DISSERTATION / DOCTORAL THESIS

Composing the Politics of Musical Creation: The Composer as the Mediator of Collaborative Work Interactions

submitted by

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Accompanying Material

The recorded audio and video examples as well as all the audio and video documentation of the case studies are included in **a Research Catalogue Exposé that can be accessed here:**

https://www.researchcatalogue.net/shared/6c82214c089a8c6d224d9c5923a84fdf

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Abstract

This dissertation investigates composer-performer collaboration through the lens of artistic research, guided by the development and implementation of the Iterative Feedback Model for Collaborative Composition (IFMCC). Designed specifically for this study, the IFMCC offers a framework for shaping interactions between composers and performers, with a focus on iterative decision-making, feedback, and shared authorship.

The research addresses how collaborative composition alters creative roles, compositional processes, and performative outcomes. Three case studies form the core of the investigation: a residency with Ensemble Vortex; a remote collaboration with the International Contemporary Ensemble; and a participatory composition project situated in a pedagogical context at the Heidelberg University of Education. Each case reflects a distinct collaborative environment, ranging from professional ensembles to educational institutions.

Grounded theory methods are employed to analyze audiovisual documentation, participant interviews, digital portfolios, and workshop data. The findings highlight the importance of group size, disciplinary diversity, and tacit knowledge in shaping collaborative flow and authorship. They further show how technology, when adapted responsively, can shift the composer's role from author to facilitator, enabling more distributed creative agency.

By comparing the model's application across varied contexts, the study outlines how the IFMCC supports both compositional openness and structural coherence—distinguishing it from models based on open form or post-hoc feedback. The dissertation concludes with a proposed taxonomy of distributed authorship, a discussion of institutional limitations, and recommendations for implementing collaborative models in artistic and educational frameworks.

Keywords: Keywords: Composer–Performer Collaboration, Iterative Feedback Model for Collaborative Composition (IFMCC), Collaborative Composition, Grounded Theory, Performative Practices, Participatory Composition, Artistic Research, Institutional Frameworks

Abstract (Deutsch)

Diese Dissertation untersucht die Zusammenarbeit von Komponist:innen und Interpret:innen aus der Perspektive der künstlerischen Forschung, geleitet durch die Entwicklung und Anwendung des Iterative Feedback Model for Collaborative Composition (IFMCC). Das eigens für diese Studie entworfene Modell bietet einen Rahmen zur Gestaltung von Interaktionen zwischen Komponist:innen und Interpret:innen, mit besonderem Fokus auf iterative Entscheidungsprozesse, Rückmeldungen und geteilte Autorschaft.

Die Forschung behandelt die Frage, wie kollaboratives Komponieren kreative Rollen, kompositorische Prozesse und performative Ergebnisse verändert. Drei Fallstudien bilden den Kern der Untersuchung: ein Residenzprojekt mit dem Ensemble Vortex; eine Fernzusammenarbeit mit dem International Contemporary Ensemble; sowie ein partizipatives Kompositionsprojekt im pädagogischen Kontext an der Pädagogischen Hochschule Heidelberg. Jede Fallstudie repräsentiert ein unterschiedliches kollaboratives Umfeld, das von professionellen Ensembles bis zu Bildungseinrichtungen reicht.

Zur Analyse von audiovisuellem Material, Interviews, digitalen Portfolios und Workshop-Daten wurden Methoden der Grounded Theory herangezogen. Die Ergebnisse verdeutlichen die Bedeutung von Gruppengröße, disziplinärer Vielfalt und implizitem Wissen für den kollaborativen Prozess und die Autorschaft. Zudem zeigen sie, wie Technologie – bei flexibler Anpassung – die Rolle der Komponist:innen von der Autorenschaft zur Moderation verschieben kann, wodurch kreative Verantwortung stärker verteilt wird.

Durch den Vergleich der Anwendung des Modells in verschiedenen Kontexten wird aufgezeigt, wie das IFMCC sowohl kompositorische Offenheit als auch strukturelle Kohärenz unterstützt – und sich dadurch von Modellen des offenen Formdenkens oder nachträglichen Feedbacks unterscheidet. Die Dissertation schließt mit einem Vorschlag für eine Taxonomie verteilter Autorschaft, einer Diskussion institutioneller Rahmenbedingungen sowie Empfehlungen zur Implementierung kollaborativer Modelle in künstlerischen und pädagogischen Strukturen.

Schlüsselwörter: Kollaboration Komponist:innen-Interpret:innen, IFMCC, kollaboratives Komponieren, Grounded Theory, performative Praktiken, partizipative Komposition, künstlerische Forschung, institutionelle Rahmenbedingungen

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Chapter 1: Introduction

1.1. Motivation and Relevance

This dissertation investigates how collaborative processes reshape compositional and performative practices within the context of Western Art Music (WAM). While the term "Western Art Music" is itself problematic—given its colonial, hierarchical, and stylistic implications—it is adopted here pragmatically to refer to a set of academic and professional practices rooted primarily in Europe and North America from the 20th century onward. The term is used in this dissertation because the case studies examined all take place within institutions and practices aligned with this geographical and stylistic context. This decision is not intended to endorse the term uncritically, but to provide a common framework for addressing the field in which this research is situated.

In contemporary artistic and academic environments, collaboration is not only a practical concern but also a theoretical and institutional one. It reflects broader shifts toward interdisciplinarity, social engagement, digital interconnectivity, and distributed creativity. These developments underscore an urgent need to understand and formalize collaboration, not just as artistic intuition, but as a structured, analyzable practice. Scholars such as Sawyer (2006), John-Steiner (2000), and Hargreaves et al. (2012) have underscored the importance of systematic frameworks for collaborative creativity, particularly in complex domains like music-making.

Current modes of composition often preserve traditional divisions between composers and performers. However, many artists have challenged these norms over the last several decades. For example, Pauline Oliveros emphasized deep listening and shared sonic exploration; George Lewis has interrogated authorship and improvisation within institutional frameworks; and intermedia practices informed by reflective texts like Pauline Oliveros's Software for People (1984), which advocate for open authorship and participatory creation. More recently, artists like James Saunders and Jennifer Walshe have further blurred the boundaries of authorship and performer agency. These examples illustrate a field increasingly interested in horizontal models of interaction.

This research offers a timely contribution to this evolving landscape by presenting and evaluating the Iterative Feedback Model for Collaborative Composition (IFMCC). Developed specifically for this dissertation, the IFMCC is a flexible framework designed to facilitate structured yet open-ended feedback loops between composers and performers. The model is not borrowed from existing scholarship but constructed ad hoc in response to the author's artistic experience and theoretical concerns. A more detailed explanation follows in Section 1.4. Here, it is introduced as a central tool that will be assessed across three diverse case studies.

By doing so, the research addresses a gap in both literature and institutional practice, proposing a transparent, reflexive approach to collaborative creation. The aim is to make collaboration analyzable

and reproducible—not in a mechanistic sense, but in a way that promotes dialogue, adaptability, and mutual influence within compositional practice.

1.2. Personal and Disciplinary Motivation

My personal interest in collaborative composition deepened after completing my formal studies in composition. As I entered the professional field, I engaged in long-term collaborations with ensembles and individual performers that extended beyond interpretation and began to challenge my assumptions about compositional control and authorship.

One pivotal moment was my 2016–2017 collaboration with the Sigma Project saxophone quartet, which culminated in the piece Milk Spilt on a Stone.[1] The ensemble's sustained involvement influenced not only technical exploration and material generation but also larger structural and formal decisions. Their creative input significantly shaped the final work, marking a turning point in my understanding of composition as an inherently dialogic and relational practice. At this stage, I was not yet consciously engaging with the concept of shared authorship, but the collaboration initiated a process of reflection that eventually led to the inquiry at hand.

This experience revealed to me the limitations of conventional commissioning models, which often isolate composers during most of the creative process and involve performers only at the final stages. I began to seek methodologies that could offer deeper, earlier, and more equitable engagement with performers—methods that could be documented, critically examined, and shared beyond my own practice.

On a broader disciplinary level, this research is driven by a growing institutional and pedagogical interest in collaborative creation. Educational programs in composition, music technology, and performance increasingly emphasize interaction and co-authorship, yet lack robust frameworks for structuring and evaluating such processes. Similarly, funding bodies and presenting institutions have shown interest in process-oriented projects, but often lack the language or tools to support them effectively. In this context, the IFMCC is proposed as both a research tool and a practical contribution to the field.

Additionally, this research is intended to serve peers—composers, performers, and educators—who are actively navigating collaborative environments. By offering a systematized and critically informed model, the IFMCC can assist artists seeking more transparent, equitable, and reflective approaches to joint creation. It opens a framework for negotiating roles, structuring feedback, and articulating outcomes that remain often intuitive or opaque.

The future development of this model could inform collaborative pedagogy, institutional programming, and artistic research methods. More centrally, it aims to directly support and improve collaborative practices for composers and performers themselves—those working within, or seeking to move toward,

more participatory and co-creative processes. By articulating concrete strategies and tools, the model seeks to enhance artistic agency, communication, and mutual understanding within diverse musical settings. It is not presented as a universal solution, but as an adaptable and testable approach that foregrounds transparency, reflexivity, and negotiated authorship. The following chapters examine its implementation and implications across diverse artistic contexts.

1.3. Artistic and Institutional Context

Collaborative environments have been explored by several authors in general contexts or outside the realm of musical practice. Key contributions include the work of John-Steiner (2000), Sawyer (2017), Paulus and Nijstad (2003), and Creamer (2004). These authors provide valuable insight into the cognitive, social, and creative dimensions of collaboration. Although they do not focus on music directly, their theories offer a foundational vocabulary and set of frameworks for analyzing interaction, group dynamics, and feedback in complex creative contexts.

Building on these broader conceptual models, music-specific literature has increasingly examined collaboration in compositional and performative domains. For instance, works by Sennett (2012) and Sawyer (1997; 2006; 2003), investigate performance as a socially embedded act. In composition, authors like Taylor (2016; 2021), Hayden and Windsor (2007), Roe (2007), and Frisk and Östersjö (2006) explore shared decision-making, negotiation, and mediated authorship. Electroacoustic and technologically mediated practices are also well represented through contributions by Zattra (2018) and Donin (2017), who address how tools and platforms reconfigure collaborative landscapes.

More recently, research in the context of WAM has presented a series of case studies and theoretical frameworks that integrate collaborative theory with concrete artistic practices. Authors like Clarke and Doffman (2017), Barrett (2014), Glover and Redhead (2018), and Hargreaves, Miell, and MacDonald (2012) provide critical examples of composer-performer partnerships. These include: Fitch and Heyde (2007); Bellamy and Ballon (2013); Nicolls and Tremblay (Clarke and Doffman 2017); the Kronos Quartet's many composer collaborations (Bayley 2017); Redgate and Hayden (Hooper 2013); Saunders and Limbrick (Clarke and Doffman 2017); the collective Entremeios (Costa, 2018); Kanga (2014, 2018); and Roche (2011) among others. These examples demonstrate the range of collaborative formats—from individual duos to large ensembles—and document the practical, institutional, and aesthetic conditions that shape them.

