dzurinko (p), (ii) Nick Lyons (sax), (iii) Cheryl Richards (voc), Gary Levy (sax), Mara Rosenbloom (p), Carol Liebowitz (p, voc), Virg Dzurinko (p), Adam Lane (b) and Mark Weber (poetry)
- Experimenting with lead sheets with the *Henning Ullén Trio*, October 13–15, 2022, Stockholm Jazz Festival (Källarbyn October 13, Teater Reflex October 14, Krematoriet October 15): Henning Ullén (p), Mauritz Agnas (b), Konrad Agnas (dr)
- *Flick—Nyberg—Banner* playing Dalarna w/ James Banner & Lina Nyberg, since 2022 (Stockholm, Scenkonstmuseet 2022; Berlin, *InSpirit* & recording at Frauenmusikzentrum Lärm und Lust e.V., 2024)

¹⁹The collaborative composition project with Liron Yariv was paused from my side after its first phase due to necessary shifts of research focus—at first toward notational exploration without improvisation, and then to toward collaborative settings with improvising groups instead of individual artists. Luckily, the collaboration could be resumed in the end of 2024, and the resulting piece *Antlitz* is in the finalization process as this text is about to be published—benefiting from the insights arisen through the research progress during the collaboration's pause, as well as the inclusion of a text fragment by Monika Rinck.

²⁰I was part of all groups as a saxophonist.

- Collaborative composing with Antje Rößeler, as part of the project *Innen-Außen*, funded by FEB-III, Musikfonds e.V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, February 2023–April 2023
- Composing for and with Mehdi Hesamizadeh, as part of the project *Mikrotonale Erweiterung*, funded by STIP-III, Musikfonds e.V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, December 2022–May 2023
- *alter ego* w/ Annekatrin Flick (cello): *Johann Sebastian Bach im Dialog mit Improvisation*, since 2022
- *Reconnecting (with) Traces* with *Proberaum* with Nina Perovic, Mina Novčić, Thomas van Walle and myself, with guest performers Hristina Merdović, Kristijan Lalović, Branislav Proročić, 2023, funded by JU Kulturno-informativni centar “Budo Tomović” Podgorica, Muzeji i galerije Podgorice, July–November 2023
- *The Enchanted Forest*, collaborative composition project with *Musa Horti* and their conductor and artistic director Peter Dejans, June 2023–February 2024
- *PlanetWoman*, collaborative composition project with *VoNo*, their conductor and artistic director Lone Larsen and Zsuzsanna Ardó in the framework of her international choral project *PlanetWoman*, November 2023–June 2024
- Performance of Yilin Yang’s *Winter Slices*, collaborative project with Yilin Yang, January–June 2024

List of artistic results

If not designated differently in the brackets behind the title, the copyright of the result is on my name, Birgitta Flick.

Documentary notations and recordings of intermediate results or results not fed back into the cycles of reflection and thus not discussed here are not included.

All links have been accessed on 20250609.

Research Catalogue exposition with all scores, lead sheets, audio and video files:

<https://www.researchcatalogue.net/shared/72b173317f2e4e37813a5eb60df3429c>

In the event of any issues accessing the files, please contact mail@birgittaflick.com.

- The “seed”
 - Improvisation I
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3678661>
 - Improvisation II
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3700983>
 - Improvisation III
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3700984>
 - Improvisation II + III
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3700985>
 - Transcription, notation
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3678660>
 - Recording of transcription
<https://www.researchcatalogue.net/view/2635968/3678648#tool-3700986>

- Lead sheets

- *Adventurous Groove* (Birgitta Flick/Antje Rößeler), MV-NRW Musikverlag/GEMA
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3746210>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3734836>
- *Bild* (Antje Rößeler/Birgitta Flick), MV-NRW Musikverlag/GEMA
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3734874>
- *Circular Experiment I*
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3701334>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3729079>
- *Circular Experiment II* (Birgitta Flick, Andreas Schmidt, James Banner, Roland Schneider)²¹
 - Notation:
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3701318>
 - Recordings (Birgitta Flick, Andreas Schmidt, James Banner, Max Andrzejewksi):
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3729667>
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3729438>
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702738>
(combined with *Circular Experiment III*)
- *Circular Experiment III* (Birgitta Flick, Andreas Schmidt, James Banner, Max Andrzejewski)²²
 - Notation:
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3701319>
 - Recordings (Birgitta Flick, Andreas Schmidt, James Banner, Max Andrzejewksi):
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3729454>
 - * <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702738>
(combined with *Circular Experiment II*)
- *Color Studies #10 (For Leslie & Paul)*
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702722>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702719>
- *Color Studies #13*
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702754>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702736>
- *Experiment IV*
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702750>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3701370>
- *In the dark* (Chanda Rule/Birgitta Flick)²³
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3700940#tool-3703834>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3700940#tool-3703836>
- *Kumbhaka* (Chanda Rule/Birgitta Flick)²⁴
 - Notation:
 - * <https://www.researchcatalogue.net/view/2635968/3700940#tool-3701252>

²¹Copyright distribution: Birgitta Flick 60%, Andreas Schmidt 20%, James Banner 20% (in agreement with Roland Schneider).

²²Copyright distribution: Birgitta Flick 40%, Andreas Schmidt 20%, James Banner 20%, Max Andrzejewski 20%.

²³Copyright distribution: Chanda Rule 50 %, Birgitta Flick 50 %.

²⁴Copyright distribution: Chanda Rule 50 %, Birgitta Flick 50 %.

