The Musical Dyad

On Interplay in Duo Settings

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Dissertation

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Abstract

This doctoral thesis is concerned with obtaining a nuanced understanding of musical interplay in duo settings. Its primary focus is on exploring musical togetherness (*Miteinander*), a phenomenon considered to reach beyond mere musical interaction and to encompass the intersubjective experience of musical and interpersonal relationship. Meaningful musical interaction which is oriented towards profound togetherness can enable the emergence of a 'We', of musically *being-with* each other, of acting and feeling together. This relational state holds a particularly strong aesthetic potential, which is sought to be uncovered by means of Artistic Research.

Due to their intimate configuration, duo settings, as the nucleus of chamber music, entail interdependencies of a special nature. Therefore, they are considered with regard to the particularities of dyadic relationship. This concerns both sonic as well as interpersonal relations and how they unfold and interact in the sphere between score and performance.

In order to shed light on the experiential realm of both the aesthetic and the intersubjective, the thesis draws on a phenomenological perspective and takes an embodied and enactive approach to duo performance. Integrating critical artistic practices and theoretical reflection, the Artistic Research approach allows intersubjective phenomena to surface, to be analysed, as well as to be re-addressed in further artistic practice. By linking the qualitative experience of relationship to aesthetic aspects of musical interplay, it offers a unique perspective on (musical) intersubjectivity.

This thesis features two strands of artistic exploration. Within multiple short-term duo encounters, a systematic and interventional approach enables evidencing phenomena with particular relational-aesthetic value. The insights and aesthetic considerations from these case studies lead to an interdisciplinary research and performance project involving a long-term duo collaboration. Performative means are developed that actively address underlying factors of musical togetherness as well as convey relational processes to an audience.

Finally, the concept of relational interpretation is discussed, in which the relational realm of musical interplay is foregrounded, explored and refined through experimental practice. This leads to an interpretation which is no longer guided by technicalities of musical interaction, but grounded on inter-human values, which are formed and enacted together through musical interplay. Such an interpretation enables jointly created and affectively shared phenomena of musical intersubjectivity. Thus, moments of genuine musical togetherness no longer occur en passant, but are consciously raised as the central goal of the interpretation.

Kurzfassung

Diese Dissertation widmet sich einem differenzierten Verständnis des musikalischen Zusammenspiels in Duo-Besetzungen. Der Fokus liegt dabei auf der Erforschung des musikalischen Miteinanders, eines Phänomens, das über oberflächliche musikalische Interaktion hinausgeht und die intersubjektive Erfahrung musikalischer und zwischenmenschlicher Beziehung miteinschließt. Musikalische Interaktion, die auf ein tiefgreifendes Miteinander ausgerichtet ist, ermöglicht die Entstehung eines 'Wir', eines musikalischen *Miteinander-Seins*, eines gemeinsamen Handelns und Fühlens. Dieser Zustand des Bezogen-Seins birgt ein besonders großes ästhetisches Potenzial, welches im Rahmen dieser Künstlerischen Forschung dekuvriert werden soll.

Aufgrund ihrer intimen Disposition implizieren Duo-Besetzungen als Keimzelle der Kammermusik besondere Wechselwirkungen und werden daher im Hinblick auf die Besonderheiten dyadischer Beziehung betrachtet. Dies betrifft sowohl die klangliche als auch die zwischenmenschliche Beziehung zwischen den Musikern, sowie deren Entfaltung und Wechselwirkung im Spannungsfeld zwischen Notentext und Aufführung.

Um ästhetische und intersubjektive Erfahrungsräume auszuleuchten, bedient sich die Dissertation nicht zuletzt einer phänomenologischen Perspektive, sowie der Konzepte von Embodiment und Enaktivismus. Durch die Integration kritischer künstlerischer Praxis und theoretischer Reflexion im Rahmen eines Künstlerischen Forschungsansatzes wird das Aufzeigen, Analysieren und erneute künstlerische Infragestellen intersubjektiver Phänomene ermöglicht. Die Verknüpfung der qualitativen Erfahrung von Beziehung mit ästhetischen Aspekten des musikalischen Zusammenspiels bietet hier im Sinne Künstlerischer Forschung eine einzigartige Perspektive auf (musikalische) Intersubjektivität.

Die Dissertation umfasst zwei Stränge künstlerischer Exploration. Im Rahmen mehrerer zeitlich begrenzter Duo-Begegnungen ermöglicht ein systematischer und interventioneller Ansatz das Aufzeigen musikalischer und intersubjektiver Phänomene mit besonderem relational-ästhetischem Wert. Die Erkenntnisse und ästhetischen Überlegungen aus diesen Fallstudien führen zu einem interdisziplinären Forschungs- und Performance-Projekt, das auf einer langfristigen Duo-Zusammenarbeit fußt. In diesem werden performative Strategien entwickelt, die zugrunde liegende Faktoren des musikalischen Miteinanders aktiv thematisieren und relationale Prozesse einem Publikum zugänglich machen.

Abschließend wird das Konzept der relationalen Interpretation diskutiert, bei der die relationale Dimension des musikalischen Zusammenspiels durch experimentelle Praxis in den Vordergrund gerückt, künstlerisch erforscht und verfeinert wird. Dies führt zu einer Interpretation, die nicht länger von formalen Aspekten der musikalischen Interaktion geleitet wird, sondern auf zwischenmenschlichen Werten basiert, die im musikalischen Zusammenspiel gemeinsam geformt und nachvollzogen werden. Eine solche Interpretation ermöglicht das gemeinsame Erschaffen und affektive Teilen von Phänomenen musikalischer Intersubjektivität. Somit treten Momente des authentischen musikalischen Miteinanders nicht mehr nebenbei auf, sondern werden bewusst als zentrales Ziel der Interpretation angestrebt.

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1 Introduction

1.1 Understanding Duo Performance

> "A better understanding of performance can not only increase our theoretical understanding of music. It reveals something of the character and condition of human experience most generally. For performance evokes a condition that affects the most fundamental aspects of perception of time and space, of sensation, and personal and social experience." (Berleant 2004, p. 170)

This opening quote highlights the extraordinary potential of musical performance, reaching beyond the mere production of acoustic phenomena. Especially the last aspect Berleant mentions—personal and social experience—suggests that *joint* musical practice could be of particular significance in further developing this perspective. Making music together requires much more than adding up the individual parts in the strict sense of a functional union. Rather, an ensemble exceeds the sum of its parts and is to be considered a complex interpersonal phenomenon. Due to their highly intimate disposition, duo settings as the nucleus of chamber music stand out in this context and presumably entail interdependencies of special nature.

Focusing specifically on instrumental duo performance, this thesis is therefore concerned with the question of what a deeper understanding of this musical practice and its socio-musical implications can reveal not only about human but, more importantly, about inter-human experience. For what captivates us, both as musicians and as listeners, in a high-quality chamber music performance is when musical interplay transcends its surface-level dynamics such as technical coordination, synchronisation, or the alignment of musical parameters. Instead, it delves into a realm where it becomes something far more profound. When experiencing such performances, both musicians and listeners use expressions such as 'sharing a special bond', 'clicking', 'invisible connection' or 'emotional closeness and intimacy' (see also, for example, Waddington 2013).

Along these lines, I shall argue that making music together holds the potential for genuine encounter, fostering deep connection and authentic togetherness

(*Miteinander*) between performers. This musical togetherness, as understood within this research, encompasses the experience of something that cannot be attained alone, a sense of musically being-with, of a 'We' emerging. When musicians engage with each other on such a meaningful level of interaction, a space of in-betweenness is created in which a shared expression can arise. Experiencing such meaningful encounters can leave us transformed as human beings, and it is within that space that this transformative power becomes palpable through musical interplay.

In order to approach the complex issue of musical relationship in a duo situation, it is important to understand the specific features of dyadic relation in a more general sense. From a sociological perspective, a dyad is composed by a pair of two individuals who are linked by a certain interest and/or relation. In a musical duo, this shared interest and relation is making music together as a form of meaningful interaction. To exceed a superficial juxtaposition of two musicians, an in-depth musical encounter necessarily includes each individual to engage with and to be acknowledged by the other as a personal entity. Hence, the two enter an interpersonal relationship.

One basic assumption at this point is that the two duo partners meet each other on the same level and interact as equals, which, of course, may not apply to all conceivable dyads. Under this premise, and referring to the ideas of sociologist and philosopher Georg Simmel, McCall (1988) carves out the following criteria constituting the "inherent sentimentality" (p. 474) of an interpersonal relationship of dyadic structure, in order to distinguish it from other social groups: The conception of uniqueness, which includes that the members are non-replaceable; the conception of intimacy as a result of the culture of relationship they created together; the conception of commitment as well as feeling equally responsible for the relationship; the conception of consistent mutuality; and the conception of mortality, meaning the dyad ceases to exist as soon as one of the two members resigns. Accordingly, a duo piece can only be performed through intricately interweaving the individual contributions of both performers, creating an entity that does not reduce to its parts. A single musician performing a duo piece does not account for half of the ensemble; rather, it results in the complete absence of the duo's essence. While it is quite common even in well-established trios or quartets

(and of course even more so in larger ensembles) to replace individual members if the situation requires it, without giving up the ensemble identity, this is not possible in a duo. An entirely new duo would immediately emerge, suggesting a high level of co-dependence.

In a positive sense, however, this co-dependence also implies the resonance of two creative forces, in which different perspectives constructively shape and enrich each other as well as their shared voice. In artistic terms, entirely new possibilities of sensation and expression can arise through the exchange of ideas, knowledge and emotional states. Thus, interaction is what gives rise to creativity. Moreover, a musical thought or a subjective musical sensation can reach new spheres of explicitness, clarity and artistic value.

All this is especially true when understanding a duo as a non-hierarchical and balanced partnership, in which the two members are involved not only as performers but also with their respective selves, merging their artistic and personal identities. In the sense of an immediate, interpersonal encounter, this can foster deep connection and intimacy between the individuals involved, surpassing what is typically experienced in larger ensembles. On the one hand, it may grant performers a greater sense of autonomy and self-direction. On the other hand, the duo situation demands a heightened level of openness and vulnerability, as there is no shield of anonymity provided by a larger group identity or role distribution. In essence, the duo dynamic brings forth a delicate balancing between independence and dependence that can lead to a togetherness in which performers thrive on mutual support and understanding, creating an exceptional and intimate artistic bond.

These basic considerations of the musical dyad substantially shape the concept of musical relationship and togetherness outlined in this thesis. To gain a better understanding of the nature of duo performance and the relational dynamics between two entities, my initial pursuit will be to conceptualise the fundamental principle of duality or, as I will call it, twoness.

1.2 Duality and Twoness

The relationship forming between the musicians in a duo is established and actualised in ongoing musical and personal interactions. Those interactions, determined by the exact number of two relating entities, entail certain possibilities but also limitations regarding their internal differentiation, all within the scope of duality. Duality is a fundamental principle that defines multiple aspects of our life. The idea of two mutually conditional entities, forces or states is crucial to how we perceive our environment and ourselves both on a large and small scale. The (inter-)action of exactly two entities is so firmly established in our thinking and being that some Indo-European languages (e.g. Ancient Greek, Sanskrit or Slovene) consider the pairing of two as a separate entity, an additional category between singular and plural, and thus make use of a dual grammatical number (Humboldt 1828). Indeed, in order to distinguish duo performance from solo performance and playing in a larger ensemble, I propose to conceive a duo consequently as its own category, located between singular and plural, yet containing elements of both.

Marten (2017), in his book *Lob der Zweiheit. Ein philosophisches Wagnis,* distinguishes four dualities or 'twonesses' that define our co-existence as human beings and the way we relate to each other.

1. The recurring alternation of day and night provides us with a sense of rhythm and time.
2. In the twoness of life and death, a human being is confronted with the determination of his or her lifetime and for this very reason realises the value of this time. The prospect of mortality gives meaning to sharing our lives with our closest others, to create new life and death, touching on the intimacy of life, the intimacy of death.
3. The dynamics between injustice and justice unfold in the light of the encounter of the unalike. Their encounter, however, is only authentic if their respective selves are acknowledged by each other, if one takes an active interest in the self of the other. If the authentic selves involved are in balance, Marten even

speaks of successfully fulfilled and potentially fruitful co-existence, although injustice might endure.

4. Marten also sees this to be true for the twoness of man and woman. Erotic appeal is rooted in the binarity of sexes and as such gives rise to loving desire and sentiment, which is a stimulus for all creativeness. A co-existence that qualifies as the art of living depends on how successfully we form a balanced ensemble of sexes.[1]

These dualities, according to Marten, are characterised by their insoluble interlocking, by the interdependency of their poles, as well as by the stimulating field of tension that they each create. This is how, according to Marten, they not only enable us to profoundly share our lives with each other, by which we would succeed in realising our essence as human beings (*Lebensteilung als menschliches Gelingen*), but specifically turn a trivial co-existence into a creative and fruitful art of living (*Lebenskunst*).

Dyadic interaction under the premise of duality can imply various ways of *how* two entities relate. However, when imagining two correlating entities, we quickly tend to think of them dualistically. Dualism, in distinction from duality, can be understood as defining the two entities as being strictly separated and even stylising them to be absolute opposites. Dualistic thinking apparently is so essential to how we make sense of the world that it is core to some of the most basic concepts and theories in philosophy, specifically in ontology, anthropology, epistemology, or ethics, building around conceptual pairs such as being and nonbeing, body and mind, subject and object or good and evil. It seems evident that by classifying our environment and how we relate to it in these kinds of opposed and clearly definable categories, such as light and dark, left and right, in and out or good and evil, dualisms convey order and clarity. Dualistic thinking paired with a desire for unambiguity, however, entails the risk of arriving at apparent absolutes, limiting oneself to a rigid,

[1] Marten furthermore argues that even in a homosexual relationship the expression of sexuality is characterized by the twoness of man and woman, since homosexuality is lived in conscious differentiation from heterosexuality. However, not least in view of the multitude of possible lived gender identities, this argument is not entirely convincing.

one-sided view or resulting in normative dogmas. Only if we allow ourselves to doubt, to embrace the dilemma or the paradox, are we able to think outside the box and possibly get closer to the truth. The wave-particle-duality in quantum physics is just one example that even in the precise world of natural sciences, sometimes an ambivalent state is the most accurate explanation and surprising solution.

For a musical duo to unfold its artistic potential, it is key to avoid the dead-end situation of dualistic dichotomy, but instead to remain open to various forms of dyadic musical interaction while looking for genuine relationship. To highlight this, I would like to extend the term 'twoness' as coined by Marten and propose a more differentiated use: The term as understood within this thesis encapsulates the dyadic relation between two entities, while clearly setting it apart from a dualistic connotation. Thus, the term does not anticipate *how* these two entities act together, merely that they act in relation to each other. It offers a neutral and inclusive framework to explore the relational dynamics of musical interplay. When joining each other to play a duo piece, the interplay between two performers can be considered as representing or rather embodying an interlocked system of two forces. Although it is their imparity or at least the distinction in their voices that makes them of equal value to the sounding result, the artistic goal can only be obtained by overcoming any implicit dualism and opening up to the whole spectrum between two poles. The mere co-existence as two separate creative forces is artistically questioned by *how* they interact, which is musically expressed as an aesthetic quality of their relation. In this sense, musical relation unfolds as a matrix spun *between* different polarities, but without being limited to these poles opposing each other: same - different and separate - together (see Figure 1).

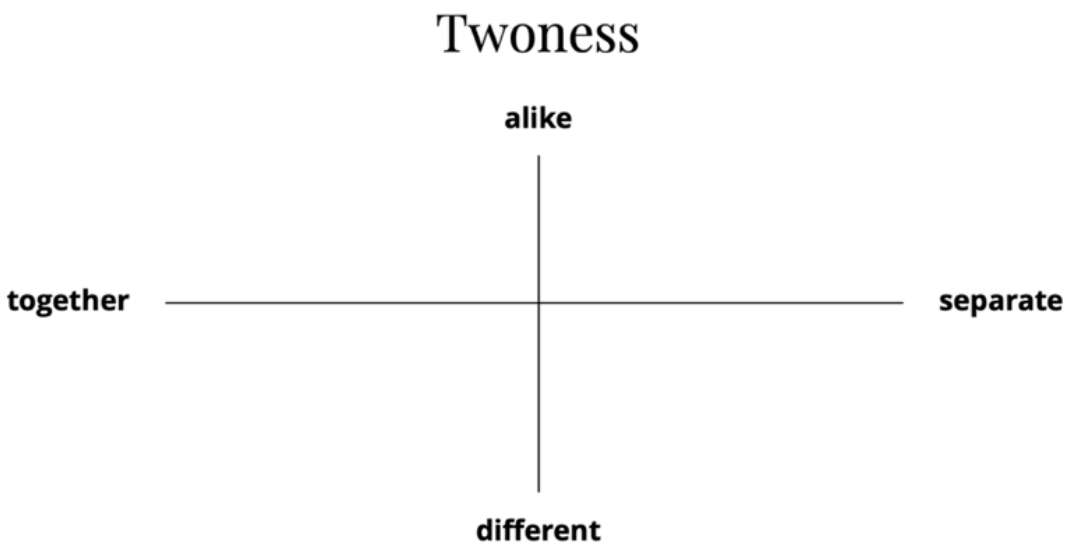

Figure 1. Matrix of Twoness.

This concerns both the relationship between two co-performers, but also to the relationship between their respective musical parts and voices based on structural relations in the score. As McCaleb (2022) puts it, “chamber repertoire lays the groundwork for these relationships similarly to how the rules of sport might be constructed. Such repertoire is designed to encourage the generation of these intimate relationships” (p. 32). A productive questioning of possibilities of relation can indeed be facilitated by the piece that the duo is interpreting: Propositions for certain dyadic modes of interaction contained in musical structure may lead to a musical exploration of the plurality of options for relation. In the following section, I will provide some introductory thoughts on the concept of musical relationship and how it unfolds in the field of tension between score and performance. Moreover, I will develop an initial understanding of musical togetherness, on the basis of which it can be further explored in this artistic research project.

1.3 Musical Relationship and Togetherness

A musical duo can be seen as a microcosm for social interaction, in which we not only enact relationships through musical interplay but can aesthetically explore and experiment with these relational qualities. This involves the development of two types of relationships, as well as their interrelation: the sonic relationships between musical parts and the interpersonal relationship between the two performers. Part of the challenge is for the duo to deal with a relational narrative provided by the score, which arguably sets up a formal frame for the musical encounter, preconceiving a certain course of interaction. Peters (2020) argues that not only the score itself, but also a composer's implicit oeuvre, performance tradition and compositional practice all must be considered when trying to understand how the two performers musically relate (p. 24). However, their relationship certainly is not entirely predetermined by the score nor by any other specific circumstance of their performance, but still depends on various influencing factors and unfolds on multiple relational levels. Most importantly, it is a flexible and open construct that is constantly re-shaped and re-defined by how those levels of relation *inter*relate.

For Christopher Small, this is even where the *true meaning* of all music-making lies: For the duration of a performance, the performers (together with the audience) enter a relational state. Through musical performance they "explore", "affirm" and "celebrate" their concepts and values of ideal human relationships by actually experiencing them in all their complexity (1998, p. 183). Small identifies different levels on which relationality is present:

1. The relationships between those taking part in the performance and the physical setting, including the affordances of the performance space, but also social, political or economic conditions under which the performance takes place;

2. the relationships among those taking part, which in the case of co-performers can concern aspects of closeness and distance (physical as well as social) or hierarchy; and

3. the relationships "between the sounds that are being made" (p. 193). Here Small refers to sound qualities regarding pitch and articulation that are put into

relation by melody, harmony, rhythm, but also the relation between the voices facilitated through texture, a specific distribution of roles and the amount of tension that is created. Within the macro structure of the piece, these "small-scale relationships relate to form larger-scale, longer-term sound relationships" (p. 199), thus contributing to the dramatic narrative of the performed music.

Small concludes his holistic outline of musical relationality by hinting at the meta-level of relation on which those individual categories of relationship themselves interact. Commenting on the relationship between composer and performer(s) correlating with the relationships between the sounds, he claims that if the relationship between the sound is too strictly mediated through notations in the score, the performers will be unable to form those sound relationships on their own terms. This notion is actually in accordance with his understanding of a musical work only existing in performance, since crucial parameters of music, such as actual sound and expression, cannot be defined through notation. Hence, the score is not even a representation of the musical work, but a mere medium, providing a written set of instructions for the performance (p. 112). In fact, Small stresses the idea that musical meaning is conveyed in the act alone, while analysis or extraction of formal principles are not significant to this meaning and even could prevent it from becoming evident.

Nicholas Cook's (2013) take on musical performance is more differentiated regarding the intertwining of the musical and the social dimension: Cook starts at the rather traditional musicological understanding of the musical work and the idea that music is to be understood as "sounded writing", as text reproduced in performance (p. 4). By entering the realm of performance and hence by taking the social setting into consideration, he quickly exposes the limits of a narrow structuralist view. Unlike Small, Cook concedes both the performance of a piece and the score a substantial share in the production of musical meaning, hence he particularly focusses on the intertwining of musical and social interaction. He describes the score as a framework, a "referent", along which the musical and interpersonal relation between the performing musicians then unfolds. As such, it functions as a script for complex social interactions being established through performance, and thereby "generates specific socialities" (p. 6). He later states,

however, that “while we may be able to see the potential for a certain narrative of interpersonal transactions in a score, it is only in performance that this potential is transformed into reality.” (p. 238)

Thus, returning to the dyadic situation, performers are faced with forms of musical twoness on the conceptual level of the musical material and structure of a piece, developing their interpretation through engaging with the score. At the same time, the implementation of those instances of twoness not only influences the musical experience but also dynamically interacts with and affects the interpersonal realm between the performers. This connection between conceptual twoness structurally incorporated in the musical work and the performers' relationship opens up a world of possibilities: The piece potentially offers, provokes, destabilises, questions etc. manifestations of relationship to be explored by the performers.

Since those forms of twoness present in the composition remain abstract until the piece is performed, they potentially model ideal forms of relation. This draws on the concept of the “ideal type” (*Idealtypus*) coined by Max Weber as a conceptual utopia, which he uses as a methodological tool to analyse its deviations in social reality. Within a duo performance, ideal relationships can thus be artistically explored through enacting them, in what is then not only musical, but also interpersonal work (cf. Cook 2013, p. 257). This exploration does not only entail reflecting on those ideal forms, but also comparing and reconciling the performers experience of relation on the interpersonal level with those ideal types as well as—ultimately—actively and jointly re-shaping them. Moreover, this requires consideration of how values of interpersonal relationship intertwine with musical values in performance (cf. p. 258).

To understand what it is that emerges from the intersection of structural relationality on the compositional level and the musical and interpersonal relationships emerging during performance, we must enter the experiential realm of both the aesthetic and the intersubjective. This brings us to the central issue of musical togetherness, which is to be explored in this doctoral research project. Musical togetherness thereby refers to a particular quality of musically *being-with*, which “is filled with mutual understanding and affective correlation beyond synchrony: the state of forming a ‘We’ not just by association under a shared goal or

shared values, but on the level of an intimate affective relation" (Peters 2020, p. 22). It happens when we affect each other through relational musical interplay, in a way that at the same time impacts the aesthetic quality of our interplay. Thus, musical togetherness is situated at the very intersection of the aesthetic and intersubjective experience (see Figure 2).

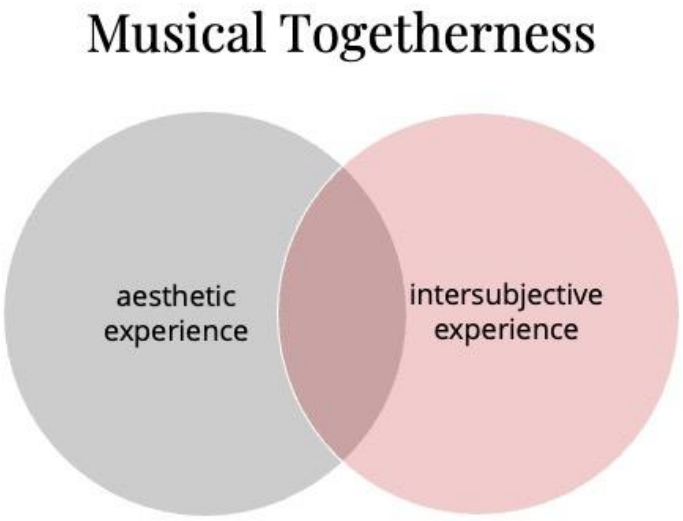

Figure 2. Musical Togetherness is situated at the intersection between the aesthetic and intersubjective experience.

However, we must be careful not to consider intersubjectivity a normative state of musical performance. Rather, it is a complex and contingent variable in what turns out to be an interpersonal and aesthetic exploration. To further unravel this will be one focus of this artistic research project. I will now provide a more detailed overview of the outset, structure, and aims of the project.

1.4 Outset and Aims

This research project stems from my extensive experience performing in duos with various partners, including both instrumentalists and singers. Notably, I have engaged in two long-term collaborations as *Kaiser Schmidt Guitar Duo* and *Duo Karuna*. The unique togetherness experienced in each duo inspired me to explore this phenomenon more deeply. In particular, these long-term collaborations with dedicated partners highlighted the importance of consciously examining the joint creative process with regard to how musical togetherness emerges, in order to enhance high-quality musical interplay. However, beyond enriching my own musical practice, I also aim to contribute to the broader field of ensemble performance research. By exploring the potential and challenges of musical interplay, valuable insights can be gained that ultimately aid musicians in flourishing at even higher artistic levels within their chamber music practice. Moreover, I believe that a better understanding of the multi-layered relationalities in joint musical practice can not only enhance performance quality but also nurture artistic growth and personal development for musicians.

From an artistic point of view, two central research strands emerge for this doctoral project: As a counterpoint to my ongoing duo projects, I will first conduct short-term case studies with unfamiliar partners. They focus on the rehearsal and interpretation process of contemporary repertoire, starting from the question how twoness is incorporated in the respective piece. Characterised by an interventional approach, they are intended to challenge the experiences gained from my established duo practice, as well as to question any routines or biases that may have been developed. Insights gained from these studies then lead to an extensive performance project realised together with my long-term duo partner, violinist Johanna Ruppert, as Duo Karuna. Focusing on alternative performance strategies, as well as the bodily dimension of musical interplay, this also includes interdisciplinary collaboration with a dramaturg and a dancer/researcher.

As previously stated, musical togetherness as understood in this research is defined by the quality of both the aesthetic and the intersubjective experience of

making music together. Profound moments of togetherness in music hold immense significance for both musicians and listeners alike. Despite this, it can be observed that when ensembles form interpretations, extensive consideration and scrutiny are given to structural, musical, and technical elements found in the score, as well as the compositional context and performance tradition. However, the interpersonal dynamics within the ensemble are often overlooked or taken for granted unless issues arise. Moreover, the connection between the structural relation of musical parts as prompted by the score and the interpersonal relationship between performers remains largely unattended and therefore demands in-depth research.

Bringing specific attention to this relationality might indeed reveal new approaches to the interpretation of Western Art Music. This is what lies at the very heart of this artistic research: By looking at duo performance as the nucleus of chamber music, I aim for a deeper understanding of musical togetherness, in order to facilitate an interpretation that explicitly foregrounds, augments and refines the relational realm. In such an interpretation, moments of genuine intersubjectivity and togetherness are not a coincidental by-product, but the central goal.

Since what is in question here is a highly subjective and bodily lived experience, I will considerably draw on a phenomenological perspective on musical performance in terms of an embodied and enactive approach. An integrated approach building on critical artistic practices and theoretical reflection allows implicit intersubjective phenomena to surface, to be analysed via audio-visual documentation and to be readdressed in further artistic practice. It is essentially the artistic research angle that unfolds its strengths here, enabling the question of musical togetherness to be addressed through a combination of analysis and (self-)experience. Instead of simply pointing towards music itself for more articulate answers in the face of the complexity of interrelatedness, through artistic research it is possible to link the qualitative experience of relationship to practical and aesthetic aspects of musical interplay. Thus, it offers a unique approach to the question of musical togetherness.

1.5 Research Questions

This leads us to the following central research questions:

1 What forms of dyadic interaction can arise in duo formations and what are their relational and aesthetic implications?

2 How can a focus on the relational level of making music together affect musical interplay, joint interpretation and performance?

3 What is it that constitutes musical togetherness, what are its conditions and how can it be evidenced?

2 Theoretical Framework and Analytical Perspectives

2.1 Performance Studies

2.1.1 Chamber Music Performance

Performance Studies in Music considers meaning to be generated in the act of musical performance. As discussed by Nicholas Cook (2013), this essentially involves the musical and social relationships that unfold in real time between performers, listeners, and the musical work[2]; but also embodied dimensions of performance and listening, as well as processes shaped by both explicit and tacit knowledge (p. 7). All these aspects hold significant relevance to the study of chamber music performance. Given this complexity, the realm of chamber music performance studies encompasses a diverse array of methodological approaches, drawing upon disciplines such as historical musicology, music psychology, aesthetics, ethnomusicology, anthropology, cultural studies, and sociology, the boundaries between which often become blurred within individual contributions. In many cases, this work is led by researchers who themselves have a professional background in the form of musical training or even a parallel, active career as musicians. In the studies, however, the researchers mostly work with performers, using observational and empirical methods.

In terms of research interest, the studies relevant here focus on coordination in small ensembles and the way it relates to social interaction and communication,

[2] Note that not all chamber music performances necessarily involve the performance of pre-existing works. The term *chamber music* originally referred to the type of music that was performed in a chamber or small room, which allowed for a more intimate and acoustically suitable setting, as well as also fulfilling a certain social function (as upper-class, non-public music with its own mode of reproduction and reception). Over time, the meaning of "chamber music" has evolved to encompass a certain range of ensemble size, typically small enough to be performed without a conductor (cf. Schwindt [1996] 2016).

as well as ensemble organisation and the negotiation of individual members' ideas and contributions. The studies reviewed in the following feature smaller ensembles from duos to quintets of various instrumental and vocal combinations, although an emphasis on string quartets can be noticed. This is certainly due to the key role of the string quartet genre in music history, but possibly also due to central theoretical predecessor studies. Young and Colman laid the theoretical foundation for this as early as 1979, suggesting that psychological research into group dynamics could have relevance for understanding music ensemble dynamics, using the string quartet as their case of application. They review studies that discuss roles, leadership, conflict management and cooperation in small groups and apply them to the string quartet situation in general, however, without providing any empirical basis (Young and Colman 1979). Murnighan and Conlon's 1991 study on 20 string quartets points in a similar direction, as it identified three paradoxes—leadership versus democracy, the ambiguous role of the second violinist, and confrontation versus compromise. The study revealed that while quartet members endorsed democracy in theory, it was not consistently practiced. Furthermore, successful quartets placed greater value on the second violinist and embraced conflict as a constructive element of creative collaboration. The study primarily focused on quartet member roles and communication during rehearsals (Murnighan and Conlon 1991).

In this tradition, King (2006) investigates how team-role behaviours influenced group work in student quartets with different instrumental combinations, including their rehearsal progress, group dynamics, and performance, through observation and interview methods. She identified eight common roles across the three groups, with quartet members taking on one or more roles, and some members shifting roles while others remained consistent. The string quartet exhibited the most stable team roles, leading to improved group dynamics, concentration, and rehearsal progress. Davidson and Good (2002) conducted an exploratory case study on a student string quartet, utilising a conversation analysis framework to examine the sociocultural and interpersonal dynamics during rehearsal and performance. They found that the dimensions of co-presence, visibility, audibility, co-temporality, and simultaneity applied to small-

group musical performance, with gestures and eye contact playing a crucial role in coordination. The study also highlighted emotional/psychological and sociocultural issues such as performance anxiety and maintaining focus during performance. In their investigation of roles and group dynamics in wind quintets, Ford and Davidson (2003) also directly refer to those quartet studies.

Goodman (2002) considers ensemble performance from a general point of view, detached from specific instrumentations. She extracts temporal coordination, communication through sending and receiving acoustic and visual signals, the role of the individual within the group and social factors like group dynamics as constitutive components of making music together. In their book chapter on the nature of dialogue in ensemble performance, King and Gritten (2017) examine communication in ensemble performance, specifically focusing on the qualitative transformations that occur during the transition from rehearsal to performance in Western art music. These transformations refer to extraordinary experiences during performance that impact the emotions, cognition, and physicality of the co-performers. The chapter thereby emphasises the significance of embodied knowledge and its central role in terms of interaction rather than (verbal) communication in ensemble performance. McCaleb (2014) also builds his research on interaction in an ensemble around the central idea of embodied knowledge, focusing on the complex content of the transferred information and ways of its communication. He also examines the execution and reading of body movement and gestures and their importance in interplay, for example performance cues or bodily expressions related to the interpretation of a piece.

In their paper on the transactional culture of chamber music performance, Davidson and Krause (2022) draw a broader scope of analysis by considering not only interpersonal dynamics, but also organisational and cultural experiences between musicians, venue and audiences. Based on data from three chamber ensembles of different sizes, they found that the shared value of musical cohesion as well as the interpersonal social interaction are both important factors in the musicians' experiences. The audience experience is significantly shaped by the intensity of emotional engagement, a balance between familiarity and novelty, as well as an informal and inclusive atmosphere.

Although some theories, approaches and conclusions applying to ensembles are also transferable to duo settings, their distinction and position on the threshold between solo and group performance shall be emphasised again at this point. It is noticeable that existing research is primarily concerned with piano duets: While Williamon and Davidson (2002) still draw substantially on the ensemble research discussed above in their study on communication processes and understand the duo as a miniature form of an ensemble, Blank and Davidson (2007) introduce the idea of an equal partnership as the result of playing on two separate pianos as opposed to sharing one instrument (both of which options qualify as piano duets), and also address gender-specific aspects of the socio-musical relationship in the duo. Ragert et al. (2013) examine the effects of increasing familiarity of a co-performer's part and playing style as the result of repeated executions of a piece on timing and synchronisation. Bishop and Goebl focus on shapes and usage of auditive and visual cues (2015) and coordination of gestures (2017) in piano duos, as well as violin-piano duos. Other duo configurations are also explored, for example, by Goodman (2000), who investigates rehearsal methods, social behaviour, topics of discourse and types of musical negotiation in cello-piano duos, and Ginsborg and King (2007), who compare singer-piano duos of different levels of expertise with partnerships of two equally established duo partners in terms of differences in short-term preparation for performance.

In an autoethnographic study, Hutchinson and Haddon (2022) delve into the factors that contribute to the development of partnership during piano duet rehearsals. With the term partnership, they refer "specifically to a dyadic collaboration that is highly mutual and that carries a strongly positive affective dimension" (p. 181). The authors suggest that chamber music making provides performing partners with an opportunity to establish a unique relationship that surpasses conventional transactional or collaborative encounters. Unlike situations where individual boundaries are preserved, chamber music allows performers to orient themselves towards transcending their individual identities and delve into a state of merged subjectivity. This kind of self-reflexive approach is much closer to the intention of this thesis. Although the empirical and cross-disciplinary approaches employed in the aforementioned studies showcase exceptional data

collection and analysis, setting a benchmark for research design and diligence in studying music in performance, they tend to fall short when it comes to exploring the inherent "magic" within musical performance, as stated by Whitney (2016, p. 198). Whitney goes on to say that while practice procedures for technical coordination are process-based, subsequent performances transcend such methods and become more spontaneous and expressive, allowing performers to make creative choices in the moment. Since this dynamic substantially relies on the performers' subjective experiences, not least of their interpersonal relationships, I argue that a methodological approach is essential that offers first-person insights on a phenomenological level. In terms of providing this kind of insider, procedural knowledge, Artistic Research can begin to fill this gap.