This research is situated within an evolving artistic discourse that challenges traditional notions of authorship and emphasizes collaborative, process-based, and participatory forms of musical creation. In the context of WAM, several key figures and movements have paved the way for rethinking the roles of composers and performers.

Historically, Pauline Oliveros's practice of Deep Listening emphasized attentiveness, shared responsibility, and sonic inclusivity, laying foundational ground for participatory sound-making. George Lewis has interrogated Eurocentric conceptions of authorship through his writing and musical work, particularly highlighting Afrological improvisation and collective creativity. Trevor Wishart's vocal and electroacoustic compositions often involve non-standard roles for performers and the audience, further questioning the division between creator and interpreter.

Contemporary practices build on these foundations. James Saunders's modular, instruction-based scores engage performers as co-decision-makers, often using rule-based systems that foreground distributed agency. Jennifer Walshe's extended performer-composer model embraces theatricality, self-authorship, and intermediality, involving collaborators not only as interpreters but as co-creators of conceptual frameworks. Collectives such as Bastard Assignments or Ensemble Adapter blend composition, improvisation, and performance art, often developed through rehearsal-based co-creation. Additionally, intermedia works and research-informed artistic practices—such as those influenced by Pauline Oliveros's Software for People (1984)—explore experimental modes of authorship and listening. Oliveros's writings and scores have shaped participatory frameworks like Deep Listening and influenced a lineage of artists working with collective improvisation, sonic awareness, and responsive compositional systems. This legacy can be seen in practices such as Christina Kubisch's guided electromagnetic sound walks and Jennifer Walshe's performative scores that foreground distributed authorship and listening as creative acts. Collectively, these strategies blur genre and role distinctions, offering varied approaches for reconfiguring traditional creative hierarchies.

This dissertation positions itself in relation to these practices not to replicate them, but to contribute a model (the IFMCC) that is both reflective of and distinct from them. While these artists often emphasize open-ended or improvisational collaboration, the IFMCC attempts to balance openness with structure through iterative feedback cycles. It offers a pragmatic strategy for working collaboratively that can be adapted to various settings while still being analyzable and replicable.

Institutionally, this research is also aligned with shifts in higher education and cultural programming. Artistic research programs in Europe—particularly in Austria, the UK, and the Nordic countries—have encouraged composer-performers to engage in reflexive practices that merge theory and creation. Residencies and academic partnerships increasingly support process-driven work, yet often lack clear methodologies for evaluating collaboration. This project seeks to meet that need by bridging institutional support structures with artistically meaningful, real-world practices.

By embedding this research within both an artistic lineage and institutional reality, the dissertation not only responds to past innovations but also proposes a framework that can evolve with the field.

1.4. The Iterative Feedback Model for Collaborative Composition (IFMCC)

The Iterative Feedback Model for Collaborative Composition (IFMCC) is the central methodological and conceptual tool developed in this dissertation. It was created specifically to investigate and facilitate collaboration between composers and performers in a structured yet adaptable format. Rather than being derived from an existing model, the IFMCC emerged organically from my artistic practice, informed by theoretical reflection and the practical needs of the projects explored in the case studies.

The IFMCC is designed to support a cyclical, dialogic process of co-creation. Its structure rests on repeated feedback loops between composer and performer(s), initiated early in the compositional process and continuing through to rehearsal and performance. Each loop consists of four core phases: proposal, response, reflection, and integration. These stages are not rigidly sequenced but are intended to remain responsive to the context and needs of each project.

Proposal – A compositional idea, sketch, or provocation is presented by the composer.

Response – Performers engage with the material, often improvisationally or experimentally.

Reflection – Both parties discuss outcomes, interpretations, and challenges.

Integration – Compositional decisions are revised based on this exchange.

This cycle may repeat multiple times within a single project, and often results in a co-evolution of the musical material and the working relationship itself. The model acknowledges the role of tacit knowledge, embodied expertise, and informal communication—elements often overlooked in traditional notation-driven composition.

Unlike frameworks that rely solely on open improvisation or unstructured dialogue, the IFMCC offers a practical scaffolding that can be adapted to a variety of settings. It can be used with professional ensembles, student groups, or cross-disciplinary collaborations. It also allows for the inclusion of technology, notation, and mediated forms of interaction, depending on the context.

This dissertation tests the IFMCC across three contrasting case studies, which vary in ensemble size, institutional setting, technological mediation, and pedagogical aims. In doing so, it seeks to evaluate the flexibility and applicability of the model while reflecting critically on its limitations and strengths. A dedicated subchapter in the methodology chapter (Chapter 3) provides a more detailed and technical breakdown of the model's stages, operational strategies, and evaluation methods. The chapters that follow will show how the model was implemented, adapted, and analyzed, and how it contributed to the artistic outcomes and collaborative dynamics in each case.

1.5. Research Questions and Objectives

This dissertation is structured around one central research question supported by a set of targeted sub-questions. These questions reflect both theoretical inquiry and practice-based investigation, aiming to evaluate how the IFMCC guides collaborative processes in contemporary compositional practice.

Primary Research Question

How does the Iterative Feedback Model for Collaborative Composition (IFMCC) shape interactions between performers and composers, and how does it influence compositional and performative practices?

Sub-questions

Impact on the Compositional Process

- How does the model influence decision-making at different stages of composition?
- What challenges and advantages arise from shared compositional control?
- How do workshop interactions shape materials and structures?

Impact on Performance and Performer Engagement

- How does early performer involvement affect interpretation and co-authorship?
- How do performers perceive their role in the compositional process?

Comparative Analysis and Theoretical Positioning

- How does this model differ from other collaborative approaches?
- What are its unique contributions?

Case Study Investigations

- How do different collaborative environments affect outcomes?
- What roles do institutions and group dynamics play?

Evaluation and Refinement of the Model

- What patterns emerge through documentation and coding?
- What supports are needed for sustainable collaborative practices?

These questions guide the methodological, analytical, and artistic trajectory of the dissertation. They serve as a framework for interpreting both the theoretical sources and the empirical material emerging from the three case studies.

1.6. Dissertation Structure

This dissertation is divided into eight chapters, each building progressively from conceptual foundation to empirical application and reflection:

Chapter 1: Introduction Outlines the motivation, context, and significance of the study. Introduces the IFMCC and the research questions guiding the project.

Chapter 2: Research Goals and Questions Revisits and expands the aims of the research, clarifying the theoretical, methodological, and artistic intentions behind the inquiry.

Chapter 3: Methodology Describes the methodological framework of the dissertation. This includes the use of Grounded Theory, qualitative coding strategies, and artistic research. A dedicated subchapter details the structure and application of the IFMCC model.

Chapter 4: Theoretical Context Surveys literature and theoretical frameworks relevant to collaboration, authorship, co-creation, group dynamics, mediation, and performer agency within the WAM context.

Chapter 5: Case Study I – Ensemble Vortex (Geneva) Documents and analyzes a collaborative residency focused on multimedia, ensemble interaction, and group dynamics.

Chapter 6: Case Study II – International Contemporary Ensemble (New York) Examines remote collaboration during the COVID-19 pandemic. Emphasizes online processes, performer identity, and digital mediation.

Chapter 7: Case Study III – Heidelberg University of Education Explores participatory sound installation within an educational context. Focuses on pedagogy, accessibility, and inter-institutional collaboration.

Chapter 8: Conclusions Synthesizes key insights from the case studies and theoretical framework. Reflects on the IFMCC's implications, limitations, and potential for future application across artistic, institutional, and educational contexts.

Chapter 2: Research Goals and Questions

2.1. From Practice to Research: The Need for Inquiry

This dissertation emerges from a deeply embedded compositional practice in which collaboration with performers has increasingly shifted from peripheral to central. While this shift was initially motivated by artistic intuition and project-specific necessity, it eventually revealed broader questions regarding authorship, process, structure, and the role of interpersonal dynamics in shaping musical outcomes. These questions could not be fully answered within the practice alone but demanded critical inquiry, systematic observation, and theoretical grounding, thus pushing the project into the domain of artistic research.

The need to interrogate these evolving collaborative formats stems from two intersecting factors: first, a lack of articulated models addressing ongoing, iterative performer-composer interaction beyond ad hoc solutions; and second, the difficulty of transferring or adapting collaborative knowledge from one project to another without reflection and formalization. This dissertation responds to those gaps through the creation, testing, and critical discussion of the Iterative Feedback Model for Collaborative Composition (IFMCC), developed and applied within case studies specifically designed to address these problems.

2.2. Objectives of the Research

The research has several interwoven objectives:

- **Artistic Objective:** To develop compositional strategies that embed performer input into the creative process in meaningful, traceable, and conceptually robust ways, and to integrate those practices into my own composing in a systematic way.
- **Methodological Objective:** To define and examine collaborative strategies employed in performer-composer interaction, and to analyze how they function across different stages of the creative process.
- **Theoretical Objective:** To engage with and contribute to discourses on authorship, performer agency, distributed creativity, and collaborative practices within the WAM context.
- **Pedagogical Objective:** To explore how such collaborative models could be taught, adapted, or used in institutional and educational contexts.

2.3. Relationship Between Practice and Research Questions

The questions that shape this dissertation arose not in abstraction but in practice—in rehearsal rooms, workshops, and exchanges—both informal and structured, such as interviews. As a composer-researcher, my dual role enabled a feedback loop between action and analysis. Reflection on collaborative experience led to the development of a formal model, and that model, in turn, framed new ways of composing and interacting.

Rather than separating practice and theory, this project embraces their entanglement. The IFMCC is both a research outcome and a compositional tool; its testing is at once artistic practice and empirical inquiry. Knowledge is generated not as a byproduct of practice, but through deliberate integration of creative and analytical modes.

2.4. Positioning Within Artistic Research

This dissertation aligns itself with a form of artistic research that values process, situated knowledge, and reflexivity. It contributes to a growing field of inquiry in which artistic production is not only the object but also the method of research. The kind of knowledge it aims to generate is procedural, experiential, and context-sensitive.

In doing so, it responds to the call for more rigorously documented and methodologically grounded case studies in artistic research, especially in music composition. By focusing on process and using grounded theory methods to analyze documentation, it aims to make visible what is often considered tacit, ineffable, or private.

2.5. Articulating the Research Questions

The primary research question that underpins this dissertation asks:

How does the Iterative Feedback Model for Collaborative Composition (IFMCC) shape and guide interactions between performers and composers, and how does it influence compositional and performative practices?