Recordings:

- * <https://www.researchcatalogue.net/view/2635968/3700940#tool-3701260>
(Chanda Rule, Ivar Roban Križić, Gernot Bernroider, Birgitta Flick)
- * <https://www.researchcatalogue.net/view/2635968/3700940#tool-3718186>
(Birgitta Flick Quartet)
- * <https://www.researchcatalogue.net/view/2635968/3700940#tool-3718253>
(Flick Nyberg Banner)
- *Pulsations*, MV-NRW Musikverlag/GEMA
 - * Notation: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3733069>
 - * Recording: <https://www.researchcatalogue.net/view/2635968/3701293#tool-3702763>

- Scores

- *Circular Composition II*, tenor saxophone solo
 - Notation: <https://www.researchcatalogue.net/view/2635968/3700940#tool-3746879>
 - Recording: <https://www.researchcatalogue.net/view/2635968/3700940#tool-3746880>
- *PlanetWoman*, six-part choir (Zsuzsanna Ardó, Birgitta Flick, Lone Larsen)²⁵
 - Notation: <https://www.researchcatalogue.net/view/2635968/3703934#tool-3703943>
 - Recording: <https://www.researchcatalogue.net/view/2635968/3703934#tool-3703945>
- *Stundenblume*, viola solo
 - Notation: <https://www.researchcatalogue.net/view/2635968/3703954#tool-3703965>
 - Recording: <https://www.researchcatalogue.net/view/2635968/3703954#tool-3703965>
- *The Enchanted Forest*, choir SATB-SATB²⁶
 - Notation: <https://www.researchcatalogue.net/view/2635968/3702863#tool-3702958>
 - Recording: <https://www.researchcatalogue.net/view/2635968/3702863#tool-3702949>

- Audio scores

- *Human Bodies in Motion*

- Electroacoustic pieces

- *Circular Composition III*
 - * <https://www.researchcatalogue.net/view/2635968/3703912#tool-3708284>
- *Trails of Traces I*
 - * <https://www.researchcatalogue.net/view/2635968/3703912#tool-3703921>
 - * <https://www.researchcatalogue.net/view/2635968/3703912#tool-3703929>
(Excerpt of embedment in *Reconnecting (with) Traces*)
- *Trails of Traces II*
 - * <https://www.researchcatalogue.net/view/2635968/3703912#tool-3703925>

- Records

- *Sending a Phoenix*, Birgitta Flick & Antje Rößeler, wismART, 2024
<https://wismart.de/releases/wis5050-cd>
- *Live in Berlin, Hesamizadeh Hoppe Flick*, online release, Bandcamp, 2025
<https://hesamizadehhoppeflick.bandcamp.com/album/live-in-berlin>

- Videos

²⁵Registered with the following percentages, as a practical solution for an even more than usual unrepresentable conglomerate of creators, poem 50 %, music 50 % (Flick 37,5 %, Larsen 12,5%).

²⁶Copyright registered with 100 % as Birgitta Flick's despite the choir's creation of the text elements, since it was practically not possible to take the whole choir into the authorship.

- *Birgitta Flick Quartet @ Studio Boerne*, Berlin, 2024, FILMED BY EAR, BERTA.BERLIN
<https://www.youtube.com/watch?v=NFPxD6Cc2gY>
- *PlanetWoman* by *VoNo*, 2025
<https://www.youtube.com/watch?v=FldxHTEPRAQ>
- Performance of *Winter Slices* (Yilin Yang), 2024
<https://www.researchcatalogue.net/view/2635968/3679573#tool-3679579>
- *The Enchanted Forest* by *Musa Horti*, 2025
<https://www.youtube.com/watch?v=10xmIJZ8sr8>

Press reviews and more information about all releases outside of the Research Catalogue exposition can be found on <http://birgittaflick.com>.

Financial support

Funded artistic projects that were applied as frameworks for experimentation

- Performance project *Reconnecting (with) Traces* by *Proberaum*, JU Kulturno-informativni centar “Budo Tomović” Podgorica, Muzeji i galerije Podgorice, November 9, 2023
- *Mikrotonale Erweiterung*, Stip-III, Musikfonds e.V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, December 2022–May 2023
- *Innen-Außen* with *Birgitta Flick & Antje Rößeler*, FEB-III, Musikfonds e.V. by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, February–April 2023
- *Circular Composition: Erweiterung*, project in the framework of NEUSTART KULTUR – DMR Stipendienprogramm 2022 by means of the Federal Government Commissioner for Culture and Media, as part of the NEUSTART KULTUR recovery programme, May–August 2022
- *Zirkuläres Komponieren & Digitalisierung*, project in the framework of Stipendienprogramm der Verwertungsgesellschaften in NEUSTART KULTUR by means of the Federal Government Commissioner for Culture and Media, October 21, 2021–February 19, 2022
- Kungliga Musikhögskolan i Stockholm (KMH), lokalt stipendium 2019, pandemic-related subsequent application for modified study and concert trip to New York City, November 29–December 12, 2022

Direct support of research parts

- mdw Forschungsförderung, travel and accommodation funding for presentation at EPARM conference 2024, Ljubljana.
- Erasmus+ phd short term mobility stay at the Royal College of Music (KMH) in Stockholm, September 19–October 18, 2023
- AEC “Johannes Johansson Travel Bursary” and mdw, Artistic Research Center, travel and accommodation funding for presentation at EPARM conference 2023, Copenhagen.
- connect.faith, 2022/2024, commission, applied for the concert at Hunter College, December 4, 2022, New York City, 2022, and the collaborations with *Musa Horti* and *VoNo*, 2023–2024
- Goethe-Institut e.V., travel and accommodation funding for study and concert trip to New York City, November 29–December 12, 2022, Goethe-Institut e.V.