2.1.2 Rehearsal Studies

Based on the understanding that the socio-musical relationship in the duo is shaped through interaction processes in joint practice, the analysis of rehearsals plays a central role in this research project. The existing literature on ensemble rehearsals extensively discusses the topic of communication, with a broad consensus acknowledging that in the sense of an embodied discourse, this encompasses both verbal and non-verbal elements (King and Gritten 2017). Looking at rehearsal methods, modes of communication and social interaction, King and Davidson (2004) conclude that finding suitable rehearsal strategies might differ greatly from one ensemble to another. They furthermore highlight the significance of the socio-emotional component for successful rehearsal outcomes.

Focusing on singer-pianist duos, Ginsborg and King (2011) investigate how non-verbal communication in the form of gestures and eye contact are utilised in terms of interaction during rehearsals by student and professional performers, as well as how these gestures may vary based on performers' experience and familiarity with their partners. In later publications, the same authors confirm that interactional style, rehearsal strategies and creativity in rehearsal and performance are shaped by the level of familiarity between co-performers. They further

emphasise the role of non-verbal communication and suggest prioritising working on longer sections over frequent interruption—which usually correlates with excess talking—for rehearsal efficiency (Ginsborg and King 2012, Ginsborg 2017). Related research on the connection between communication, interaction style and familiarity with co-performers, as well as the rehearsed musical work, include studies by King (2013) as well as Ginsborg and Bennett (2022).

McCaleb (2014) challenges the use of the term communication due to its potential implications of information conveyed through speech-like means. Instead, he proposes an ecological model of ensemble rehearsal that centres around the concept of procedural knowledge. In his research with string quartet as well as improvising musicians, various modes of representation were observed during ensemble rehearsals, including linguistic, vocalised, performed, and integrated modes. Such procedural emphasis is particularly present when engaging longer sections of continuous music-playing during rehearsals, which according to Todd and King "serves as a mechanism to enable the performers to make the music their own." (2022, p. 223). The qualitative analysis of such purely musical rehearsal sequences with implicit socio-musical activity, again, is predestined for an Artistic Research context and methods. In terms of methodology, Bayley's ethnographic studies on interactive and creative processes in rehearsals and composer-performer collaboration between Michael Finnissy and the Kreutzer Quartet offer valuable insights. Her research emphasises the role of documentation and the integration of quantitative and qualitative approaches to data collection and analysis (Bayley 2011, 2017).

2.2 Ecological Perspectives on Music Performance

2.2.1 Ecological Psychology

To better understand the complex dynamics of making music together and the many factors that shape a duo's performance, I have also turned to research on the ecology of performance. At its core, this research considers the relations between actions of the performers and their bodies, the instruments they play, as well as the environment in which they find themselves as critical in shaping the performance experience (Windsor 2017). This is rooted in the broader ecological psychology framework as developed by Gibson in the 1960s and 70s, which Clarke (2005) in his book *Ways of Listening* applies to the context of music and specifically the perception of musical meaning. The ecological theory of perception implies that we perceive our environment directly and by way of already structured information, as our perceptual system resonates to this information through active engagement with the environment. As a central principle of the ecological approach, Clarke asserts that "perception must be understood as a relationship between environmentally available information and the capacities, sensitivities, and interests of a perceiver" (Clarke 2005, p. 91). This results in a continuous loop of perception and action.

Furthermore, it gives rise to the theory of affordances, also coined by Gibson (1966). He defines affordances as the perceived opportunities for action that arise from the constant properties and characteristics of objects or elements in the environment. Affordances are learned through perception and experience, allowing individuals to understand how objects can be manipulated, their potential uses, and their relationships with other objects (Gibson 1966, p. 285). Windsor (2017) emphasises the mutuality of this dynamic: "Affordances are not determined by object or subject, but through their relationship" (p. 115). Using the example of the concert grand piano, he demonstrates that a musical instrument can offer numerous affordances, depending on the physical constitution or particular needs of the subject attending to it. It does not necessarily have to be used as a musical

instrument but may also offer other practical applications. But even when considered more narrowly, a grand piano will afford differently to every performer, depending on the level of expertise or the musical context in which it is used. Drawing on Windsor and de Bézenac (2012), Östersjö elaborates how musicians actively navigate affordances to achieve specific aesthetic or functional goals and work to overcome potential limitations, rather than taking the path of least resistance. Exploring an instrument thus involves learning how to work with its resistances and affordances (Östersjö 2020, p. 18), which fundamentally shapes the aesthetics of a performance. Other affordances in the context of a performance concern, for example, the physical environment, such as the acoustics of a performance space, or the social context, such as the dynamics in the ensemble or the interaction with the audience.

The ecosystem of a performance might also extend to "historical, ideological and 'memorial' forces operating at a variety of scales" (Clarke and Doffman 2017, p. 9), as well as "aesthetic attitudes that the musicians bring with them to their creative encounter" (p. 10), resulting in a web of sources of information. Windsor (2017) therefore emphasises the "relational nature of performance ecology" (p. 117). Through highlighting the dynamic relationships between musicians and their surroundings, an ecological theory of musical performance can thus contribute to a holistic understanding of the interplay in a duo.

Windsor and de Bézenac (2012) also point out the social nature of music-making and the affordances provided by other individuals. Both in the context of improvisation and in the case of the performance of notated music, "behaviours of interacting musicians are simultaneously motivated and constrained by the collectively produced actions and resulting sounds: what is seen, heard and felt affords particular kinds of subsequent behaviour" (p. 111). In the specific context of group improvisation, Linson and Clarke (2017) build on this assumption by discussing the extent to which co-performers afford each other opportunities for actions, based on the "ecological principle of perception-action coupling in which playing informs listening, and listening informs playing" (p. 63). Furthermore, each musician may focus on different aspects of the complex situation, perceiving unique affordances based on personal associations. These individual perspectives will both

overlap and diverge from those of other ensemble members. The authors hence suggest that "by remaining open to new perspectives, we may be able to perceive uniquely through our interaction with others, and these new perspectives may in turn afford different responses and imagined possibilities for the future" (p. 64). In the course of this doctoral project, it remains to be shown to what extent this view can also be transferred to the scenario of joint interpretation in a duo.

2.2.2 Embodied Music Cognition

To further understand the role of the body within this ecological approach to musical practice, it is worth considering duo interaction in relation to the embodied music cognition paradigm. Varela et al. (1991) understand cognition as embodied action:

> "By using the term *embodied* we mean to highlight two points: first, that cognition depends upon the kinds of experience that come from having a body with various sensorimotor capacities, and second, that these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context. By using the term *action*, we mean to emphasize once again that sensory and motor processes, perception and action, are fundamentally inseparable in lived cognition. Indeed, the two are not merely contingently linked in individuals; they have also evolved together." (Varela et al. 1991, p. 173)

In their book *Musical Gestures: Sound, Movement, and Meaning* (2010), Godøy and Leman transfer this basic understanding to a musical context through a collection of essays dedicated to the "holistic experience of continuous sound and movement in relation to our bodies" (p. ix). In his chapter *Music, gesture, and the formation of embodied meaning,* Leman (2010) proposes an integrated approach to musical gesture that incorporates three perspectives: first-person (phenomenal self-observation), second-person (intentionality, social interaction and empathy), and third-person (measurable physical motion). He emphasises the importance of action and experience in first-person research, examining the repertoire of musical gestures available to performers. Within the second-person approach, he grounds the experience of empathy in the corporeal co-articulation of musical perception: "Through [...] embodiment, we have access to the intended emotional meaning of the music" (p. 145).

Clarke and Doffman (2016) suggest that embodiment yields several functions when two musicians work together, analysing the collaboration between the composer Jeremy Thurlow and the violinist Peter Sheppard Skærved on a composition for solo violin and laptop computer:

> "First, the body acts as a conduit for knowledge in relation to instrumental techniques, and the tacit knowledge that connects musicians to a musical past – something that is also realized in less procedural and more explicit ways through the musicians' dialogue [...]. In this respect, the body connects musicians, instruments and events over relatively long timescales. Over the course of the workshops and performances, however, and at a relatively short timescale, the body is a means to Peter's increasing absorption in the music and a manifestation of that changing relationship. It is in this enactive relationship that Peter both makes and finds a developing understanding of the material, an embodied complement to the shared discursive engagement that constitutes and intensifies their creative collaboration. (Clarke and Doffman 2016, p. 46)

Much more differentiated embodied approaches to social music interaction can be found in Lesaffre et al. (2017), providing multiple perspectives on social cognitive processes and interactive dynamics. Chapters in this companion discuss issues such as intense absorption in joint musical practice (Cochrane 2017), entrainment[3] within an embodied cognitive framework (Himberg 2017), joint action theory of social cognition (Michael 2017) or, specifically, dyadic interpersonal coordination (Thompson et al. 2017). The latter apply a highly empirical approach, using motion capture technology to trace processes of entrainment and to quantify gestural coupling. I have already pointed at the limits of such empirical methods, which in the latter case are even acknowledged by the authors themselves, since they do not account for emergent factors of performance. Timmers (2022) examines such emergent processes of interaction and alignment through an embodied and enactive framework, connecting notions of expressiveness with processes of coordination and communication. Referring to emergent variations in tempo, dynamics, timbre and tuning, she notes that "realizing change at various moments

[3] Himberg understands entrainment as mutual adaptation that occurs in interaction and further specifies that it can be observed based on the criteria of flexibility in the continuous adjustments of behaviours of the agents, coupling in the sense of establishing a connection, and autonomy in the sense that the individual processes remain self-sustained. (Himberg 2017, p. 141)

in the music is a central aspect of ensemble performance and rehearsal" (p. 103). She further argues that "with respect to possible referential meaning of ensemble sounds, [...] 'embodied meanings' may specifically concern associations with energy levels, bodily tension and effort, sensations, feelings, and emotions, but also associations with movement patterns, gestures, actions, and interactions" (ibid.). To further account for these experiential aspects of interaction, in the following section I will focus on phenomenological perspectives on joint musical practice.

2.3 Intersubjectivity and Intercorporeality

In his essay *Making Music Together: A Study in Social Relationship* (1951), Alfred Schütz develops an intersubjective understanding of musical interaction. Schütz considers the act of making music together a social phenomenon that precedes all communication connected to any semantic system. Instead, meaning is conveyed by actively participating in and mutually influencing each other's stream of consciousness in immediacy. He describes musical togetherness as a "mutual tuning-in relationship":

> "This relationship is established by the reciprocal sharing of the other's flux of experiences in inner time, by living through a vivid present together, by experiencing this togetherness as a 'We'. Only within this experience does the other's conduct become meaningful to the partner tuned in on him" (p. 177)

This relationship indicates an intersubjective state, which, according to Schütz, is essentially based on the simultaneous partaking in various dimensions of inner and outer time, where inner time is "the very medium within which the musical flow occurs". Hence, the music mediates between the subjects through its retentions and protentions—that is, the interrelations between its successive elements—, thus establishing intersubjectivity.

In his critical reading of Schütz, however, Peters (2020) points out that "by shifting the place where synchrony is established into an oblique inner realm, Schütz *presupposes* synchrony, without critically assessing whether synchrony really is present, or whether it yields the claimed 'immediacy'" (p. 19). Schütz seems to suggest that that the way a musical piece unfolds in time, even under phenomenological terms, is simply given and as such can be experienced by the subjects upon correct execution in a joint performance, which then should automatically result in immediate synchrony. However, this definition leans toward a formalistic view of music in general. It ignores the fact that the temporal perception of music is not only subjective, but also highly variable in different iterations of listening or performing, since for both performers and listeners it depends on the perceptual frame of temporal reference, as well as on factors such as acquaintance with the music or to what extent attention is directed to details. In fact, the (micro-)temporal shaping of phrases (for example in rubato playing) and

the timing of transitions are essential to the overall sense of temporal continuity and the immediate joint decision-making on these aspects during performance significantly contributes to the experience of a profoundly cohesive and synchronised interpretation. These phenomena are artistic achievements that have to be constantly (re-)established by the performers in a reciprocal process of empathetic listening and (inter-)play. They indeed belong to the elusive realm of interpretation of those aspects of music that cannot be conveyed by the score, therefore demanding the autonomy of the performer. In the case of a duo (or any ensemble), they also considerably depend on the relationality that is at work in between the players, i.e., how they experience their relation to each other and how they let their musical voices interrelate in time. As mentioned before, intersubjectivity in joint musical practice is not to be understood as a normative condition. Instead, it represents a plastic dimension contingent on both the interpersonal and the aesthetic domain of musical interplay.

In the search for conditions for genuine intersubjectivity, contemporary research on intersubjectivity turns towards embodied and enactive approaches to social cognition, arguing that intersubjectivity in the sense of a socially extended mind is constituted by embodied interaction dynamics (Froese 2018). This is in line with phenomenological traditions that emphasise "the varied possibilities of direct perceptual and embodied interactive understanding of other minds" (p. 166). The enactive perspective furthermore entails that subjects actively participate in the generation of meaning through interacting with their social and physical environment.

One theoretical framework through which enactive researchers investigate intersubjectivity is *participatory sense-making,* which understands intersubjectivity as an "unfolding relation between individual becomings, where the body-mindly relations and interactions between the subjects are themselves effective dynamics in bringing about their (ambiguous, divergent, joint, mutual, contrastive,…) understandings" (Candiotto and De Jaegher 2021, p. 514). Schiavio and De Jaegher (2017) apply the concept of participatory sense-making to joint musical practice, arguing that "musicians […] participate in, and thus can form and transform each other's sense-making, enacting unique shared worlds of meaning" (p. 33). This

theory views the musicians as interactive and highly plastic systems (ibid.) that negotiate goal-directed actions in immediacy during a musical performance. It highlights the "relational nature of musical experience [...] made explicit by the concrete adaptive activities of the living bodies embedded in the musical environment they co-create in the performance" (ibid.). The musical object is thereby understood as an emergent phenomenon which is the result of collaborative generation and transformation of musical meaning and intricately tied to the embodied participation of all individuals involved. Thus, the authors emphasise the possibility of dynamically open musical co-creation, stating that "music in intersubjective contexts is never 'fully constituted'—it is not 'given'. Rather, it is always shaping and being shaped, through time, space, and interactive dynamics—all these elements are coupled together in musical perceptual experience" (p. 35).

They furthermore ground this view on the notion of *mutual incorporation*, which suggests that the horizon of possibilities in musical interplay is constituted by concrete, bodily interactions. Thus, co-performers enact an intersubjective corporeality that "allows for one individual to be integrated in the body schema of the other in a non-trivial way—as a dynamical source of significance that integrates and complements the subject's original 'point of view' of the world" (p. 34). This embodied understanding of intersubjectivity goes back to Husserl who states that "[t]he body, the living body of the other, is the first intersubjective thing" (Husserl 1973, p. 110). Merlau-Ponty has coined the term *intercoporeality,* referring to "the manner in which lived bodies interact with each other, in the overall context of intersubjectivity and 'being-with-one-another'" (Moran 2017, p. 286). It implies that "intersubjectivity is founded on intercorporeality" (p. 287).

To describe the embodied experience of making music together as intercorporeal "is to emphasize that the experience of being embodied is never a private affair but is always already mediated by our continual interactions with other human and nonhuman bodies" (Weiss 1999, p. 5). Like other activities that can be considered intercorporeal, such as kissing, having sex, dancing together, or wrestling, making music together also implies that "the other's body comes to appear and is experienced in a particular way by my body. One learns to anticipate

the other, to respond to the other's timing, distance, speed, and so on" (Moran 2017, p. 287). In his book *Embodied Knowledge in Ensemble Performance,* McCaleb (2014) points out how successful ensemble coordination relies on applying embodied performative knowledge accumulated by the individual musicians, which allows them to inter-react to each other. This view slightly underscores the bodily dimension of interplay in terms of embodied expressiveness and perception, which not only offers us enhanced access to the musical experience of the other but enables us to develop a *shared* or *relational* embodied knowledge on which intersubjectivity can be based. Building on the concept of intercorporeality, Høffding (2018) describes this kind of knowledge as "mediated [...] by an interkinesthetic [sic] sense of union" (p. 235) through auditory perception and interoception of being touched by the other through the sound he or she produces. Perceiving and reciprocating each other's movements facilitates an intersubjective proprioception. For a sense of we-agency to emerge, interkinaesthetic affectivity is furthermore essentially accompanied by a shared emotional state: "Only when coupled with the affective intentionality of deep trust, does the change in agency from singular to plural come about." (p. 240) This is consistent with the understanding that the qualitative experience of the relationship is decisive for musical togetherness. The concept of *embodied interaffectivity* as described by Thomas Fuchs (2016) further entails that "in every face-to-face encounter, the partners' subject-bodies are intertwined in a process of bodily resonance, coordinated interaction and 'mutual incorporation' which provides the basis for an intuitive empathic understanding." (p. 196) The intercorporeal process of re-enacting a dyadic pattern furthermore may create what he calls a "dyadic body memory" (p. 204), by acquiring a specific interactional history, which shapes further interaction through emerging patterns and autonomous dynamics (p. 205).

This argument points towards the role of affective, emotional dynamics in musical interplay, which will be discussed in the next section by introducing the concept of musical empathy.

2.4 Musical Empathy

To date, the current state of research on the nature of empathy across different fields of academic research reveals a great deal of variance, obscurity or even a lack of definition in the use of the term empathy. This is also reflected in the investigations that have been undertaken into the role of empathy in musical interaction. Both Laurence (2017) and Peters (2020) attempt to address this by providing a comprehensive outline of the philosophical origins of the term, while trying to distinguish it from related concepts such as inner imitation, perspective-taking, emotional contagion, or sympathy, as well as explicitly relating it to a musical context. For Peters, this leads to the following definition: "Empathy [...] names our conscious ability to—imperfectly—grasp another human being's psychological state through the affective character of their appearances and actions" (Peters 2020, p. 22). I will now discuss some existing approaches to co-performer empathy specifically, in order to arrive at a more concrete conceptualisation that can be applied to the particular context of joint interpretation.

Through a comparison of verbal and non-verbal modes communication in a jazz sextet (Seddon 2005) and string quartet, Seddon and Biasutti (2009) develop the concept of 'empathetic attunement'. It is used to describe a collective state of mind, which is achieved "only when musicians are able to decentre and see things from others' musical perspectives" (p. 398). The authors found that "empathetic attunement was musically evident in the production of a more animated performance of the piece. On occasion this more animated, 'risk taking' performance could result in the production of unpredictable musical variations on interpretation when participants engaged each other in challenging musical interaction" (p. 407). The emergence of such spontaneous variations and reactions to each other's musical ideas during performance was regarded as 'empathetic creativity'.

Waddington's (2017) findings concerning the relationship between co-performer empathy and creativity in performance bear striking parallels to this.

Pondering various concepts through investigating three different ensemble and duo settings, she arrives at the following definition:

> "Co-performer empathy is a cyclical process during expert ensemble playing that is based on a pre-requisite condition of a shared approach to musical interpretation and to working together. It is often characterised by a special connection between players and involves a process of empathic responding where players are aware of the expressive intentions of their colleagues and respond with some degree of flexibility" (p. 244).

Waddington considers the empathetic process a continuous cycle between "intentional awareness" or "musical perspective-taking", in which one player identifies the musical intention of the other, and an intentional or intuitive response, as co-performers "negotiate a given moment within the music" (ibid.). In consequence, this can lead to spontaneous and novel expressive variations in performance, which are associated with optimal performance experiences. This seems to imply that the moments of intense co-performer empathy rely on an action-reaction principle within a leader-follower schema, where real-time musical negotiation happens through cognitive processing of and affective response to each other's musical actions. Although the described perspective-taking might happen in temporally fine-grained manner and intuitively, it does not correspond to immediate co-experience and co-creation as related to and desired for musical togetherness. It certainly cannot be extended to genuinely intersubjective phenomena of high-level musical interplay which are not the result of an individual intention but spontaneously emerge from a relational agency and/or even without any preceding explicit intention. Furthermore, I argue that jointly conceived and planned musical goals may also involve empathy in that shared expressivity may not be negotiated down to the last detail, but ultimately requires an empathetic effort in order to overcome the negotiation between individual autonomies and achieve a truly relational and affectively shared result. Countering the idea of an intentional awareness of the other's subjective states, Schiavio and Høffding (2015)—within an enactively and phenomenologically informed framework—therefore propose that what is at work in a musical encounter is a pre-reflective, embodied awareness, rooted in the concrete musical interactions. This alludes to "a much deeper-seated

empathy or other-awareness, existing beyond attention and explicit awareness" (p. 12), which can lead to an altered or enlarged sense of subjectivity or we-agency.

This thought can be traced back to Stein's treatise on empathy (*Einfühlung)*, in which she speaks of the experience as a "'we' as a subject of a higher level" (Stein [1917] 1989, p. 17), thereby also emphasising the aspect of immediacy within the concept of empathy:

> "I feel my joy while I empathically comprehend the others' and see it as the same. And, seeing this, it seems that the non-primordial character of the foreign joy has vanished. Indeed, this phantom joy coincides in every respect with my real live joy, and theirs is just as live to them as mine is to me. Now I intuitively have before me what they feel. It comes to life in my feeling, and from the 'I' and 'you' arises the 'we' as a subject of a higher level" (Stein 1989, p. 17).

This we-subject emerges as we empathetically comprehend each other's inner states and thereby mutually enrich our own feeling. Thus, feeling as a 'We' does not happen in the sense of the erasure of individual subjects or the dissolution of interpersonal boundaries, but rather with the senses of self being maintained, since "'I', 'you' and 'he' are retained in 'we'. A 'we,' not an 'I,' is the subject of the empathizing" (Stein 1989, p. 18).

As Laurence (2017) remarks, Stein hereby evokes a distinct category of feeling, that of *shared feeling*, which is taken up by Angelika Krebs in her dialogical account of love (2011, 2015). Delving into Scheler's understanding of *Miteinanderfühlen*, Krebs explores the question of what it actually means to share feelings with each other in dialogical form, i.e. through mutually engaging in a symmetrical relationship with another human being. The meaning of the shared feeling thereby does not arise from the aggregation of isolated individual feeling contributions, but rather emerges as a unity of sense that permeates the individual contributions. It necessitates the ability to empathise and think and feel from a collective perspective, embracing the notion of 'We'. Krebs repeatedly relates this dynamic to the very nature of making music together, whereby the duo in its symmetrical layout seems particularly obvious in its potential for dialogical

intimacy.[4] Peters (2020) transfers the Krebs's concepts of dialogue and shared feeling to the context of duo improvisation, arguing that musical togetherness grounds on "mutual understanding and affective correlation beyond synchrony: the state of forming a 'We' not just by association under a shared goal or shared values, but on the level of an intimate affective relation" (p. 22). He suggests that dialogical playing is distinguished by genuinely relating to each other musically through empathetic listening and responsiveness to the other's playing, in order to open up "a space of joint affective exploration that preserves the individual players' autonomy while contributing to a shared narrative" (p. 29). Drawing on five central criteria for shared feeling as identified by Krebs[5], Peters shows that shared feeling can indeed be evidenced in what he calls "*relational improvisation*" (p. 31), which is essentially mutually empathetic and dialogical.

Peters furthermore suggests that in a classical duo, musical (inter)actions are "predetermined, preorganised, and premeditated" (p. 24) by the composer, and thus the composition "provides the *form* and, thinking in terms of process, the *continuation* along which the shared emotional narrative unfolds." (ibid.) Working towards a shared interpretation, they follow a "predetermined path for the social exploration of the interpersonal" (p. 31). As previously noted, there are of course multiple dimensions within an interpretation in which we can act freely, hence allowing for interpersonal exploration. To go even further, however, I shall argue that it is precisely through a practice of relational playing that a duo can transcend set frameworks and attain newfound dimensions of freedom by way of stepping into a relational autonomy. Hence, one objective of this thesis is to explore how a relational approach to interpretation that is grounded in empathy and shared

[4] "Ein intimes Duo zwischen zwei Geigen oder zwischen einer Geige und einem Klavier versinnbildlicht das, worauf es in der romantischen Liebe ankommt, weitaus besser als die Verschmelzung zweier Halbmarken zu einer Kugel oder die heilige Mutter Maria mit ihrem Jesuskind" (Krebs 2015, p. 60)

[5] These are: being similarly emotionally affected by the situation, recognising each other's emotional affectedness, jointly evaluating the situation, jointly acting out of the emotion, and tying the individual emotional components together into a shared emotional narrative. (Peters 2020, p. 30; cf. Krebs 2015, p. 220).

feeling can unfold musically, giving rise to enhanced affective and aesthetic qualities that surpass the capabilities of each performer acting individually.

3 Duo Interventions

3.1 Artistic Research Method

One important consideration while approaching this research project was how to move from an (inter-)subjective perspective on my own duo practice to a more theorisable gain of knowledge that would be applicable to a broader research context. On the one hand, this required to fundamentally intervene in my current practice with long-term duo partners, in order to scrutinise basic premises and potential biases, raise implicit knowledge to the surface, dismantle unconscious routines and ingrained strategies and eventually enable their re-formulation. On the other hand, I had to develop a systematic procedure that could be reliably applied to different settings. Methodologically speaking, a series of tests was necessary to examine what kind of knowledge was bound to specific actors or interpersonal constellations, and which elements could be transferred to other duo situations as well. Considering that my experience of profound togetherness in long-term collaborations was usually linked to factors such as familiarity and trust, I also wondered if and how this quality could be obtained in more spontaneous and temporary encounters. I engaged in nine different short-term collaborations with unfamiliar musical partners, a phase of the research which I called *duo interventions*.

3.1.1 Intervention, Artistic Research Laboratory, and Experimentation

The term intervention has become quite a buzzword that is highly charged with expectation, often promising exceptional efficacy with relatively little effort, as Borries et al. note in their *Glossar der Interventionen* (Glossary of Interventions, Borries et al. 2012, p. 5). It is also used in many different contexts and meanings. Originating in international law, interventions have found their way into the fields of medicine, economics, education, activism, and the arts, causing more and more vague conceptual contours. Even within the arts, different practices that are

described or self-describe as artistic interventions should be distinguished. One common variant of artistic intervention is using a creative strategy as a tool and placing it within fields of application outside of the arts. Furthermore, artistic interventions as publicly staged scenic acts or performances often imply a notion of subversive, political or societal protest (activism), or of being a corrective action in a state of crisis.

However, the concept of intervention as understood within this research project is that of a disruptive action, *causing* a state of crisis or at least momentary irritation rather than *amending* it. The duo interventions follow the intention to create gaps in a continuum, to interfere with and question established structures as part of my long-term duo practice. They can be deconstructive, but are always envisaged to be discursive, with the focus being on a curious and reflective search for new strategies or alternative solutions. This happens through critical analysis, ideally followed by re-thinking different aspects of our existing practice. In this way, our approach corresponds with the definition of critical interventions by Borries et al., as the overall aim is also not to completely dissolve the existing structures, but rather to temporarily put them in motion (Borries et al. 2012, p. 125).

A key factor to consider was how an interventional approach would affect the inner attitude of the musicians involved. The overall aim was to create an open space and mindset, which allows for alternative perception, thinking, and playing. For us to consciously leave familiar territory and engage in an open-ended experience required an attitude of openness and aesthetic receptivity. This was encouraged by a well-balanced combination of clearly defined frameworks regarding time, space, repertoire, and practical objectives on the one hand, as well as by introducing potentially confounding external triggers in the form of experiments, and thus inviting inconvenience or discomfort on the other hand. It hence resembled a semi-controlled laboratory set-up that heightened our awareness regarding our actions and observations, while fostering an experimental and venturous mindset. Guided by the question of knowledge production through artistic research, Östersjö understands the artistic research laboratory as a place for thinking in and through art (2020a). He draws on the following conception of the

Knowledge Lab curated by Sarat Maharaj for an event at the Haus Der Kulturen Der Welt in Berlin in 2005:

> The Lab is about plunging in, getting under the skin of things to see how they tick from the inside. The atmosphere is of intimacy, immediacy and involvement—not clinical aloofness. We are not standing by watching the presentations as "spectacle." It's a "thinking and doing" mode. We join in, participate, eventually begin to watch ourselves watching. A self-reflexive awareness surfaces building up towards attentive understanding. A sense of analytical observation and critical scrutiny is teased out from probing the processes of making. It gets elaborated in the thick of the performative experience—from within its sticky non-discursive spread—rather than in terms of some off-the-shelf' theoretical programme. (Maharaj 2005, as cited in Östersjö 2020a, p. 121)

This implies an immersion in the performative experience, through which knowledge embodied in the practitioner can be accessed through a process of 'thinking-in-music', which "additionally introduces the possibility of a translation from the artistic, through an understanding of art also as process, towards a translation into a verbalizable articulation of knowledge" (Östersjö 2017, p. 90). In the case of the duo interventions, this translation is generated through dialogical analysis using video stimulated recall, as will be discussed below in section 3.2.1.

The conditions for each duo intervention were kept as homogenous as possible: They all took place in the same space and over the course of three days each. We furthermore chose contemporary repertoire that none of us had been familiar with, apart from practising it individually prior to the respective study. The agreed objective of each study was to realise a video recording of the respective piece, for which we recorded several run-throughs, as well as a live performance, either directly after the working sessions or later in a concert situation. The live performance was recorded as well. This iterative process implied a constant re-assessment of the piece and our musical relationship, as well as enabling us to discover and carve out ever new nuances of interplay, while eluding the ingraining of (new) habits. Pivotal moments in the piece often revealed themselves precisely in the comparison between repeated executions, in that they were either strikingly constant to observe, or significantly influenced and changed by external factors or experiments. This general approach allowed me to identify recurring patterns and themes across all nine studies by way of the analytical approach described in 3.1.2, as well as by comparing results regarding the question of how (quickly) we would be

able to create a sense of togetherness, of *musically being-with*, when particularly paying attention to the relational realm while working on our interpretation.

Experiments in the sense of creative and innovative measures were introduced as outlined in table 3.1, in order to induce instability or interferences, as well as lead to dynamic and productive working methods. The guiding question was always concerned with which aspects of interplay an experiment would affect and if and to what extent it would influence the experience of musically *being-with*. Significantly, the experiments were not strategically planned or premeditated but conceived together in the respective rehearsal situation as the result of an open, collective effort and decision-making process. As such, they were themselves the result of an experimental undertaking, often in response to a specific musical problem, a question regarding interplay, or as an attempt to introduce an unknown variable into the iterative rehearsal process. Concrete examples of those experiments and, in particular, their implications on interplay, as well as the resulting insights into musical togetherness will be discussed in the following sections.

Type of experiment	Description	Aspect of interplay / intention
Spatial dispositions	Taking up different positions and spatial relationships to each other; exploring polarities like proximity and distance, visual contact and no visual contact etc.	Spatial and bodily awareness, acoustic challenges
Improvisational digressions	Improvising on compositional material or a technical problem regarding interplay, that is presenting itself during rehearsal	Detaching from the score, shift focus to and facilitate a shared momentum
Sonic explorations	Includes experimentation with playing techniques and sound production	Intersubjective understanding of sonic intention and expression
Thought experiments	Collectively setting an intention regarding sonority or the conceptual narrative of the piece	Intrinsic attunement and shared interpretative narrative

Choreographed movement	Adding choreographic elements to the interpretation	Additional, embodied dimension of expression of the dyadic relation between the two voices
Physical contact	Enabling physical contact during playing, e.g., sitting back-to-back	Integrating the tactile-kinaesthetic realm of playing
Role play	Conducting each other individually	Increasing responsiveness
Pantomime playing	Executing playing gestures without the instrument	Increasing attention towards our movements, bodily listening, and gestural expression
Interpersonal Exercises	Integrated performative exercises with or without instruments	Embodied interpersonal awareness, building connection and trust
Documentation as experiment	Setting up specific camera perspectives	Enabling focused analysis of specific details of performance, creating a certain analytical framework

Table 3.1. Description of experiments.

A common meta-approach and development could be observed in the rehearsals across most of the duo interventions: As soon as we had clarified the rougher technical questions of the individual voices as well as regarding interplay and established a basic, shared understanding of the piece, which usually took the first one or two hours, the rehearsals began to take on a more experimental character. Not only did we initiate the above-mentioned experiments, but also our general way of rehearsing, of playing and listening, can be described as a jointly developed, experimental duo practice. According to Catherine Laws, the "practice of practicing as an experimental process [can be] defined [...] as oriented towards situations with unknown outcomes. In this sense, the aim of practice is not to pin things down—deciding how exactly to place a note, weight a chord, or develop a 'reading' or interpretation of a word—but rather to hone the ability to respond to the contingencies of sound in the moment of performance" (Laws 2014, p. 289). In the case of ensemble performance, this experimental process of deliberately exploring parameters like sound, tone and resonance, material or playing techniques, is always pursued with the intention of refining the quality of interplay. In this respect it is also extended to modes of dyadic interaction as suggested by the score and our interpretation thereof, as well as bodily dimensions and their effect

on the perception of intersubjective musical phenomena. In fact, it is artistic exploration in this intersubjective realm that offers a special kind of creative potential: Continuously devising artistic responses to the perpetually changing dynamics and challenges of musical relationship means developing and expanding a shared "aesthetic universe" (Vanhecke 2014, p. 92), i.e., the sum of our explicit and implicit knowledge as a duo, as well as our aesthetical experiences and their emotional traces. The aim of an experimental duo practice is therefore not to arrive at concrete interpretative decisions as effectively as possible, but—following Catherine Laws' definition above—to sharpen the ability to productively deal with the contingencies of interplay. Paulo de Assis argues that this kind of experimentation makes interpretation an "epistemic activity", as it "creates space in relation to the score (which would otherwise overdetermine and close down the epistemic potential of performance practice), allowing unpredictable futures to happen" (de Assis 2014, p. 50).[6] In order to actually transform those unpredictable and unexpected incidents that would occur during this explorative work into new aesthetic concepts, experiences and expressive procedures, an important step was to cast them into a systematic analytical framework.

3.1.2 Documentation, Stimulated Recall, and Phenomenological Analysis

In all nine duo interventions, the analytical method was essentially based on a threefold foundation which consisted of repeated loops of documenting rehearsals, sessions of stimulated recall, and phenomenological analysis. This modus operandi was first developed in a pilot study of the piece Charon by British composer David Gorton, hosted by the Doctoral School for Artistic Research of the University of the Arts Graz in 2019, and has consistently proven to be useful in the subsequent studies. Designed as a three-day research residency, the *Charon* study involved

[6] The role of the score and its multifaceted implications for interplay will be discussed in more detail at several points throughout this thesis.

Stefan Östersjö and myself as performers, the composer David Gorton as well as Deniz Peters, who joined the research situation as an additional observer. As such, this residency also marked the launch of the Ensemble Empathy Research Cluster consisting of PhD students and senior researchers at the Doctoral School for Artistic Research and Piteå School of Music.