This question implies a dual line of investigation. On one hand, it addresses the relational dimension: what kinds of interactions the model enables, how agency is distributed, and how dialogue is sustained over time. On the other hand, it considers the artistic consequences: how these interactions influence structure, aesthetics, interpretation, and authorship.

To support this, five clusters of sub-questions are explored throughout the dissertation:

1. **Impact on the Compositional Process:** Which collaborative strategies influence compositional decision-making? How are roles negotiated at different stages, and what remains the composer's domain?

2. **Impact on Performance and Performer Engagement:** Which aspects of the performed work—such as structure, articulation, or performer interpretation—are most influenced by collaborative decisions made during specific phases of the IFMCC? How do performers experience agency within this model?

3. **Comparative and Theoretical Positioning:** How does IFMCC relate to other models of collaboration? What assumptions does it challenge or reinforce?

4. **Case-Specific Investigations:** How do different environments (institutional, cultural, pedagogical) shape the collaboration? What adaptations are needed?

5. **Evaluation and Refinement of the Model:** What recurring patterns and unexpected challenges arise? How might the model evolve?

These questions guide the design of the case studies and frame the evaluation of their outcomes. They also act as a lens through which the broader relevance of the research—for practitioners, institutions, and the field of artistic research—can be articulated.

Chapter 3: Research Methodology

3.1. Methodological Framing and Artistic Research Context

This research situates itself within the field of artistic research, where artistic practice is both the object and method of inquiry. It acknowledges the particular epistemology of artistic research, which emphasizes tacit knowledge, reflexivity, processual investigation, and situatedness. Rather than measuring artistic outputs in empirical or generalizable terms, this methodology seeks to understand the specific, experiential, and procedural qualities of collaboration in composition.

While this dissertation integrates methods from sociology and qualitative analysis, its foundation remains grounded in the artistic act of composing through collaboration. The iterative, cyclical structure of the process aligns with broader artistic research approaches that emphasize dialogic knowledge production and reciprocal exchange between theory and practice.

The methodological approach is thus twofold:

- An **artistic-practical** component, centered around the design and execution of three case studies based on the IFMCC.
- An **analytical-reflective** component, using tools from grounded theory, interaction analysis, and qualitative coding to examine the material generated during these collaborations.

These components are not separate but mutually reinforcing: the analytical reflection informs and refines subsequent artistic choices, while the artistic process generates the material and context through which the research inquiry unfolds.

3.2. The Artistic Method: Implementing the IFMCC

The IFMCC functions as a dynamic framework for structuring collaboration over time. Its structure is shared across the three case studies presented, but it is applied flexibly in each to accommodate varying artistic, institutional, and logistical parameters. Below, the core structure of the model is presented in four titled phases to clarify its operational logic:

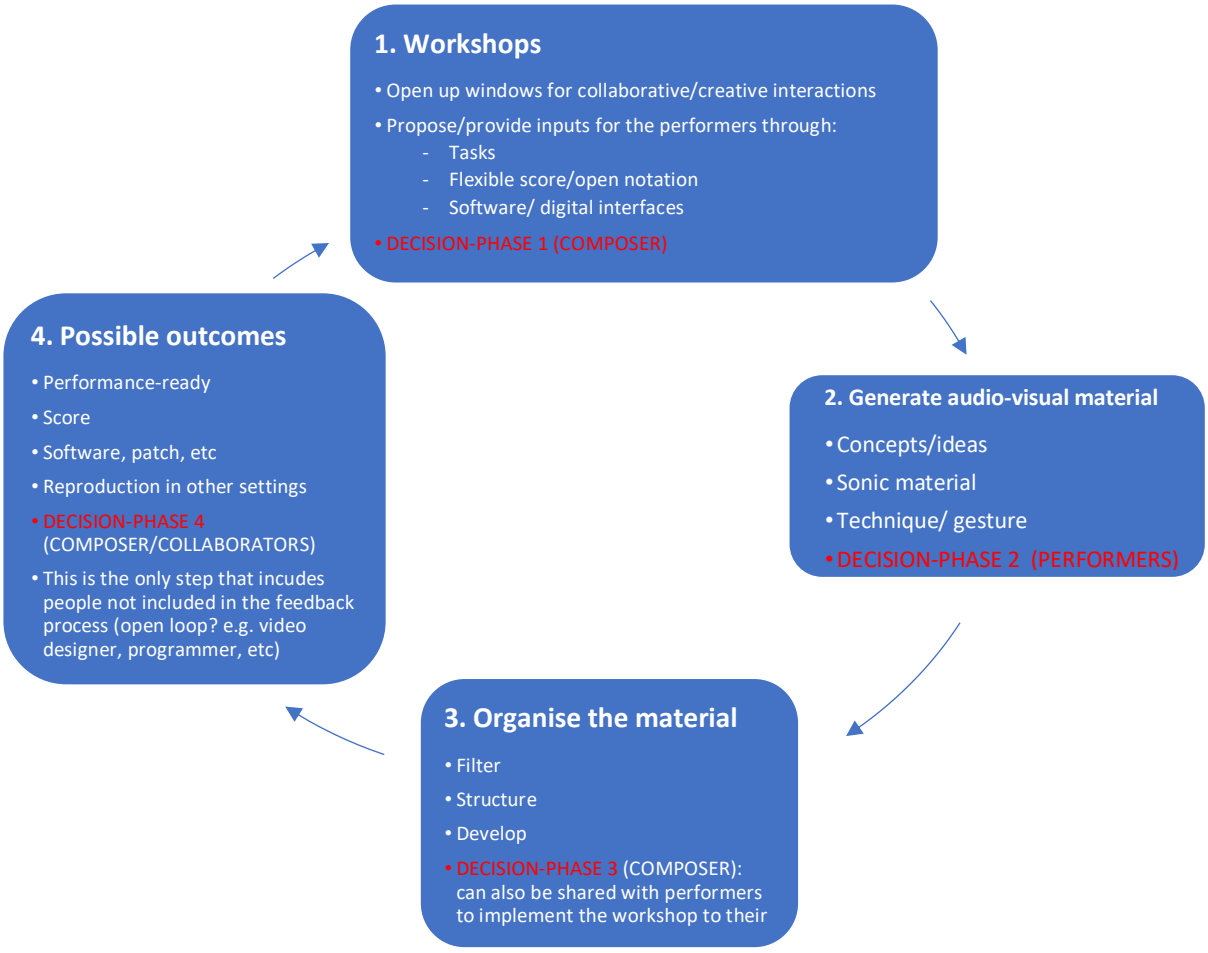


Figure 1. Overview of the Iterative Feedback Model for Collaborative Composition

Phase 1: Initiation and Orientation

A project begins with the composer designing a conceptual and temporal framework, along with initial tasks or sonic materials. These are shared with performers in an open-ended format during a first workshop. This session serves both as a generative space and as a social encounter for participants to establish common ground. Performers respond musically and verbally, providing material that begins to shape the direction of the work.

Phase 2: Documentation and Reflection

All interactions are documented via audiovisual recording, field notes, and participant journals. These materials capture both the musical and conversational dimensions of the process, including performer responses, technical exploration, and emerging ideas. Crucially, the documented material extends beyond sonic or gestural content; it includes conceptual reflections and the articulation of aesthetic intentions. This exchange of ideas forms the foundation of collaboration in this model.

Phase 3: Artistic Response and Reiteration

The composer (or composer-researcher) analyzes the documentation to draw insights and refine the compositional direction. This may lead to new workshop tasks or adjustments to the conceptual frames. When feasible within the project timeline, additional workshops are implemented to deepen the collaborative process and refine previously generated material. These follow-up sessions serve a differentiated purpose: they are more feedback-oriented and goal-driven, responding to a now more defined conceptual and sonic framework. In doing so, they reinforce the model's cyclical nature, supporting iterative refinement while preserving overall continuity.

Phase 4: Artistic Outcome and Evaluation

The collaboration culminates in a performed output (e.g., score, video/audio, or installation). After its public presentation, the process is evaluated through interviews and written reflections from the participants. These reflections feed back into the model itself, potentially initiating another cycle. This continuity is not driven by a fixed outcome, but by the open-ended, adaptable nature of the resulting work—its capacity to be reconfigured for different settings, performers, or iterations.

This multi-phase process distinguishes the IFMCC from more ad hoc collaborative practices by structuring creative exchange as a repeatable, analyzable process. Its systematic use of feedback cycles aims not only at providing a tool for making music but also a framework for generating artistic knowledge.

3.3. Analytical Approach: From Documentation to Theory

The analytical approach in this dissertation draws from multiple qualitative theories, which, though distinct, are used in a complementary manner. The overarching structure of analysis follows the five-step model proposed by Miles and Huberman (1994; 2014), providing a scaffolded progression from data organization to theoretical reflection:

1. Prepare and organize data
2. Review and explore materials
3. Generate initial codes or categories
4. Develop themes and analytical constructs
5. Relate findings to research questions and report results

To enhance the coding phase, I integrate Saldaña's (2016) multi-cycle approach. His *First Cycle Coding* foregrounds participant voices—often using in vivo and descriptive coding—while *Second Cycle Coding* uses pattern coding to identify social dynamics and collaborative strategies. A post-coding phase links these themes to relevant theoretical frameworks, allowing recurring ideas to inform broader analytical constructs.

In parallel, Biasutti's (2015) grounded theory-informed framework provides a reflective and iterative lens particularly suited to artistic research. His five-step process—Immersion, Categorization, Phenomenological Reduction, Triangulation, and Interpretation—guides both the analytic interpretation of data and the progressive development of the Iterative Feedback Model for Collaborative Composition (IFMCC). In this context, analysis and creation become integrated: the IFMCC is not just what is studied, but also what guides the process.

To capture multimodal aspects of collaboration, including gesture, eye contact, and instrumental behavior, I use video annotation tools (e.g., VideoAnt[1]) alongside textual data. This multimodal perspective reinforces the central methodological position of this study: that collaboration is not only communicated through words, but also through embodied, non-verbal cues that co-construct the artistic process.

[1] VideoAnt. Minneapolis: University of Minnesota, 2011. https://ant.umn.edu/.

Chapter 4: Theoretical Framings of Music Collaboration

4.1. Introduction

This chapter outlines the theories that inform both the design and evaluation of the Iterative Feedback Model for Collaborative Composition (IFMCC) and the broader compositional and performative themes explored in this research. Rather than providing a comprehensive survey of all existing collaboration literature, it focuses on selected theories and models that are applied directly in the three case studies and help articulate the research questions presented in Chapter 2.

These theoretical frameworks support several key dimensions of the dissertation. First, they underpin the methodological rationale of the IFMCC—especially its focus on iterative processes, distributed agency, and evolving authorship. Second, they provide analytical tools for understanding broader dynamics in music-making: from the shifting role of the composer to the influence of notation, technology, and institutional contexts. Finally, they inform the inquiry into co-creation, a recurring theme throughout the case studies.