The rehearsals were documented by means of audio and video recordings, to enable a holistic analysis of the multi-layered interaction dynamics, which was essential for the research aim. In the initial study, this included a stereo audio setup and multiple cameras operated by the filmmaker Jana Tost. In the following studies, a reduced setup with only a single, static camera covering a wide shot was used. With both approaches, it is important to reflect on how the presence of a camera influences the research situation. When a cinematographer is involved, this must be considered as an additional subjective perspective that incorporates their own aesthetic and artistic choices, when later approaching the edited material. As part of the elaborate artistic and technical execution of their work, decisions about which details to capture and which to omit, about the placement and timing of cuts, etc., ultimately result in a certain cinematic narrative. Arguably, the use of a fixed "witness" camera which constantly films in a long shot can lend a certain layer of objectivity to the material and its analysis, as it seems to represent a more neutral view. However, it is important to acknowledge that there is still a choice of perspective implied.

In particular, the spatial and bodily aspects of performance and interaction received increased attention through the visual part of the documentation. The mere presence of a camera made us more aware of the physical space we inhabited and of how we acted within it. This led us to actively include that space as a research variable and use it as an experimental field. I will discuss below how in some of the duo interventions, we started to intentionally work with different levels of movement and gesture and to take different positions in relation to each other in the space, while examining how this affected the musical interplay. At the same time, the combination of spatial conditions, camera settings, lens angles and focal width restricted the way we could position ourselves and move in that space, so as not to be out of frame. Hence, the way the documentation was undertaken

significally influenced the research process and led to a particular accentuation in the findings discussed below, especially when it comes to embodied aspects of joint performance.

However, when a normally private and closed situation such as the (early) rehearsal phase of a new piece is the subject of documentation and research, the fundamental question arises as to how much social and musical interaction are influenced by methodology. In other words, concerns could be raised about the objectivity or social construction of the research results. Were the rehearsals characterised by more, or less, verbal exchange, interpretation-finding efficacy, expression of mutual criticism, or even by different artistic aspirations, due to the fact that every step was recorded? Not to mention the impact of the research questions, which we discussed in advance of the rehearsals to create a shared understanding and clear focus of the work, albeit with open-ended objectives. Drawing on Bruno Latour's notion of the social construction of scientific facts (Latour & Woolgar, 1986), Stefan Östersjö argues in this context: "Artistic research, as well as collaborative work in ordinary artistic practice, is also a matter of 'fact-construction'. It is crucial to acknowledge this aspect of the results from the empiric studies: when, for instance, aspects of performance practice are defined, the processes leading up to these results must be laid open for deconstruction and new readings" (Östersjö 2008, p. 11). This is especially relevant, since this research deals with highly individual, interpersonal duo constellations that are very momentum-based in their relational dynamics. At the same time, they are bound to the musical frame of reference of the respective piece of music the duo is dealing with.[7] Thus, the (musical) relationship cannot be viewed as entirely isolated anyway but is determined by fundamentally constructive factors. The epistemic validity is therefore dependent on the authenticity of the relational manifestations, as well as the reflexive contextualisation and integration of the experienced relational

[7] Here I am referring to modes of interaction that are structurally incorporated in the composition and provoke or constitute the relationship insofar as they pose a potential relationship question that is answered in the process of interpretation, as discussed in more detail in section 3.2.

qualities with the musical material and the emerging musical phenomena. Herein lies the strength of this artistic-research approach, since it allows “spaces of possibility and worlds [to be revealed and analysed] that lie outside the realm of scientific justifiability and yet form facts that cannot otherwise be uncovered.” (Mersch 2015, p. 29)

Analysis and reflection on the collaborative rehearsal process were facilitated by sessions of stimulated recall, a method coined by Bloom (1953). In these sessions, which interpunctuated the rehearsals, the recorded material was viewed by all involved researchers together and analysed using the qualitative data analysis software (CAQDAS) Hyper Research for open coding, an analytical approach drawn from grounded theory (Strauss and Corbin 1990), in which descriptive labels (codes) and annotations are applied to selected video sequences by timecode (see Figure 3).

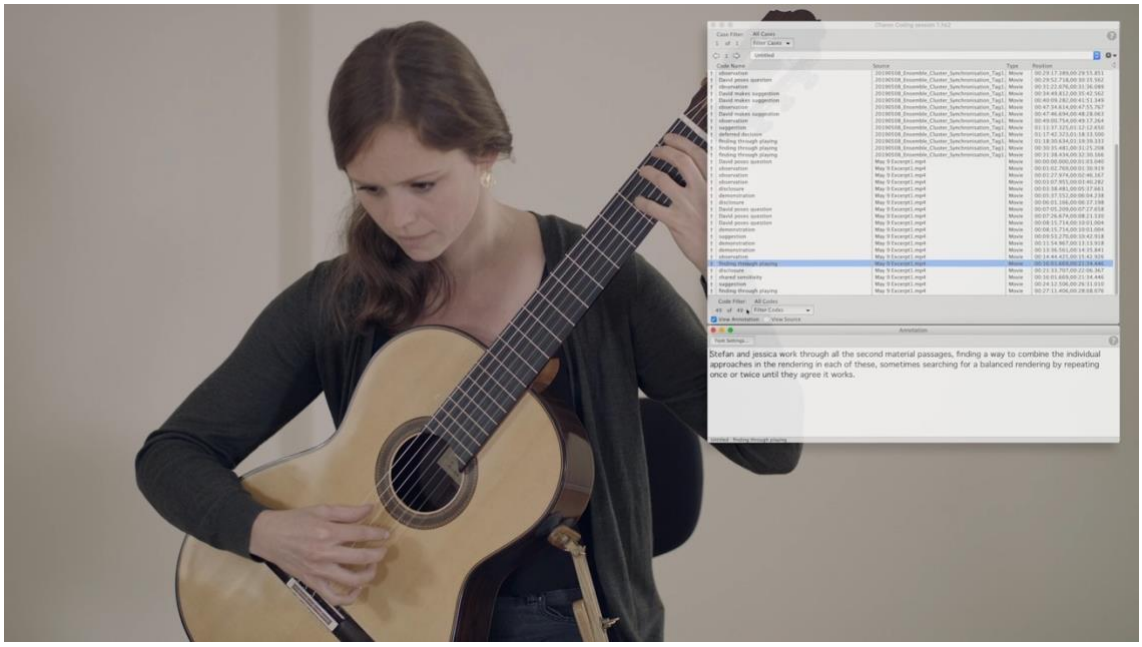

Figure 3. Coding and Annotations in HyperRESEARCH.

In the case of the *Charon* study, the selection and detailed wording of the codes and annotations were negotiated between all four researchers and therefore include all respective perspectives as composer, performer, and observer/listener. This coding process has substantially shaped and inspired further thinking and work, with individual codes even feeding into subsequent studies. The aim of this

analysis was to evidence different types of relationality by making explicit the tacit, intersubjective knowledge inherent in our interaction. In terms of a phenomenological approach, this was pursued through communicating, reflecting on, and later conceptualising the individual's perception and subjective experience with emphasis on relational qualities of musical interplay. Moments with a sense of commonality in the relational experience were of particular significance. Given the relatively small sample of duo interventions, this idiographic approach seeks an in-depth understanding of particular, (inter-)subjective phenomena, while in combination with an interpretational attitude towards analysing the material, it enables the development of rich accounts of musical relationality. The iterative and inductive process of noting, listening/watching and re-listening/re-watching, coding and re-coding, resulted in the emergence of themes, representing the essence of experiential narratives and their joint interpretation. Through their systematic assessment and examination, we were able to identify relations and patterns of similarity across the rehearsals.

Beyond the discursive output of this method in the form of codes and annotations, the stimulated recall sessions were closely interwoven with the artistic practice. The analytical insights were continually incorporated into new rounds of rehearsals within the above-mentioned practice-reflection-loop of rehearsals and analyses, by prompting questions or resulting in new rehearsal strategies. Furthermore, the intersubjective dialogue facilitated a joint approach to the material, paying attention to the same phenomena, developing a shared listening through sharing experiences and negotiating precise readings and meanings, and above all formulating shared values in relation to interplay. These processes eventually proved to be vital extensions of the artistic practice, blending into each other based on a reflexive attitude.

3.1.3 Questionnaires

Reflexivity permeating practice is a crucial response to dealing with matters of subjectivity in artistic research. While uncovering and articulating implicit 'insider'

knowledge is one of the central objectives within artistic research (Borgdorff 2011, Crispin 2015, Peters 2017), the seamless transition between research subject and object requires a certain sensitivity towards my role as artist/researcher and an awareness towards how my own (first-person) perspective, informed by certain theoretical, epistemological, and ontological assumptions, interacts with the perspective of the respective duo partner. To address this, I developed questionnaires for the participants in the studies on Pisati's *Sette Duo.* The questionnaires are supposed to amplify the voice of the participants, but are also intended as a tool to further stimulate a reflective and reflexive practice. In addition to inquiries about the participants' chamber music background and experience, the line of questioning was also designed to introduce the research aim with clear reference to practice, both in general and specifically in relation to the piece in question. It also encourages reflection on the research situation in terms of its impact on the rehearsal process and the participants' own behaviour, attentiveness, and communication. This provides insight into how much the situation might deviate from the participants' usual rehearsal experiences. Care was taken at the same time to formulate the questions in a non-judgemental and open-ended way to allow a wide range of possible responses. The questionnaires were answered on a voluntary basis by all but one participant. All filled out questionnaires are enclosed in Appendix B.

3.2 Musical Twoness in Contemporary Duo Repertoire with Guitar: Score, Instruments, Material, Bodies and Sound

A central claim of this section is that socio-musical interaction in a duo is significantly influenced by the characteristics of the respective piece in terms of the relationship between the two parts, as grounded in the compositional structure and musical material. McCaleb (2022) describes the interweaving of chamber music repertoire and chamber music as an activity on a very general level as follows:

> "Designed for a small number of performers, chamber repertoire features musical lines which generally move independently of each other. The balance of complication and importance across the parts within a piece of chamber repertoire is particularly important, as this interplay provides the template upon which the purported intimate social relationships are founded. […] In […] chamber musicking, pieces are generally designed to encourage performers to interact in such a way as to generate egalitarian relationships." (McCaleb 2022, p. 28)

McCaleb sees nuanced interplay based on a balance between the voices in terms of their musical relevance, technical challenge, and complexity as the underpinning factor for such relationships to emerge (ibid., p. 32). In literature on the canon of chamber music repertoire, too, this balance between the parts is repeatedly invoked as a sought-after compositional quality (Radice 2012). Also, in the context of this research, it was important at first to deal with works with flat hierarchies that facilitate egalitarian encounters in that way and thus offer a wider range of possibilities of interaction and interpretative directions. Within chamber music repertoire involving the guitar, this is for the most part only true for works from the 20th century onwards, as during this period the classical guitar significantly evolved as an instrument, in its role and relevance within the musical world, as well as in terms of performers' proficiencies and playing techniques. Hence, contemporary duo repertoire was selected. This had the additional advantage of unfamiliarity and lack of ingrained conventions reducing potential biases and habitus, while conversely offering or even requesting more experimental freedom, e.g., in terms of playing techniques. Different instrumental combinations were considered, covering both the same instrument (guitar duo), instruments with heterogenous characteristics, as well as guitar and voice.

In the following, I will examine the processes of interpretation in the duo interventions, or more precisely, how an interpretation takes shape that is oriented towards the premise of musical twoness and deliberately foregrounds the relational dimension of the interplay. However, in addition to the question of whether and how the compositions were designed to encourage specific kinds of interaction and evoke certain relationships, it is necessary to have a more differentiated look and elaborate the many different forms and levels of dyadic interaction in the sense of an ecology of performance. The analysis is structured on the basis of three major projects, centring around three main works: *Charon* (2015) by David Gorton, *Mundus Canis* (1998) by George Crumb and *Sette Duo* (1993-2007) by Maurizio Pisati. It focuses specifically on the forms of dyadic relationship between the two parts as presented on the level of each piece's compositional-structural disposition. In addition to the musical material itself, the factors of instrumentation and instrumental affordances and constraints, and their implications for producing and shaping (a shared) sound are then also considered in this discussion. I will give detailed examples of their nuanced effects on the relational level of a shared interpretation and performance. Finally, these observations flow into a reflection on how duo interpretation is to be understood in the field of tension between the role of the score and the sphere of performance.

3.2.1 *Charon* (2015) by David Gorton with Stefan Östersjö, Guitar

The title of the composition *Charon* by British composer David Gorton refers to the larger of Pluto's moons, with which Pluto forms a binary system with the barycentre of the orbit positioned outside of either body. The piece was composed in 2015, when the first detailed photographs of Charon's surface were taken by the New Horizons space probe. Inspired by this binary system, the compositional material in *Charon* preconceives different types of duo interaction. The overall structure of *Charon* is mainly distinguished by three different and alternating compositional materials, with those respective sections being interposed by a refrain-like interchange of chords. The piece ends with a coda that takes up

individual elements of the previous materials while reducing the textural density, until the piece comes to a close.

Both guitars are to use a micro-tonal tuning system (see Figure 4a), for which strings 1, 3, and 5 are detuned a sixth of a tone sharp or flat relative to standard pitch. These microtonal pitches are found by tuning one string to the naturally flat seventh harmonic (approximately one sixth of a tone flat) produced on another string, as shown in Figure 4b. Whereas usually on the guitar one would have several options to produce a certain pitch, which means that fingering choices also accentuate a particular shaping of the musical material, the micro-tonal tuning system in most cases eliminates those options: Choosing a different string and fret for the same note would result in a slightly different pitch. Therefore, the indications in the score regarding string and fret are exceptionally specific, resulting in rather constricting conditions for the players. This circumstance affects how the performers confront the material as well as how their voices relate in a surprising way, to which I will return at a later point in my line of argument.

Figure 4a. Tuning of the guitars in *Charon*.

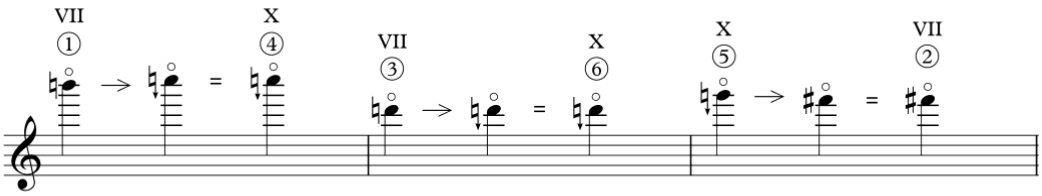

Figure 4b. Instructions for implementing the tuning system for *Charon*.

During our rehearsals, mainly two different modes of duo interaction emerged from the compositional material. On the one hand, sections of temporal alignment require togetherness in the sense of rhythmic unison as well as producing a consistent and coherent sound, whereas on the other hand, rubato sections encourage individuality regarding timing and shaping in the single voices.

Gorton and Östersjö (2020) have already elucidated in detail the process of how we explored and analysed those different modes of duo interaction proposed by the composition. In particular, they focused on how individual voices of performers and composer are combined and negotiated during our rehearsals and performance of *Charon*, in regard to their model of the formation of a 'discursive voice', which emerges from the processes of composer-performer collaboration and is described as "a complex entanglement of individuals, and their co-engagement with instruments, notation, and shared contexts and practices" (p. 76). They further suggest that this discursive voice is substantially facilitated by a process we coded as finding-through-playing, which represents shared decision-making during rehearsals and in which "negotiations are embodied and situated in the performative domain of musical creativity" (ibid.).

Using the same jointly developed coding, I would like to add to their analysis by enhancing the idea of musical twoness, in order to forge a bridge between the compositional material and the musical and interpersonal relationship between the performers. I will attempt to further develop the understanding of those moments we labelled as finding-through-playing and reconcile it with the concepts of dialogical playing and musical togetherness as outlined in chapters 1 and 2. For this purpose, I will scrutinise our approach to the material that is first established from bar 11. As Figure 5 shows, irregular lines set against each other are marked *espressivo e con molto rubato*, with short bar lines indicating that precise synchronicity between the two instruments is temporarily suspended.

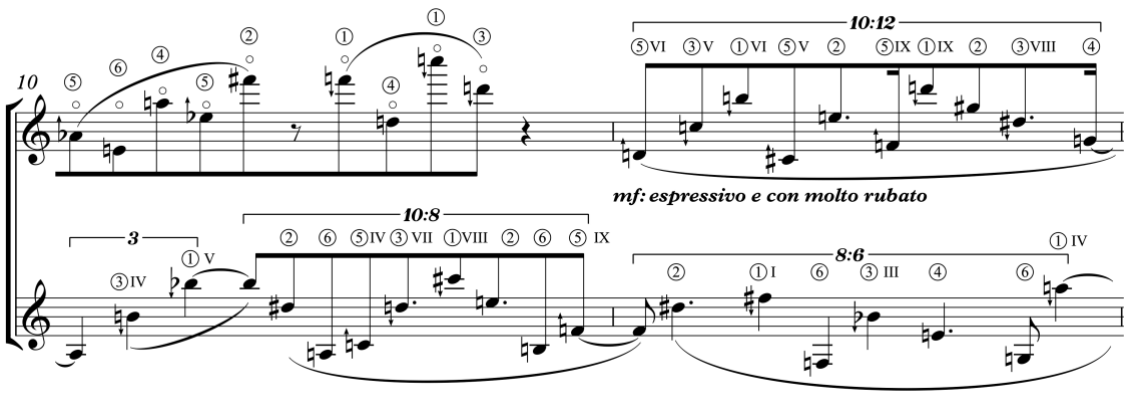

Figure 5. *Charon*, bars 10-11.

A first glance at the score already reveals an interesting paradox: while the short bar lines paired with the rubato indication encourage temporal flexibility both individually and between the voices, a complex rhythm is specified by precise ratios and thoroughly set vertical adjustment of the voices. Before our first rehearsal in Graz, Stefan and I made separate recordings of our respective parts and shared them with each other, in order to enable a further study of our individual approaches to the piece. Those recordings already document a considerable difference in how we individually read and tacitly interpreted the material in question. While Stefan approached the material as polyphonically layered chordal structures, I focused on the leaps in the melodic structure and conceived of it as a singular line, which obviously resulted in different use of rubato, but also drew distinctions in the length of phrasing, the use of sound colours and vibrato. The restrictive character of the notation lets this appear as even more striking.

During our rehearsal, we explored this open question of interpretation raised by the score regarding the possibilities of interplay it might engender. Through our analysis of the videos (see video example G1, 14:04, 17:54), we were able to identify six main codes: “DG [David Gorton] question” and “observation”, “disclosure” and “demonstration”, “finding through playing” and “shared sensitivity”, which Östersjö and Gorton put into a continuous narrative in the diagram shown in Figure 6.

Video example G1. *Finding Through Playing*. Artistic Research Documentary with the Ensemble Empathy Research Cluster. https://jessicakaiserguitar.com/videos/g1

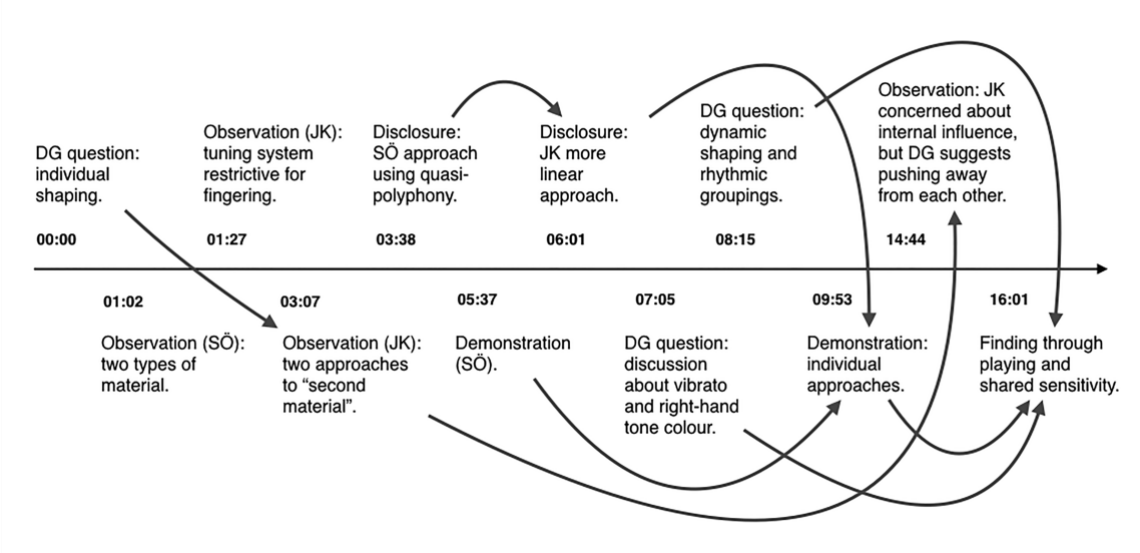

Figure 6. Working towards a shared understanding of the "second material" (Gorton and Östersjö 2020, p. 74).

Three (not necessarily consecutive) levels of interaction mark the evolving qualitative changes in interplay that define the process of how we negotiated a shared understanding between us as performers, but also between performers and composer: The first level involves the examination of the score as a *guiding framework* regarding any preconceptions for the duo interaction. In the given moment of rehearsal, the implicit proposition of the score was impersonated by David Gorton, who stated that "in some ways the composition is restrictive but turns the question to the two performers asking how a space for individual shaping can be created" (annotation of Code "DG question"). It also entails the code "observation", referring to acknowledging the different approaches the two performers tacitly chose to the material. A series of questions by the composer regarding specific aspects of our individual interpretations are then followed by verbal "disclosure" and practical "demonstration" of the individual approaches, engaging the performers in a discussion on how to deal with this divergence. Since both versions were rendered equally valid, instead of levelling them, they were both put forward, underlining the egalitarian disposition of the duo relationship. Sustaining their opposing character increased "the inner dynamic of the performance", as proposed by David Gorton.

This differentiated approach was put to the test in several executions of the different passages holding this material, until an integrated version was attained

through a process we afterwards described as “finding through playing”. The integrated version did not resolve the quandary by merging the individual approaches in the sense of a compromise. Instead, a “shared sensitivity” was established despite, or rather because of, each person pushing in opposing directions. In terms of twoness, a new level of dyadic relation unfolded through our interplay, which reached beyond what was laid out in the score. As video example G1 shows, this new level of interplay could be evidenced based on a subtle dovetailing in timing and sonority, through which the contrasting solutions built a coherent continuity together (video example G1, 21:04-21:28). As the code “finding through playing” suggests, this could not possibly be communicated by words but happened in immediacy through integrated playing and listening. A paradoxical togetherness through non-togetherness took place in the elusive space of the interpretative co-creative process located between what is conveyed by notation or indications in the score, and the sounding result.

In terms of twoness, a clear field of tension could be observed with the compositional layout. Precisely in view of this tension, the twoness emerging through our interplay was perceived as an even more significant achievement, as it was actually found together and arose from a mutually empathetic process. While both different interpretive approaches were acknowledged in their essence, a fundamental sense of ‘We’ was achieved. This achievement was reflected even more strongly as a sense of togetherness, evident in both in the quality of the musical interplay and in the intersubjective experience. When evaluating the musical interplay, it is hence crucial to consider this felt quality of intersubjectivity and togetherness. It reaches beyond the limits of what can be negotiated extrinsically, thus offering an enhanced perspective on the concept of the discursive voice as developed by Gorton and Östersjö.

An intersubjectively grounded and nuanced interplay became even more evident in further performances of *Charon* at the Symposium *Who is the ‘I’ that performs* at *Tinnenpot* theatre in Ghent, Belgium, in November 2019 (see video example G2), as well as during the Performance Studies Network conference at the University of Surrey in July 2022. Furthermore, refined individual playing technique as well as increased acquaintance with the other’s part after revisiting it in prior

rehearsals enabled us to promote our individual ideas more confidently. The detailed comparison of these and possible future performances in the form of a longitudinal study on how our interplay has developed over time will be the subject of further research.

Video example G2. *Charon* by David Gorton, live performance at Tinnenpot Theatre, Ghent (BE). https://jessicakaiserguitar.com/videos/g2

3.2.2 *Mundus Canis* (1998) by George Crumb with Manuel Alcaraz Clemente, Percussion

In order to give more space to the role of instrumentation and instrumental affordances with regard to the musical relationship, in the next phase I chose repertoire that provided diversity in this respect. As a next duo project, I worked with percussionist Manuel Alcaraz Clemente on *Mundus Canis* ("A Dog's World") (1998) for guitar and percussion by George Crumb. Just like *Charon*, the work *Mundus Canis* is rooted in a programmatic theme. The composer himself describes it in the programme notes of the score published with *Edition Peters* in 2000 as

> "five canine humoresques, each being a portrait and character study of one of the Crumb family dogs. I have always known that dogs, like their biped masters, have various and distinct personalities. The addition of a percussionist, who supplies a specific instrumental color for each piece, helped me to delineate each canine character." (Crumb 2000, preface to the score)

Written while Crumb was contemplating the composition of a solo piece for guitar, *Mundus Canis* is in a sense conceived as five short and concise character pieces with the guitar part at their centre, which in some of the movements, according to the composer, is "punctuated" or "complemented" (ibid.) by the

percussion part. It seems surprising at first that duo pieces are used to characterize individual dogs. The interaction of the two instruments takes on various functions in this respect, as will be shown in the following analysis: it ranges from a mutual sustaining or blending in the sense of a newly emerging unity, to the generation of an inner tension which adds creative value in portraying a more complex canine personality, to the simple representation of the interaction between the dog and its master.

In each movement, the percussionist is instructed to use a different, very specific, sometimes rather uncommon, somewhat primitive (set of) instrument(s) with distinct sound qualities, such as two maracas of slightly different pitch, a pair of claves or a *güiro*: a notched, hollowed-out gourd, which can sound very diverse depending on its material and construction. Additionally, it is noted in the performance notes that "all of the percussion instruments must be of the finest quality, with clear and sonorous projection and bright timbral characteristics" (Crumb 2000, performance notes). On the level of interplay, but especially in dealing with sound quality during rehearsals, the percussion part effectively serves as a catalyst for specific sonic characteristics of the guitar. However, in terms of relationality, the percussion part cannot be reduced to a subordinate function, an observation which shall now be further elaborated by identifying the essential relational dispositions of the individual movements on the basis of the musical material.

Admittedly, at first glance the difference in textural density between the rather rich and differentiated guitar part and the percussive interjections and accompanying figurations suggests such a hierarchy. But already in the first movement, *Tammy,* a more balanced perception and interplay of the two voices is encouraged through delicate handovers and complementary passages, as well as temporal overlaps. In the first phrase (Figure 7), and then multiple times during the movement, the arrows between the staves indicate the precision in timing and cueing when taking over from the other voice, which means synchronising the diffuse sound of the two maracas with the precise attack of the guitar. The excerpt in Figure 8, on the other hand, shows how the two maracas sustain the musical gesture of the guitar, albeit with a very different timbral quality.

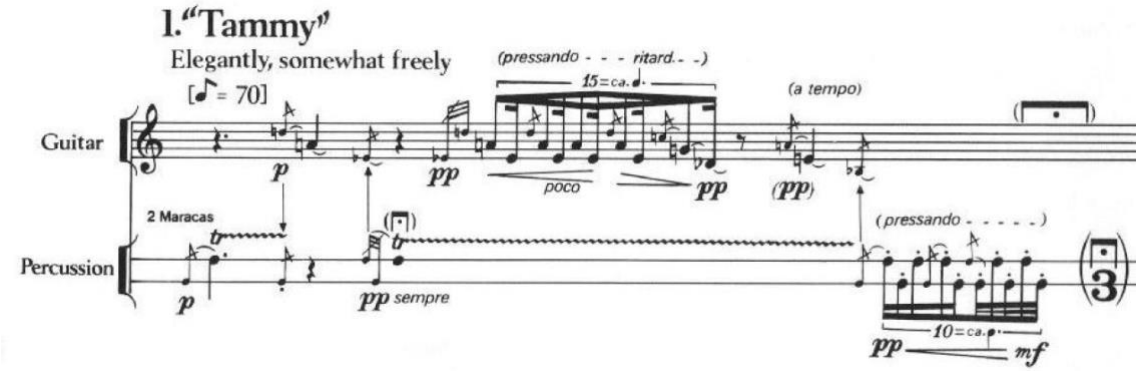

Figure 7. *1. Tammy*, first phrase: arrows.

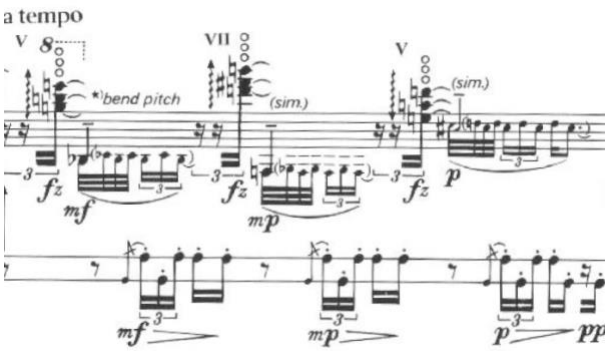

Figure 8. *1. Tammy*: shared/distributed musical gesture.

Fritzi, the second movement, is characterised by a provocative, "impetuous" (Crumb 2000) competition between the two parts over the same material, consisting of percussive effects on the bodies of the guitar and the frame drum (Figure 9), as well as scraping effects on strings, metal struts and the membrane (Figure 10). The opposing dynamic is temporarily interrupted by a middle section with strong inner tension due to the close interlocking of the voices, which increases into a joint forward thrust both in tempo and dynamics.

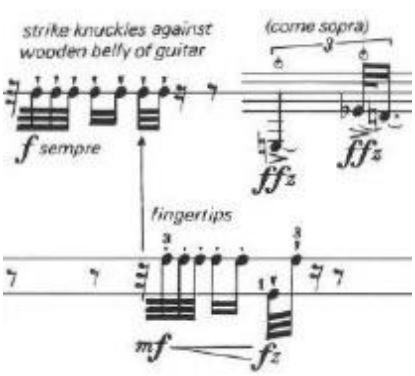

Figure 9. *2. Fritzi*, percussion motives.

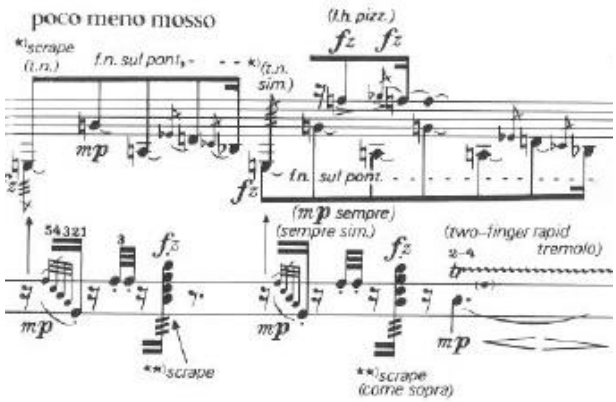

Figure 10. *2. Fritzi*, scraping techniques.

Heidel is a profound, almost metaphysical movement in which sonority is paramount. It resembles a joint sound bath—quite literally because it involves a water gong (a gong struck while lifting it in and out of a container of water), producing a glissando effect. This is matched by bottleneck glissandos and left-hand bending in the guitar part. Together with assimilating tremolo techniques (Figure 11), this gives rise to a compound or even blended sound entity, even though the two voices hold very distinct roles and densities.

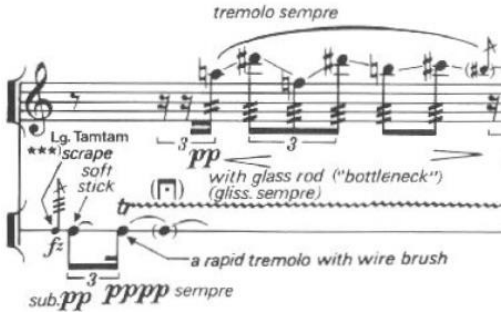

Figure 11. *3. Heidel*, corresponding tremolos.

In the fourth movement, *Emma-Jean,* the compositional scheme again corresponds closely to Crumb's initial description, in that clave interjections deliberately punctuate the guitar's melodic line, while suspended cymbal sounds take on a structuring role and abruptly set a different tempo and mood for more sustained, hesitant guitar reflections in between (Figure 12).

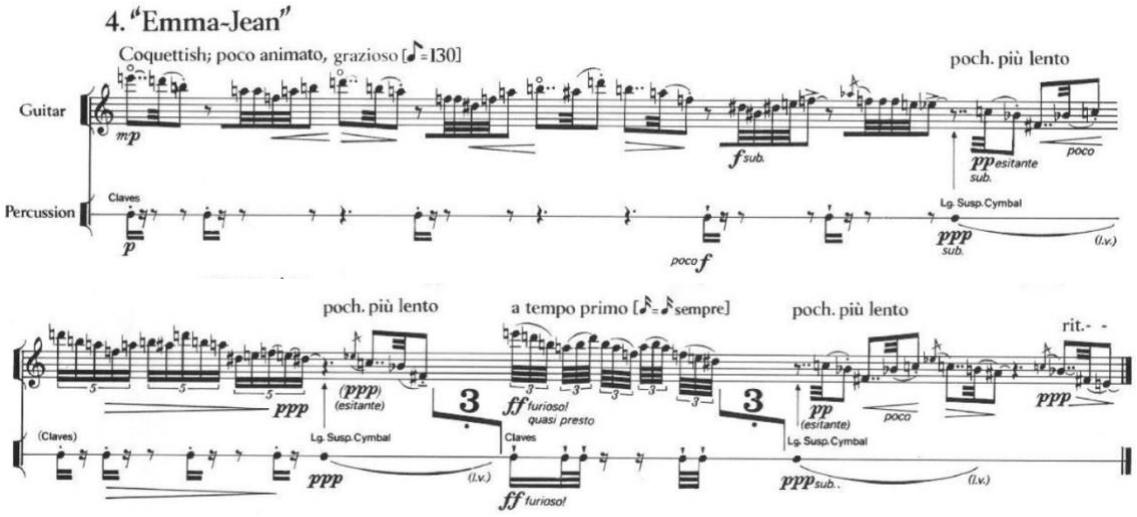

Figure 12. *4. Emma-Jean*, contrasting roles of claves and cymbal.

Finally, the last movement, *Yoda*, endures more tension again. The guitar part evokes a very agitated and capricious, *scherzando* character, and continually eludes regulation by the very repetitive and insisting percussion motives, especially when the acoustically dominant castanets enter (Figure 13). At the end, the movement closes in resigning discord, with the percussionist speaking the scolding words "bad dog!" (Figure 14).

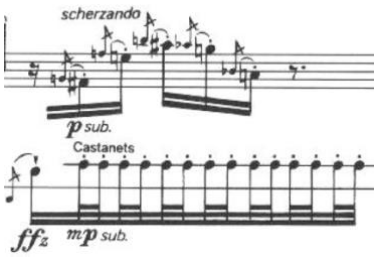

Figure 13. *5. Yoda*, enter castanets.

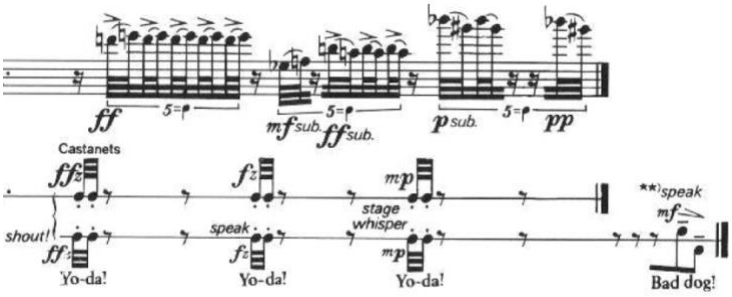

Figure 14. *5. Yoda*, ending.

This brief analysis already shows how strongly structure and sound are interwoven in this music. In the following, I will draw an even more differentiated picture of inherent musical twoness by examining how the levels of musical material, structure and sound are interconnected in how they constitute or contribute to this twoness. This connectedness also reflects two key concerns of Crumb's compositional style: an emphasis on precise notation, which also represents meaning, as well as the exploration of timbre by use of experimental playing techniques. More so, in the later, more mature music by Crumb from 1962 onwards (*Five Pieces for Piano*), an extended concept and use of timbre can be seen as a central structuring element, on which the permutatively treated and imaginatively organised motivic cells are based (Krämer 2022). In terms of interpretation and performance practice, the experimental treatment of sound production and playing techniques results in an aesthetic emphasis on sound quality, in the search for new and evocative sounds, as well as subtle timbral colourings and changes. The prominent place of this aspect in *Mundus Canis* also became the focus of our interpretative process as a duo: to realise the concise character of each movement through developing a precise, intersubjective understanding regarding a shared sonic intentional aim and expressivity.

As for timbre, a thorough literature review of the study of this phenomenon in the fields of acoustics, music psychology or computer music would be beyond the scope and purpose of this study. Instead, I will point to different approaches that seem relevant to our duo interaction while working on *Mundus Canis* by George Crumb. There is a common, two-layered understanding to timbre, which certainly contributes to the following considerations: First, it concerns the instrumental timbre and thus the broader sonic characteristics of an instrument type (plucked, bowed etc.). Second, on a more granular level, the perception of timbre is based on certain aspects of a sound, its harmonic spectrum, behaviour of partials, attack, sustain or noisiness (Helmholtz 1954, Bregman 1994, Kleiner 2012). In addition, other sound properties like pitch, intensity, or articulation, as well as time and space, may affect or interrelate with timbral qualities, implying a multidimensionality of sound quality and its perception (Murail et al. 2003, Nancy 2007). Magda Mayas (2019) in her artistic research on *Orchestrating Timbre* in improvisational piano performance introduces an "extended understanding of timbre, articulating relationships between space, material, and movement/body as non-hierarchical and non-separable agents" (p. 35), which reveals and realises its performative qualities and potential.

In this sense, Mayas' approach also acknowledges the subject-object relation between performer and instrument when it comes to timbral experimentation, as well as the role of the technique as to "be thought of as always *idiosyncratic, multisensory*, and *continuously reinvented*. Given that I perform sound in active relation to objects, the instrument, my body, and the space, such an approach is crucial […]" (ibid., p. 54). A musician's ability to manipulate the sound of their instrument in general and timbre in particular, e.g., in terms of distribution of overtones, sustain, etc., can also be understood through the notion of affordances (and constraints) of their instruments, bodies and environments. As Windsor (2017) argues: "Affordances are not determined by object or subject, but through their relationship: a principle often described as mutuality" (p. 115). This suggests great aesthetic potential in discovering affordances through deliberately exploring techniques and relational aspects of sound production.

Given the very specific instrumental configuration described above, instrumental affordances also played a central role when working on *Mundus Canis*. The phenomenological analysis and coding of our rehearsals evidenced how creating a jointly shaped, refined sound quality requires subtle interaction on several levels, manipulating multiple aesthetically relevant, sonic parameters at the same time. During early rehearsals, we first had to establish a mutual understanding of the affordances of the individual instruments, especially the more unusual percussion instruments. On the analytical level, this is represented by the codes "demonstration" and "mutual understanding", wherein demonstration implies verbal explanations and practical demonstrations of material properties of the instrument and/or playing techniques and mutual understanding refers to negotiations between the affordances of guitar and percussion.

This concerned, for example, the diffuse sound and delicate responsiveness of the maracas in the first movement (video example C1), ways of hitting the water-gong in the third movement (video example C2), the sustain of the cymbal as well as the precise attack and extreme dynamic range of the claves in the fourth movement (video example C3), as well as the sharp rattling of the *güiro* in movement five (video example C4). While the claves can be played at a surprisingly low volume, hardly any dynamic or tonal differentiation is possible with the *güiro* without it losing its distinct sonic characteristics, just like the castanets; which is why in this case, we went for a more diverging relationality between our individual sonic expressions. Marked by the code "finding through playing", these demonstrations were followed by a process of joint exploration. This process is mainly based on subtle mutual adaptation of sound quality, finding a shared sonic expression through empathetic relation. This effect can be traced following the respective video excerpts of takes of early and later or final stage rehearsals. It becomes perceptible how we adapted our sound production in a granular process either mono- or bidirectionally, in terms of volume and dynamics, attack and articulation, sustain and other timbral nuances. In other words, the subject-object relation between performer and instrument must be thought of as enhanced by another level of relationality: by responding to the instrumental affordances and timbral qualities of the other, we explored subtle

timbral changes and were even able to stretch our own instrument's affordances, situating aesthetic potential in the relational realm.

Video example C1. Demonstration maracas.
https://jessicakaiserguitar.com/videos/c1

Video example C2. Demonstration water-gong.
https://jessicakaiserguitar.com/videos/c2

Video example C3. Demonstration cymbal & claves.
https://jessicakaiserguitar.com/videos/c3

Video example C4. Demonstration *güiro*.
https://jessicakaiserguitar.com/videos/c4

The sonic relationship described here involved adapting single or multiple aspects of very distinct instrumental timbres and sounds to achieve a coherent and converging compound, in which differences are still recognisable. Another edge case within a matrix of relationality would be uncompromisingly sustaining such differences and enduring their inner conflict, as happens, for example, in movement five (see above). Furthermore, in the second movement, we tried to find ways to counteract each other and create tension while playing the same material and producing similar sounds, which we interpreted in the form of a competitive effort—we also explored this aspect further through joint improvisation based on the compositional material. In other instances, we aimed for the full fusion of sound

despite different timbral conditions. I will go into details about resonant sonic phenomena in section 3.3.1 Sound and Resonance.

As the final live recording of *Mundus Canis* (video example C5) shows, sophisticated duo interaction guided by timbral qualities concerns multiple dimensions. It is intricately connected with instrumental and material affordances, including the performer's skills and technique, and requires nuanced perception as well as the ability to precisely manipulate and control sonic parameters while responding to one another. Hence, it also reaches into the realms of timing and phrasing. While subtle changes were initially provoked, perhaps negotiated, and implemented through deliberate experimentation and analysis, sensitive and profound togetherness on the level of sound and beyond was ultimately achieved through "finding through playing", a joint process defined by immediacy, attentive listening, and mutual, flexible adaption,[8] encompassing all musical parameters and layers of interplay. Again, I will dive deeper into these complexities in section 3.3 by discussing the aesthetic implications of our artistic experimentation in terms of an enhanced understanding of musical togetherness.

Video example C5. *Mundus Canis* by George Crumb, recorded in Graz, November 2019. https://jessicakaiserguitar.com/videos/c5/

[8] Cf. also Manuel's answers in the questionnaire, where he explicitly mentions listening, flexibility and adapting as central concepts to his understanding of (our) interplay, see Appendix B.

3.2.3 *Sette Duo* (1993–2007) by Maurizio Pisati

The next step was to scale up the methodological approach and apply it to a larger number of samples. *Sette Duo* by Maurizio Pisati is a collection of seven duos for guitar plus different instruments or voice, which originally are part of the instrumental opera *Theatre of Dawn*, but also were published as independent concert works. In the individual duos, the guitar is joined by viola, voice, double bass recorder, double bass, saxophone, bass clarinet and percussion. The duo partners selected for the studies consisted partly of members of the Schallfeld Ensemble Graz, partly of other internationally recognised musicians specialising in contemporary music; for their biographies, see Appendix A. The seven studies, each lasting for three days, commenced in January 2020 and, due to interruptions caused by the Covid-19 pandemic, spanned a period of just over one year. Finally, in February 2021, all seven duos were presented in a concert entitled *interplay—interference* as part of the SONify! Festival for Music and Artistic Research at MUMUTH, University of Music and Performing Arts, Graz. For the full recording of the concert see video example P1.

Video example P1. *Sette* Duo by Maurizio Pisati at SONify! Festival 2021.
https://jessicakaiserguitar.com/videos/p1/

Similar to Crumb, Pisati understands his composing as "research of sound" (Pisati 2007) and deals with the individual instruments, their relationship and treatment of sonic affordances in a very differentiated way, while pushing the performers to the limits in terms of sound production and instrumental technique.

The guitar part of the duos is in fact developed from Pisati's *Sette Studi* for solo guitar. These studies are characterised by a compositional search for new sounds on the guitar, deriving from an improvisational approach and concerned with "ordinary and internal (inner) sonorities of the instrument" (Pisati and Casoli 2023, p. 19). Pisati treats the guitar very idiomatically, without using any external objects or modifications, but rather exploring sonic properties hidden inside the instrument. This results in often very quiet and delicate sounds, as well as dense and rhythmically complex motifs. Tremolo and *tremolando* techniques, of various *glissandi,* muted notes, harmonics, tapping, percussive effects or squeals that are produced by scratching the strings with fingernails, produce a rich palette of sounds and timbres. In a process spanning 14 years, Pisati transformed each of these studies into a duo with a different instrument. The guitar part was modified and reworked to sonically relate with and create timbral references to the respective partner instrument. This kind of timbral exploration and evocation is reminiscent of George Crumb's *Mundus Canis* discussed in the previous section. On the level of interplay, but especially in dealing with sound quality, the percussion part effectively serves as a catalyst for specific characteristics of the guitar. Similarly, Pisati creates very differentiated timbral relations between the respective instruments in the musical material of each of the *Sette Duo.* However, the duos to some extent still display a coherent compositional style, as well as multiple internal cross-references across each other, which also enables a comparative approach within a meta-analysis.

In this section, I will first examine the duos with regard to their compositional structure and how they can be considered instrumental music theatre. The gesture-based disposition of the pieces is particularly relevant here. Thereafter, I will discuss how this guided our experimentation and interpretive process, especially in terms of how we dealt with sonic relations and the physical dimensions of interplay. More detailed and thematically structured insights into our coding sessions and analyses, including references to video examples, will be given in section 3.3. I will not elaborate on each duo in a linear and comprehensive way, as an extensive analysis of more than 70 hours of recording material would go beyond the scope of this thesis, but rather give exemplary insights into representative particularities and

findings, as well as similarities and differences across the single studies. In doing so, I will be guided both by the first instance of coding of the video material together with the duo partners, as well as by an additional coding layer that I carried out later as a comparative and consolidating meta-study.

In the programme notes, the composer describes *Theater of Dawn* as a "fantasy theatre" in which the music captures the indefinable moment between night and day in the northern Italian Alps: In this mystical hour, seven "spirits" of alpine legends meet in an abandoned mountain house, each of which is portrayed by one of the seven duos. Their characters are built on abstract associations like "nightmare, winter or danger" or hint at specific storylines from those legends. The dramatic content is conveyed without any words, but by hand gestures, signs and sounds (Pisati 2007), which strongly corresponds to the genre of instrumental music theatre (see further below). In the theatre version, an emphasis on gestures as a paramount expressive element is reinforced by performance instructions for the guitarist, to be placed behind a screen while their hands are being filmed and projected onto it. Pisati considers the movements required to produce a certain sound or musical gesture an integral part of the piece: "The guitar is *the* theatre stage: the hands' dance generates the music" (Pisati and Càsoli 2023, p. 21). Understanding the duos as instrumental music theatre served as a stimulus for our interpretive process as well as concrete experiments.

The concept of instrumental music theatre developed around 1960 and is rooted in the efforts of composers such as Schnebel, Kagel, Berio, Ligeti and Stockhausen to foreground the underlying *processes* of music making, of *producing* tones, sounds and noises. As Pittenger (2010) puts it: "Instrumental music theatre is music that makes the drama of performance fully intentional. Its material is both visual and acoustic, including the physical gestures of instrumental performance as well as the many relationships between and among musicians, audience members, the score, the stage, and, of course, the sound. It reclaims the physicality—the actuality—of music-making […]." (p. 5) This expanded concept of performance is largely applicable to the *Sette Duo* in terms of the strong emphasis on gestures and sound production, which makes them ideally suited as a means of exploring these

performative spheres, but also, building on this, the here-mentioned multifaceted relationships inherent in duo performance.

The structural relation between the voices in terms of twoness reflects a very conscious approach to dyadic interaction, resulting in a sometimes dialogical character of the music. In some duos, this is also based on a programmatic narrative. The two parts are often composed in an alternating manner, with only brief points of contact or overlap, so that they basically form one single line together. Relations between the two, especially with regard to temporal sequence or the passing on of cues or accents, are repeatedly indicated by intuitive-seeming, curved lines (see figs. 14, 17 and 18). Towards the end of the piece, the voices and their interaction then condense towards simultaneity. This is especially true of the duos *Yemeles*, *Odolghes*, *Habergeiss* and *Ey de net*. In *Samblana,* on the other hand, a precisely concerted togetherness is evoked by shared accents, close rhythmical interlockings or jointly established, continuous musical patterns—only to be deliberately disrupted again in an instant by the composition. *Habergeiss* and *Alp* are characterised by a larger-scale, tonal and dramaturgical counterpoint of the voices. Sonic relations are also repeatedly stipulated by indications in the score. This is particularly striking in *Derscialet*, when at the beginning the composer figuratively wants the sound of the guitar to be placed "inside" the viola ("*'dentro' alla viola*"). In the ending section from number 83, the piece explores what we labelled as 'shared material', in the form of similar techniques on the two instruments, such as tapping, tremolo/jeté, or harmonics. A similar scenario was found in *Ey de net*, where tremolo was to be performed on both instruments, but the required technical execution turned out to be very different. Regarding our interpretation, the problem was to find a shared sound between the different techniques of the two instruments. The right-hand technique of the guitar had an uncontrolled, unsteady and random quality, which Manuel countered by intentionally making his tremolo somewhat unstable by forcing extreme dynamics in the pianissimo range.

It can be noted that Pisati compositionally seeks both ways of acknowledging inequalities and independence in terms of instrumental dispositions, playing techniques, temporal non-simultaneity or dramaturgical opposition, but also ways of overcoming them. In addition, the extended performative approach of

instrumental music theatre here offers further possibilities to identify different musical and performative realms in which a shared voice can be expressed—also and especially those within the performers' domain, that is, for example, quality of sound, timing and phrasing, momentum and direction, or movement and gestures. I will now focus on the latter due to their prominent role in instrumental music theatre, but also consider how they integrate with the shaping of sound and other expressive elements of performance.

According to Kagel (1983), "movement is the fundamental element of instrumental theatre, and it is therefore considered during musical composition: on stage, movement becomes the essential distinction as opposed to the static nature of normal musical performance. The use of movement must be considered equally as the creation of a relationship between musical space and real space". (p.107) In the *Sette Duo*, some performative movements and gestures are already preconceived at the level of notation, while others arise during execution and performance. *Odolghes* and *Samblana*, for example, contain special playing techniques such as percussive effects and complex sequences on the guitar or double bass, for which hand symbols are used to support the playing instruction (Figures 15 and 16).

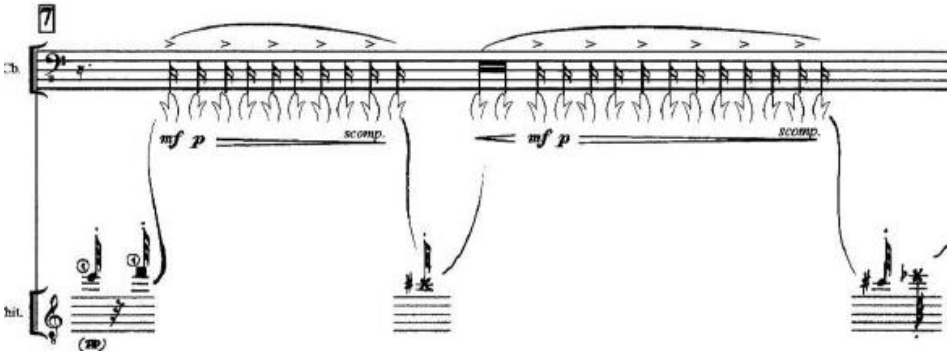

Figure 15. *Odolghes*, percussive effects on the finger board.

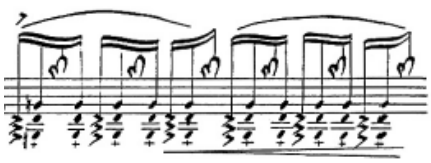

Figure 16. *Samblana*, percussion sequence across the guitar corpus.

Yemeles stands out even more in this respect since expressive hand movements for the singer are also noted in detail in the score as a continuous element of their part (Figure 17).

Figure 17. *Yemeles*, notation of the singer's hand movements.

The already mentioned curved lines (Figures 18 and 19, see also Figure 15), graphically marking transitions between the parts, also evoke a sense of movement. This was gradually incorporated into the duo's movement repertoire as communicative, but also expressive gestures, following the musical phrasing (annotation of code "expressive extra gesture").

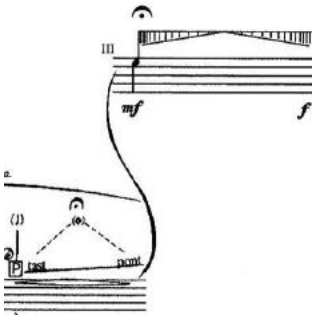

Figure 18. *Odolghes and*

Figure 19*. Habergeiss*, handovers between the two parts.

Another physical dimension of performance is addressed when in *Alp* the playing technique and deliberately noisy inhalation of the double bass recorder player suggests breathlessness as a programmatic reference (Figure 20). Hence, the breathing here becomes the musical object.

Figure 20. *Alp*, inhalation motive.

The *come un graffio* (*like a scratch)* motive in the guitar part that features in several duos in identical or similar form is characterised by a certain intricacy in notation, while sonically or rather visually it is ultimately perceived as a single performance gesture (Figure 21). The motive is used here as an example for several other similar motives. Through appropriating and cultivating the complex movement(s) during practising, the physical execution of such a gesture is however clearly different in quality, in terms of density, traction or friction, than if it had initially been rendered in a more straightforward or simplified way in the score. At the same time, it gains a different relational quality through its application in different musical contexts across the duos, for example when it is matched with similar sonic qualities or playing gestures on different partner instruments. In some cases, a disjunction between visual and aural effects can be observed: The gestural expression strongly outweighs the sonic result, as is not unusual in instrumental music theatre (Pittenger 2010).

Figure 21. *Derscialet*, come un graffio (like a scratch).

The close interconnectedness between gestural qualities in the music and the outward bodily actions that are involved in their physical production has already been much discussed within performance studies (Godøy and Leman 2010, Gritten and King 2011). Rink et al. (2011) even understand musical gestures as potential motives, i.e. expressive patterns realised in and through performance. While in the *Sette Duo*, musical gestures are strongly conceived from and through movement, they indeed hold motivic, communicative, and expressive functions. However, reversing the common reasoning in a way, I argue that performative gestures can become musical acts that facilitate relation between two performers.

One striking example was *Odolghes* for guitar and double bass. The theatrical factor in this duo is situated in the field of tension between autonomy and fusion,

offering multiple opportunities for interaction. Corresponding sounds and musical gestures, such as scratching, were notated, and produced very differently on the two instruments, while similar physical and sound-producing gestures like sliding across the finger board resulted in very different sonic effects (code "corresponding sound"). In addition, in the analysis of the videos we were able to observe non-sound-producing extra gestures, which nevertheless expressively interacted with the sound in some way, potentially also those produced by the duo partner (code "expressive extra gesture"; this is further discussed in 3.3.5. Embodied Relation). As expressive motives, these elements receive their meaning in the conjunction of gesture, sound, and interaction.

Central to the experimental practice rehearsing the *Sette Duo* was the aim of finding ways to artistically work with the physical or bodily dimensions of the music, in the sense of an aesthetic relational embodiment. In order to create different qualities of embodied musical relation, we conducted experiments such as adopting different positionings towards each other in the space, conducting each other, doing interpersonal exercises for integrative awareness and presence with and without our instruments (cf. Bryon 2014), pantomimic playing and physical touch. I will elaborate on further examples from our practice in terms of how the realm of embodied relation resonates with other expressive parameters in terms of musical togetherness and how an experimental approach to the physical dimension of the performance guided us towards a relational interpretation of the *Sette Duo* in section 3.3.5 Embodied Relation.

3.2.4 Side note: Pandemic Restrictions and Impact on this Research

The outbreak of the Covid-19 pandemic in 2020 coincided with the initial phase of the *Sette Duo* project. Restrictions in terms of physical distancing affected our possibilities for experimentation and prohibited physical proximity in particular. The study on *Ey de net,* in which we experimented with physical touch, was the only one that took place before the outbreak of the Covid-19 pandemic. Unfortunately, this meant that in the remaining studies we were not able to elaborate on and

deepen the findings we had gained. On the contrary, as part of the restrictions imposed, a plexiglass screen became necessary as a spit shield with increasing physical proximity (see Figure 22).

Figure 22. Rehearsal with singer Jerilyn Chou using an obligatory plexiglass screen as a spit shield.

The concert performance of the *Sette Duo* as part of the SONify Festival of Music and Artistic Research in 2021 was furthermore live-streamed with no audience allowed into the concert hall. While this allowed the composer himself to participate virtually and share his feedback afterwards, not having an audience on site left several questions unanswered about the experience of relational qualities and intimacy in a live concert situation and how it differs from the laboratory research environment we had established in the rehearsals.

This eventually led to the idea for the *Encounters* project and our intentional interaction with the audience as developed in it, as well as reintroducing and intensifying the notion of proximity and touch, both within the duo and with the audience. The project is discussed in chapter 4.

3.3 Exploring Musical Togetherness

Based on the themes that emerged most strikingly in the phenomenological analyses of the duo interventions, I will now deepen the aesthetic considerations of musical togetherness and interplay in the duos. How has our experimental approach towards a shared interpretation manifested and how are its effects perceived? What moments of interplay were of particular relational-aesthetic value and why? The musical parameters of sound and resonance, as well as timing and phrasing, proved to be of critical importance here. Our exploration also delved into the more performative dimensions of shared momentum and musical absorption, embodied relation, listening, as well as the idea of separate togetherness, as a way of challenging the relational approach.

The themes were elaborated by means of an additional coding layer, in which I subjected the codes and annotations of the individual studies to a meta-analysis, re-coding them within the software HyperRESEARCH. It will become apparent that the resulting themes are strongly interrelated, blend into and/or are embedded within one another. Although *Charon, Mundus Canis* and the *Sette Duo* are equally taken into account here, a clear focus of the considerations is on the *Sette Duo*, not least because of their quantitative share of analytical material. I will touch on individual observations while distilling their underlying themes, for an elevated level of reflection and aesthetic evaluation. As such, this does not claim to be a comprehensive account of what I call musical togetherness, but once again aims to foreground the process of exploration of these central aspects of interplay, for musical togetherness remains a fluctuating, interpersonally shaped emergent that constantly varies in its distinct quality.

Furthermore, it is not only about the processes of interaction, but about the feeling of connectedness with each other, i.e., the (inter-)personal experience of being involved in these interactions. To understand musical togetherness, we must therefore enter the experiential realm of both the aesthetic and the intersubjective, by linking the musical phenomena with the qualitative experience of relationship or the emergence of a 'We' (Krebs 2015, Peters 2020).

3.3.1 Sound and Resonance

I would like to go back to the ways of relating to each other in and through sound as the primary product of our musical interaction. In section 3.2, I drew out the complex interrelations between material, instruments, bodies and sounds, focusing on the process of developing a mutual understanding and a common language of sound. This led to moments of genuinely shared sonority or resonance, which during stimulated recall we consensually identified as instances of experienced togetherness (codes "shared sound/sonority", "corresponding sounds", "resonance" and "togetherness").

The term resonance is deliberately chosen here because it points beyond the field of acoustics and is also coined in an interpersonal sense. In his book *Resonanz. Eine Soziologie der Weltbeziehung* (Resonance. A Sociology of our Relationship to the World, 2019), Hartmut Rosa uses it as a metaphor to describe relational qualities. According to the Latin word origin re-sonare, which means "to sound back, to sound again", he refers to a specific relationship between two entities that respond to each other and at the same time sound with their own voice, that (co-)exist relationally. They stimulate each other to intrinsic vibration (*Eigenschwingung*), whereby their mutual amplification is able to exceed the sum of their respective efficacies. In terms of an intersubjective relationship, resonance means affecting and being affected. Moreover, the interaction is neither mechanically causal nor forced, therefore unpredictable. With regard to the duo relationship, music can ideally create a space for resonance (*Resonanzraum*) which enables – but does not enforce – a resonance effect (*Resonanzwirkung*).

Coming back to the duo interventions, examples of resonant moments can be found in all nine studies. They are basically consistent in how they manifest and are perceived throughout. The following examples shall help to pinpoint the phenomenon. At the beginning of *Charon* by Gorton, the two guitars play natural harmonics in rhythmic unison of repeating quavers, grouped into short, irregular phrase lengths. This section is explored in the first part of video example G1, starting at 2:43. After questioning whether we think of the opening as one or two

instruments playing and negotiating different approaches to attack, articulation, and phrasing, we were able to achieve a consistent sound through a differentiated attack of the individual harmonics in terms of their physical responsiveness, as well as their phrasing. The harmonics were finely balanced between the two voices, blended in a specific way in their overtone spectrum, and by closely listening to their resonating behaviour, we intuitively achieved a subtly attuned phrasing. This was a result of reflection and conversation with the composer; but above all, a joint sonic exploration took place in iterative practical trials (code "finding through playing"), in which through mutual empathic attunement we developed an “increased shared sensitivity” for the sound and transformed our individual sounds into a blended sonic compound. This is summarised in the annotation as “reveal[ing] a new quality in the sonority of the two instruments. A different type of structuring the phrasing and resonance of the harmonics emerges, so here, the duo is finding through playing.” (see video example G1, 8:49) The term “revealing” is interesting here, as it hints towards a certain degree of passivity, in which we choose not to interfere and let the music or the sound unfold in this way. Høffding describes this “performative passivity” as an aspect of musical absorption, while emphasising that the implied receptivity includes both the active and the passive as a continuum, which brings us back to the term resonance (Høffding 2018, p. 188-194).

A similar resonance effect could be evidenced on the second day of rehearsals of *Mundus Canis* by Crumb, specifically in the third movement *Heidel*, between the water gong and the bass notes of the guitar (code “shared sonority”, video example C2, 05:28). In this case, I handled the lower register of the guitar with a very indirect attack either by way of an extremely soft touch of the string with the right hand or a pull-off in the left hand. In this way, despite the different instrumental timbres it was absorbed by the fading resonance of the water gong, resulting in a seemingly unified sonority of the two instruments. The phenomenon of sonic blending or fusion is described by Lettberg (2011) in her study on learning and performing Alfred Schnittke’s Piano Trio as “integrat[ing] the piano sound as closely as possible with the strings by imagining that these instruments of very different nature could produce a united sound” (p. 80). When noticing this kind of blending effect between guitar and water gong, we felt the need to enhance it by focusing

more on the sound within the space, adopting different spatial relationships within the room and hence creating a spatialisation effect, which not only caused different listening experiences, but also resulted in a kind of resonant amplification of the guitar through the water gong, which was positioned behind it (video example C2, starting at 5:54).[9]

This integration of one instrument's sound into the other is even requested explicitly by the composer at the beginning of the first of the *Sette Duo, Derscialet*, namely by the already mentioned *"dentro" alla viola* indication for the guitar. Consolidating with other passages in the piece that indicated this, such as shared sonic material consisting of tapping and tremolo/jeté conjunctions, we interpreted this as the guitar adding an extra layer to the sound of the viola, contributing to an extended viola, in a sense. As evident in video example P2, this entailed a certain subordination of the guitar, while at the same time the viola had to allow this expansion by opening up its sound, giving space to and reciprocally adapting to the additional sound quality, in order to "produce a sound together that would not be possible or not be as effective on the viola alone" (annotation of the code "shared sonority").

Video example P2. Resonance in *Derscialet*.
https://jessicakaiserguitar.com/videos/p2/

[9] In fact, Crumb used such effects of acoustic spatialisation himself in other works, for example, in the form of special positioning or processions through the concert hall *in Echoes of Time and the River* for orchestra (1967). These kinds of spatial experiments then also became a key component of the studies on the *Sette Duo* by Maurizio Pisati, in which the bodily dimension of interplay was one of the main concerns.

In *Samblana,* we were also looking for a shared sound quality despite the different sound production qualities of the two instruments, saxophone and guitar. Such instances of shared sonority and resonance are presented in video example P3. At the end of the intro section, the guitar creates a sustained sound by tapping on the bridge and thus indirectly causing the open strings to resonate. This resonance is picked up and amplified by the low-register vibrato tone of the saxophone (00:30). Another type of resonance reappeared when our interplay triggered the harmonics and overtones of the two instruments to interact, which we further explored in a joint improvisation (starting at 00:45). In the stimulated recall, we observed the aeolian sounds created by the saxophone to amplify and enhance the overtones of the guitar and vice versa, as a spontaneous reaction, but more importantly as a result of a respectful and attentive listening and attunement. In our annotations to the code "togetherness", we noted that we were under the impression of being 'inside' the other's instrument, in order to create this quality of togetherness and sensitive 'bubble'. These observations seem to always go hand in hand with a 'shared sensitivity' that was developed together in the rehearsal process through joint reflection and increasingly differentiated listening, which led to more nuanced playing through recalling shared, tacit knowledge. This implies that these spontaneously appearing effects are ultimately only consciously controlled to a limited extent, but based on a constant, intuitive attunement.

Video example P3. Resonance in *Samblana.*
https://jessicakaiserguitar.com/videos/p3/

It appears that in these moments of resonance, the individual instrumental affordances, timbres and other diverging, physical factors of sound production are

in a sense transcended, that it is only about the sound as a collectively created, "pure event" (Scruton 1997, p. 11). A connection of this kind and the perception as a sonic fusion is possible because the sound is perceived as detached from its „identity-conditions“ (p. 7). Instead, what emerges is a new, collective timbre as an immediate sensation. This applies to a similar extent to the aforementioned positioning in space, which ultimately only prepares the way for the musical space and the sonic experience, or in Scruton’s words, the "'sound world': a world which contains nothing else but sound." (ibid, p. 12) Nevertheless, the co-created sound at a given moment is ultimately not an end in itself, of course, but exists within the musical “field of force” (ibid., p. 17); it is but one aspect of the shared interpretation that further interacts with other expressive parameters, such as timing and phrasing, which I will discuss next.

3.3.2 Timing and Phrasing

One aspect that is often associated with the question of intersubjectivity in ensemble performance is the shared experience of time and temporality. As discussed in section 2.3, Alfred Schütz (1951) bases musical togetherness on continuously sharing various dimensions of inner and outer time. A shared temporal consciousness while jointly shaping musical events in time seems to be central to the experience and aesthetic perception of musical togetherness; however, it of course requires and encompasses more than simultaneously engaging in a musical piece, aligning tempo, metre and rhythm, and temporally synchronising via a “correct” execution. Rather, it is about details such as the (micro-)temporal shaping of the musical material, for example in rubato playing, or the timing of transitions, which are essential to the overall sense of temporal continuity. In particular, the strong interrelatedness of timing and phrasing became apparent in this research, as well as how the immediate joint decision-making on these aspects during performance significantly contributes to the experience of a profound cohesion in interpretation. These phenomena indeed do not happen automatically but are

jointly generated artistic achievements that must be constantly (re-)established by the performers and depend on how they experience their relationship.

Mark Doffman (2019) draws a more differentiated and dynamic picture of time consciousness in ensemble performance by dividing it in processual consciousness, which refers to the tacit knowledge and temporal awareness involved in *timekeeping* with regard to rhythm, metre and tempo, as well as event consciousness, or *timeliness*, meaning the awareness of the propitious timing of singular expressive moments and qualities in music. This also emphasises factors such as emergence, spontaneity, and contingency in performance, since practical time consciousness, as Doffman puts it, is shaped by a discursive practice that operates on different, interrelating levels of temporality (see also Payne 2022, p. 508).

In the duo interventions, the temporal relationship at times indeed manifests as synchronous passages of shared development in metrical and rhythmic alignment. When they contain a strong rhythmic component or consist of repetitive patterns, such as in the last pages of *Samblana,* we have associated them in our analysis with a "shared feeling of pulse and direction" (annotation of the code "shared directionality"), which is also closely related to the phenomena of entrainment and flow, as discussed in section 3.3.4. It is, however, remarkable how they exhibit a certain inner dynamic through "microrhythmic ambivalences" (Danielsen 2022, p. 82), that elude a rigid metre, but which are forward-driving and which we considered aesthetically pleasing precisely for that reason (see video example P4).

Video example P4. Shared pulse in *Samblana.*
https://jessicakaiserguitar.com/videos/p4/

Analogously, D'Amario and Bailes (2022) state that "synchronization between musicians is not homogenous across the course of a piece of music" (p. 139), but rather correlates with dynamic interpersonal processes. However, they do not elaborate on how exactly this correlation occurs. Adaptive timing between musicians is based on an underlying, jointly felt musical pulse. However, this pulse is "rarely metronomic in its regularity" (ibid.). Rather, I argue that through a shared sensitivity to tempo and timing, an elasticity can be created, a stretching of time, while simultaneously retaining temporal integrity. This elasticity becomes a marker for a jointly experienced potentiality of interpretation.

Similarly, a "stable instability" (Danielsen 2022, p. 82) occurred in passages that demanded synchronicity but allowed more flexibility in terms of timing, such as the first material of *Charon*. I have already elucidated above how through a gradual process of reflection, collective understanding and empathetic attunement, we were able to reach a shared sonority that was intricately interwoven with a clear phrasing. In iterative rounds of "finding through playing", we could furthermore observe how along with this nuanced phrasing, we tacitly increased our use of rubato by way of attentive listening, as the new resonance inspired us to give more space to certain harmonics, without losing the feeling of being closely interlocked (video example G1, 8:48). The differentiated timing of single notes indeed was not explicitly negotiated and predicated on fixed decisions, but happened in immediacy, since it also varied across the iterations. As such, it was a result of a shared sense of time, and of our temporal experience of the music and its successive elements. This experience can be understood as an internal listening process extended by both the past and the future, for which Husserl expounds the concepts of retention and protention (1991, p. 11-12). They respectively refer to the presence of the past in the present moment through the recollection of prior experiences and knowledge, and the forward-looking aspect of our actions and thoughts. Our playing hence integrated a retrospective understanding of the past while simultaneously shaping the future trajectory of the music. This is also true of the second material in *Charon*, where the two voices create very complex, dovetailing rhythms that tend to be unstable and fluctuating in execution. Through finely attuned, but deliberately scattered timing,

we reached the shared aesthetic goal of creating an interlocked temporal coherence of the voices while resisting rhythmic synchronicity.

3.3.3 Transitions

One question remains: How can a shared sense of time be established in cases where the composition is rather asynchronous, lacking a discernible metre or shared rhythmical structure to rely upon, and with the two parts predominantly alternating, as it is often the case in the *Sette Duo*? Here it is even more important to consciously integrate the realm of relationship as an essential variable of the "energetic and tensional morphologies" (Cook 2013, p. 93) of performance. As the meta-coding shows, in the case of alternating parts, the shaping of *transitions* was also strongly relevant here to the process of creating a sense of togetherness. This concerns the handovers between alternating voices. In *Ey de net*, Manuel describes these transitions as "energy conductors": A stream of energy runs between the voices and must be kept up at all times and from both ends, as a "shared energy". Otherwise, the piece falls apart and the voices remain independent. He further states that he has the illusion to continue to hear the guitar in the sections where he plays alone. Passing on the musical flux through transitions and maintaining the feeling of togetherness in the solo moments in the end resulted in a kind of meta-groove, which runs through the piece, indicating a shared presence in time despite the alternations.