Rather than offering a fixed definition of collaboration, this study draws on a constellation of perspectives—historical, sociological, cognitive, and practice-based—that illuminate how roles are negotiated and redefined in collective creative settings. Consistent with the ethos of artistic research, these frameworks serve as interpretive tools that help articulate the tacit, emergent, and situated knowledge embedded in collaborative practice.

4.2. Composition as a Collective Action

In Western Art Music (WAM), the image of the composer as a "lone genius" has prevailed, especially since the Romantic era, shaping both cultural narratives and institutional structures (Goehr 2007; Barrett 2014). While this idea remains influential in professional and educational contexts, it overlooks a longer history in which compositional activity has often been intertwined with performance, improvisation, and social practice.

However, this has not always been the case. As Goehr states (2007, 181), until the late eighteenth century, WAM was mostly a performative art form. Compositional decisions, such as instrumentation or structure, were often beyond the sole control of composers. Music was written with particular performers or occasions in mind and was regularly re-used, adapted, and rearranged. This impermanence impacted the notion of authorship, which remained fluid. Even when composers were acknowledged by employers or institutions, music was treated functionally—frequently performed or modified without attribution or permission. It was not until the rise of Romantic aesthetics that composers began to be seen as "divinely inspired creators" charged with expressing something unique, personal, and transcendent (Goehr 2007, 208).

The Romantic ideal of the genius creator tends to conceive composition as a solitary process and disregards the cultural, institutional, and interpersonal forces that shape creative output (Sloboda 2000; Barrett 2014). It ignores the social and political context of artistic labor (Becker 1974; 2005) and assumes a direct line between inner inspiration and artistic artifact (Taylor 2016). Historical studies influenced by this model have tended to minimize group dynamics and collaborative exchange, despite growing evidence of their importance in creative work (Paulus and Nijstad 2003).

From the second half of the 20th century onward, a number of high-profile partnerships began to blur the established boundaries between composition and performance. Performers such as Cathy Berberian (with Luciano Berio) and David Tudor (with John Cage) made substantial contributions to the development of new works, though these contributions were often informally acknowledged or categorized under interpretative rather than compositional domains. Other notable collaborations—such as Benjamin Britten and Peter Pears; Michael Tippett and Alfred Deller; Cornelius Cardew, Howard Skempton, and Michael Parsons with the Scratch Orchestra; Peter Maxwell Davies and the Maggini Quartet; and Harrison Birtwistle with National Theatre workshop musicians—similarly reflect the significance of performer input, even if it was rarely recognized through formal authorship (Whittall 2003; Glover and Redhead 2018).

This research adopts a contrasting perspective, one aligned with distributed creativity (Sawyer 2003). Here, composition is understood not as an isolated act, but as one embedded in dialogue, negotiation, and situated practice. The IFMCC operationalizes this view by structuring co-authorship through iterative feedback loops, emphasizing the performer's creative agency in shaping the work.

4.3. Theories on Musical Collaboration

This research draws on a selected group of theoretical frameworks that reflect the multifaceted nature of collaboration in compositional and performative contexts. The models outlined in Figure 2 were chosen for their relevance to different dimensions of the IFMCC: real-time interaction and emergent creativity (Sawyer 2003; 2006), the evolution of collaborative roles and relationships (John-Steiner, 2000), decision-making structures (Taylor, 2016), composer–performer dynamics (Hayden & Windsor, 2007), and group cognition in creative tasks (Paulus & Nijstad, 2003). Together, these frameworks provide a layered understanding of how collaboration is conceived, implemented, and reflected upon throughout the dissertation.

Author	Focus	Model / Taxonomy	Relevance to IFMCC
Sawyer	Group creativity	Collaborative Emergence	Emphasizes feedback loops and emergent structure in creative group processes
John-Steiner	Typologies of collaboration	Distributed, Complementary, Familial, Integrative	Framework for analyzing evolving social and emotional dimensions of collaboration
Taylor	Decision-making & division of labor	Hierarchical, Consultative, Co-operative, Collaborative	Informs structure of interaction and decision-making phases within the IFMCC
Hayden & Windsor	Composer–performer interaction	Directive, Interactive, Collaborative	Captures degrees of shared authorship and flexibility
Paulus & Nijstad	Group cognition & social behavior	Idea generation models	Supports analysis of group dynamics and idea flow in rehearsal and workshop settings

Figure 2. Theoretical Models Informing the IFMCC

Keith Sawyer's theory of group creativity (Sawyer 1997; 2003; 2006; 2017; Sawyer and DeZutter 2009) introduces the idea of collaborative emergence—novel outcomes arising from group interaction rather than individual pre-planning. This is particularly applicable to the IFMCC's emphasis on feedback loops, where material and meaning evolve through collective input. This framing resonates with my own experience of iterative co-creation in rehearsal and workshop environments, where structured unpredictability is a core feature of the creative process.

John-Steiner (2000) categorizes collaboration into four distinct styles of collaboration:

- **Distributed collaboration**, characterized by loosely connected individuals working in parallel without necessarily converging ideas.
- **Complementary collaboration**, in which participants contribute different skills in a coordinated structure but retain distinct roles.
- **Integrative collaboration**, where roles overlap, and participants co-create content with shared authorship.
- **Familial collaboration**, a less formalized mode built on trust, shared values, and long-term familiarity, often found in artistic settings.

An illustrative example of familial collaboration can be found in the work of Oscar Escudero and Belenish Moreno-Gil (group interviews, 2021). In our interviews, they describe how their co-creative process evolved over time—from casual exchanges to deeply intertwined creative decision-making. Their collaboration is marked by mutual trust, emotional investment, and shared authorship, aligning with John-Steiner's definition of familial modes, where personal relationships and flexible roles foster creativity. At the same time, their process often integrates elements of complementary collaboration, especially when engaging across their respective disciplines of performance, dramaturgy, and composition. These nuances highlight how collaborative types can overlap and evolve within the same working relationship. These distinctions provide a framework for analyzing the range of collaborative relationships presented later in this dissertation.

Taylor (2016) introduces a taxonomy of collaborative structures based on two central dimensions: the division of labor and the hierarchy of decision-making. He identifies four working models:

- **Hierarchical working**, where tasks are divided among participants, but decisions are made by a single authority.
- **Consultative working**, where all participants engage in the same tasks, but decisions are made by one or more individuals.
- **Co-operative working**, where tasks are divided and decisions are taken jointly.
- **Collaborative working**, where both tasks and decisions are shared equally among all participants.

This framework has been instrumental in shaping the IFMCC. Each phase of the model is structured to accommodate varying levels of authorship distribution and decision-making dynamics, reflecting Taylor's view that genuine collaboration emerges when both labor and authority are equitably shared.

Hayden and Windsor (2007) propose a taxonomy of three collaborative categories within music composition, particularly useful for evaluating composer-performer interactions:

- **Directive collaboration**, where the composer maintains control and the score acts as a set of fixed instructions, typical of conventional notation and acoustic settings.
- **Interactive collaboration**, where dialogue and negotiation occur between the composer and performers or computer music designers, leading to shared interpretations, though final authorship remains with the composer.
- **Collaborative collaboration**, where decision-making is collective, roles are fluid, and the resulting work may be co-authored or emerge from non-traditional, often technology-mediated processes.

This taxonomy is particularly applicable to the case studies in this dissertation, which span from directive to fully collaborative approaches. It also aligns with the IFMCC's intention to create flexible structures that accommodate varying degrees of performer input and co-authorship.

Paulus and Nijstad (2003), writing from a behavioral and cognitive science perspective, offer insights into group dynamics and idea exchange. Their frameworks support this study's focus on the rehearsal and workshop as sites of knowledge transfer and creative negotiation. These interactions were especially relevant in Case Study I (Ensemble Vortex) and Case Study III (Lieder aus der Fremde), where fluid role boundaries required sensitive attention to evolving group structure.

These theories were selected not only for their disciplinary breadth but also because they provide concrete tools for analyzing the kind of collaborative practice described in the case studies. They help situate the IFMCC within a wider discourse and clarify why certain strategies—such as repeated feedback cycles and shared reflection—are prioritized.

Rather than evaluating these theories in a comparative or critical sense, this chapter positions them as interpretive lenses. Their relevance will become evident in later chapters, where their influence is explicitly traced in the documentation, coding, and reflection processes that shape the project's outcomes.

4.4. Collaboration versus Cooperation

This section clarifies the nuanced difference between two frequently conflated terms: collaboration and cooperation. While many artistic and academic discourses refer broadly to any non-solo creative work as "collaborative," recent literature has highlighted the need to distinguish between degrees of shared authorship, decision-making, and mutual involvement (e.g., John-Steiner 2000; Taylor 2016; Hayden & Windsor 2007; Zattra 2008; Sawyer and DeZutter 2009; Seddon and Biasutti 2009; Sennet 2012). These frameworks propose taxonomies and typologies that move beyond the simplistic binary of "solo vs. collaborative," emphasizing the diverse relational, structural, and temporal dynamics at play in co-creative work. This is particularly relevant to this research, which aims to systematize collaborative practices in contemporary music-making and move beyond loosely defined cooperative settings.

Hayden and Windsor (2007, 39) note that it is difficult to imagine a musical practice that is not collaborative at some level. Yet, their categorization highlights degrees of collaboration, implying that certain forms of working together may not merit the label "collaborative" in the strictest sense. As no consensus exists on what collaboration definitively entails, it becomes crucial to identify what it is not—starting with cooperation.

One key distinction lies in the distribution of labor and the presence (or absence) of shared authorship—two factors that will also guide the evaluation of participant interactions and documentation in the case studies. Sawyer (2017, 68) and Sawyer and DeZutter (2009) distinguish between "distributed creativity"—joint work toward a shared product—and "collaborative emergence," where unpredictable, novel results arise through real-time, reciprocal interaction. The latter is characterized by:

1. An unscripted, open-ended process;
2. Moment-to-moment contingency between participants;
3. Mutual influence between actions;
4. Equal contributions from all collaborators.

These characteristics directly informed the design of the Iterative Feedback Model for Collaborative Composition (IFMCC) and its application within the case studies. The model was built to maintain an open-ended process, encourage contingency between participants, and create flexible phases that allowed contributors to mutually influence one another's ideas and decisions.

Taylor (2016; 2021) similarly argues that collaboration can only occur when the outcome includes shared authorship and genuinely emergent ideas. He outlines three necessary conditions:

1. Negotiation of shared goals, built on common ground;
2. Generation of new ideas from interaction;
3. Inclusion of more than one author in the final outcome.

These conditions likewise guided the logic of the IFMCC—particularly in the use of pre-compositional workshops as platforms for exchanging influences and forming collective goals from the outset.