In the instances where the voices cross each other, there exists a notable sense of tension regarding the ambiguity of the overlapping syntactic functions of conclusion and initiation of a phrase, to be expounded by the performers and their interpretational choices. Even when the phrase is continued by way of the transition, it remains essential to elucidate the manner in which one voice concludes their line or gesture within the passing-on process, and how the succeeding voice commences its own. Now, considering this ambiguity an aesthetically valuable form of musical tension, we aimed to convey its elements by several means: To establish a "shared understanding of timing and phrasing" (annotation of the code "mutual

understanding"), we first had to be well acquainted with and keep in mind each other's voices, also taking into account any technical issues. This is achieved by listening to the other's voice and by respectively discussing it on a conceptual level, followed by integrating this knowledge in one's own playing. Refined timing and spacing of the transitions also went hand in hand with a careful balance, not in the sense of equal volume, but of dynamic permeability through clear articulation and giving appropriate space and duration to each other's musical gestures (code "togetherness"; see video example P5), in order to enhance the effect of these ambiguous moments, further contributing to the overall aesthetic experience. In further instances of "finding through playing", i.e., iterative practice paired with empathetic attunement, this close interplay of expressive parameters contributed to the experience of a genuinely shared sense of time, as fully integrated with these parameters, hence constituting a cohesive interpretation.

Video example P5. Transitions in *Ey de net.*
https://jessicakaiserguitar.com/videos/p5/

An alternative mode of transition occurs when shifting between individual fragments or sections, such as those between metrically unconstrained material and rhythmic passages, or between solo and duo sections. On certain occasions, these transitions are accompanied by a collective pause or at least a moment of suspension. Since breathing or visual cues are not always possible or desired for these moments, a shared sense of timing and phrasing is essential. Fundamentally, the transitional process entails an instantaneous recalibration of attention, a reconfiguration and re-establishment of the shared time-consciousness, catalysed by a change in energetic engagement and heightened mutual attention. This is

analogous to a “temporal switch” that “acts like a trap for listening by temporality”, as proposed by Anthony Gritten (2022, p. 138).

I will further elaborate on the importance of pauses for the joint listening experience in section 3.3.6 Listening. Additionally, some of these transitions, especially in *Odolghes* and *Ey de Net,* are accompanied or rather guided by expressive gestures or a shared bodily impulse, which I will come back to in section 3.3.5 Embodied Relation. But first, I will now discuss the phenomenon of shared momentum, which in its essence is based on the jointly established sense of time and phrasing.

3.3.4 Shared Momentum

The phenomenon of shared momentum refers to passages in which the musical interplay develops a certain dynamic of its own and results in a natural, compelling unfolding of the music. Togetherness manifests itself here as a unified experience of multiple expressive parameters, of things falling into place. The notion of shared momentum was a finding of the meta-coding and is hence associated with a variety of codes, some of which have already been mentioned in different analytical contexts, such as “finding through playing”, “shared sound”, “shared expressivity”, “mutual incentive”, “shared directionality”, “shared sensitivity” or simply “togetherness”. This suggests that shared momentum is affected by and the result of the interaction of different factors. In order to draw a clearer picture, I will now look at concrete examples from practice.

I already mentioned the final section of *Samblana* above, which is characterised by a strong, continuous rhythm that unfolds a kind of groove. The inner structure of the rhythmic patterns, however, is very complex and varies in unexpected modulations, which presents a certain coordinative challenge. In the course of the rehearsals, we noticed how we developed a shared feeling of pulse and direction, which could further be traced by the correlating dynamic development. Despite or especially in view of metrical and rhythmic irregularities and ambivalences (see 3.3.2.), we had the impression of being securely interlocked

(see video example P4). We described the mutual incentive as assuming a similar energy and leading to rehearsal euphoria. This mutual rhythmical synchronisation and stabilisation of a temporal flow through dynamic interpersonal interaction and adaptation is consistent with the concept of entrainment (cf. Clayton 2012) and as such seems to have a direct correlation with social and psychological meaning (cf. Peters 2019).

The coding data of the other *Sette Duo*, especially *Derscialet, Yemeles* and *Ey de Net* show similarities, in that we find further examples for moments in which several parameters, such as "directionality", "dynamic development", "building larger and coherent phrases" , "correlating sound characteristics, such as the micro tempo of a vibrato or tremolo", or "timing and duration of musical gestures", supported by "natural, [fluent and effortless] body movements", integrate into an expressivity that is unfolding itself organically between the two musicians. As one would expect, this also often becomes evident in rehearsal stages marked as "finding through playing", which entail a repetitive approach, more implicit communication, and larger coherences in practice. Furthermore, shared momentum seems to be characterized by a shared directionality based on an intentionality directed towards the other that is balanced between projection and receptivity, again indicating the close connection between the aesthetic and interpersonal experience.

Another example of both musicians being "in the zone" together is the *ad libitum* section in *Yemeles*, in which both voice and guitar are to permutatively repeat several fragments in an improvisational manner. This experimental approach to the musical material led to increased mutual attention and integrated listening, introducing more flexibility in our playing to cope with the higher degree of unpredictability (video example P6). This may suggest that improvisation has greater access to such an experience than interpretation. However, I support the view that the quality of an ensemble interpretation is felt to be at its strongest when, in the moment of performance, it indeed contains elements of improvisation in which nuances and differentiations are modulated and experimented with, even against a supposedly established interpretation. Unpredictability, which in human behaviour typically results from a certain spontaneity, can, paradoxically, also arise from

uncompromising, progressive conditionality of musical development in the moment of performance. Consequently, this also requires the aforementioned attention and flexibility, as well as a certain degree of trust in the musical partner, while remaining open to an emerging and constantly evolving interpretation.[10] Nevertheless, we have used improvisation as an experiment also in some of the other duos, especially when there was a desire for more coherence, in order to trigger and strengthen a more flexible approach of the material on the one hand and a heightened mutual attention on the other.

Video example P6. Ad libitum section (semi-improvised) in *Yemeles.*
https://jessicakaiserguitar.com/videos/p6/

The examples discussed seem consistent in combining the assessment as peak performance and an intensely felt "we", or in other words, an optimal experience, both aesthetically and relationally. As such, it points towards the psychological concept of flow as coined by Csikszentmihalyi (1990). Sawyer (2003) further elaborates the notion of group flow: a shared attentional and mutually attuned state in which "everything seems to come naturally" (p. 44). He further argues that this state relies on attaining a balance between the unpredictable nature of spontaneous (improvised) actions and the coherence of shared knowledge and skills (see also Payne 2022). Even if the dynamics in a duo certainly differ from those

[10] This also corresponds to the experience of the Danish String Quartet as reflected in the phenomenological interviews conducted by Høffding for his research on musical absorption. However, the relational level of experience is somewhat underrepresented in his work, which focuses primarily on the individual experience of each member of the ensemble (Høffding 2018).

in a group, these aspects can provide some pointers for understanding the phenomenon.

Høffding (2018) contrasts the flow concept—which he criticises for being too vague and general to have scientific value—with the notion of musical absorption: a state experienced in performance that can take on different intensities, from standard absorption to intense absorption to ex-static absorption. The last two involve a perceived transcendence of self, or at least an altered sense of agency. In an ensemble, this sense of agency is essentially shared, or intersubjective. Høffding speaks of a performance passivity that constitutes musical absorption through balancing intentionality and receptivity. In the ensemble, this passivity results not only from the inherent necessity of the musical flux and its active-performative contemplation, but also from an altered “self-other distinction" (p. 261) as the result of an affective and bodily we-consciousness, or as Høffding calls it, “interkinesthetic [sic] affectivity” (see pp. 249-257). Central here seems to be a fusion of individual intentions into a single structure that implies the pleasant feeling of being understood without explicit communication, as well as a shared knowledge that is based on intercorporeality, which together can instantiate a relational aesthetic experience. At this point, it seems useful to revisit the role of the relating bodies with regard to musical togetherness.

3.3.5 Embodied Relation

The relational experience in a duo performance is formed through the dynamical, moment-to-moment and whole-body interaction between the two musicians. In this respect, they enact their (musical) relationship, i.e. they bring it forth, shape it and express it in action, while engaging in a shared environment. This suggests an embodied approach to understanding duo performance. Drawing on the phenomenological notion of embodiment, musical performance can be considered embodied in that it evokes a perceptual and experiential condition that is grounded in the lived body, and the performer's bodily presence and situatedness in his or her environment, thus making for a multimodal, sensual experience. Regarding aesthetic experience, Berleant states that "[i]n embodiment meanings are experienced rather than cognized. That is to say, we grasp them with our bodies, literally incorporating them so they become part of our flesh." (Berleant 2004, p. 86)

In her artistic research project *Embodying Expression, Gender Charisma – Breaking Boundaries of Classical Instrumental Practices* (PEEK AR 749-G), Barbara Lüneburg explores the social embeddedness of practice through an embodied perspective: "Embodiment plays directly into or even constructs the value system that is shared with the audience because bodily and artistic expression are intertwined with social messages and meanings. In gestures, emotions and thought processes are produced and represented." (Lüneburg 2023, para. 7). This can also be transferred to the interplay with co-performers, in that the performing bodies form and inform norms, values and the social relationship. In performing together, the relation to another lived body can furthermore enable us to understand the other and to create a shared experience in an intersubjective sense, as discussed in 2.3. This leaves us with the question of how an embodied musical relationship unfolds, how it shapes aesthetic experience, and most importantly, how we can artistically work with intercorporeal phenomena.

An example of how gestures and physical expression facilitate relationship became evident in *Yemeles* for voice and guitar. As mentioned in section 3.2.3., the singer was moving her hands through the air as an inherent element of her part, as

indicated in the score. Despite each instrument playing or singing in fragmented parts, the fluidity and continuation of the hand movements seemed to bind the measures and the instruments together. Even though the movements are produced only by the singer, they represent a continuity and "serve as a shared foundation throughout the piece" (annotation of the code "shared expressivity"; see video example P7).

Video example P7. Gestures in *Yemeles.*
https://jessicakaiserguitar.com/videos/p7/

Another striking example of musical interkinaesthesia was the significance that gestures took on in terms of timing and phrasing in *Odolghes* for double bass and guitar. The hand and body movements that were necessary for the sound production occupied considerable space within our interpretational work. In addition, references between the voices could be observed, consisting, on the one hand, of corresponding gestures that produced different sounds, and on the other hand of similar sound characteristics that were produced in very different ways on the respective instruments. Now, how could such gestural relations be enhanced, thus transforming individual playing gestures into a shared expressive language? And how would that affect our musical interplay?

Our experimentation led us to pantomime playing, which in a way escalates the idea of instrumental theatre: Basically, we performed a silent version without instruments in order to bring the playing gestures into focus. Mauricio Kagel already used this as an element of theatricalisation in his early works of instrumental theatre, such as in *Sonant (1960/...)* for guitar, harp, double bass and

membranophones, where in some of the movements the instrumentalists are offered the option to mimic the performance without actually producing sounds.

This is explored in video example P8. As can be seen in the excerpt, this created a strong visual impression, transforming the gestures into dance-like, choreographic symbols. However, it also triggered different perceptual processes of ourselves, each other, and our interaction. Considering the close connection between "auditory, visual and motor modalities in performance, imagination and perception" (Wöllner 2017, p. 76), the silent execution entailed drawing on our auditory imagination and bodily memory. It also transformed our listening since we suddenly became much more aware of our own and each other's breathing and started listening with our whole bodies.

Video example P8. Pantomime version of *Odolghes.*
https://jessicakaiserguitar.com/videos/p8/

The quality of our gestures became more fluent, sometimes almost indistinct, since there were no points of contact with the instruments, no resistance from a string, for example. On the other hand, the gestures also became more pronounced because without the music as a mediator, movement and other (bodily) sounds were now the main level of communication. In a way, the dance-like character of our movements offered the possibility to internally co-experience and empathise with each other's movements, to interpret those movement qualities in an embodied way and incorporate them in our own bodily actions (code "quality of movement"). The jointly created, shared movement material and shared bodily knowledge emerged through a process of embodied listening, as well as through reciprocally perceiving and incorporating each other's movements in our own. This can thus be understood

as a kinaesthetically coupled, embodied experience, which could then flow back into the musical performance: Here in fact, the sound essentially mediates the unfolding empathetic process as an additional semantic level.

This process also increased our sensitivity towards the duration, direction, and dynamic quality of our movements, experiencing them in space and time. Epstein (1995) discusses the subjective experience of time and duration ("integral time", p. 10) as closely associated with the perception of structured motion through time. The dimension of bodily movement makes this even more explicit: Our gestural interaction was a means of conveying our otherwise elusive individual temporal experience, aligning subjective differences in perception, and instead shaping a shared perception of time. In other words, musical timing and phrasing were mediated through gesture, reflecting reflective goals and thus resulting in a shared expressive quality (codes "quality of movements" and "shared expressivity").

This is evidenced in multiple instances in video example P9, which presents a run-through recorded towards the end of the rehearsals. What stands out here in particular are shared bodily impulses (e.g. 0:44, 1:24, 3:57), expressive extra gestures (Margarethe 1:11, Jessica 2:12) that enhance sonic events, as well as an overall increased bodily involvement in each other's movements and sound, indicating an empathetic, embodied co-experience. In our joint analysis of the material, we assessed them as "shared gestures happening *between* the performers" (annotation of the code "quality of movement"). Without necessarily being synchronous or otherwise explicitly coordinated, they show a coherence in the quality of movement and thus create continuity in the musical dialogue as the result of an intersubjectively experienced bodily presence. This ultimately manifests itself in the form of enriched acoustic nuances of interplay, such as the tight interlocking of sounds and musical gestures (e.g. 1:59, 3:17) or enhanced resonance effects (e.g. 2:05, 2:29, 4:10).

Video example P9. *Odolghes* by Maurizio Pisati with Margarethe Maierhofer-Lischka.
https://jessicakaiserguitar.com/videos/p9/

In the duo *Ey de Net* for percussion and guitar, Manuel and I experimented with the experience of touch as another way of relating through aesthetic embodiment. A central aspect in this duo was to overcome the apparent separateness of the two voices through creating a shared expressive language. The piece is organised such that both instruments predominantly play in alternation (see Figure 23). Apart from brief overlaps at transitional points, it offers only few and short musical "points of touch" between the individual parts, therefore challenging us to nevertheless find different levels of connection and create something shared.

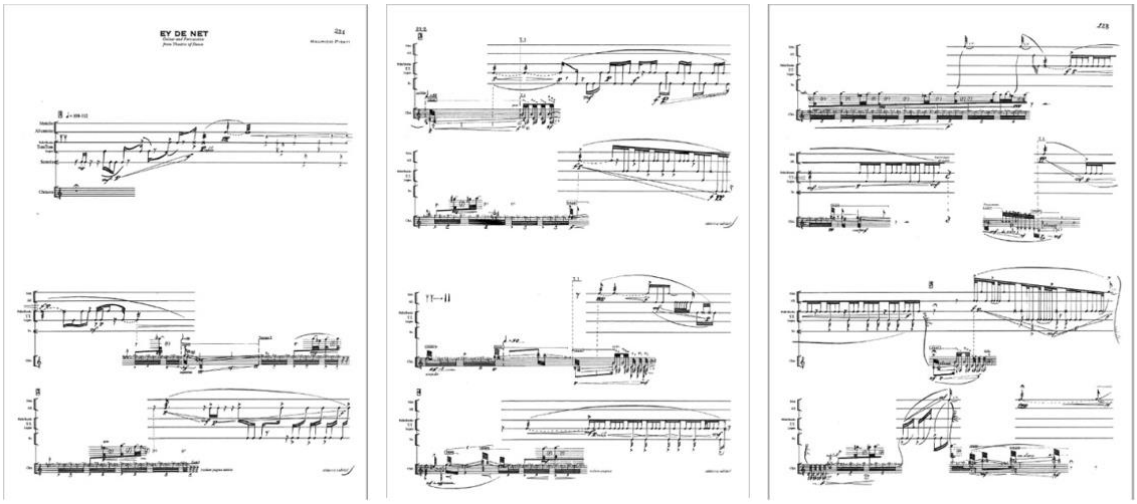

Figure 23. *Ey de net*, alternating, only briefly overlapping parts on pages 1–3.

After experimenting with various degrees of eye contact and auditory information by way of varying spatial dispositions, as well as placing visual and/or acoustic barriers between us, we ended up in a back-to-back position, sharing one piano bench. In the context of musical experience, touch and being touched, but

also move and being moved are of course terms highly charged with meaning. We say that music touches our souls or moves us emotionally. There are also phenomenological approaches that take this quite literally and argue that the physical vibrations of sound actually touch and penetrate into our resonant bodies (Høffding 2018). In this respect, "[i]t is not a metaphor to say that the musicians' bodies touch each other through the sound they produce." (p. 237). But what happens when we make this embodied relation more explicit and actually touch each other physically during instrumental performance?

The experience of physical closeness and touch is fairly familiar within another instrumental duo situation, namely four-handed piano playing. In fact, there are also a few guitar duos that attempt four-handed playing on one instrument, albeit often in a more humorous context. This involves even closer playing positions, such as sitting on each other's laps (Bruck/Ross Duo), or—more commonly—placed one standing behind the other sitting and intertwined in what looks like an embrace. In both cases, piano and guitar, sharing a single instrument may well generate a high level of intimacy, but it is also associated with a considerable degree of musical interdependence and physical as well as technical limitations, as reported by Haddon and Hutchinson (2015). Moreover, at least in more classical repertoire, a straightforward distribution of registers often implies the musical goal of having the two musicians function as a unit rather than as individual players (Haddon and Hutchinson 2015, p. 141). Leaning on each other back-to-back evoked not only a similar intimacy, but also a particular sense of stability and trust. Yet it was still possible to keep one's own space and, literally as well as metaphorically, to envisage different directions.

The position allowed us to feel each other's movements, while visual information was limited to peripheral areas. Having highlighted above as well as in section 3.2.3 how bodily motion in interaction with musical instruments shapes sound and is integral to our experience of music, not only seeing and hearing, but feeling each other's sound-producing movements through our own bodies opens up yet another level of sensemaking through embodied musical expressivity. Kinaesthetically co-experiencing the motion quality of the shake of a hand or the rebound of a stroke provides us with additional information about how a movement

is planned, and structured in time and space, allowing us to comprehend its timing or how it integrates within the musical phrase. Above all, it tells us about the expressive intention and not "just" the result, which may also be dissipated by biomechanical limitations or the physics of the instrument.

Physical touch not only gives us the possibility to experience the other, but also to be in contact with the other's experience. We can feel the other person's bodily state in terms of temperature, tonus or energy, and sense how our bodies relate in terms of pressure or friction. The experience of touch can therefore also vary in depth. It might even reach beyond the surface, revealing internal bodily mechanisms such as the rhythm and physical effects of breathing. However, this also seems to be extendable in the other direction: While playing together we sometimes just barely touched each other or even lost touch for a brief moment, but still a tactile sensitivity remained, and it was as if we could still feel each other.

Being moved by each other while performing furthermore reveals information about the quality of a performed movement, providing at least some experience of a movement that is not one's own, which allows us to better understand and respond to the other's musical intention. Moreover, this also enhances the perception of one's own quality of touch and movement. Merleau-Ponty highlighted the reversibility of the touching-touched situation (Merleau-Ponty [1945] 2012). The passive component of being touched while touching the other also evokes the foreign in one's experience, through which an otherness in oneself can be discovered that also makes one intimately acquainted with the otherness in the other (cf. Høffding 2018, p. 243). Acoustically and tactilely experiencing the other's embodied musical expressivity in a sensually intertwined way in the back-to-back position hence facilitates entering each other's experiential world. At the same time, I not only perceive the other as otherness, but his expression as affected by our intersubjective and intercorporeal we-consciousness. The empathetic awareness unfolding through the musical interplay in combination with touch can be understood as a bodily lived relationality. The musicians "participate in, and thus can form and transform each other's sense-making" (Andrea Schiavio & Hanne De Jaegher 2020, p. 33) through embodied engagement in the jointly created and

shaped musical environment, through developing a shared knowledge that is constituted in interactions and interactional histories.

As the different nuances and intensities of relation in the compared versions in video example P10 show, the back-to-back position leads to considerable changes in perception and performance. Particularly striking is the refined timing and spacing of the transitions, which goes hand in hand with a careful balance, not in the sense of equal volume, but of dynamic permeability through clear articulation and giving appropriate space and duration to each other's musical phrases and gestures. Manuel describes these transitions as "energy conductors": A stream of energy fluently runs between the voices and must be kept up at all times and from both ends, as a "shared energy". Otherwise, the piece falls apart and the voices remain separate. He further states that he "has the illusion to continue to hear the guitar in the sections where he plays alone".

Video example P10. Different beginnings of *Ey de net.*
https://jessicakaiserguitar.com/videos/p10/

The full back-to-back run-through in video example P11 shows how passing on the musical flux through transitions and maintaining the feeling of togetherness in the solo moments ultimately resulted in a more nuanced phrasing, as well as a kind of meta-groove, which runs through the piece, indicating tight connectedness and a shared presence in time despite the alternating structure. Feeling each other and (literally) being moved by each other is not merely bound to the tactile-kinaesthetic realm but expands the idea of the lived body to a multimodal unit of touch, movement, sound, and musical phrasing. Thus, it enables a genuinely intersubjective understanding and expressivity.

Video example P11. *Ey de net* by Maurizio Pisati with Manuel Alcaraz Clemente.
https://jessicakaiserguitar.com/videos/p11/

The insights gained from these experiments in the form of a deepened awareness of and sensitivity for the tactility inherent in making music together, as well as the experience of intersubjective connectedness through embodied musical expressivity, served as a starting point for further studies of embodied relation in the *Encounters* project, as discussed in chapter 4.

3.3.6 Listening

The intense interpersonal experience of pantomimically playing without our instruments in the *Odolghes* study provokes reflections on another, fundamental aspect of the musical encounter: listening to each other. It was when we no longer produced sounds with our instruments, in apparent silence, that we became much more aware of our listening attitude. Our acoustic attention suddenly was more focused on the sounds of our breathing, maybe even hearing our blood and nervous system sounding. As discussed by Hogg (2018), Voegelin concludes from this kind of experience that "silence is not the absence of sound but the beginning of listening", since the "embodied experience of silence [...] opens up a form of dialogue" (Voegelin 2010, p. 83) between internally experienced sounds and ever so quiet sounds from the outside. "This stimulates a kind of close, attentive listening through which the inside of the body re-emerges as a sound source, evoking something like an improvisation between internal bodily sounds and tiny sounds in the external world, driven by a particular sense of silence." (Hogg 2018, p. 169)

When silently performing *Odolghes,* our listening had a strong physical, embodied component. With reference to Nancy, we perceived our bodies as a place of resonance, ourselves as resonant subjects. This entails coming into presence by "opening oneself up to the resonance of being, or to being as resonance: 'Silence' in fact must here be understood [*s'entendre,* heard] not as a privation but as an arrangement of resonance: a little – or even exactly… – as when in a perfect condition of silence you hear your own body resonate, your own breath, your heart and all its resounding cave." (Nancy 2007, p. 21) We listened to the gestures, in the literal sense of any very quiet sounds they might make, but also in the figurative sense of an embodied perception of each other's movements. This was represented by the code "shared bodily impulse and expression", for example when we noted in our analysis that Margarethe Maierhofer-Lischka is using her bow as a conducting tool, inducing a shared gesture; this is also followed by a similar process initiated by Jessica. The gestures express a bodily listening. Above all, this also means an awareness of a shared embodied presence. Thus, the embodied listening not only facilitates relating to each other's bodily actions, but the experience of being-with each other.

In section 3.3.3 Transitions, I have already identified transitions and pauses as further examples of silences that bear relational potential in that they evoke a reorganisation of the relationship guided by attentive listening. I have emphasised that conducting joint transitions and collective pauses between sections or fragments is grounded in establishing a shared sense of time. However, I would like to argue that those kind of silences in music can hold a variety of qualities. Hogg (2018) understands silence as a phenomenon that marks the threshold of perception, but as such is still included "within the continuum of the field of sound" (p. 168), rather than implying its absolute absence as its antithesis. The fragmented beginning of *Habergeiss* for bass clarinet and guitar prompted us to consciously deal with that threshold of the audible in shaping the pauses between fragments. These came along with undefined blank gaps in the score, with the suspension of the staves. The quiet and often muted sounds of the guitar required close listening from both performers to follow their fading on their way to silence, which in turn would determine the length of the pause until the next entrance. It would be a mistake,

however, to reduce these silences to their duration since they directly relate to their surrounding musical material. When Szilard Benes remarks that the pauses should be "experienced more consciously" as another element of connection between the voices (annotation of the code "pauses"), it is because they are not empty, but in fact also may contain dynamics and timbre. Depending on how we arrived at the silences—abruptly ending a sound, or slowly fading away—they would sound differently, as "every sound leaves behind *its own silence*" (Hogg 2018, p. 169, emphasis in the original). However, the way we think or intend their continuation—as a rearrangement, a sustainment of energy, or dynamic intensification—also varies their qualities, as they "arise within and are part of the world of sounds" and are to be understood as "presences rather than absences." (ibid.) To hear these silences as timbral and dynamic qualities means at the same time to open oneself up and listen to the other through the silence, hinting at their experience and trying to find a shared understanding of these qualities. This listening process can be observed in video example P12, comparing different stages of rehearsal.

Video example P12. Pauses and Silences in *Habergeiss.*
https://jessicakaiserguitar.com/videos/p12/

In *Listening to the Other*, Östersjö describes this listening mode as "*searching listening",* an attentive state which is, however, essentially characterised by a fundamental openness and undefinedness of the musical material which often seems to occur at an early stage of musical interaction (Östersjö 2020, p. 97f). To accentuate this way of listening, we started an experiment: Szilard moved around me while playing, searching for different positions in the room and varying the distance between us, thus creating different listening settings, also in a spatial and

embodied sense. This is shown in video example P13 (movement starting at 02:39). We explored different durations, but also timbral and dynamic intentions and qualities of the pauses, with a clear focus on how a change in our listening would influence these qualities. This is where the relational potential of these silences lies: Embracing the void with a conscious, relational listening approach creates the space to reach out to each other within and through the undefined, to trust and empathise in anticipation, to experience silence as a shared presence.

Video example P13. Movement in *Habergeiss* by Maurizio Pisati, with Szilard Benes.
https://jessicakaiserguitar.com/videos/p13/

There are certainly many more ways in which listening to the other facilitates musical togetherness, by mediating between the aesthetic and relational levels of interplay, providing a particular relational focus, or guiding our responses and choices as a duo. As Östersjö states, "[a] musician's listening is all about relation and interaction." (Östersjö 2020, p. 11) He further describes "musicianly listening" as oscillating between tradition and innovation, as "a fundamental mode of listening through which we may approach musical Others in a dialogical manner based on an openness that stretches beyond tradition." (p. 49) Discussing openness against the background of Gadamer's hermeneutic philosophy, Östersjö concludes that openness is not only a fundamental factor of listening, but as such constitutes a basis for the intersubjective experience of listening to the other, for genuine interpersonal encounter and relationship (cf. p. 51). Nancy relates this to the sensory experience of listening:

> To listen is to enter that spatiality by which, *at the same time*, I am penetrated, for it opens up in me as well as around me, and from me as well as toward me: it opens me inside me as well as outside, and it is through such a double, quadruple, or

> sextuple opening that a "self" can take place. To be listening is to be *at the same time* outside and inside, to be open *from* without and *from* within, hence from one to the other and from one in the other. Listening thus forms the perceptive singularity that bears in the most ostensive way the perceptible or sensitive (*aisthetic*) condition as such: the sharing of an inside/outside, division and participation, de-connection and contagion. (Nancy 2007, p. 14)

In the previous sections, I have repeatedly touched upon different modes of listening that occurred in our exploration of musical togetherness, ranging from analytical to pre-reflective state. At earlier stages of the rehearsals of *Ey de net,* for example, a more analytical attitude of listening to the other's part helped establish a basic shared understanding of the musical material, often accompanied by verbal discussions of potential problems and solutions (code "mutual understanding"). The process of "finding through playing" in *Charon*, which in 3.2.1. I described as characterised by both active attention and pre-reflective immediacy, can best be placed between the modalities of *attentive listening* and *structural listening* as defined by Östersjö: "*Attentive listening* is a way of being in which all or some of the players are attuned with the Other and with the ongoing music. From this arises also a state of mind in which new directions can be found at any moment. More than the other modalities, attentive listening presupposes the fundamental openness of listening that Gadamer discusses." (Östersjö 2020, p. 97) *Structural listening*, in comparison, is used "to describe the kind of being-in-listening that creates an understanding of the past while shaping also the further direction of the music, a listening that recalls Husserl's concept of the 'living present,'" (p. 97) while containing both subconsciously embodied and actively attentive dimensions (cf. p. 158). At the other end of the spectrum, I have used *integrated listening* to refer to a moment of musical absorption in *Yemeles*, when we improvised together based on a set of fragments with increased mutual attention (see 3.3.4.). This matches Östersjö's understanding of *integrated listening* "[referring] to a specific kind of attentiveness that arises when [...] players join in resonance with the Other. It is a state at which the playing of two or more performers is integrated and works towards a similar direction" (p. 97). The transitions between the modalities on this spectrum are fluid, and in particular the process of "finding through playing" is predestined to manifest a transmodal understanding of the listening experience in musical interactions, "which embrace

holistic perspectives of playing and being played, of pre-reflective and reflective states, of analytical attention, informed intuition, and openness" (p. 158).

3.3.7 Separate Togetherness

The basic understanding of togetherness (*Miteinander*) in this research is defined to include a broad spectrum of dyadic musical interactions or twoness. One approach is that the composition demands specific qualities of relationship, which must not only be thought of harmonistically, but can also extend to tension, ambiguity or conflict. Togetherness thus encompasses both a homogeneous and a heterogeneous interpretative approach. The two voices may either adapt to each other and aim for a blended, unified result, or emphasise the differences between them, to create a more diverse musical texture. Nguyễn and Östersjö (2019) describe these two perspectives as "equally strong expressions of an ethical approach to the musical other. Hospitality expressed through the principle of blending may be understood as attentive listening based on adaptation. Blending emerges from a search for sameness. The discursive heterogeneous voice instead builds on the creation of a space for co-existence and a celebration of difference" (Nguyễn and Östersjö 2019, p. 253).

I would now like to delve deeper into the particular creative potential of such a heterogeneous approach, where the two voices present themselves as agonists. In section 3.2.1., I described our interpretative process involving the second material in *Charon*, which resulted in a fruitful co-existence of two very divergent individual approaches to the musical material, as a paradoxical togetherness through non-togetherness. In our exploration of the dynamic between two opposing views, we engaged in an iterative process that allowed both perspectives to exist simultaneously. Through this process, we intentionally increased the tension between the views by pushing away from each other. However, we also found new stability in this state of uncertainty by managing a more coherent and dynamic interaction between our parts. Additionally, we developed a shared sense of dramaturgy and meta-timing that helped to guide our exploration. The resulting

musical phenomena did not follow a clearly defined, linear narrative. Rather, they emerged as an ongoing and unsettled exploration of different directions at the same time. The interplay between the two opposing positions unfolded in a state of genuine ambiguity, the result of a dialogical relationship between the perspectives.

In *Fritzi,* the second movement of *Mundus Canis,* we also dealt with a counteraction between the two voices. In section 3.2.2., I described this as a competition between the two parts over the same material. The percussive motifs and the quintuplet figures were characterised above all by the fact that one voice interferes with the other and tries to dominate, to overrule it. In the rehearsal process, it turned out that a central challenge was to resist the emergence of a complementary musical gesture in which the voices simply overlap and flow into each other. A risk here was also gradually getting more accustomed to the sound and the gradual draining of musical tension. Instead, we had to actively carve out the antagonism and strive for differentiation of the individual voices. This, of course, represents a playful situation in which rivalry is simultaneously bound to an underlying togetherness. In this context, reference should be made to Angelika Krebs (2015), who sees autonomy, i.e., self-efficacy with simultaneous connectedness, as an integral aspect of a dialogical relationship. At the same time, however, it is to be distinguished from independence. She explicitly draws a comparison to musical interplay, which for her is an essential, albeit particularly demanding and risky form of human autonomy (p. 60).

Referring to Sarah Callis et al. (2015), these examples suggest seeing these forms of separate togetherness as resistances, as presentations of problems, which unfold a certain creative potential when dealing with them. In their article, the authors explore the idea of creative resistance as a performative tool. They distinguish between found and made resistances:

> "'Found resistance' implies, for the performer, that resistance is already present – for example, embedded in an unusual notation or in a physical conflict with their instrument – and provokes a response; this is usually filtered through the declared or assumed strategy of composers, who may explicitly signal resistance in their notation. 'Made resistance', on the other hand, might suggest choosing a challenging or obscure fingering or bowing in the face of 'straightforward' materials, or indeed, making inroads into a complex notation by making it more complex still." (Callis et al. 2015, para. 9)

They furthermore argue that constructively working with these resistances and using them as an investigational technique requires a "resistant attitude", characterised by deliberately avoiding habitual behaviour that gravitates towards an obvious solution, or an easy, clear interpretation (ibid.). I have already mentioned another example of a kind of separate togetherness, which creates a certain resistance, with the often alternating distribution or division of the two parts in some of the *Sette Duo*, our approach to which I described in section 3.3.5 based on *Ey de net*: By emphasising the embodied relation through the element of touch, we succeeded in creating a coherent, dialogical interpretation. Just as in the examples above, this is a presentation of a problem that arises from the musical text. In other Pisati duos, however, we also encountered resistances resulting from our interpersonal interaction or communication, which made togetherness temporarily more difficult to achieve. Rehearsing *Yemeles* with the singer Jerylin Chou, we spent quite some time with a passage in which Jerylin had to master a large interval leap, while I had to play a series of delicate, rapidly successive musical gestures. Jerilyn was having difficulty finding her pitch and wasn't sure if we could work on it based on a previous comment from myself that I have to play a lot of notes. Jerilyn interpreted this to imply that it would be too much effort for me, so she put pressure on herself to figure out the pitch herself as quickly as possible (code "miscommunication"). Only later did I clarify that I felt rushed because I had to play many notes in a short amount of time, which depended on the beginning of Jerilyn's target note. We realised that we were trying to work on our own problems individually, but in reality, we both depended on each other to accomplish this section. Through this exchange, we were able to clarify this section further by giving space to the individual gestures, which not only gave Jerilyn more time to internally hear and anticipate her tone, but also to embed it coherently into the sound, pitches, and overtones of the guitar (code "finding through playing").

Let us look at another example: Although the notation of the guitar part in *Habergeiss* left room for timing within a musical gesture in many places, this was countered by the fact that at specific moments a very precise synchronisation of the two voices was required. Due to the complex sound output, it was however not always possible for Szilard to follow the guitar voice by listening, but he had to resort

to eye contact or visually following details in the movements of my fingers (code “visual contact”). We clearly regarded this as a kind of failure of togetherness, which we eventually managed to overcome through a better understanding of each other’s part, empathic listening and shared feeling of and for the musical flux.

Høffding (2018) cites the members of the Danish String Quartet as saying that although visual cues can give a feeling of security, they also limit the musical interplay. This is mainly because "listening is much more fine-grained and precise, much more dense in information than vision" (p. 209).

> Asbjørn’s point is that a lot of what they do, they don’t really know what is, in the sense that they cannot express it or conceptualize it. But they perceive its effect, not because they see it, which is a crude safeta mechanism, but because they hear it and feel the sense of movement communicated with the bow. Relying too much on visual cues prevents or overrides the perception of the tiny musical nuances that the audience normally is far from able to perceive, but which makes a tacit difference.” (Høffding 2018, p. 210)

In an interview book with the Guarneri String Quartet, the musicians point in a similar direction:

> *In an effort to improve ensemble, chamber-music players often make a point of looking at one another.*
>
> Soyer: We try to avoid that.
>
> Steinhardt: I haven’t looked at these guys in years.
>
> Soyer: Eye contact doesn’t do any good, because you don’t play with your eyes.
>
> Steinhardt: God has given us peripheral vision. That’s enough for everything you need in a quartet…
>
> Soyer: …Of course, there are times – say, in the slow movement of Beethoven’s Opus 132 – when it’s really not a question of watching the bow or the fingers; it’s more a matter of feeling the pulse. (Blum 1986, p. 14)

This seems particularly interesting given that there is a considerable body of literature discussing visual cues as a central element in the coordination and communication of expressive intentions (see section 2.1). Questioning the relationship between auditory and visual information and its impact on musical togetherness now brings us back to the "made resistances" mentioned above (Callis et al. 2015). With various experiments, we were looking for ways to manipulate our visual and/or auditory contact, in order to interfere with the current flow of events. This could also be described as an attempt to define a threshold for togetherness,

or even to suppress an intersubjective experience. However, it is obvious that suppression would not be the ultimate goal, because it would not make sense to evaluate our interaction on the basis of isolating the duo partners. The more interesting question would therefore be what the consequences of the mere attempt are, both for the musicians' immediate experience of relationship and for a shared sense of an aesthetic goal.

The first of these experiments was to reduce overall contact by sitting far from each other in *Samblana* for saxophone and guitar. In this particular duo, the extremely different dynamic capacity of the instruments was indeed always an issue in the background, making balanced interplay difficult at some points. This was now additionally accentuated, because from the point of view of the saxophonist Stephanie Schoiswohl, the guitar became barely audible. On the one hand, this resulted in a loss of connectivity and intensity of our playing since Stephanie was playing dynamically laid back in order to create more space for the sound of the guitar (code "connectivity"). On the other hand, our respective playing was observed to become more differentiated through clearer articulation and taking more time. The two voices were thus able to express their individual characteristics more effectively. I also felt that I could now expand the guitar sound in view of the extended common sound space between us, as well as push the limits of the dynamics away from what the saxophone was demanding, more towards the softer end of the range. In the sense of a separate togetherness, this eventually could be evidenced by a more evenly balanced, shared sound (code "separate togetherness"; see video example P14).

Video example P14. Separate togetherness in *Samblana.*
https://jessicakaiserguitar.com/videos/p14/

In our rehearsals of *Ey de net* for percussion and guitar, we proceeded with our experiments in two steps: First, we eliminated visual contact by placing an occluder between Manuel Alcaraz Clemente and myself. Due to the richness in nuanced auditory cues in the music, our basic temporal coordination was only very slightly affected. However, it was observed that both musicians placed less emphasis on physical expression in terms of visual cues. This did not lead to a reduced expressivity in the music, but rather to a more empathetic way of playing that was more tentative and afforded more time for dramaturgical developments (code "expressivity"). Finally, we intensified the separated experience by using earplugs while playing, in order to minimise the acoustic information. This by no means led to a desperate attempt to filter out details and nuances despite the acoustic restriction. Rather, after a short time we adjusted to the unfamiliar listening experience and concentrated on larger musical coherences. Similar to the last example of *Samblana,* the individual voices became more distinct from each other in their respective expressive quality. Nevertheless, the music exhibited shifts in shared energy and cohesion that evidenced not isolation, but relationship, as shown in video example P15. Even though separateness was present, transitions, entrances, and other potentially critical moments of interplay were managed on the basis of trust and a previously established, shared knowledge. In this respect, the goal is always somehow an underlying togetherness, which sustains the intentional non-togetherness. The separate togetherness that emerged marked a novel interpretive approach regarding the musical relationship, which was effected by deliberately introducing creative resistances to our interplay.

Video example P15. Separate togetherness in *Ey de net.*
https://jessicakaiserguitar.com/videos/p15/

4 The Encounters Project

4.1 Re-thinking Duo Performance

The aesthetic findings from the duo interventions highlight the significance of adopting an embodied approach to duo performance in our exploration of musical interplay and togetherness. It could already be observed how introducing and working with performative elements that emphasise physical aspects of the musical interaction, such as spatial dispositions, tactility, or embodied musical expression, significantly shaped the intersubjective experience. In fact, they were ultimately to be considered integral components of the jointly developed interpretation. As a result, this led to an individual performative approach for each of Maurizio Pisati's *Sette Duo*, which was then tested in the concert performance at the 2021 SONify! Festival for Artistic Research in Graz (see video example P1). Even though the artistic potential of such a performative concept was already recognisable, we were not yet able to exploit the intercorporeal dimension of our interaction in its full depth and scope. This was partly due to the pandemic-related restrictions in terms of physical proximity and contact, but also to our intuitive approach to the bodily phenomena as grounded in the gestural character of the music and its roots in instrumental theatre. Furthermore, we were aware that the relational dynamics would change decisively in a live situation with an audience, also in the sense of a shared physical presence.

Consequently, for the next phase of this research, the following objectives emerged:

1. To deepen and systematise the embodied approach to duo performance.
2. To apply it to and test it on a wider range of repertoire.
3. To consider the role of the audience in a live performance situation.

This led to the *Encounters* project, which integrated all three of these objectives. The project explored how we need to re-think duo performance from an embodied perspective, in order to foreground relationalities in joint musical performance. To achieve this, it included the musical exploration of diverse

repertoire from different styles and periods in duo with violinist Johanna Ruppert; this was combined with bodily-choreographic experimentation in collaboration with dancer/scholar Elizabeth Waterhouse. Through this interdisciplinary approach, we developed performative means that actively involve the musicians' bodies in order to expose intercorporeal and intersubjective processes. The emergence of a 'We' was encouraged through finely tuning musical and interpersonal processes to each other and through a focused effort of artistically working with different relational qualities. Furthermore, performance artist Christina Lederhaas was substantially involved in developing an innovative performance concept in which the audience is actively involved in the explorative process rather than being presented with results. This provided the space for diverse forms of musical and interpersonal encounters as manifestations of an actively shaped musical relationship. The purposeful interaction and involvement with the audience as part of the web of unfolding relationships during a live performance was central to what was envisaged as an immersive concert experience.

The *Encounters* project was centred around my long-standing duo collaboration with violinist Johanna Ruppert as Duo Karuna[11], which marks the second strand of *The Musical Dyad* and spans the doctoral project as a field of exploration and as a reflective constant. Already at the beginning of this doctoral project, we experimented with performative elements that were intended to reinforce the relational dynamics in the duo. For the ARTikulationen Symposium in 2019 we developed a semi-choreographed performance of Arvo Pärt's *Fratres* together with dancer Magdalena Chowaniec. As can be seen in Figure 24, for each variation of the theme, Johanna moved through the space and positioned herself in a different spatial relationship to myself, while I was seated centrally on the stage, thus enacting different relationalities.

[11] Founded in 2016 during our studies at the University of the Arts Graz, we soon recognised the importance of shared emotional states for refined musical interplay, which led us to choose the duo's name: The Sanskrit word karuna can be translated as compassion, not in the sense of pity, but as a way of empathetically feeling-with each other. See Appendix A for more information on Johanna Ruppert.

Figure 24. Performative experiments in *Fratres* by Arvo Pärt, ARTikulationen 2019.

To further substantiate these preliminary artistic explorations, I initiated a joint study with contemporary dancer and researcher Elisabeth Waterhouse as part of the *Encounters* project. In her book *Processing Choreography* (2022), Waterhouse investigated duo dance performance by providing her unique dancing-scholar perspective in a longitudinal study of the piece *Duo* by William Forsythe, while drawing on her embodied knowledge as a former Forsythe dancer and blending first- and third-person perspectives of movement. Against this background, she developed core values of moving *together*, some of which reveal striking parallels to making music together, such as relational movement, shared intentionality, dialogue, mutual entrainment, or sensorial attunement, among others.

I invited Waterhouse to join our experimentation sessions in Graz in February 2023. Waterhouse's differentiated analysis of our bodily actions enabled us as a duo to experiment artistically with nuanced qualities of movement, and to relate them to phenomena of musical togetherness. Her input focused on the aspects of somatic attention and empathetic kinesis. As I will describe in greater detail in 4.3., incorporating them into our musical interplay enabled us to modulate musical qualities and intensities and enhance our musical expressivity.

The aim of experimenting with embodied expression was not only to increase our sense of togetherness within the duo, but also to convey internal relational processes more explicitly to an audience. This entails questioning how an emotional state shared between co-performers can be transferred to the listener. To answer this, it was necessary to embed those experiments in a broader performative concept and to consider other ecologies of performance, such as space, light and dramaturgy, but also question culturally established conventions and formalities of concert situations. In order to induce and intensify empathetic processes and create an intimately shared experience, hierarchies between performers and audience, as common in traditional chamber music performances, need to be dissolved (cf. McCaleb 2022). The audience shall no longer remain in a mere observational position to the musical relationships enacted by the performers, but instead needs to be actively engaged in the aesthetic activity. McCaleb therefore draws the concept of *Chambering Music*, which focuses on the creation of intimate musical relationships and experiences both between co-performers and with the audience.

> Chambering music expands the scope of intimacy to include all those partaking in the experience of the live performance. Its full extent requires a flattening of the artistic hierarchy typically found in presentational music, placing the performers and the audience in parity with each other. It is difficult to imagine how intimate relationships can be developed between parties whose power or degree of control vary dramatically. Chambering music validates and elevates audiences' experiences. (McCaleb 2022, p. 33)

The author hence proposes a new practice that "position[s] performers and audiences as parties in equal dialogue with each other—and, consequently, in open dialogue with chamber repertoire" (p. 34). This is to be achieved through a limited number of participants and smaller performance spaces that allow for physical intimacy and where the audience can be positioned closer to and around the

performers. Likewise, in the *Encounters* project, a main concern was to bring audience and music closer together. Considering performance as embodied, physical proximity allows the listener to perceive the physical act of playing the instrument more intensely. This includes details of gestural interaction, but also secondary sounds and noises, such as breathing, minor vocal utterances, string noises when changing the left-hand position on the guitar, or the sonorous touchdown of a finger on the violin fingerboard. Such nuances can in fact not only be quite revealing about the interplay between the musicians, but also "may further humanize performers" (ibid, p. 34), thus enhancing interpersonal connection. McCaleb even takes this as far as proposing a participatory scenario, in which musicians play together with audience collaborators joining the ensemble and exploring the repertoire together in what can be understood as an open rehearsal format.

Even though this was not intended for the *Encounters* project, the aim was to facilitate a truly shared experience with the audience. Berleant describes the experience of musical performance in a way that always seems to guarantee this: "As the music begins, the sounds in performance become tangible in the space of performance, given shape by the fingers as they play, much as a potter molds her clay. Thus the sounds join with the pianist and the audience to become the medium of performance, fusing body and presence with space, time, and movement into fluid continuity." (Berleant 2004, p. 173) However, I argue that there is much untapped potential for togetherness here that an extended performative approach can unleash.

Christina Lederhaas's background in theatre studies and her practical experience in diverse performative contexts were very valuable here, since the idea of actively sharing and jointly enacting the space of performance as performers together with audience, and even the blurring of the boundary between the two, is far more established in the field of (experimental) theatre. Erika Fischer-Lichte in her book *The Transformative Power of Performance* (2008) discusses the "bodily co-presence of actors and spectators" as the basis for the emergence of a sense of community, as well as the possibility for more radical forms of interaction, such as

physical touch (pp. 51-67). I will elaborate on how we conceptually implemented this idea in our performance in section 4.4.

4.2 Repertoire

To initiate the working process, the first step was to select suitable repertoire. In the duo interventions, the clear focus on contemporary works resulted from the intention of using original duo repertoire for diverse instrumentations. In this contemporary repertoire, the compositional treatment of the two parts is designed to be as egalitarian as possible, liberating the guitar from its traditionally mostly accompanying role (see also 3.2.). The intermediate findings were notably shaped by the expressive and gestural nature of the compositions. Particularly, in Pisati's Sette Duo, we observed a distinct localization within the genre of instrumental theatre. The goal was to find out to what extent the embodied approach could be transferred to different repertoire and how insights on interplay in contemporary music might inform the interpretation of more traditional repertoire from earlier periods, thereby challenging and possibly revising preconceived notions about interplay. In addition to a certain stylistic range, the main concern in programming the repertoire for the *Encounters* project was to include different forms of musical twoness, as well as to address a variety of possible relational conditions and dynamics.

As for the instrumentation of violin and guitar, apart from an early Romantic peak, one is quickly confronted with a lack of high-quality duo repertoire, or even a lack of duo repertoire at all, when it comes to earlier periods. Taking, for example, one of Paganini's plentiful sonatas, one all too often encounters clichés such as imitation between the voices or, indeed, the classical division into melody and (simplistic) accompaniment. The aspiration for more sophisticated constellations prompted us to work to a large extent with transcriptions. However, the idea of being able to intervene in the musical structure even prior to the rehearsals as an additional level of experimentation and, potentially, to pre-shape the musical relationship in this way was a welcome effect. This gave us the opportunity to both

work with certain clichés, but also to be able to manipulate them to a certain degree. The individual transcriptions therefore deviate to varying degrees from their original, depending on which relational aspects we wanted to explore. This coincided with the general approach to programming and—more importantly—interpretation, which was always preceded by a performative and relational goal. Bringing relational agency more into the realm of the performers through a liberal attitude towards the musical text and its interpretation also implies questioning a *Werktreue* performance culture, which I will further discuss in section 5.2 Relational Interpretation. I will now give a brief and chronological overview of the individual works performed and comment on the relationship between the two parts. Their dramaturgical embedding and performative implementation will then be the subject of sections 4.3. and especially 4.4.

4.2.1 Transcriptions

Johann Sebastian Bach (1685-1750)

Sonata for Violin and Basso Continuo in e-Minor BWV 1023
Sonata for Violin and Basso Continuo in G-Major BWV 1021
(transcr. Jessica Kaiser)

Transcriptions of his own works, as well as those of other composers (e.g., Antonio Vivaldi), hold quite a significant place within Johann Sebastian Bach's body of works. Moreover, subsequent generations of composers showed great interest in adapting Bach's compositions based on their contemporary aesthetic concepts and sensibilities. This demonstrates an evolving approach to Bach's repertoire, constantly fuelled by the enduring allure of his profound musical message. An adaptation of the basso continuo part to the guitar has become a common practice. It is true that some technical compromises cannot be avoided in comparison with keyboard instruments as prioritised by Bach, such as three-voice instead of four-voice movement, or octave changes in case of extreme ranges in the bass line. The practice still seems more than appropriate, not only because of the instrument's

relation to historical plucked instruments such as the lute or theorbo, the latter of which was used almost entirely as a continuo instrument, but also because the guitar is able to mediate particularly well between the lute and the harpsichord in terms of timbral and dynamic qualities.

As far as the relationship between solo voice and basso continuo is concerned, it would be too reductive to understand Bach's intention as the division between melody and accompaniment. Instead, basso continuo playing goes far beyond mere accompaniment practice, providing the very foundation of the composition on the one hand, and often following contrapuntal rules on the other (cf. Remeš 2021), such as through counter-themes, imitation, or a melodic (not soloistic) leading of the upper voice, calling for a trio-like texture. The latter aspect is of particular importance in the two selected sonatas: In some places, the exact course of the continuo realisation is notated by means of compound numbers, which is quite unusual, and in which an artistic intention of the composer seems to be clearly present (Bötticher and Christensen 1995, para. 1). Of course, contrapuntal dialogue is most pronounced in a fugue, as found in the final movement *Presto* of BWV 1021. A full analysis of the two sonatas would go well beyond the scope of this thesis. In general, great importance was placed on creating a historically informed but practical and well-balanced transcription of the basso continuo that allows both instruments to encounter each other dialogically in their idiosyncrasies and to mutually enrich each other. In terms of performance practice, the realisation of the basso continuo is oriented towards historical practices for plucked instruments, such as the repeated striking of full chords, as well as of dissonances as opposed to tied notes, or the use of rhythmical or free arpeggios. This contributed not least to a dynamic balance between the instruments.

Christoph Willibald Gluck (1714–1787)

Mélodie from Orfeo ed Euridice – *Ballet des Ombres Heureuses*, Wq.41 No. 30 (transcr. Jessica Kaiser)

The famous flute solo more precisely constitutes the D minor middle section of the minuet *Ballet des Ombres Heureuses* (Dance of the Blessed Spirits) in F major in the second act of Gluck's *Orfeo ed Euridice*. This middle section was only added to the work in the Paris version of 1774, thus extending the minuet to almost three times its original length. The minuet marks Orpheus' passage into Elysium, where he is embraced by the serenity of the blissful spirits.

Originally for solo flute and strings, the melody has been adapted for numerous instrumentations, including by Fritz Kreisler as one of his many transcriptions for violin and piano. In his *Grand Traité d'instrumentation et d'orchestration modernes,* Hector Berlioz describes the flute part as follows:

> Gluck's melody is conceived in such a way that the flute lends itself to all the vicissitudes of this eternal grief, still imprinted with the scars of passion from life on earth. At first it is a scarcely audible voice that seems afraid to be heard; then it begins to wail softly, rising to a reproach, then to profound grief, then to the cry of a heart rent by an incurable wound, and then falls back little by little to the lamentation, the wailing and the bitter sob of a soul resigned . . . What a poet! (Berlioz/Macdonald 2002, pp. 140-141)

The challenge here, then, was to transfer this melody, seemingly tailor-made for the flute, in its delicacy and lament, to the violin. This is facilitated by the fact that the accompaniment by the guitar in the piano range in any case requires an introverted, yet at the same time very approachable and responsive playing of the violin. In this way, it constantly seems to push the lower dynamic limit of the instrument, resulting in a fragile and expressively very compelling tone quality. In this case, too, the somewhat reduced transcription of the string parts onto the guitar demanded such liminal playing of the violin. For the sake of playability and balance of sound on the guitar, this transcription also required some octave adjustments of bass notes as well as position adjustments of the upper voice of the accompaniment. The division of melody and accompaniment was strictly maintained in this transcription, with an attempt to evoke both the orchestral timbre and to bring out contrapuntal elements through deliberate texturing of the guitar part.

Gabriel Fauré (1845-1924)

Après un rêve op. 7 No. 1 (transcr. Tilman Hoppstock)

The development of French art song in the period from early Romanticism to Impressionism was strongly marked by the emergence of the *Mélodie*, which increasingly replaced the extremely popular *Romance*. This development can be traced well in Fauré's song œuvre (cf. Jost 2023). *Après un rêve*, written around 1877 and one of Fauré's most famous songs, can still be regarded as a *Romance*, in which the voice fundamentally dominates the accompanying instrument. This clear distribution between soloing voice and serving accompaniment is prevalent in *Après un rêve*. Nevertheless, by virtue of the strong harmonic freedom and richness of the accompanying part, it already points in the direction of its harmonic, motivic, and expressive emancipation as pursued in the *Mélodie*.

In principle, Fauré's songs can be transferred relatively well to the guitar in terms of their tonal range and structure of the setting. By using a (quite unusual) scordatura of the 6th string two whole tones downwards, the arranger Tilman Hoppstock ensures that the original key is retained. The richness of colour that results from this, as well as from the complex harmonies on the guitar, underlines the impressionistic character of the music. In addition to typical demands on the interplay in terms of balance of sound, phrasing and timing, the aspect of intonation between the instruments is strongly challenged.

Gabriel Fauré (1845-1924)

Sicilienne op. 78 (transcr. Raphaël Bereau)

The Sicilienne was conceived in several stages: Originally intended by Fauré for the incidental music of *Le Bourgeois Gentilhomme*, it has survived in fragments for flute, oboe, and strings. In 1898, Fauré finally composed the version for violoncello and piano, which was later included in the incidental music for *Pelleas et Melisande*. The melodically catchy character piece carries the typical elegance and lightness of Fauré's music. Avoiding flashy effects and contrasts, it draws on richly

shaded nuances (Jost 2023), but also a certain oscillating ambivalence with regard to harmony, rhythm and tonality, as it was representative of the sophistication of French fin-de-siècle salon culture.

The piece is particularly interesting from a chamber music point of view due to its compositional structure: Both instruments alternate between melody and accompaniment, and the melodic lines are sometimes handed over to each other fluidly. The role exchange becomes particularly clear in the accompanying pizzicato passages of the violin, as well as in the middle section, when the guitar moves its melody above the violin in terms of position. In this dialogical relationship, the striking and concerted chords seem like reflexive moments of encounter and joint breathing. The multiple repetitions of these chords as well as other motifs and themes require a nuanced and finely attuned sense of expression.

Richard Reed Parry (*1977)

Duet for Heart and Breath (2014)

Duet for Heart and Breath by Richard Reed Parry is based on a quartet version commissioned by the Kronos Quartet, which Parry eventually developed into an entire suite for different instrumental settings and ensemble sizes, under the title *Music for Heat and Breath*. The compositional idea brings physicality to an immediate attention, but in a completely different way than through movement and gesture. Instead, the minimalist music follows the heartbeat and respiratory rhythm of the performers. As Parry writes in the composer's note prefacing the score, breathing and heart rates of the players determine the pace at which the musical material is played (Parry 2014). For the polyphonic instrument, in our case the guitar, "two eight notes (quavers) correspond to the two sounds of a normal heartbeat, and performers should match as closely as possible the staccato and irregular rhythm they hear." The violinist, on the other hand, is instructed to play sustained notes aligned to their breath: "[T]he natural cycle of one inhalation and one exhalation, or vice versa, will determine the length of the bar (two quarter notes/crotchets) without any attempt to make it regular." This entails a natural dynamic as these rhythms

change constantly throughout the performance, with the two parts seeming to run independently, moving in and out of sync, and sometimes meeting each other at incidental points of contact when the individual paces match for a moment. The result is a quiet and subtle soundscape, as each instrument must play quietly to keep the extreme inward focus and stay in time.

4.2.2 Original Works

Julia Kadel (*1986)

Équilibre (commissioned for Duo Karuna by Open Strings Berlin) (2020)

In her work, pianist and composer Julia Kadel explores the boundaries between jazz and contemporary music. Équilibre was commissioned in early 2020 for the event *Berlin Dialogues* and was written especially for Duo Karuna. In close collaboration between duo and composer, the piece conceptually focuses on the research question of musical togetherness in joint performance. It consists of several sections in each of which Kadel incorporated a different form of musical twoness, including complementarity, dialogicity, improvisational openness, melody-and-accompaniment-type role distribution, compound soundscapes, solistic interjections and transitions, or unison playing. This yields a rich spectrum of interaction, while the piece balances tonality and atonality, intuition and reflection, poetry and austerity.

Lukáš Hurník (*1967)

Conversation: 5. Confrontation and Resume (2013)

Hurník's compositions are characterised by a synthesis of different styles, in which elements of popular music meet baroque polyphony, chromaticism meets classical melodicism and cantilena meets minimalist patterns. *Confrontation and Resume* is the fifth and last movement of the mini-suite *Conversation,* which narrates the exchange between two subjects. The conversation develops from a tense inner

dialogue via consonance and doubt to well-wishing and cumulates in the moment of confrontation: In its energetic, almost aggressive undertone, Hurník employs various elements of a (not so promising) conversation, from ironic imitation to cutting each other short, insisting repetitions, talking simultaneously and/or past each other. The tension then resolves in a consolidating *résumé*, followed by a coda that once again touches on the theme of the dialogic first movement, ending in a striking but common conclusion.

4.3 Embodied Musical Togetherness

The first day of rehearsals was dedicated to duo-internal calibration. This included reading through the pieces to develop a shared understanding of the music, balancing intonation, roughly adjusting musical parameters such as dynamics, timing, and phrasing, and getting comfortable with the acoustic situation while working on a shared sound. On the second rehearsal day, the experimental work with dancer/scholar Elisabeth Waterhouse was initiated, who played the role of choreographic support. Waterhouse's expertise centred around analysing our movements and how our bodies interacted with each other in the context of our performance. Her focus encompassed both micro- and macro-movements and expressions. As opposed to the more global role of Christina Lederhaas, which was more concerned with the overall performance and its dramaturgy as well as the spatial concept and our relation to the audience, with Waterhouse the aim was to experiment with nuances and details of our bodily actions and their effect on the music performed, while always reflecting the felt relational experience. At the same time, according to a broader understanding of movement and choreography, these aspects cannot, of course, be thought of separately from the perspective from which they are perceived, which therefore includes space, light and audience. References to the overarching performative concept, to elements of the production and site-specific details therefore always operated in the background of the experiments.

In the joint session, we focused on three pieces, in each of which we explored different aspects of bodily relationship, and which I will discuss in more detail below. Thereby I describe our work process and provide insights from the joint reflection, along with selected excerpts from the video documentation. Not least, the discussion will substantially relate to the findings of the duo interventions discussed in section 3.3.

4.3.1 Transitions, Shared Time, and Space in *Équilibre* (2020) by Julia Kadel

The piece *Équilibre* is organised in sections of different lengths, each of which poses a different variation of twoness. At the beginning of our session with Waterhouse, our interpretation still seemed somewhat collage-like and we experienced it as challenging to hit the right mood together right away for a new section. How could we create more coherence and still bring out the character of each section more clearly? How were the transitions between sections to be managed in order to be able to shift to the next relational quality with greater sensitivity?

One of Waterhouse's early observations was that in developing the performative concept, we had considered where we would like to position ourselves in the space, either as a duo or individually, but had not clearly notated what direction each of us would face, both in terms of room directions and relative to the other. The aspect of direction in space is specifically addressed in Laban's Movement Notation by depicting the single dancer as a pin or T, with a dancer standing on the head of the pin or the point where the two lines meet and the tip indicating the direction they face (cf. Guest and Anderson 1977, p. 105). Considering this was particularly relevant for our performance, as the audience would later be distributed throughout the space and all around us. If we now take different positions in relation to each other, then the directional relationship changes not only for us as a duo and how we perceive ourselves visually, acoustically, as well as somatically, but also for the audience.

Thus, our first experiment aimed precisely at this: Around the fixed axis of our music stands, we turned ourselves facing in different directions and hence adopted different positioning constellations as a duo. This also implied a playful approach to proximity and distance. Coming from a medium-distance juxtaposition, we moved towards and away from each other through the rotation around the music stands, as shown in the excerpts in video example E1. Decisions about the direction and degree of the individual rotation were improvised in view of how it

was guided both by the musical proposition of the preceding and/or following section as well as by an empathetic awareness of the duo constellation. In terms of musical interplay, some of the positions particularly encouraged the felt connection in the sense of musical togetherness. This was true, for example, of an intimate close-up for a free, almost improvised, soundscape-like section, evoking sensorial attunement (video example E1, 02:17). The fact that we could only see each other peripherally in this position not only enabled particularly detailed listening but activated a rich sensory experience of one's own performing body in relation to the other and the shared environment, which facilitated musical connectivity (cf. Waterhouse 2022, p. 194, "sensorial attunement"). Rhythmically tightly interlocked and dialogical sections, on the other hand, benefited from a diagonal alignment to each other with sufficient peripheral and direct vision, evoking a different kind of somatic attention while opening up space in between us, in which the individual sounds could unfold and interact (video example E1, 01:53).

Video example E1. Rotation around the music stands in *Équilibre.*
https://jessicakaiserguitar.com/videos/e1/

Indeed, this engagement with the space as a result of the rotation and different positionings was perceived not least in its sonic effects and the relation between the individual voices, ranging from clearly differentiated sound sources to a highly blended duo sound. Not only did we perceive ourselves in the space in different ways, but we also opened up spaces of different sizes in terms of sound. Regarding the experience of space in performance, Berleant writes:

> "Phenomenal space is connected to the perceiver. It is lived, not objective; personal, not formal. And it is experienced not only as spatial but equally as dynamic and temporal. It may or may not appear intimidating, depending on one's experience, expectations, and psychophysical state, and these affect its perceived dimensions.

> Unlike the physical definition of space as empty, space in performance is thick, fluid, almost palpable. It is not just the area in which the musical activity takes place but becomes a participant in that activity." (Berleant 2004, p. 172)

Phenomenal spaces within the physical space were thus created through sound. The shaping and structuring of these sonic spaces, their expansion or densification, is the result of the emergence of a 'We', of an intersubjective decision-making process that takes place between the duo partners.

In view of requirements for the musical interplay, as well as specific musical or physical-relational intentions, we began to actively search for favourable positions as part of a shared intentionality, which was also evident from minor adjustments in response to each other after initially taking a position (video example E1, 04:26). The liberty of decision required sensing into one's own physical position and posture, but also into that of the other, and what they bring out musically. Waterhouse describes this in the case of the two compared performance traditions of Forsythe's *Duo* as subtle variations within a choreography that hold an element of surprise and thus "ideally elicit a reaction and enliven the play." (Waterhouse 2022, p. 183) She describes the sensory attunement necessary for this as "intuiting, supporting, observing and listening. The dancers remembered: 'I'm there for you,' 'I hear you,' 'I will wait for you,' 'I see you,' 'I feel you,' 'I'm with you,' 'I change it with you,' 'I answer you.' In both cases, the dancers engage relationally with the virtual potential to co-create-perceiving microvariations and nuances." (ibid., p. 184)

Another matter concerned the actual turning of the upper parts of the music stands while rotating around them: Waterhouse noted that it would be essential to understand these processes as part of the piece, not only in the sense that they produce sound. How could we embed these sounds, but also the movement itself, as expressive but also relational moments in the musical narrative? Waterhouse suggests making eye contact before starting to move, as well as actively listening to the emerging sounds. In addition, the movements needed to be coordinated by both starting together and, more importantly, finishing the rotation together. This is explored in video example E2. As Waterhouse states after the last try-out, "this suddenly brings up dance". Drawing on one of the core values of moving together developed in her work on *Duo* by Forsythe, our movement started to be *relational*:

> "In *Duo's* relational movement, the movement emerges contingently through mutual attunement [...] to one another, the context of performing, the audience and the ambient musical score. Connection is forged through practice. This involves listening to one's partner while dancing—neither dominating nor following passively—retaining at all times an awareness of the other. The connectivity between people, through mobile bodies, is an active component of Duo's movement, as well as the source of variation within the choreography." (Waterhouse 2022, p. 189)

Video example E2. Joint rotation around the music stands in *Équilibre.*
https://jessicakaiserguitar.com/videos/e2/

The attentive alignment of our movements requires an intimately shared sense of timing through a sort of empathetic kinesis, allowing us to shape the quality of this shared time. This is also true for transitions in which only one of us moves, since it is still to be considered time actively shared. Movement is generated as suggested by the piece itself, respectively the dynamics of the previous section, and a feeling for what length the pause needs to be. In these moments, we are hence still sharing *musical* time: The sense of time during the transitions is informed by the sense of time while playing the individual sections and vice versa, thus contributing to the synthesis of the whole piece. Most importantly, the timing is not determined by an external force, but is developed together in an empathetic process. By surrendering to this experience of togetherness in the jointly shaped transitions, they can unfold their relational potential, which involves (re-)orientation and (re-)attunement towards each other, thus facilitating the necessary (re-)configuration for the next musical section.

Beyond greater clarity in the shaping of the individual sections, this embodied exploration led to a transformed overall interpretation of *Équilibre*. While in some parts, the piece appears to be in search of equilibrium, in others it makes a

seemingly decisive statement about it. Equilibrium, however, depends on continuous calibration, on a dynamic and elastic process. The apparent juxtaposition of uncertainty vs. decisiveness therefore indeed benefits from the integration of one quality into the other. By shaping the transitions together more consciously, we were able to strengthen the relationship between the individual sections in this way in a process of ongoing synthesizing, thus creating more coherence across the piece. This also became particularly evident in the Graz performance, which I will discuss in detail in section 4.4.

4.3.2 Sound, Phrasing and Listening in *Sicilienne op. 78* by Gabriel Fauré

When we first tried Fauré's *Sicilienne* in the session with Waterhouse, the piece was still at quite an early rehearsal stage. Hence, the following musical problems could be identified that required attention: The phrasing and especially the endings of phrases were not yet clearly coordinated; the dynamic balance occasionally slipped, and the interpretation of repeating themes and motifs was still undifferentiated. Instead of determining various musical parameters trying to solve this in a somewhat trivial way, we first approached the piece via the relational level, hoping to reach deeper into the core meaning of this piece of chamber music. The musical material in the *Sicilienne* is indeed very evenly distributed between the two voices, in the form that both instruments alternate between melody and accompaniment. Nevertheless, there is a significant imbalance in the technical challenges of the two parts since the transcription of the piano part onto the guitar involves numerous strenuous barre chords and relatively elaborate fingering sequences. The violin, on the other hand, mostly features conveniently set single-voiced lines or simple accompanying figures.

To compensate for this imbalance, we explored ways of adding extra challenges to Johanna's violin performance. These included, for example, bringing the bow to the string in a willingly uncontrolled and risky way to slightly increase insecurity for the attack, playing by heart, and performing different kinds of

movement while playing. The two latter ones were eventually combined in one experiment that can be traced in video example E3, in which we play the first larger section of the piece: Johanna was asked to move through the space while playing. With the intention of creating a certain contrast to the intimacy and sonic delicacy of the piece, we also decided to work with distance, with Johanna wandering peripherally at the edges of the room around me as the centre.

Video example E3. Movement Johanna in *Sicilienne.*
https://jessicakaiserguitar.com/videos/e3/

In a way, this went against the more intuitive impulse to seek timbral closeness between the instruments in this music. It challenged us all the more to span the space between us by way of sound and to maintain an intimate connection across the distance to ensure a nuanced joint phrasing. In fact, what happened was that suddenly two distinct, yet relating sound spaces were created, which in a way also went somewhat against the respective acoustic potential of the instruments: on the one hand, a kind of spatial sound from the guitar, trying to fill up the room in all directions; on the other hand, the sound of the violin, which seemed to unfold in Johanna's kinesphere[12], thus moving through the space with her. The aural differences in terms of listening to each other induced by the different angular positions had striking effects on our playing: The previously dominant violin voice could become lighter and more floating, and at the same time was acoustically

[12] The notion of kinesphere as defined by Laban is the sphere around the body whose periphery can be reached by easily extended limbs without stepping away from that place which is the point of support when standing on one foot (1974, p.10).

supported by the all the more projecting guitar voice. Without any explicit communication, we intuitively and empathically also opted for a slightly slower tempo than before to give the sound even more space and time to breathe.