John-Steiner (2000) echoes this distinction but emphasizes engagement and commitment: for collaboration to take place, tasks must be shared meaningfully and with mutual involvement. This personal component also played a major role in shaping the workshop structure of the case studies and the expectation of participant ownership. Zembylas and Niderauer (2017, 24) further differentiate cooperation from collaboration in terms of formality and shared intent. Cooperation is informal and potentially fragmented, whereas collaboration requires a structured commitment to a shared goal.

Seddon and Biasutti (2009) offer an interactional typology that further clarifies the distinction. They define three modes of interaction—instruction, cooperation, and collaboration—each identifiable across verbal and non-verbal dimensions. Cooperative modes are associated with lower-level cohesion, while collaborative interactions foster higher-order creative exchange. These distinctions support the IFMCC's emphasis on process design and communication modes in shaping productive group dynamics.

Sennett (2012) and Sawyer (2017) add that cooperative efforts often benefit individuals separately, whereas collaborative efforts prioritize collective results. As such, institutional pressures or asymmetric motivations can undermine true collaboration, especially in artistic settings. These tensions—between voluntary creative agency and institutional frameworks—will be explored further in the case study analyses.

This dissertation—both in its theoretical framing and in the design of its case studies—intentionally seeks to enable collaborative emergence. The IFMCC is constructed to ensure an open-ended structure, moment-to-moment contingency, and reciprocal influence through multiple feedback loops.

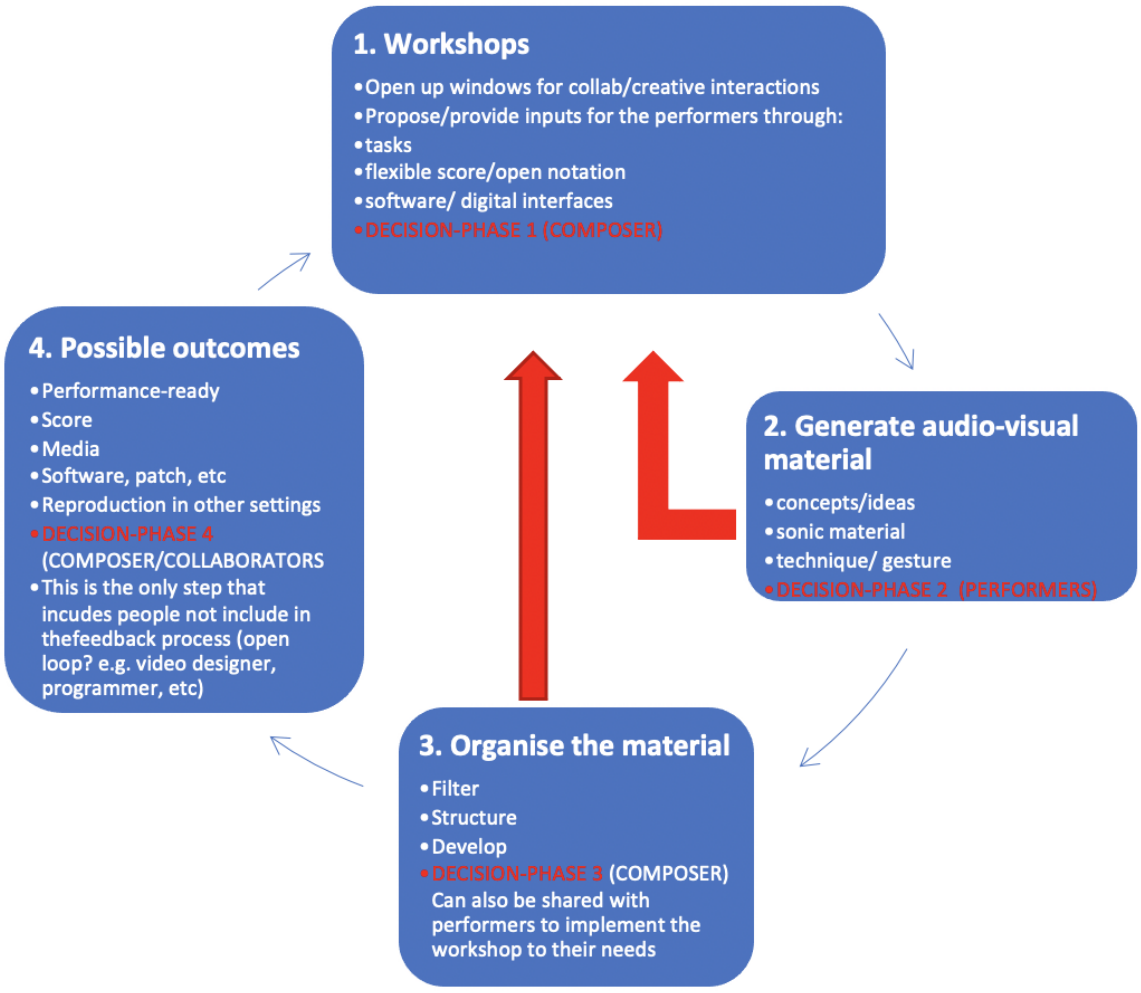


Figure 3. Iterative Feedback Model for Collaborative Composition (IFMCC)

Taylor's emphasis on shared ground is reflected in the careful pre-selection of collaborators and the use of early-stage workshops to exchange aesthetic values and creative approaches. John-Steiner's view on engagement is mirrored in the model's phased structure, designed to maximize participant commitment and authorial agency from the outset.

Nevertheless, inherited roles and habits can still pose challenges. Fitch and Heyde (2007) caution against shallow collaboration, where composers merely refine their ideas through performers' feedback, reducing interaction to a "box of tricks." Similarly, Bellamy (2013) reflects on her own shift from directive to genuinely collaborative practices, underscoring the need for deeper engagement beyond simple task alignment.

This highlights the role of implicit hierarchies and learned behavioral norms. Burnard and Younker (2008) distinguish between vertical (hierarchical) and horizontal (democratic) interaction in group composition. Sustained and reciprocal collaboration is more likely to develop in horizontal settings where negotiation, evaluation, and shared decision-making are embedded in the process. These principles have shaped the design of the workshop sessions across all three case studies. Importantly,

as will be explored in the upcoming chapters, the persistence of hierarchical habits sometimes produces moments of resistance among participants—revealing a crucial tension between collaborative ideals and entrenched role expectations.

Finally, the concept of interdisciplinarity must be carefully distinguished from collaboration. While often used interchangeably, interdisciplinarity typically involves structural role separation—even when appearing integrative (Born 2010a). It may manifest as:

- **Integrative**: Symmetric coexistence of multiple disciplines;
- **Subordination-service**: One discipline supports another's goals;
- **Agonistic-antagonistic**: Critical, reflective engagement across disciplinary boundaries.

Although narrow in some respects, this classification remains analytically helpful when addressing asymmetries within collaborative settings. All three case studies involve interdisciplinary dimensions—namely, technological development and programming in Case Studies I and II, and pedagogy and musicology in Case Study III. While the focus remains on composer-performer interaction, special care was taken to minimize hierarchical divisions of labor and maximize iterative, cross-disciplinary feedback.

Details on how this was concretely implemented are discussed in chapter 3 (methodology) and chapters 5,6, and 7 (case studies), where the model's structure and participant roles are examined with regard to both designed and emergent dynamics.

4.5. Group Dynamics

While many accounts discussed thus far focus on dyadic interactions—particularly between a composer and a performer—this dissertation centers on collaborative processes within groups. This broader scope enables the testing of more complex interactional structures and reflects the reality of many working composers, who often operate within ensemble or interdisciplinary setups. Furthermore, it extends the potential applicability of the IFMCC beyond solo projects. R. Keith Sawyer's research on group creativity is therefore especially relevant to understanding how shared authorship and collaborative emergence can function within larger group settings. Although not focused exclusively on composer-performer interactions, his models provide essential insights for the framework developed in this dissertation.

Building on this foundation, his extensive body of work (1997–2017) offers one of the most influential frameworks for analyzing group collaboration. His focus on socioculturally structured interactions—particularly in improvisational theatre and ensemble music—shapes a process-centric understanding of creativity. From this research, Sawyer identifies five defining features of group creativity (2003, 5–12):

1. **Focus on Process**: The group's goal is not a fixed product but the emergent performance itself. The creative value lies in the processual unfolding rather than any predetermined result.
2. **Unpredictability**: Creative actions are shaped moment-to-moment in response to context. In tightly scripted scenarios (e.g., orchestras), options are limited. In open-ended contexts (e.g., improvisation), each action can drastically alter the trajectory.
3. **Intersubjectivity**: Mutual understanding is not fixed but negotiated. Each action only gains meaning once interpreted by others. Ambiguity and open-ended responses are often strategies to foster coherence.
4. **Complex Communication**: Due to constant negotiation of meaning, the group must develop adaptive strategies to interpret and respond to evolving inputs.
5. **Emergence**: Group creativity produces outcomes that exceed the sum of individual parts—highlighting the transformational potential of collective effort. Recognizing and enabling this emergence is one of the key challenges explored in the case studies.

These principles have deeply informed the development of the IFMCC, particularly in its emphasis on process-based structuring and real-time responsiveness. However, their application to Western art music (WAM) contexts requires adjustments, especially when working with performers from varied backgrounds—including both classically trained musicians and improviser-composers. This heterogeneity introduces potential tension, resistance, or confusion, especially in situations where conventional hierarchies are destabilized.

One of the central challenges in collaborative group work is thus facilitating shared investment in process-oriented methods, especially when participants have different assumptions about authorship, structure, and goals. To address this, sufficient time must be allocated early in the project for shared framing—through workshops, open dialogue, and mutual learning—which is a built-in feature of the IFMCC. Such scaffolding is particularly important for reducing resistance linked to inherited hierarchies.

Paulus and Nijstad (2003) contribute an additional model for understanding group creativity, focusing on the balance between enabling and obstructive factors:

1. **Diversity**: Heterogeneity in skillsets, knowledge, and experience enhances creative output, provided shared ground exists. Divergence fosters dissent, which can prevent conformity and spark innovation—but only if accompanied by structures supporting trust, equality, and open communication (Sawyer 2017).
2. **Obstacles**: Group productivity depends on available resources—skills, time, and clarity of roles. Deficits in any of these areas risk impairing outcomes.
3. **Group Climate**: A productive atmosphere balances harmony and critique. Excessive consensus can undermine dissent and flatten idea generation.
4. **Environment**: Cultural and institutional contexts shape group dynamics. Creativity can be constrained by environments that do not value experimentation—or enhanced when social ecosystems are receptive.

While the IFMCC cannot fully resolve these challenges, the theoretical input it draws from helps at least to identify and remain aware of them. It seeks to mitigate such obstacles through cyclical feedback, flexible structuring, and early collaborative framing. Group-level exchange continuously reshapes the roles and contributions of individuals, feeding back into their individual creative agency—an idea reflected in both the Paulus and Nijstad model and the IFMCC.