For the purpose of a choreo-musical dramaturgy of the first part of the *Sicilienne*, Waterhouse suggested structuring Johanna's movement: To emphasise the guitar's solo beginning, she should begin by standing and anchoring in listening. After a nearly circular movement around me, she should come to a halt in a new position at the end for the reprise of the theme, to express a transformed statement: "Now, where are we at…?" (Waterhouse) Due to this structuring, Johanna was forced to move during the passage that she could otherwise exploit most from a technical point of view. Before, she played the exposed notes and interval leaps in the high register almost with bravado, whereas the rest of the piece paled in comparison. Due to the changed, rather unstable physical sensation and posture while moving, the passage consequently had less grounding, at the expense of brilliance; however, in this way it was better integrated into the rest of the piece. Upon recognising this, Johanna was able to use it as a creative element, experimenting with movement and stillness in this passage to bring out different musical qualities in her voice, which at the same time informed our shared interpretation.

As can be heard in the choreographically more structured, second version of the same excerpt in video example E4, the described experimental process created the desired variance and timbral differentiation in the repetitions of the individual themes and motifs, as well as a more nuanced and fine-tuned phrasing. These qualities of interplay were grounded in the embodied relational experience and unfolded between us as part of a jointly shaped and lively musical narrative—without us having determined any musical details in advance, but through attentive listening and empathic attunement. Through the relational approach, we achieved an in-depth, multidimensional musical result that included not only an awareness of how our shared sound acted in the space, but also the intercorporeal sensation as part of the joint interpretation.

Video example E4. Structured movement in *Sicilienne.*
https://jessicakaiserguitar.com/videos/e4/

Most importantly, the interpretation plastically changes with the performers' attunement, is continuously reinvented and shaped by the emerging relational process and intersubjective experience. This provides a clear parallel to what Waterhouse discusses as relational movement: movement emerging contingently through mutual attunement and in the betweenness of the two dancers, adding a contingent variable to the choreography. Drawing on philosopher and dancer Erin Manning, she points out the creative potential of the relational:

> "Relational movement is movement with a highly generative virtual component. The virtual is felt as intensity burgeoning in movement—in which movement is creative. It is an intensity that is real. For Manning, it is typically ineffable because it is a process of gesture or expression coming to the fore, not finalizing. For Forsythe dancers experienced in improvisation and the negotiation of various procedures of planning movement as choreography, they become masters in feeling the different ways that relations unfold. These experienced dancers follow becoming, feeling movement rich with micro-tendencies that bring it in and out of the habitual." (Waterhouse 2022, p. 166)

Foregrounding the relational thus builds a creative surplus, in that it carries the potential for change and joint invention. In duo performance, this jointly experienced potentiality is evidenced in the plasticity of interpretation, in an elastic approach to timing, phrasing and musical expression. Waterhouse writes:

> It is this sense of relationality as [...] creative that I believe is insightful for understanding Duo: a concept of togetherness based on mutual negotiation of the virtual. Duo dancers submit themselves to a relational togethering that lets them feel power as a sort of creative potential in becoming rather than as discipline. They find a manner of thinking through their bodies together, which not only is limited to their bodies but to their connection to the presence of the audience. (ibid., p. 169)

Here our understanding of togetherness is sharpened, not as a final destination, but as a process of generative "togethering". As a result of exploring musical

togetherness through an embodied approach, the "thinking through their bodies together" (see above) can be expanded to the multidimensionality of musical interplay as an intersubjective, creative process that evokes a resonant space of collective thinking through playing.

4.3.3 Shared Space and Resistance in *Confrontation and Resume* (2013) by Lukáš Hurník

With its strong expressiveness and characteristic antagonism, the piece *Confrontation and Resume* by Lukáš Hurník clearly stands out from the rest of the programme. It therefore seemed particularly appealing to work with contrasts between the musical content and its performative realisation in order to increase the inner tension between the voices, which we explore in video example E5. In an attempt to bring us as physically close to each other as possible, we opted for a back-to-back position, sharing one piano bench. We each took seat at one of the short sides of the bench for stability. The back-to-back position is a conscious penetration into each other's kinespheres, but not in the sense of a confrontational conflict. Associatively speaking, it rather stands for qualities such as intimacy, trust, introversion and support. At the beginning of the piece, it can be observed how we both still tend to move forward, each projecting the sound in front of her, which seems to originate from a performative habit as internalised for classical concert situations. Over time this tendency changes, we increasingly seek physical contact with our backs, sensing backwards, and distributing our somatic attention, as well as sound, all around us, creating a shared kinesphere. The physical contact helped us to arrive in our own bodies and become present with each other. The concept of *sharing space* is another value of moving together as presented by Waterhouse (2022, p. 192), which in this proxemics of touch becomes transferable to musical togetherness.[13]

[13] Proxemics refers to the study of human use of space as an element of nonverbal communication, as coined by cultural anthropologist Edward T. Hall in his book *The Hidden*

Video example E5. Back-to-back position for *Confrontation and Resume.*
https://jessicakaiserguitar.com/videos/e5/

To further modify the quality of this nearness between us, Waterhouse suggested that the piano stool be rotated 90 degrees, which significantly reduced the available seating surface for each of us (video example E5, starting at 01:25). Beyond the kinaesthetic perception and integration of each other's performative movements, described as being moved by each other in section 3.3.5, there was above all an intense haptic effect: The quality of our touch changed, as we had to actively expend energy and pressing against each other with our backs in order not to fall off the chair. This pressure was characterised by both counteraction and interdependence, which lent an ambiguity to the situation and thus, above all, to the musical expression. In the sense of a separate togetherness, as discussed in section 3.3.7, the antagonism of the confrontation is imbued with an underlying interdependent relationality, thus creating inner tension and interpretative depth.

Waterhouse also observed that while playing the guitar I frequently pull up my heels, which conveys an unstable impression. At the same time, Johanna exhibited a similar demeanour in this piece, physically reaching upwards and thereby displaying a great deal of movement and looseness in her legs and feet. We followed the suggestion that Waterhouse, together with Deniz Peters, who was attending the working session as an observer, should each weigh down the feet of

Dimension ([1966] 1990). Hall, for example, classifies four zones of interpersonal distance—intimate distance, personal distance, social distance, and public distance—which can provide information about the relationship between these people.

one of us with their hands. For Johanna, this led to increased proprioception, she felt supported and more grounded in herself. For myself, the effect was initially quite the opposite, as it was such a fundamental part of my habitus to hold my feet up in this way. As Peters remarked, by the end of the first part of *Confrontation* he could hardly keep my feet on the ground as an emotion seemed to rise "up from my feet into the sound". The overall setting of this experiment, including the rich sensory input of the various points of touch on back and feet, thus created a kind of resistance (see also 3.3.7). As can be witnessed in video example E6, this on the one hand initially led to a loss of technical control as well as imprecisions in the interplay, such as missed cues or out-of-sync playing. On the other hand, it had an activating effect on the expressive potential of the antagonistic musical interplay, which became evident not only in a slightly increased tempo, but also in a wider dynamic range and incisive sound characteristics.

Video example E6. Waterhouse and Peters holding down our feet in *Confrontation and Resume.* https://jessicakaiserguitar.com/videos/e6/

4.4 The Graz Performance

4.4.1 Forethought and Concept

In developing the dramaturgical concept, we thought in terms of placements for the individual pieces, taking into account not only the relational question of the piece, but also the interaction with the space and its stationary objects, acoustics, and lighting conditions, as well as with the audience. The first *Encounters* performance took place in cooperation with *Theater am Lend* in Graz, Austria, on February 4, 2023. This theatre space is characterised by its distinct shape and bright red panelling on the curved wall, but can also be transformed into a more neutral, black-box-like surrounding using enveloping black curtains, making it relatively flexible to use. Through the different placements, which I will describe in detail below in section 4.4.2, we on the one hand aimed to fully occupy the room as performance space and thereby eliminate the distinction between stage and audience. On the other hand, we needed to structure and subdivide the relatively generous space of around 200 square metres in such a way that the energy would not dissipate, and we could still create intimate musical spaces together with the audience. We considered not only our own positions, but also explored different configurations with the audience, through which the venue itself became an experimental ground. However, we encountered certain permanently installed features, like the audience stands or the lighting system, which necessitated pragmatic adaptations. Despite the inherent flexibility of the space, we discovered that aesthetics and production conditions intricately intertwine, as the spatiality of our performance was linked to the architectural context of the theatre. The map of the space drawn up by Christina Lederhaas in Figure 25 shows the sitting arrangement for the audience, which creates three different zones (in the order in which they are actuated in the performance): The centre of the room is marked by the imagined cross between the seating cubes in the middle area. The audience stands below as well as the circular arrangement of cubes above represent the

second and third zone. The plan does not yet indicate cushions on the floor, which were distributed both on the stands and within the circle.

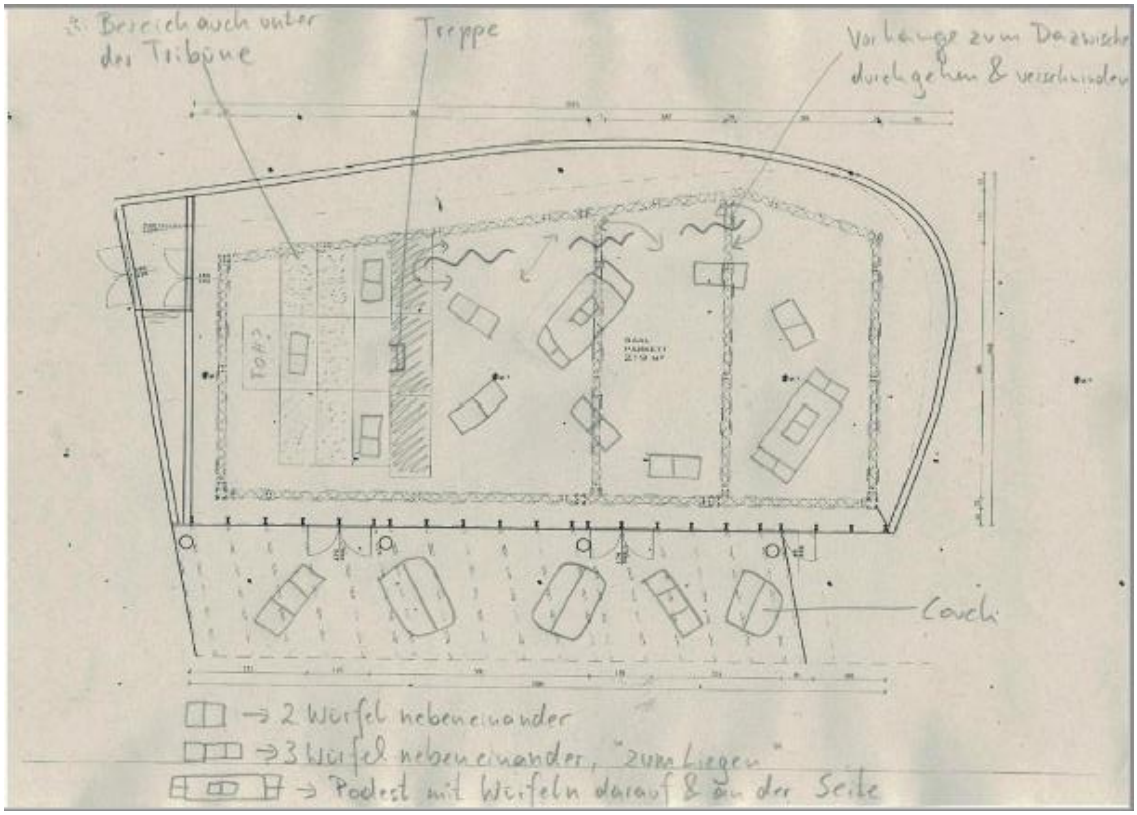

Figure 25. Map of *Theater am Lend*, including indications for audience seating arrangements.

As for the audience, the various seating arrangements were an offering from which they were free to choose. In addition, they were told upon arrival that they were free to move, even during a piece, to change their sitting position and/or relocate in the space. The overall setting was designed in a way that provides an informal atmosphere, as well as enhances proximity between audience and performers. Reference should be made here to the chamber concert series Music in the Round in Sheffield, UK, which pursues a similar approach in terms of audience placement relatively close to and all around the stage. Researchers Lucy Dearn and Stephanie Pitts report that "[t]hese features have been reported by regular MitR audience members to contribute to feelings of accessibility and inclusivity, building audience community through familiarity with the performers and the opportunity to watch other audience members as they listen." (Dearn & Pitts 2017, p. 47) However, it should be noted that these concerts still take place in a fixed setting with

the audience sitting in an elevated position on tiered stands, which is still highly reminiscent of a conventional concert situation.

While we tried to anticipate possible thoughts and feelings the audience might develop during the performance, their behaviour was a source of uncertainty, i.e., to what extent they would make use of the offer to move around, where in the space they would position themselves at a given moment and how closely they would dare to approach the performers. This lent an openness to the performance concept and required space for spontaneous reaction and improvisation. Nonetheless, it was our aim to provide the audience with contextual guidance through subtle, suggestive prompts in the form of questions. Each member of the audience was randomly handed one of the questions at the entrance:

- How close is close enough?
- When do I feel myself, when do I feel you, when do I feel us?
- How much conflict can I endure?
- What kind of togetherness do I want and how can I contribute to it?
- Do I hear the "we"? What does a “we” sound like?
- Do I feel part of the “we”?
- Do you feel what I feel? Do we feel together?

These questions were intended to motivate the audience members to adopt a reflexive attitude, but also to possibly engage in more active and investigative behaviour. Alternatively, we also planned individual moments of active, albeit non-verbal, communication at key points of the performance, such as inviting everyone into the circle for the final placement or seeking consensus when entering personal space. In the following I will outline the course of the performance, going into detail about the individual placements and transitions, lighting conditions, as well as the interaction with the audience.

4.4.2 Performing *Encounters*

Both an evidentiary compilation as well as the full recording of the performance are available from the following video files (video example E7 and video example E8):

Video example E7. *Encounters.* Trailer of performance in Graz. https://jessicakaiserguitar.com/videos/e7/

Video example E8. *Encounters.* Full concert film. Live recorded in Graz, February 2023. https://jessicakaiserguitar.com/videos/e8/

Placement 0. The performance begins as soon as the auditorium doors open and the audience is admitted. Positioned with intentional subtlety, Johanna and I assume a diagonal placement at the two long sides of the room: While I sit next to the door through which the audience enters, Johanna is standing behind the audience stands. The spotlight is pointed at the centre, creating a defined circle of light, which places us in the off. While the audience familiarises themselves with the surroundings and settles into their seats, an improvised soundscape of dispersed flageolets, trills, broken chords and percussive sounds sets the mood.

Placement 1. As soon as silence falls, we slowly move to the outer perimeter of the circle of light. We take a moment to sense the co-presence with each other and the audience and then begin with the *Sonata* BWV 1032 by Johann Sebastian Bach. The initially almost soloistic introduction is dominated by the violin's virtuoso semiquavers, with the guitar gradually augmenting its presence with ever denser accompaniment figures. To underline this musical convergence, finding each other as a duo, we slowly continue to move towards each other until we finally arrive in an open, juxtaposed position at the end of the introduction, ready to embark on the *Adagio ma non tanto*. The audience is quite spread out in the room, which reinforces

this feeling of an open beginning. In the following *Allemanda*, one member of the audience finally reacts to our change of position and sits down in a triangular position with us in what was probably the almost ideal spot in terms of acoustic resonance at that moment. In terms of applause, too, we did not want to prescribe anything for the audience, even though we had conceived the performance as a continuous piece. After finishing the *Gigue,* tentative clapping immediately ceases, which helps maintain the tension. However, some audience members take the opportunity to relocate. Furthermore, we used the transitions between pieces to seek eye contact with the audience.

Placement 2. Starting from the same position, we now performed the rotational movement around our respective music stands in *Équilibre* by Julia Kadel, as devised with Waterhouse (see 4.3.1.). Compared to the rehearsals, I now have the advantage of wheels attached to my chair, which allows for more fluid turns. Beyond significant effects for our interplay in terms of somatic attention and listening (see 4.3.1), the resulting positions create different acoustic conditions for the audience depending on which direction each instrument was facing, as well as different images of us as a duo as visual stimuli (see Figure 26), further influencing the listening experience. Meanwhile, it can be observed that some individuals are lying down on the floor or have taken off their shoes.

Figure 26. Different positionings in *Équilibre* by Julia Kadel.

Placement 3. Johanna moves to the periphery in order to circle the room in Gabriel Faure's *Sicilienne*. The light shifts from the focus spot to an inclusive opening of the entire space. The spatial and acoustic distance that now arises between us is considerably greater than in the rehearsal room, which makes exact synchronisation difficult in some places. In addition, Johanna first enters the part of the room to which I am turning my back. This requires even more attentive and anticipatory listening. Instead of a perfect circle, Johanna now has to make her way through obstacles in the form of sitting accommodations, audience members or podiums, which requires a certain amount of extra-musical concentration. As a contrast to the distance within the duo, there is now an even greater proximity to the audience, which the audience acknowledges with attentive glances and smiling faces. This multitude of distracting factors, however, gives rise to a certain insecurity,

which is also noticeable musically, especially in the first section of the piece. In order to re-connect, Johanna positions herself directly behind me for the middle section, so that we are both playing in the same direction for an intense and stabilising experience of resonance (see Figure 27). Due to the fixed position of the microphones at a certain point in the room, the acoustic consequences triggered by different spatial configurations become particularly evident in the recording. Towards the end of the piece, Johanna eventually and for the first time during the performance takes a seat on a seating cube next to an audience member.

Figure 27. Resonance in the middle section of *Sicilienne* by Gabriel Faure.

Placement 4. Likewise seeking contact with the audience, I now move to the other side of the room and sit down on one of the cubes with an audience member. Thus, embedded amongst the audience (see Figure 28), we set ourselves the task of spanning the sound across the entire distance, despite the delicacy and dreaminess of Gabriel Fauré's *Après un rêve*. This requires both of us to project as much as possible within the appropriate dynamic and to be almost more attentive to each other's voices than to ourselves. In terms of the relationship between melody and accompaniment, this has the unexpected effect of Johanna's timing and phrasing being very much aligned to my accompaniment with its complex harmonic

progressions, rather than the accompaniment being classically subordinate to the melody.

Figure 28. Johanna and Jessica each sitting amongst the audience in *Après un rêve* by Gabriel Fauré.

Placement 5. For the *Sonata* BWV 1021 by Johann Sebastian Bach, I head to the highest level of the audience stand. Our primary intention was to challenge the height difference that exists in our usual performance position, in which Johanna plays standing up and I play sitting down. Turning this around underlined the differentiation of melody and basso continuo in their equivalence. At this point, the emotional connection forged between performers and audience member shall be emphasized again, palpable through the exchange of meaningful glances and smiles, but also affectionate gestures between couples and family members attending the performance. The nuanced expressions strengthen a symbiotic bond, intertwining the realms of sound and emotion, as the shared experience transcends mere auditory appreciation to become a profound and immersive journey of shared sensitivity.

Placement 6. To finally level out any disparity in height, Johanna now takes the initiative to take a seat on the wheeled chair, and I join her on it in a back-to-back position. While this seating arrangement symbolises the fusion of artistic purpose and collaborative spirit, we now delve into the intricacies of Lukáš Hurník's *Confrontation and Resume*. The choice to confront the piece with this contrasting performative approach invites the audience to collectively explore the complexities and contradictions inherent in human experience. The energy that is unleashed by these opposing artistic forces is not only clearly audible, but also manifests itself in

the strong movements of the wheeled chair as we push against each other. In a way, the chair becomes a vessel of expression, an extension of our physicality, mirroring the intensity of our musical dialogue and amplifying the auditory impact of our artistic confrontation.

Placement 7. Emerging from this passionate struggle, the final chapter of the performance unfolds, as we try to find our way back to a more balanced coexistence. Acknowledging the profound potential of our shared back-to-back seating position, we remain in this intimate configuration, now aiming to amplify its more obvious qualities. Rolling on the chair together, we make our way towards the centre of the circle, inviting the audience remaining on the stands with subtle gestures to join us. The spotlight shifts accordingly. We furthermore support this transition with a duo improvisation, enhancing the transformative nature of the moment. As we arrive in the centre, surrounded by the audience, we start to play the *Mélodie* from Orfeo ed Euridice Wq.41 No. 30 by Christoph Willibald Gluck, resonating with the intimate atmosphere of the circle.

Placement 8. Richard Reed Parry's *Duet for Heart and Breath* concludes the performance. Introspection and self-awareness through perception of one's own body's internal rhythms of breathing and pulse interweaves with connection through the haptic perception of the body of the other. The focus here is to intensify the relationship with the audience once more and to go one step further by seeking direct physical contact with individual audience members. As the piece progresses, we move to approach them in a back-to-back position on the cubes (see Figure 29). The space is now bathed in dimmed, warm light. This experience of physical contact implies a certain vulnerability on both sides: on the one hand resulting from the unexpected, on the other hand from the potential of rejection. However, in the Graz performance the touch is mutually reciprocated from both involved audience members. In this act of reaching out, the boundaries between performer and listener dissolve, creating a powerful synergy of co-presence and shared emotions. This evokes Roland Barthes, who in his famous essay *Rasch* writes: "On the level of the beats (of the anagrammatic network), each listener *executes* what he hears. Hence, there is a site of the musical text where every distinction between composer, interpreter, and listener is abolished." (1979, p. 54, my translation) This dissolution

of roles is supported by the fact that we physically step into the background, as well as the expansive spaciousness of the music, which becomes a conduit for empathy and profound togetherness forged through artistic expression.

Figure 29. Sitting back-to-back with audience members in Duet for Heart and Breath by Richard Reed Parry.

4.5 The Hamburg Performance

4.5.1 Adaptations to Concept and Performance

A second performance of *Encounters* took place on 28 April 2023 at the TONALi Saal in Hamburg, Germany, as part of an artistic residency in the TONALISTEN_Lab series, an incubator for experimental concert formats. This allows for a comparative perspective regarding the spatial dynamics of relation, as well as the interaction with different audiences. The residency was documented by filmmaker Philipp von der Dellen, who produced a vivid documentary presented as video example E9. The TONALi SAAL differs greatly in its basic form from the Theater am Lend. With an almost square shape, it also extends to less than half the size, which presented a completely different challenge and necessitated an adapted spatial concept. One notable advantage we encountered was the lighting system, which allowed us to create much more nuanced lighting moods. This contributed significantly to the overall aesthetic of the production, effectively augmenting the dramaturgy of the performance and enabling a more immersive and engaging experience for both performers and audience members alike.

Video example E9. Documentary of *Encounters* lab and performance in Hamburg, April 2023.
https://jessicakaiserguitar.com/videos/e9/

We arranged various seating accommodations in a circle around the centre of the room, which became the focal point for the audience from the outset. From there, however, we explored different zones inside and outside this circle. In

addition, we actively engaged the diagonal axes of the space. Despite the initial appearance of limited variability, the different placements and episodes of movement continuously redefined the space. The overall atmosphere of the performance was characterised by a heightened sense of intimacy and density, largely attributed to the close proximity between performers and the audience. With minimal physical distance and a lack of possibilities to retreat or escape an encounter, individuals were compelled to directly confront one another and engage with each other's presence. This immersive setting created a specific dynamic where the audience members restrained their movements and hesitated to relocate to avoid disrupting the fragile choreo-musical constellations.

While preserving the core idea and form of the individual placements, the altered spatial and relational conditions often resulted in different effects on interplay and togetherness. A striking example was our rendition of Fauré's *Aprés un rêve*, for which we positioned ourselves in opposite corners of the room. The spatial separation between us was accentuated by the presence of audience members seated in between us, disrupting visual contact, but also the sonic connection. This further increased the challenge of bridging the physical gap and creating a cohesive artistic expression through a heightened sense of empathy. The difference in elevation in Bach's Sonata BWV 1021 was created with a bar stool placed on a resonance podium usually used by cellists. What made this setup remarkable was the wooden construction's ability to resonate, thereby amplifying the sound and adding clarity, focus, and presence. This resonance proved especially significant for lower notes. Given the significance of the basso continuo in the composition, this acoustical enhancement played a crucial role in ensuring its prominence and effective delivery. Furthermore, we intensified the tensely charged dynamic in *Confrontation and Resume* by Hurník by rolling across the room and through the audience together during the insisting opening section, pushing against each other while simultaneously trying to pull in different directions. When we once again sought physical contact with the audience in the final moments of the performance, it also took a slightly different trajectory: While the two audience members Johanna interacted with reciprocated the touch, the person I sat down with exhibited a tendency to repeatedly withdraw despite my cautious attempts to approach. This

will be further analysed within the context of the audience discussion in the next section.

4.5.2 Afterthoughts

In contrast to the Graz performance, in Hamburg we had the opportunity to engage in an open discussion with the audience following the concert. This post-performance dialogue enabled us to exchange thoughts, insights, and reflections with the attendees and better understand the impact of the performance. A particular focus was placed on the experience of the audience. They explicitly highlighted the significance of eye contact facilitated by the circular arrangement. This configuration fostered a sense of intimate connection, akin to a cozy "campfire atmosphere". However, the mutual gaze also reduced the protective anonymity typically found in larger venues, which was already lowered in this case given the relatively small audience. As a result, individuals felt a heightened accountability, recognising the delicate nature of both the musical and relational narratives unfolding in the relatively confined space. This collective awareness and focused attention led to a sense of shared responsibility to preserve the integrity of the performance, prompting an inclination among the audience members to minimise their movements and avoid disrupting the immersive experience. Individual audience members furthermore pointed out that a change of position on their part would have cancelled out the elaborate concept of placements on our part.

The concern of potentially being a disrupting factor was also mentioned by the particular audience member engaged in the touching situation as a reason for her to hesitate. She expressed uncertainty about whether the approach was intentional or if she was supposed to make space for me to be able to perform properly. Additionally, she remarked that the situation felt “close enough anyway”, even without physical contact. This highlights the delicate balance between active participation and respectful distance, as audience members navigate their role in the performance. The acknowledgment of the inherent intimacy within the space emphasises that a profound connection can be fostered through various means,

beyond physical touch. On a contrasting note, the feedback from the couple Johanna sat down with was in fact very positive. They expressed a deep appreciation for the proximity to the music, noting that they relished the sensation of the sound reverberating through their bodies. The emotional impact of the performance was evident in their tearful reaction, underscoring the profound connection they experienced. The touch, both in a physical and emotional sense, played a significant role in enhancing their overall engagement and eliciting a heartfelt response.

One question that remains open after the two performances is how this kind of intimacy could be created and maintained when faced with a significantly larger audience and a potentially more expansive venue. Future research could delve into various aspects, including spatial design, staging techniques, audience interaction strategies, and technological advancements, as well as draw on insights into psychological aspects of audience engagement, with the potential to unlock new possibilities for transformative artistic experiences that reach and touch a broader audience.

5 Synthesis and Discussion

5.1 Short-term vs. Long-term Collaboration

The artistic research conducted within the framework of this doctoral project, as described in the two preceding chapters, was methodologically based on two pillars: on the one hand, the duo interventions as short-term, narrowly-scoped case studies with a clear focus in the setting of an artistic research laboratory, and on the other hand, the long-term collaboration as Duo Karuna, which was discussed in this thesis primarily on the basis of an extensive performance project. At this point, I would like to discuss the ways in which these two strands of research have influenced each other, as well as evaluate some of their key differences.

In the development of the research project, a significant effect became unmistakably apparent—the *Encounters* project gained substantial thematic impetus from the duo interventions. The exploration of the physical dimension of musical interplay came to play such a central role due to the compelling findings from the analysis of the individual case studies. In fact, most findings from the duo interventions regarding musical togetherness were in some way or another echoed and reflected in the *Encounters* project. In this regard, the initial aim of gaining new perspectives on the established duo practice by means of an interventional approach and experimental laboratory setting was fully realised.

With the duo interventions, I furthermore addressed the question of how quickly we would be able to establish a minimum level of familiarity and intimacy, or even rudiments of a common duo identity, on the basis of which instances of musical togetherness could be achieved. In literature on ensemble performance, the proficiency and success of an ensemble is quite often put in correlation with the amount of time its members have known each other, as well as spent rehearsing and performing together in order. King (2013) discusses the levels of familiarity in new ensembles versus established duos and how they relate to their musical interaction. She describes the observed development as progressing from hesitant and unshared behaviour in early stages of social bonding towards becoming “an

effective, integrative, creative social instrument" (Douglas 1970, as cited in King 2013, p. 260) with a high level of solidarity in partnerships with years of experience together. Høffding (2018) emphasises that the Danish String Quartet has rehearsed for "thousands of hours" (p. 244) in order to achieve "deep trust and mutual reliability" (ibid.).

Indeed, socio-musical familiarity and trust seem to be key factors in comparing the different duo settings within this research project. In the duo interventions, we first had to familiarise ourselves with each other also in terms of our respective instrumental practice. This process includes understanding each other's "musical tendencies, gestural idiosyncrasies and mechanics of the instrument" (Waddington 2017, p. 240), which has been described with multiples instances of negotiation and demonstration in order to establish mutual understanding, as outlined in the analysis in chapter 3. The process of social bonding certainly varied in the different duos and ranged in intensity. Nevertheless, it can be stated that moments of profound musical togetherness could be found in all nine duo intervention studies. They were characterised by attentive listening and empathetic attunement, often in connection with the phenomenon of finding through playing, or an empathetic, embodied awareness and co-experience. These manifestations of musical empathy and shared feeling became evident through shared musical actions and psychological states, such as sustained sonic relation or resonance, a shared sense of time, shared sensitivity, or shared expressivity. Since they appeared mostly at later stages of rehearsals, a connection with the building of trust—or the validation of a leap of faith—seems likely.

Gritten (2017) considers trust as a fundamental component of musical interaction: "Trust is certainly found in all kinds of interactions between performers and underpins their activities as both an assumption and a goal. Trust enables and facilitates interaction, collaboration, risk taking, experimentation, interpretative leaps and all kinds of phenomena that are frequently associated with 'wonderful' performance" (p. 253). He furthermore claims that it grows over time and is the basis on which empathy can eventually unfold its potential within a relational process. Peters (2020) extends this thought by stating that the "feeling of trust enables one to enter more deeply emotionally into what is currently at hand. Trust is thus not

only a condition for good ensemble musicking, as Anthony Gritten claims [...], but beyond this, also a result of relational playing" (p. 29). It can be argued that this concerns in particular the fathoming, i.e., perceiving and assessing, of the trustworthiness (cf. Gritten 2017) of a co-performer. Also here, empathising into the other person and understanding his or her psycho-emotional state proves to be helpful. In addition to the factor of time and the associated degree of familiarity, the extent to which people dare to go into depth emotionally and affectively share their own selves plays a central role here. In fact, it seems worth looking for methods to stimulate this process instead of waiting for it to happen after a certain amount of time. Arguably, as was the case with duo interventions, three days is still quite a short period for a musical collaboration, and yet this special quality of musical togetherness was able to emerge to a considerable extent. At the same time, considering that we only worked on one piece, it was of course plenty of time. I would like to argue that it was the research attitude in particular, and even more specifically the shared and focused reflection through stimulated recall, that fostered a profound socio-musical relationship. As also mentioned by some of the participants in the questionnaires, compared to the everyday music business, the repeated (self-)reflection within the stimulated recall sessions provided us with an unusual amount of space to open up to each other in depth, both musically as well as interpersonally, to gain knowledge about each other, but also to develop shared knowledge together.

Even though this is certainly a continuous process within musical collaborations that never ends, in comparison, we as Duo Karuna in the *Encounters* project could already draw on a considerable foundation and shared background. This was reflected in less explicit negotiation of technicalities, and instead being able to immediately enter into the interpretation on a deeper musical and emotional level. Moreover, we only had to hint at things in terms of rehearsal talk, building on such shared knowledge and our interactional history. One example of this is our approach to sound. Whereas in the duo interventions the focus was often initially on understanding each other's sound production processes, in Duo Karuna there already exists something like an established duo sound or shared idea of sound (*Klangvorstellung*), which is preconceived as an experiential value, even if it has not

yet been achieved in the respective piece at that particular moment of rehearsal. Generally speaking, it has already been more or less clarified on which underlying fundamental principles and values the collaboration is grounded, essentially shaping the unfolding musical interplay. This also includes a strong sense of individual commitment to the duo, in the sense of both personal dedication and artistic motivation, especially in view of long-term cooperation and joint future perspective. These shared values indeed create a strong sense of trust.

The short lifespan of the duo interventions was clearly defined at all times of the collaboration (although follow-up projects may well have resulted from this, it was not necessarily to be expected). Individual commitment was nevertheless remarkably high, but above all in the sense of a strong professional and artistic commitment to the music as a common goal. In a few duos, it was noticeable that the willingness to open up on a (inter-)personal level was adapted to establishing a merely temporary social bond. Accordingly, in the duo interventions, individual values first had to be mutually identified and, in the next step, shared values had to be established on which to ground a relational interpretation. In what follows, I will discuss the nature of relational interpretation in reference to the findings of this research.

5.2 Relational Interpretation as Experimental Practice

What makes an interpretation relational? As this research has shown, relational interpretation, drawing on Peters' (2020) relational *improvisation*, is understood as a practice that reaches beyond the negotiation, reconciliation, and fixation of single interpretive decisions. Such a view falls short since the musical result would remain construed. Hence, analysing musical interaction in terms of (measurable) paradigms such as the management of communication, technical matters, or role distribution may seem apt for individual aspects or phases of the interpretive process, but it does not adequately capture the entire picture (cf. Gritten 2017). Music rather demands a genuine synthesis in the sense of creating something affectively shared together as a 'We', which is thus empathically formed. Of course, interpretation as a process also involves analytical modes of thinking and interacting, especially in dealing with the score (Östersjö 2008). In the end, however, the goal is to overcome these through a "thinking-through-practice" (ibid.), characterised by mutual sensitivity towards the other and immediate musical relation, and arrive at something truly shared. In both the duo interventions and the *Encounters* project, such relational playing manifested in co-created and affectively shared musical phenomena in terms of sonority, momentum, timing and phrasing, gestures or silences. I suggest that these phenomena transcend mere auditory, visual or sensory perception and instead evoke profound *felt* effects—felt both by the performers and an audience.

A relational approach to interpretation implies a certain detachment and independence from the score. Much has been written about the elusive realm of interpretation, that is, interpretive nuances and flexibilities regarding parameters such as intonation, rhythm, tempo, dynamic balance or timbre that spontaneously arise from the socio-musical interaction between musicians during performance and can never be fully notated in any score (e.g. Lester 1995; Cook 2013; Waddington 2017). Even after extensive rehearsing, a musically refined interpretation ideally isn't a fixed set of data simply accessed come the live performance. Instead, the nuancing continues in real time during the performance,

rendering it “rich with micro-tendencies that bring it in and out of the habitual” (Waterhouse 2022, p. 166). This of course is also true for solo performance and can depend on external influencing factors or an altered performance energy and personal risk management, but even more applies to the interpersonal situation of chamber music, when co-performers act in mutual dependency, producing spontaneous renderings and unexpected variants, or as Waddington calls it, “a group process involving inter-individual co-variation” (2017, p. 234). Keith Sawyer (2003) describes what unfolds from such creative interaction as reaching beyond action and re-action, as a constant development that is co-created in immediacy, the “collectively created emergent” (p. 89). This is especially crucial since “these unnotated details are largely responsible for the quality and expressive character of the music as audiences experience it”. (Cook 2013, p. 235) From a performer’s perspective, the musical phenomena occurring in this state of shared creativity are often experienced as intense moments of connectedness and fostered by a sensitive awareness to interpersonal dynamics as well as mutual empathetic attunement (cf. Cook 2013, Waddington 2017). In an interview with Blum (1986), a member of the Guarneri String Quartet describes this relational spontaneity in a performance as being of central importance:

> The playing of quartet music is … an organic process. Each of us is influenced by constantly fluctuating circumstances. Each moment of our playing is conditioned by what has just occurred or by what we think is about to occur. It remains creative because just about anything can happen. (Blum, 1986, p. 20)

This suggests that the value of an ensemble performance should be measured by its relational element rather than by specific interpretive choices, given that it is still “musically – that is, historically, stylistically, analytically, technically, expressively – viable” (Rink 1995, p. 257). Consequently, it requires careful consideration and exploration of musical possibilities in a way that balances aesthetic and relational intentions and goals into alignment, leaving the interpretation largely open in favour of relational flexibility.