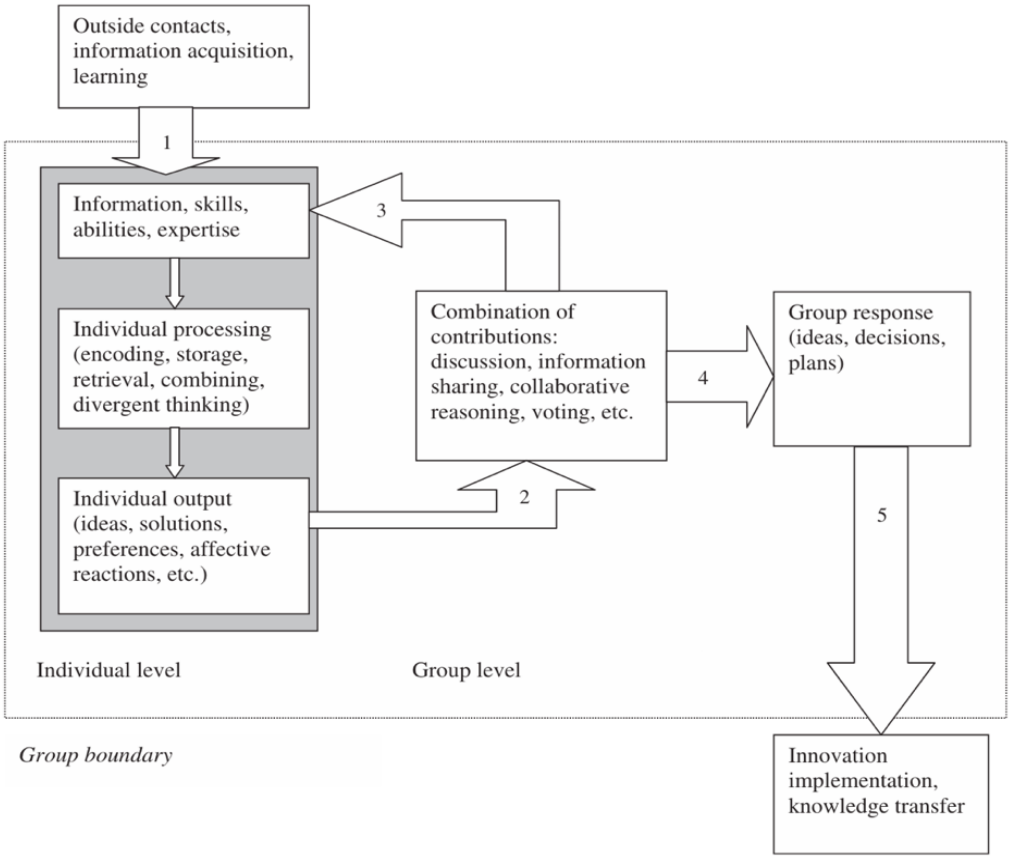


Figure 4. A generic Model of Group Creativity (Paulus and Nijstad, 2003, 334)

In the IFMCC, a comparable feedback loop exists between early-stage collaborative workshops and the ongoing restructuring of the project—based on mutual reflection and participant input.

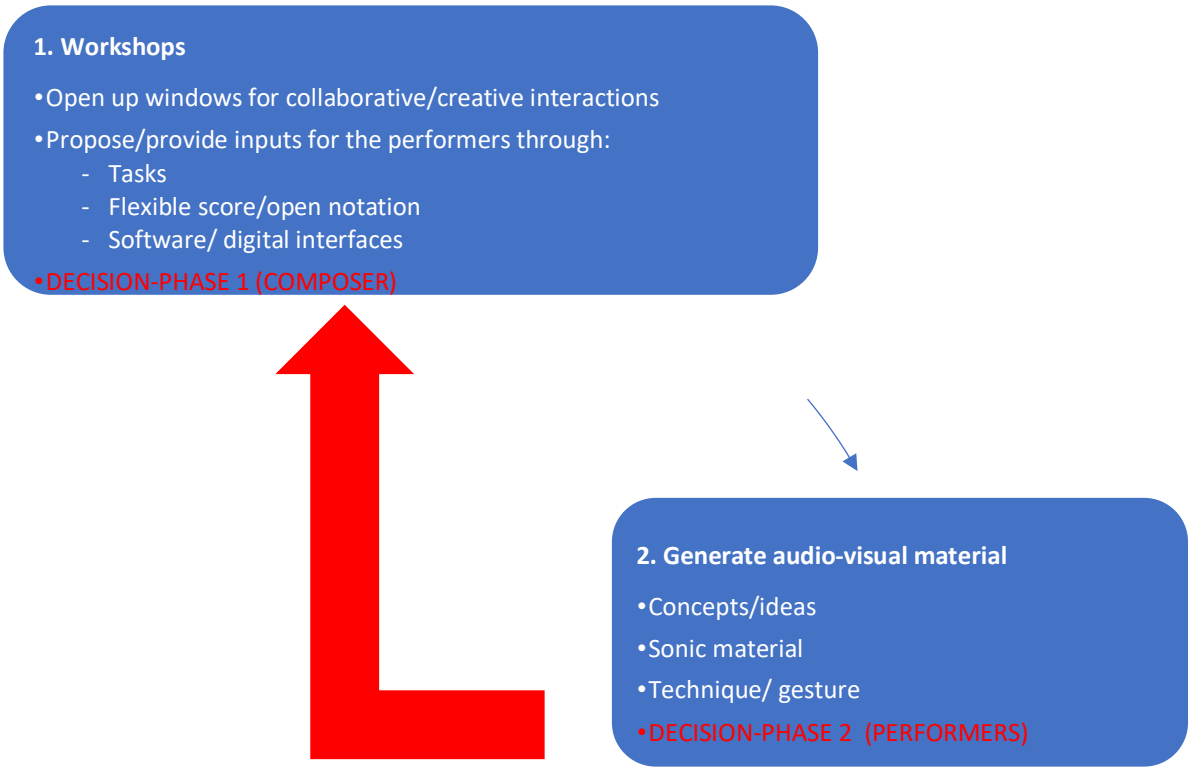


Figure 5. Detail of the Iterative Feedback Model for Collaborative Composition

These frameworks help structure a nuanced understanding of group creativity, but their relevance to this research lies not in abstract description but in practical application. In each case study, the presence (or absence) of Sawyer's five conditions, the group climates described by Paulus and Nijstad, and the resistance patterns linked to hierarchical inertia will serve as interpretive lenses for understanding participant behavior, project evolution, and overall collaborative efficacy. Rather than treating these models as normative ideals, they are mobilized as dynamic tools for analyzing and learning from the lived complexities of real-world collaboration.

4.6. The Role of the Composer in Collaborative Endeavors

Having outlined relevant conceptual frameworks concerning collaboration and group dynamics, this section turns to the composer's specific role as the mediator of collaborative work interactions, positioning the composer both as an initiator and as a facilitator within group settings. This dual role implies a delicate balance: maintaining some authority over the process while actively sharing creative agency with others.

To adopt this role, the composer must move away from the historically entrenched notion of the solitary genius—a concept rooted in Romantic ideals that positioned the composer as the sole originator of

meaning and structure (Goehr 2007; Huff 2018). This shift necessitates both conceptual and practical changes: opening up aesthetic decision-making, loosening control over form, and reconfiguring the composer's status within the group.

Despite growing interest in collaborative practices, many composers still default to solitary modes of working. Directive models—such as those described by Hayden and Windsor (2007)—allow composers to consult performers on matters of technique or notation, but final authority remains with the composer. Recognizing collaborative authorship, by contrast, entails relinquishing aesthetic sovereignty and embracing a model where meaning and form emerge from interaction.

The motivation to do so can vary—from institutional expectations to personal inclination or artistic curiosity. Yet even when composers actively seek collaboration, barriers persist. A proposed collaborative model must be mutually accepted; performers unfamiliar with or skeptical of such frameworks may resist. Similarly, institutional structures may favor clear authorial roles and discourage collective authorship. As Hayden and Windsor (2007, 11–12) argue, collaboration must be voluntary, reciprocal, and systemically supported.

Another obstacle lies in the complexity of sharing the compositional process itself. Composition is not simply problem-solving but an aesthetic and intuitive journey shaped by material exploration, analysis, and practice (Frisk and Östersjö 2006; Biasutti and Concina 2021). In my own practice, for instance, initial ideas may emerge from experimenting with a series of harmonic textures or electronic samples that suggest a specific form. For example, in the pilot project of this dissertation described in Chapter 5, I proposed a conceptual framework grounded in Saussurean semiotics, using it to spark initial discussion and frame compositional experimentation. In the next case study presented in Chapter 6, the project was guided by the idea of engaging with each performer's personal identity and interpretative voice. These conceptual anchors shaped the process while remaining open enough to accommodate evolving contributions and transformations.

As I begin shaping a piece, the materials often shift in meaning—leading to the restructuring of entire sections or the substitution of previously central elements. Because these decisions rely on subjective associations or intuitive choices, they can be difficult to articulate or externalize in a group context, adding further complexity to collaborative authorship.

Taylor (2016, 8) suggests that collaboration may be more manageable when the composition process is viewed in two phases: a conceptual phase (idea generation) and an execution phase (realization and refinement). Involving collaborators at different levels in each phase enables a spectrum of working modes—from egalitarian to hierarchical. This structuring has influenced the IFMCC, especially in Step 2, which foregrounds the collaborative emergence of not only sonic or technical material but also conceptual frameworks that shape the direction of the piece.

(2012; 2013) proposes a related distinction between ideas that "start with the instrument" and those that originate conceptually. This is echoed in Step 2 of the IFMCC, where the collaborative articulation of concepts may be sparked either by material exploration or abstract propositions. In collaborations like that of Dorothy Ker and oboist Christopher Redgate, the composer offers a framework while the performer generates material through exploratory combinations. Ker then shapes these into a compositional narrative. Although both contribute, their decision-making roles differ: the performer's choices are exploratory; the composer's, editorial. (Hooper 2012, 29).

Building on these models, Lucas (2012) frames the composer as a facilitator—someone who crafts conditions for collaboration without dictating outcomes. Rather than assigning tasks or determining content, the composer engages with the group dynamically, listening closely, responding fluidly, and promoting autonomy. Sawyer (2017, 41–54) describes this as cultivating "distributed creativity," where collaborative emergence can flourish.

This reconceptualization directly informs the IFMCC. The model is structured around iterative feedback phases that enable interaction during both conceptual and execution stages. Early workshops are designed not merely to test material, but to foster shared vocabulary, recalibrate expectations, and embed authorship within the group. While the composer remains a guiding presence, they no longer enforce a fixed vision but adapt responsively to the group's unfolding contributions.