Hence, this is not to say that the score and musical structure are irrelevant for creating a relational interpretation, but that the relationship is more complicated than in a structuralist paradigm. One could say that musical interplay and togetherness are certainly to some extent based on the score, but at the same time

essentially about what is *not* in the score. In his experimental take on performance, de Assis (2018) proposes a change of perspective, away from representational models of interpretation towards "understanding performance first as a space of problematisation" (p. 19). Reconsidering the musical work and how to creatively operate with it, he argues that

> "this critical deconstruction of interpretation creates a productive tension with representational models, which resist change, and it is a proposal for critical renderings infused by research and inventiveness. Musical practice becomes primarily a critical act, allowing performances to be critical studies of the works performed, significantly in, by, and through the means of performance itself." (ibid.)

For Assis, the key to approach the transition from representation to problematisation lies in experimentation. Experimental practice in the sense of problematisation involves openness and flexibility in terms of its object of inquiry and aims to "criticise, challenge, and deconstruct prevailing practices and concepts through concrete musical practice" (p. 20).

To that end, a vital question for this research project was how and to what extent the relational level can become a space of experimentation in performance. As shown in the artistic projects of this research, through an experimental approach to interpretation, we were able create the above-mentioned distance to the score. In practice, this involved, for example, introducing an improvisatory attitude into our playing, mostly by jointly improvising on material from the piece at hand; experimenting with spatial arrangements or movement that required playing the piece from memory; or deliberately acting against obvious interpretive or relational suggestions or implications of a piece. This distance is important since it shifts agency towards the performers' realm, who thus emancipate themselves from the authority of the score. It allows the focus to be increasingly directed towards the relational level. Thus, the relational factor of musical interplay can be actively questioned, and a relational intention can be introduced, instead of considering the interpersonal relationship as a coincidental by-product of the musical interaction. In conjunction with an empathic process, a shared sensitivity can then be developed that is increasingly intuitive and brings the duo closer to the immediate 'We' experience. What emerges here is a relational autonomy. This relational autonomy symbolises an ideal state, since it—analogous to the 'We'—is able to maintain and

support the individual autonomies of the duo partners, while it holds the potential for an intersubjectively acquired freedom in musical expression. It gives rise to a space for experimentation in terms of exploring possibilities of relation through enacting (ideal) relationships and interpersonal utopias, as we have strived to do in the *Encounters* project. Hence, the interpretation is no longer guided by technicalities, but by basic values of togetherness (*Miteinander*) that are formed and enacted together through musical interplay. They oscillate between connectivity (trust, affectivity, intimacy, empathy) and independence (autonomy, openness, ambiguity, freedom), whereby the two poles are not mutually exclusive. In this sense, relational interpretation is an experimental practice that enables us to explore not only in which ways we *can*, but how we *want* to relate.

6 Conclusion

This doctoral artistic research project was undertaken with the primary objective of obtaining a comprehensive and nuanced understanding of musical interplay in duo settings. Specifically, its focus was on investigating the phenomenon of musical togetherness, positing that it extends beyond mere musical interaction to encompass the intersubjective experience of qualities of relationship. In this pursuit, I actively engaged in a variety of duo situations, allowing for the accumulation of a rich and varied set of experiences and facilitating a multi-faceted exploration of the phenomenon under investigation.

Through a systematic and experimental approach within the duo intervention case studies, I was able to compare and contrast nuances that emerged in the different duo situations, while identifying common themes and discerning patterns of musical interplay that transcended individual idiosyncrasies. Starting at the question how twoness as grounded in the compositional structure and musical material is developed within the emerging socio-musical interaction, we explored how an interpretation oriented towards the relational dimension takes shape. This also included considering other factors within the ecology of performance, such as instrumentation and instrumental affordances, space, or the role of the performing body. Eventually, this led to aesthetic considerations and findings regarding musical togetherness through evidencing perceived musical as well as intersubjective phenomena, as they manifested within our interpretation and performance.

Based on these findings, new approaches to duo interpretation and alternative strategies of performance could be implemented to a broader range of repertoire within the *Encounters* project. An embodied and enactive approach to duo performance emerged as particularly significant. In order to respond to this, an interdisciplinary research approach was developed and implemented, which also included the aspects of bodily and spatial perception and movement, as well as performance dramaturgy. In creating an innovative and immersive concert format, we also considered the interaction with the audience in order to allow for a more

intimate sharing of the aesthetic, interpersonal and embodied processes of making music together.

I have argued that relational interpretation manifests in jointly created and affectively shared phenomena of togetherness that are not only perceived acoustically, visually or sensorially, but rather collectively *felt.* For this to happen, musical expression must truly be found together through an empathic process resulting in an intersubjective 'We'. Interpretation that follows a relational approach no longer fits into a representational paradigm but opens up a space of aesthetic and interpersonal experimentation. By way of a relational agency, it not only offers the opportunity to explore the ways in which we can relate musically, but also to musically enact interpersonal utopias and cultivate meaningful relationships.

This is where duo performance entails a strong ethical potential, in that through adapting an experimental approach, we can form, test and strengthen shared values of togetherness through musical interplay. This relates to Gritten (2017), who states that "ensemble interaction generates social capital, albeit in ways that often seem indirect, and it behoves us to remain cognisant of this underlying rationale, for it makes us better citizens and improves the quality of life in the polis" (p. 254). In fact, it may be this socio-philosophical and political dimension that accounts for the very fascination, meaning, and virtue of making music together. Considering the intersubjective sense of agency and the creative power of a relational togethering, joint performance may even hold the potential for social change. A performance infused with musical togetherness is able to affect us in a way that leaves us deeply transformed (cf. De Jaegher 2015, p. 113). Since musical interaction of this quality is so closely interwoven with some of our essential human capabilities that constitute a good life as human and social beings, such as autonomy, individuality, social belonging and recognition, to show concern for others, or to love (Nussbaum 1992), it involves us as whole persons, shaping our subjectivity. In this meaningful engagement with each other and in the explicit cultivation of the intersubjective, we not only affectively share our selves, but our selves are simultaneously affectively constituted.

Given this scope of potential, it might indeed be valuable to further investigate this socio-philosophical dimension of musical interaction and joint

performance. An interdisciplinary research approach seems essential here, including both a social-anthropological component as well as Artistic Research, which can provide a crucial perspective based on the aesthetic dimension. Furthermore, it seems obvious that chamber music pedagogy would benefit from incorporating an explicitly relational approach to joint interpretation and performance into strategies of teaching. Instead of expecting students to already possess such interpersonal abilities and knowledge or letting them figure them out on their own, it could be introduced as a potential artistic guideline that transcends the technicalities of interplay. This seems particularly relevant, since really getting to the essence of musically interacting with others is so deeply linked to a musician's personal development not only as an artist, but also as a human being. For musical interplay guided by empathy and relational awareness entails more than developing instrumental and musical skills, but builds on human capabilities and interpersonal qualities such as responsibility, autonomy, respect, intimacy, trust, and connection.

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Appendix A: Artistic Biographies of Collaborating Duo Partners

Stefan Östersjö is professor of Musical Performance and Head of subject at Luleå University of Technology. He received his doctorate in 2008 for a dissertation on interpretation and contemporary performance practice, and since then he has been engaged in senior research projects in Sweden (Two projects funded by the Swedish Research Council and one currently running funded by MAW), Belgium (as a Research Fellow the Orpheus Institute since 2009) and the UK (funded by the AHRC). He became a research fellow at the Orpheus Institute in 2009 and is still active there, currently in a research cluster concerned with subjectivity in musical performance, the final results of which will be published at the end of 2019, primarily in the form of two edited books. His research interests lie primarily in the development of inter-disciplinary collaboration, and the possibilities for method development and the creation of new knowledge through the interaction between musicology, music ethnology (such as in the ongoing MAW project), music psychology, music education and computational approaches, and specifically with an interest in the role of artistic research in such method development.

Östersjö is a leading classical guitarist specialising in the performance of contemporary music. As a soloist, chamber musician, sound artist, and improviser, he has released more than twenty CDs and toured Europe, the USA, and Asia. He has collaborated extensively with composers and in the creation of works involving choreography, film, video, performance art, and music theatre. Between 1995 and 2012 he was the artistic director of Ensemble Ars Nova, a leading Swedish ensemble for contemporary music. He is a founding member of the Vietnamese group The Six Tones, which since 2006 has developed into a platform for interdisciplinary intercultural collaboration. As a member of the Landscape Quartet he has developed an articulated performative practice within ecological sound art. As a soloist he has cooperated with conductors such as Lothar Zagrosek, Peter Eötvös, Mario Venzago and Andrew Manze.

Manuel Alcaraz Clemente is a Spanish percussionist, specializing in the interpretation of contemporary music. He is mainly active as a soloist, chamber and ensemble musician, as well as an educator. Manuel is currently based in Graz, Austria. As a soloist, his versatility ranges from playing classic contemporary music repertoire for percussion, to regularly working with young composers, who are recognized in the international contemporary

music scene for the creation of new pieces and innovative interpretations. Since 2016, he has been the percussionist of Ensemble Schallfeld (AT) and Noviga Projekto (PT/AT)
Besides his work in these formations, he freelances regularly with Contemporary Music Ensembles and Orchestras such as Klangforum Wien, Lucerne Festival Alumni, Ensemble PHACE, Recreation Grosses Orchester Graz and Mdi Ensemble, among many others.
In addition, he has performed in several festivals including the Lucerne Festival (CH), Wien Modern (AT), Internationale Ferienkurse für Neue Musik Darmstadt (DE), Klangspuren Schwaz (AT), Afekt Festival (EST), Impuls Festival and Steirischer Herbst (AT) and the Huddersfield Contemporary Music Festival (EN). He offers regularly workshops and masterclasses for composers and percussionists in Austria, Portugal, Spain and Slovenia.
Manuel received his Bachelor Degree at ESMuC (Catalonia College of Music, Barcelona). In 2015, he completed his Master in solo performance at ESMAE (Oporto, Portugal). In January 2018 he completed the Master Program 'PPCM (Practice and Performance of Contemporary Music)', where he worked alongside the members of Klangforum Wien.
The current season includes among other activities, the premiere of Pierluigi Billone's new piece for percussion solo and ensemble, written for Manuel Alcaraz Clemente and the Ensemble Schallfeld, and financed by the Ernst von Siemens Musikstiftung; as well as the premiere of "An Elemental Thing", Manuel Alcaraz Clemente's new solo project.
Since 2019 Manuel is Marimba One™ Educational Artist.

Margarethe Maierhofer-Lischka studied double bass and musicology in Dresden and Rostock, as well as a master in contemporary music in Graz with Klangforum Wien. Currently she works as a freelance musician specialized in contemporary music, improvisation and interdisciplinary performing arts besides doing sound art and sound design for radio, film and installative formats. She also holds a doctorate in Music Aesthetics and is active as a freelance researcher and lecturer, specializing in music, performance and media studies. https://suonoreale.mur.at

Szilárd Benes was born in Keszthely (Hungary) in 1990. He studied clarinet and bassclarinet by Prof. Stefan Schilling and historic clarinet by Dr. Ernst Schlader. He completed his mastercourse by Ernesto Molinari, Sabine Meyer, Wenzel Fuchs and Béla Kovács. He won the 2 prize at the international championship for „Contemporary Hungarian Music" in Hungary as well as a scholarship of Forum Hungaricum. His performance of clarinetquartetts from Krzysztof Penderecki in Graz in 2012 was broadcasted on Channel Ö1. In 2013 he debuted as soloist by his project „Colours of Music". In 2015 he performed his project „F Modulations"

in Budapest and his project „Clarinetronix“ a two-hour soloperformance with bassclarinet, electronic and video effects in Graz. He played at ICAD-Festival and IMPULS-Festival in Graz. The same year he won the 1 prize in composing competition of University Karl Franz with his project „Trio Sinus“ Szilárd Benes worked among others with the following Composers: Beat Furrer, Pierluigi Billone, Franck Bedrossian, Marko Ciciliani und Johannes Maria Staud. He has been a member of Ensemble „Schallfeld“ since 2015. In 2013 he founded „Klezmer Band of Graz“.

Silvija Ciuladyte is the founder of international contemporary music festival, CROSSROADS in Salzburg, Austria. The festival emerged in 2016, following contemporary music concerts of the same name, organized by Silvija in 2014 and 2015. Her vision is that CROSSROADS becomes one of the most prominent and unique contemporary music festivals in Europe, while also contributing to the Salzburg's cultural scene as an international, innovative, open and attractive event. Silvija is an active music performer, and regularly works with different classical and contemporary music ensembles and orchestras. She also manages various projects in Salzburg in collaboration with her fellow Lithuanian artists and composers, as well as the GOYA quartett. Silvija received a Bachelor of Arts degree from the Mozarteum University of Salzburg. In 2021 she completed the Master's program PPCM (performance practice in contemporary music), led by the ensemble Klangforum Wien, at the University of Music and Performing Arts Graz, Austria.

Chinese-American lyric coloratura soprano, **Jerilyn Chou**, has performed in the Americas, Europe, Asia and Africa singing an array of repertoire ranging from early to modern music. She won several singing competitions including the Zemlinsky Prize at the International Helmut Deutsch Lied Competition, first place at the IMMCC Maribor Singing Competition, third place at the George London Foundation of the Friends of the Vienna State Opera Competition, and first place at the University of Texas at Arlington Symphony Orchestra Concerto Competition. Jerilyn Chou is also a recipient of the KS Gabriele Fontana Scholarship. Stage performances include roles such as Valencienne (F. Lehar's "The Merry Widow"), Donna Anna (W.A. Mozart's "Don Giovanni"), and Lucy and Monica (G.C. Menotti's "The Telephone" and "The Medium"). In the 2022/2023 season, she sang in two productions at the MusikTheater an der Wien (F. Caccini's "La Liberazione di Ruggiero dall'Isola d'Alcina" as Damigelle 1 and V. Martin y Soler's "L'Arbore di Diana" as Britomarte). As a concert soloist Jerilyn Chou performs works such as J.S. Bach's "St. John‘s Passion" and Cantatas, J. Brahms' "Ein deutsches Requiem" and F. Mendelssohn-Bartholdy's "Paulus" in halls such as the

Vienna Musikverein, Vienna Konzerthaus, and the Oriental Art Center in Shanghai, China. She also performs numerous cross-over recitals that included a solo concert in Brahms Saal Vienna Musikverein.

Jerilyn Chou is also an experienced contemprorary music interpreter performing works such as Beat Furrer's "Begehren" at the Salzburger Festspiele, premiering Eduard Kutrowatz's "Concerto Nr. 3" at the Liszt Festival Raiding as well as Martin Heindl's "Paradise" at the Steirischen Herbst Festival. She is also the first to record Cécile Chaminade's "Messe pour deux voix égales", op. 167. As an ensemble singer, she sang under conductors such as Helmuth Rilling and Hans-Christoph Rademann at the International Bach Akademie Stuttgart and the Weimar Bach Cantata Academy at the Thüringer Bachwochen Festival.

Jerilyn Chou holds a Master of Music from the University of Music and Performing Arts Vienna, an Operetta Performance Certificate from the Music and Arts University of the City of Vienna, a Bachelor of Music from the University of Texas at Arlington and a second Bachelor of Music in vocal pedagogy from the University of Music and Performing Arts Graz. Masterclasses included Christa Ludwig, Barbara Bonney, Helmut Deutsch, Julius Drake, Birgid Steinberger and Linda Watson, to name a few.

Zuzana Gulová was born in Prague in 1994. She always had a marked desire to play. It happened to first appear sometime in childhood. After finishing school, this desire was so strong that she left Prague to study recorder performance under Julie Braná at the Conservatory in Pilsen. There, she also completed a Bachelor's Degree in anthropology and a pedagogical degree in music. She spent one year at Durham University focusing mainly on anthropology through the Erasmus Exchange Program before relocating to Graz to begin a new study in recorder performance at the University of Music and Performing Arts, where her mentors included Andreas Böhlen and Tabea Schwartz. In Graz, she started learning different instruments and grew closer to that exciting playground which is the intersection between early and contemporary music.

She joined projects like orchester Dolce Vita - "Händel in Rom" (2019) and recreation.Barock under the direction of Sergio Azzolini (2021) and is part of ensembles such as the sféra ensemble - sphere full of recorders, overtones, sharing, discovering, singing, discussing;
duo Tubes - a collaboration with organist Stjepan Molnar; churches + recorder + organ; and ensemble WIND (We're in "n" dream) - a collaboration with composer Dakota Wayne.

Stephanie Schoiswohl was born in 1990 and comes from Windischgarsten in Upper Austria. Her musical career began at the age of 10 at the local music school and at Admont Abbey

High School. From 2009 she studied classical saxophone at the University of Music and Performing Arts Graz with Gerald Preinfalk, graduating with excellent results in 2015. In 2014, a study abroad program took her to the Académie Supérieure de Musique Strasbourg (France). Subsequently, Schoiswohl completed a master's degree in Performance Practice in Contemporary Music with Klangforum Wien in Graz, which she completed with excellent results in 2017. Furthermore, Schoiswohl is a regular guest lecturer at music seminars. From 2015 - 2017 she was Senior Lecturer for Young Saxophone - Classical at the University of Music and Performing Arts Graz. Since October 2018 Stephanie Schoiswohl leads the class for classical saxophone at the Kärntner Landeskonservatorium respectively at the Gustav Mahler Privatuniversität.

Stephanie Schoiswohl is a member of various ensembles of all genres: Mixed Arts Saxophone Quartet (MASQ), Ensemble KUG-SAX-SIPPIA, Grazias Saxophone & Flute Quintet, Eddie Luis und die Gnadenlosen XL and The Perlin Noise Quintet Guest performances led her to the Salzburg Festival, Wien Modern and other concerts on international and national stages with Klangforum Wien. She has also performed with the Israel Chamber Orchestra, with the orchestra "recreation", with the Ensemble Zeitfluss and as a soloist with various symphonic wind orchestras. Schoiswohl performs regularly with chamber music ensembles in Germany and abroad, for which she is also active as a composer. Since 2012, she has had a close collaboration with the Graz Philharmonic Orchestra.

Stephanie Schoiswohl is a laureate of the "Allegro Vivo Festival 2010" and has been one of the scholarship holders of the PE-Förderungen für Studierende der Musik e.V. in Mannheim since 2014. In 2015 she received the Würdigungspreis of the Federal Ministry of Science, Research and Economy, a state prize awarded for the best diploma and master's degrees. Since 2022, she is professor for saxophone at University of the Arts, Graz.

The successful and versatile violinist **Johanna Ruppert** is part of a generation of young musicians who are looking for new paths in the classical music scene. She is the initiator and artistic director of the festival Klassik nah dran, which is particularly characterized by its collaboration with young people and the development of new formats. Since 2017, Johanna Ruppert has been a member of the Orchester im Treppenhaus. There, she leads the education area Step Up and works conceptually on the orchestra’s program as a member of the board. As a member of the TONALiSTEN agency and she looks back on several years of concert experience in the field of education.

As a chamber musician and soloist, she is a regular guest at festivals such as the PODIUM Festival Esslingen, the Schleswig-Holstein Music Festival, the Festspiele

Mecklenburg-Vorpommern, the Beethovenfest Bonn, the Transsiberian Art Festival, the Gezeitenkonzerte, the Altmark Festival and the Festival Internationale Foundation Monteleon. She made her debut at the Elbphilharmonie and the Marinsky Theather in 2017 with the chamber music mono opera Anne Frank by Grigori Fird.

Together with Jessica Kaiser (guitar) she founded the duo Karuna in 2016. They achieved 1st prize at The North International Music Competition and two 3rd prizes at international chamber music competitions in Italy and Portugal.

Since 2018 she has been a regular substitute in the Mahler Chamber Orchestra, and since 2021 she has been teaching at the Hochschule für Musik “FRANZ LISZT” and the Musikgymnasium Schloss Belvedere in Weimar.

Johanna Ruppert has won numerous competitions, including 1st prize at the Kiwanis Competition in Zurich, 3rd prize at the International Music Competition in Hamburg, as well as a sponsorship prize and the audience prize at the International Queen Sophie Charlotte Violin Competition. As a soloist she has played with the Saarland State Orchestra, the Jena Philharmonic Orchestra and the Gotha Symphony Orchestra, among others.

Appendix B: Questionnaires

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: Theatre of Dawn - Oddghes
Name of participant, instrument:
Margarethe Maierhofer-Lischka, double bass

1. What types of chamber music have you played?
   classical (duo to Quintet),
   improvised (all kinds of formations)
   contemporary (all kinds of formations from duo to Ensemble)

2. How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?
   being in a state of mutual connectedness and communication, sharing emotions and a sense of timing together, building a common sound and musical structure, and creating an active dialogue through listening and acting/reacting

3. What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?
   I can perceive my own sounds and actions while perceiving the others, on the bodily level I synchronize movement and sometimes breath with the others,
   sound - I can either "melt" into the group sound or be an active individual part of it

4. Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.
   - timing or time structure
   - visual communication via gestures
   - aural communication (tiny sounds)
   - relation of score/notation and sound

5. Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.
   dialog (part one until last page)
   parallel but individual (last page)
   similar gesture but different sound
   similar sound but different gesture

6. What positive or negative moments did you experience during rehearsals, regarding interplay?

⊕ conscious integration of "extra" gestures helped to play together
seeing my own gestures mirrored in the other instrument
"learning each others' gestural language" facilitated interplay

7. How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.

⊕ it helps me to focus on certain levels of score/sound/body
- to find a more precise language for rehearsing
- to be conscious about listening modes (body listening, ears listening, ...)

⊖ sometimes I tend to theorize too much :-
by focusing on a research situation, other approaches (improv, playfulness, intuition) can get discredited or neglected

8. Would you like to add anything else that seems relevant to you?

I would like to compare the playing experience from the lab (bright place) with a "blackbox" setting) stage situation, to find out which role the gaze/visual aspect plays

9. Do you have any questions?

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: ALP - Pisati
Name of participant, instrument: ZUZANA GULOVA', DOUBLEBASS RECORDER

1. What types of chamber music have you played?
   - Solo recorder with accompaniment of harpsichord/piano/organ/orchestra etc.
   - Recorder duo, trio ..... octet with or without accomp. of cembalo (baroque + contemporary rep.)
   - Recorder consort (3, 4, 5 voices; raiuessance + contemp. repertoire)

2. How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?

Connection
Understanding
Security/certainty
Fullfilling feeling

It is very important for me to share some musical ideas or approach with the other(s) and if not, to be able to find a satisfying compromis for both (all). When this ground is established, then it is easier to build or strengthen the connection among the players.

Then it is also easier to find a certainty in the playing. Similarly important is to be able to rely on the other(s). When all this works well, then there is a possibility of on spot (unplanned) interaction. That make the musicking somehow alive. (and therefore successful in my eyes.)

3. What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?

Feeling of unity, coherence, understanding. Feelings of being "above" the music, "in control". I believe, that these manifest themselves in the successful interplay described above. But more personally – to experience these sensations makes me feel happy and satisfied (possibly some chemical reaction I don't entirely understand).

4. Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.

The biggest challenge, in my opinion, is the last section of the piece – starting on the second page down with the complementar rhythm of the quintuplet. Regarding the faster tempo, rhythmical complexity and the fact, that both voices play till the end without real break, it is challenging to feel the same pulse, listen to the other player while keep playing your own part as precise as possible, and at the same time create certain (chosen) musical expression together.

5. Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.

Dialog-like section (2. line on the 1st page).
Solo + accomp. (first lines of the 2nd page).
Intertwined parts on the last page - ranging from action-reaction-like relation (first line), syncronised moments (end of 2. line-rhytmically, 3. line-end of 1. bar-soundwise) to certain level of independency from each other (first half of the 5. line).

6. What positive or negative moments did you experience during rehearsals, regarding interplay?

It always felt good when we would find places in the composition that would bring the two voices together (or where they interact) and with focussing on them, we would bring stabity to a bigger section/phrase.
As a negative could be seen the fact that due to higher level of technical difficulty we did not reach the point where we could start to experiment more and focuse more in detail on some "story-telling" or on creating certain atmosphere, feeling in different part of the piece.

7. How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.

It might have helped me to feel more comfortable and sure about myself, in a way, that I felt more free to express my opinions, doubts, problems, suggestions, than I would probably do in similar situation without this content.
Because we spent maybe more time on actual practicing together, there was not so much space for some big experimenting.

8. Would you like to add anything else that seems relevant to you?

I would like to add, that from my personal experience, the best results in ensemble playing were when the people worked with each other regularly, made long rehearsals (naturally) but also knew each other from other activities or even in personal life (to some extend). Of course I am aware of the fact, that in a life of professional musician it is not always possible, but still I believe, it adds something special to the way the ensemble performs.

9. Do you have any questions?

Nope.

Thank you :)

Thank you for participating ☺

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: Ey de Net by Maurizio Pisati
Name of participant, instrument: Manuel Alcaraz Clemente, percussion

1. **What types of chamber music have you played?**

Many different kinds: Duo with nearly all the instruments and voice (except a few ones: tuba, harp…)
Trios, quartets, quintets, sextets for mixed instruments.
Duos,Trios, quartets, quintets, sextets for percussion instruments.

More concrete selection:
https://www.schallfeld-archive.cloud/owncloud/index.php/s/0lGoMqHdloJ8R7g

2. **How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?**

For me, the interplay happens when I have the absolute control as a musician of what is happening. This technical and musical control allows me to go beyond the score, to not need it.

This control allows me to interact with the other player/players. To have control until the point of controlling if you want to loose it and let the music flow.

I have the feeling that if the other player has also this control, the interplay moments can happen.

3. **What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?**

From happiness until adrenaline “push”, respect, delicacy, “mantra”

4. **Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.**

In general, finding the sounds that make both instruments sound together. Both players have to do it. Adapt their instruments, their techniques, the sticks, the attacks, etc.

This is not in the score, but it something that the players need to feel and to experience.

Also in general, this piece is about energies. Energies that come and go back, and go from the guitar to percussion and vice versa. This is also an interplay challenge: to find the right waves, when to start “dall niente”, where is the climax of every wave, etc.

Also, how to connect the different interventions, that it does not sound as isolated material. For example: from number 5 to 6

5. **Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.**

The tremolo of the guitar and the roll of the percussion: beginning of number 3

Guitar fade out and percussion fade in: beginning of number 2. In general this creates these “waves”

The percussive moments from both instruments: one system before number 13

6. **What positive or negative moments did you experience during rehearsals, regarding interplay?**

Positive moments: the improvisations, trying out different settings for playing. This helped to the flow of the piece

Negative moments: especially the beginning of the rehearsals. It takes time to understand the piece, find the right sounds, etc. Sometimes I am a bit inpatient.

7. **How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.**

Of course, the possibility of recording, watching and analyzing every rehearsal is a “luxury” Usually there is not the time to do this with every rehearsal on every project…

It helps me a lot, not only for “Ey de Net” but also for other situations. For example I realized that sometimes I could be more efficient on the rehearsal. I also realized that the language may be a problem sometimes, or let’s say, I am not so efficient in German or English as I am in Portuguese or Spanish.
It is very interesting to watch it from outside, since the self-critics are also very constructive.

Thank you for participating ☺

Answering to the question more concretely, the research situation helps me to communicate better, to try to synthetize the sentences better and to use the language better. Also to listen the suggestions of the other musicians (this is something I have been doing, but it is always good to check it again). In short, to make music better and make the process to it more efficient.

8. **Would you like to add anything else that seems relevant to you?**

Yes:
It is difficult for me to describe all this feelings and analyze them, of course because it is something that I don't do often.
But also because some situations or feelings of playing music are very difficult to describe... Some things just happen for a moment, like a Comet, and it is very difficult to "hunt" them and bring them to the laboratory

9. **Do you have any questions?**

No

Thank you for participating ☺

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: Maurizio Pisati „Derscialet"
Name of participant, instrument: Silvija Čiuladytė, Viola

1. **What types of chamber music have you played?**
Classical chamber music formations like string trio, quartett, quintett, piano quartett, classical, romantic and XX century music, as well as modern formations of various instruments, like viola, cello, theramin, accordion, etc.

2. **How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?**
Respectful, attentive, reactive. Listening, being aware of the situation, feeling the energy of your stage partners. Trusting each other on stage

3. **What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?**
Levels – audible, visible, energetical,
they manifest in being able to concentrate fully on your partner's playing while also doing your part, being able to adapt fast and intuitive in unexpected situations, communicating with each other on all those levels, feeling free to express myself and give space to others (trusting)

4. **Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.**
(B. 24-37, 63-80; B 1., 62A-82, 83-95; B. 62B-80, general)
It is rhythmically complicated, which means – difficult to be exactly together when needed. Also, soundwise – to manage to unerge the two different timbres so that it sounds more like one instrument.
It is also difficult to adapt the dynamic balance, since the guitar is mostly much softer than the viola.

5. **Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.**

In general – that the guitar is supposed to „extend" the sound of the viola, but also is not entirely just background (accompaniment) – it has an important role in the parts, where it interfers with the viola, usualy adding much more effective gestures to vidal playing. It's a very interesting way of composing a duo – it can in a way be described as a duo for solo viola, but at the same time there is realy a lot of interplay and communication.

6. **What positive or negative moments did you experience during rehearsals, regarding interplay?**

Positive - intuitive adapting to each other's sound and gestures, having similar goals, but also different and inspiring thoughts and insights to the piece and regarding each other's playing. Exchanging ideas that help the rehearsing and performing process.

Negative – sometimes, because of the complexity of the piece, it was hard to rehearse productively: we did not always seem to identify, what went wrong and how to improve it, so we kept repeating it with no exact goal.

7. **How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.**

It showed me that we really did spend way too much time on repeating some sections without properly analysing it (what I mentioned above). The research made me think of better and more productive strategies for the rehearsing process. Another point that was good to see from a distance – dynamics and balance. It is hard to hear the balance while playing, but listening to the recording helps a lot (F.ex. begginig – I was way louder than I thought)

8. **Would you like to add anything else that seems relevant to you?**

→ Question Nr. 5. Bar 1: relation – balance and sound similarity
Bar 20: tremolo + cresc.: balance, sound, mood, dynamics have to be similar.
B. 23–31: interaptions of the rhythmical structure together with similar glissandi, but syncopated rhythm.
B. 63–80: rhythmical relation: the accents have to be precise in time, exchanging between the instruments + balance of the dynamics
B. 83: tapping, B. 85 – harmonics

9. **Do you have any questions?**

Thank you for participating ☺

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: SAMBLANA – M. PISATI
Name of participant, instrument: STEPHANIE SCHOISWOHL, SAXOPHON

1. What types of chamber music have you played?

   Saxophone Quartet, Saxophone Quintet, Duo with Piano, Saxphone and String Quintet, Duo with Percussion, Trios

   Classical, Jazz and Contemporary

2. How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?

   There is an invisible connection between the musicians, that allows the members to develop an unique sound and switch easily between different styles. The perfect control of the instrument is taken for granted. The musicians speak the same "musical language". Also the personalities need to fit to each other, but every person brings in his specific life experience.

3. What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?

   secureness; inner touch; very private/personally emotions connected to some life experiences;

   a nearness feeling; the music is flying; the audience is captured in the music; you forget all problems around you;

4. Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.

   First of all, it was important to get to know the playing techniques and sounds of the other instrument, to be able to follow the score (f.e.: p. 216, first bar). Some transitions from "free" bars to "groove" bars are difficult and require a good communication in the duo (f.e.: p. 220, transition into (28)).
   It's important to develope a collectively time-feeling for the "groove" bars, to be able to do all tempo transitions and to make it sounding easy and light.

5. Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.

The Unisono and the merge of both sounds are very important. (f.e.: Beginning or p. 215 first and third system).
The composer is also playing with the connection of the harmonics/overtones of both instruments and how it could be a trigger for richer colours in the sound (f.e.: p. 215, 2nd bar). Additionally he is switching between reacting on each other (f.e.: p. 216, (17) 2nd bar) and locked in rhythms where the instruments merge (f.e.: p. 220, (28)).

6. What positive or negative moments did you experience during rehearsals, regarding interplay?

I think the "groove" bars draw the attention a lot on them and brought us to a very detailed work and showed our quests on perfectionism. This was on one side positive, but on the other it got for some time too much weight and we need to remind, that the "lyrical" passages should not be forgotten.
I enjoy a lot when the sounds of us started to fit together and matched perfectly, that made feel, that we are both happy.

7. How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.

I think it made me reflecting earlier on an interaction in the duo. That means excepting earlier some "mistakes" and trying to think in a bigger sense.
It didn't feel like a normal rehearsal, because the thought about the research is always in your mind and you try to reach some peak of interaction, that is a bit unreal for me, only in 3 rehearsals. But I tried to imagine, that we play already more together and act as an old duo.

8. Would you like to add anything else that seems relevant to you?

It's an interesting topic, but I feel that it's somehow impossible to describe all these special emotions and felings we get as musicians. It's also very intimate to describe this.
The Duo is the most intimate form of chamber music, so it's a super special thing, that is fascinating me again and again! The composer did a great job to combine our different instruments and I'm very impressed how well it sounds!

9. Do you have any questions?

NO ⇒ BUT: Viel Glück und Erfolg!

Thank you for participating ☺

Questionnaire

The musical dyad – on interplay in duo settings

Duo Intervention

Piece: Yemeles
Name of participant, instrument: Jerilyn, Soprano

1. What types of chamber music have you played?

Duos (with piano, guitar, Akkordeon), choir ensembles, etc.

2. How would you describe successful/profound ensemble interplay? Which keywords do you associate with it?

Connection, being together (tempo, timing, dynmaics...), communication

3. What levels of sensation do you personally experience in successful/profound interplay while playing in an ensemble and how do they manifest themselves?

When the piece flows almost effortlessly and naturally with the other person, you feel like you're on the same level/playing field.

4. Which challenges/difficulties in terms of interplay would you attribute to the piece addressed in this study? Please refer to bar numbers where possible.

(Don't have the music on me, unfortunately, but...) The part where I kept missing my D...we had to keep rehearsing it over and over again, I think it was near the improvisational part.

5. Which forms of (dyadic) relation between the individual parts can you identify on a compositional level in the piece addressed in this study? Please refer to bar numbers.

6. What positive or negative moments did you experience during rehearsals, regarding interplay?

Positive: influencing each other on the improvisational part, listening to each other to really try to make sure we're together

Negative: a point where we had a bit of miscommunication which led to slight frustration as we did not understand what the other was saying we were confused assuming the other person meant something else.

7. How do you think the research situation influences your strategies for rehearsal, your way of listening and/or communicating? If possible, describe specific examples.

It opened my ears to be a bit more aware of my surroundings/the other person and their part and how it intertwines with my own.

8. Would you like to add anything else that seems relevant to you?

9. Do you have any questions?

Thank you for participating ☺