What can be learned from the evolving role of the composer in collaborative contexts? Rather than offering definitive conclusions, this dissertation explores how such developments may challenge conventional notions of expertise and authority by positioning authorship as a relational and adaptive process. This perspective invites further inquiry into how compositional influence can be exercised through facilitation, responsiveness, and shared decision-making. The IFMCC is proposed as one possible framework for examining these dynamics and understanding how authorship might be redistributed across collaborative processes.

4.7. Collaboration into Motion: Skills, Strategies, Tools and Resources

Once the composer has initiated a shared creative process and all parties are willing to actively engage, the next challenge lies in how to effectively operationalize collaboration. This section presents an overview of the skills, tools, and cultural dynamics that enable or hinder collaboration, starting with the role of tacit knowledge and conventions.

4.7.1. Tacit Knowledge and Conventions

As noted in earlier sections, communication in collaborative music-making is inherently complex. One core challenge stems from the limitations of verbal language in capturing the fluid and nuanced nature of musical ideas. In many instances, interaction takes place through actions and musical exchanges rather than explicit verbal articulation (Biasutti 2015). This is closely tied to the concept of tacit knowledge—knowledge derived from personal experience and embodied practice, which is often difficult to verbalize (Chugh 2015).

For example, pianist and composer Sara Nicolls describes the challenge of developing a shared language in her collaboration with Pierre Alexandre Tremblay: “The hardest thing in any collaboration is creating the language and the way that you communicate... you have to give time and space for the language to develop” (Clarke and Doffman 2017, 114). While evocative, such statements highlight the need for more concrete examination. How exactly did this language emerge? Was it through repeated musical gestures, shared rehearsal rituals, or adaptation to preferred working tempos? These are the kinds of dynamics this dissertation investigates.

Tacit knowledge, especially when reinforced through shared aesthetic reference points, allows collaborators to communicate efficiently without over-articulating. John-Steiner (2000, 63–64) refers to this as "complementarity"—a state in which differences in artistic backgrounds enrich the partnership by offering mirrored insight and opening space for reciprocal influence. Glover and Redhead (2018) extend this notion, noting that shared aesthetics often arise collectively through the network of collaboration, rather than being predetermined or consciously designed.

Still, tacit knowledge alone is insufficient without a shared framework of conventions—unspoken social agreements and practices that develop within musical subcultures and domains. Conventions help structure collaborative behavior by creating recognizable rituals and guiding interactions (Sennett 2012; Barrett 2014). For instance, in chamber music rehearsals, much is conveyed through subtle cues, dynamics, and gesture-based dialogue.

These conventions are not codified in rulebooks but are acquired gradually through socialization within a particular musical culture (Sawyer 2003, 52–53). Csikszentmihalyi (1996; 2015) notes that musical domains typically have their own symbolic systems and rule structures, including specific notational practices and genre-based expectations. Becker (2005) expands on this by observing that each participant typically operates within a subset of these conventions, shaped by their specific role and responsibilities within the collaborative system. This highlights how conventions are not uniformly understood or applied, but filtered through the function each person fulfills—reinforcing the importance of role-awareness in negotiating collaborative dynamics.

Yet these very conventions can become barriers when left unexamined. One of the aims of the IFMCC is to question the rigidity of such conventions, particularly the distinction of roles between composers

and performers. For example, in common practice scenarios, composers often enter only during final rehearsals, while performers have limited input during the early development stages (Doffman and Calvin 2017, 185).

At the same time, conventions are double-edged: while they support fluency and coherence, they may also impose predictability. Sawyer (2003) notes that overly constrained systems reduce the space for creative surprise. Instead, he advocates for balancing familiarity (useful for problem-solving) with unpredictability (key to "problem-finding" and innovation). This dissertation explores how collaborative frameworks like the IFMCC attempt to strike that balance.

It is important to clarify: while this research touches on creativity, it does so through the lens of collaborative interaction—not to define creativity as such, but to examine how creative dynamics are shaped or constrained by social and structural conditions. In this sense, the work aligns as much with the politics of collaboration and authorship as with the study of creative output.

The relevance of tacit knowledge and convention will be examined in depth in the upcoming case studies. In the first two case studies, shared cultural knowledge among professional musicians facilitates interaction. In the third, a more heterogeneous group—including musicologists, students, and pedagogues—requires more scaffolding to establish shared ground. Across all three, the interplay between tacit understanding, learned conventions, and collaborative flexibility emerges as a key determinant in shaping both process and outcome.

4.7.2. Communication Strategies and Collaborative Proficiency

Building on the foundation of tacit knowledge and conventions, this section turns to how communication strategies and collaborative skills can be intentionally cultivated. This subchapter focuses on synthesizing recurring principles from relevant disciplinary and creative domains, aiming to clarify how they resonate with the specific dynamics of composer-performer collaboration.

Elizabeth G. Creamer (2004) outlines five core strategies for successful collaboration in academic teams: create overlapping but distinct expertise zones; foster interpersonal trust; treat difference as a generative asset; establish feedback responsibilities; and allow time for informal, unstructured exchange. Paul Roe (2007) translates these into the realm of collaborative composition by charting a progression from idea generation to joint authorship. Sawyer (2017) stresses the importance of improvisational responsiveness—arguing that innovation grows out of flexible, dynamic group dialogue, not rigid systems.

These frameworks converge on the shared insight that collaboration thrives not on rigid plans, but on sustained, process-driven interaction. This insight was instrumental in designing and executing *I See You* (Case Study 2). Across months of distributed co-creation—through remote meetings, iterative

workshops, and asynchronous tasks—contributors were able to integrate their perspectives into the developing work. As a result, the final performance required minimal rehearsal. The key takeaway is not efficiency per se, but the depth of shared understanding that preceded execution. “Reduced rehearsal” here does not signal shortcutting, but the outcome of distributed responsibility and co-creative engagement throughout the process.

Communication in this context is not simply about clarity or delegation, but about reciprocal interpretation. This becomes especially crucial in interdisciplinary environments or projects that intentionally resist conventional hierarchies. As discussed earlier, the IFMCC addresses this not with abstract ideals, but through concrete structuring: e.g., alignment of conceptual ground early on (Step 2), and recursive revision (Step 4).

The notion of "group flow," developed by Sawyer (2017) following Csikszentmihalyi’s (1996) work, underscores how collaborative synergy arises not from rigid structures but from active listening, mutual adaptation, risk-taking, and shared investment. In this context, when performers challenge or reshape material, they are not disrupting the process—they are enacting the very ethos of fluid, co-constructed meaning that such collaboration demands.

Rather than offering a fixed model, the aforementioned literature on group communication emphasizes principles of openness, responsiveness, and negotiated interaction. It is not about achieving "better" outcomes in a simplistic sense, but about enabling more coherent, inclusive, and responsive forms of collective authorship. “Better” in this context means works that are deeply informed by the process, that reflect the negotiations and transformations occurring within the group. Yet, not all collaboration is frictionless. Resistance—whether to tasks, aesthetics, or roles—is not an anomaly, but an expected dynamic in co-creation. This is evident throughout the case studies in this dissertation. Rather than signaling failure, moments of resistance reveal the boundaries of comfort and expectation.

The challenge is to design systems resilient enough to absorb resistance without stalling. Ross Karre, percussionist and then-artistic director of the International Contemporary Ensemble (ICE), suggested during a reflective interview on *I See You* that “the collaborative apparatus must be bigger than the individual.” This might sound deterministic, but in the context of *I See You*, it referred to creating layered scaffolding—e.g., modular structures, asynchronous input, shared documents—that allowed the group to keep moving, even when certain voices paused.

This, however, opens further questions: Who sets these systems? What happens when a participant’s resistance is silenced or circumvented in the name of continuity? Scholars like Zattra (2018) and John-Steiner (2000) underscore the role of trust—not just in others’ competence, but in their ability to critique, diverge, and reshape direction. In this sense, trust enables risk-sharing, role flexibility, and reciprocal accountability.

Encouraging this shift also requires that performers move from reactive to participatory roles. Glover and Redhead (2018) propose that effective collaboration demands commitment to the group over individual preference. Yet the goal isn't simply a smoother process—it's critical awareness. Collaborative systems like the IFMCC are not designed just to support making works more efficiently, but to interrogate the structures that define authorship, labor, and value within Western art music.

In summary, communication strategies and collaborative proficiency are not technical layers added to an otherwise fixed process. They are foundational methods for reframing power, fostering distributed creativity, and surfacing the implicit structures we too often inherit uncritically. The IFMCC provides a practice-based and conceptual framework through which such systemic shifts can be explored and enacted.

4.7.3. The Role of Digital Technology in Facilitating Collaboration

Digital technology, broadly understood here as digital tools and systems that mediate communication, creation, and distribution—including software environments like Max/MSP, online collaboration platforms, or custom-built interfaces—plays an increasingly prominent role in collaborative music-making. While all musical activity involves technological mediation—from instruments and notation to recording devices—this section narrows in on computational and digital technologies that enable or structure collaborative interaction, whether in real-time or asynchronously. These include programming environments, networked platforms, digital audio tools, and communication interfaces.

One of technology's clearest contributions to collaboration is in expanding communication channels. As discussed earlier, collaboration depends on shared understanding and mutual codes. Laura Zattra (2018), in her study of composer–sound designer interactions, highlights how technological mediation can both support and complicate these exchanges. For instance, Carl Faia (2014), working with Jonathan Harvey, created user-friendly patches—what he calls "composing tools"—that allowed Harvey to engage more directly with electronic processes. These patches bridged the knowledge gap and enabled reciprocal experimentation. Similarly, Alvise Vidolin and Salvatore Sciarrino used diagrams and adapted notation to articulate electronic transformations in a collaborative workflow. These examples show how digital technologies not only demand new languages of interaction but also allow for hybrid forms of authorship across divergent expertise levels.

However, such mediation introduces questions about authority and aesthetic control. Magnusson (2019) discusses how digital composition increasingly resembles systems design, involving the integration of tools, protocols, and structures—a point that, while not focused explicitly on collaboration, underscores how technological frameworks may condition the creative roles within group work. While not all system design equates to composition, the act of defining the system parameters can shape the aesthetic and conceptual trajectory of a work. This becomes particularly complex when the composer

also takes on the role of programmer or engineer: when does the tool function as a means of artistic expression, and when does its very creation constitute the artistic act? Moreover, technology is never neutral—software environments carry implicit assumptions and biases, influencing what is musically possible or encouraged.

Hayden and Windsor (2017, 13) argue that digital tools can blur traditional hierarchies in music production. Rather than reinforcing a strict divide between the composer as visionary and others as technical executors, flexible tools may enable multiple participants to contribute more creatively and meaningfully across domains of expertise. Biasutti and Concina (2021, 58) suggest that this flexibility can democratize access, enabling users with different skill levels to participate meaningfully in sound manipulation and structural decision-making. Yet as Zattra (2018, 290) and Sawyer (2017, 41–54) caution, this depends heavily on intentional structuring: shared language, clear goals, and continuous negotiation remain as important here as in any other form of collaboration.

The collaborative potential of technology becomes especially evident in online communities. Synchronous and asynchronous digital interaction can support geographically distributed teams, enabling contributions to unfold across time zones and varied schedules (Paulus and Nijstad 2003). Biasutti and Concina (2015, 5; 2021, 61) identify key affordances: flexibility, reduced costs, and increased accessibility. However, they also warn of potential drawbacks, including loss of contextual cues, asynchronous misunderstandings, and ambiguous attribution of ideas. In collaborative artistic work—where authorship often carries aesthetic, legal, and professional implications—such ambiguity can complicate questions of responsibility, recognition, and intellectual property. These issues will be revisited in the discussion of Case Study 3 (Lieder aus der Fremde), where participants worked through a shared platform to co-develop compositional material.

Tanaka et al. (2005, 2–6) highlight a related issue: integrating the social dimension into technology-mediated exchanges. Effective tools must be sociable, not just usable. While digital platforms reduce physical distance, they don't erase it—they reconfigure it. Contributions may become harder to trace, which can enhance egalitarianism but also complicate authorship. Who created what, and when? And what happens when that ambiguity is intentional?

Ultimately, technology neither guarantees nor obstructs collaboration. It amplifies the need for reflexivity and structuring. The same collaborative strategies outlined earlier—shared goals, feedback loops, role clarity, and distributed authority—are just as essential in digital contexts. This section argues not that technology improves collaboration by default, but that it reshapes the modes through which collaboration happens and the questions we must ask about authorship, agency, and mediation.

This dissertation's case studies will discuss how digital platforms have enabled projects that would not have been logistically possible otherwise. But they have also introduced new forms of complexity—particularly regarding how contributions are shaped, recorded, and interpreted. The goal here is not to

celebrate or critique technology as such, but to examine how its integration demands renewed attention to the political, structural, and communicative dimensions of collaborative music-making.

4.7.4. The Score as a Mediator or Medium in Collaboration

The role of the score in composer–performer collaboration is multifaceted, deeply entangled with evolving historical practices, symbolic systems, and cultural conventions. While all musical notation functions as a mediating tool, this section focuses on how different notational strategies—ranging from conventional to open or digital—can foster, limit, or complicate collaborative interaction, agency, and authorship.

Historically, scholars like Wishart (Wishart and Emmerson 1996) and Steiner (1992) have argued that the emergence of Western musical notation instituted a functional split between composer and performer, privileging literacy over oral transmission and individual over collective authorship. Others (Roe 2007; Frisk and Östersjö 2006; Sennett 2012) suggest that this shift curtailed spontaneous musical dialogue, reinforcing a hierarchy mediated by the written page.

Yet, notation is never entirely prescriptive. Goehr (2007) and Casey (2016) describe how the development of scores into fixed, intricate documents—especially after 19th-century aesthetics—sought to transform musical works into timeless artefacts. Even so, authors such as Goehr *(ibid.)*and Roe (2007) argue that scores are inherently incomplete: they offer partial instructions open to interpretation. In collaborative settings, these ambiguities become sites for negotiation, where interpretation is shared rather than singularly authored.

This opens a crucial space for thinking of the score not only as a transmitter of fixed information but as a dynamic participant in collaborative dialogue. In contexts where traditional notation proves insufficient—particularly for conveying timbre, gesture, or embodied nuance—the score's gaps invite further exchange (Roe 2007, 73–177). Rather than closing down creativity, these absences can foster discussion, improvisation, or co-authorship.

However, notational openness does not automatically guarantee collaboration. Graphic or flexible scores can both expand and restrict agency, depending less on visual design than on the composer's underlying intention. As Schröder and Straebel (Schröder and Straebel 2012; Gresser 2014) note, the appearance of freedom often coexists with strict control in practice. This is evident in works where fixed frameworks remain beneath seemingly open surfaces, revealing that authorship is negotiated as much through process as through notation.

Recent examples illustrate these dynamics. Jennifer Walshe's EVERYTHING IS IMPORTANT (2016)[2] exemplifies the ambivalence of collaborative openness. Framed under her concept of the "New Discipline," the work integrates live video, amplified string quartet, spoken text, and synchronized media. Walshe recounts that early sessions involved free improvisation with the Arditti Quartet, suggesting a porous authorship at the generative stage (Hiendl. 2019 69–74.). Yet the final score reveals tight control: stopwatch synchronization, video cues, and vertically scrolled timelines structure the work into discrete, time-coded blocks. Within these, degrees of openness vary—from conventionally notated passages to text-based behavioral seeds for improvisation. Performer agency, then, is present but circumscribed: interaction occurs within fixed temporal architecture rather than through real-time negotiation. The piece thus embodies a paradox common to many multimedia scores: while aesthetically predicated on openness and collaboration, it reinstates composer-led control via technological and temporal grids.

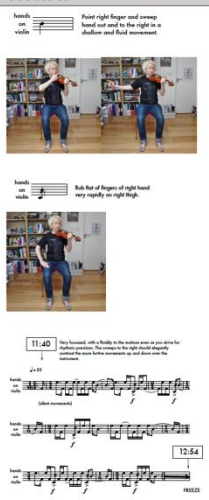
Time	Voice	Violin I	Violin II	Viola	Cello	Elec.
				your face. 		
12:54	FREEZE	(FREEZE)	FREEZE	FREEZE	(FREEZE)	Carrick on Shannon hen party
13:03	RELEASE, get ready for next section.	RELEASE, get ready for next section.	RELEASE, get ready for next section.	RELEASE, get ready for next section.	RELEASE, get ready for next section.	
13:20	Ten seconds of silence – be completely still during this.	Ten seconds of silence – be completely still during this.	Ten seconds of silence – be completely still during this.	Ten seconds of silence – be completely still during this.	Ten seconds of silence – be completely still during this.	

Figure 6. Detail of Jennifer Walshe's score *EVERYTHING IS IMPORTANT* (2016)

[2] Walshe, Jennifer. EVERYTHING IS IMPORTANT. Accessed July 16, 2025. https://milker.org/jenniferwalsheworklist

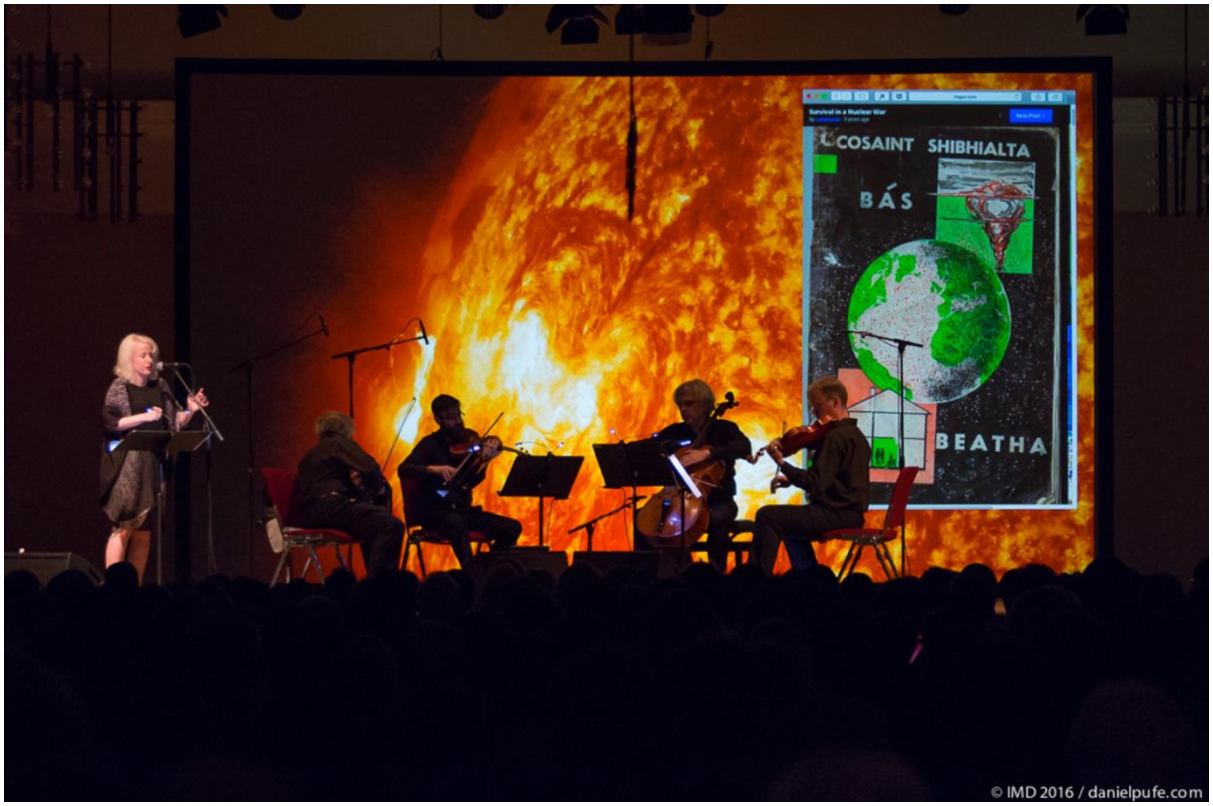


Figure 7. Jennifer Walshe and the Arditti Quartet performing EVERYTHING IS IMPORTANT. Photograph: IMD 2016/Daniel Pufe.

By contrast, Celeste Oram's *Third Person* [3] employs movement-based visual prompts as sonic triggers, requiring performers to interpret and negotiate meaning collectively in real time. The flutist Naomi Johnson described the work as requiring "collaborative energy" to bridge ambiguity and the composer's intention (personal blog, accessed 17.11.2023). Similarly, Stefan Prins' *Infiltrationen (Memory Space #4*[4]*)* uses real-time score generation across networked laptops, ensuring each performer's actions affect the group. While authorship remains with the composer, this system redistributes agency by making performers co-responsible for triggering and reacting to new material in a feedback loop.

[3] Oram, Celeste. Third Person. Score and performance documentation. Accessed November 17, 2023. https://celesteoram.com/third-person-2014-a-video-score

[4] Prins, Stefan. Infiltrationen (Memory Space #4). 2010. Performance notes Accessed November 17, 2023. https://www.stefanprins.be/eng/composesInstrument/comp_2009_02_infiltrationen.html

Figure 8. Jeremy Bass, Naomi Johnson, and Matt Kline performing *Third Person* by Celeste Oram

These examples suggest how different forms of notation—conventional, graphic, or dynamic—frame collaborative behavior through constraints and affordances. D'Heudières (Glover and Redhead 2018) and Magnusson (2019) argue that media choice influences performer-score dynamics, shifting expectations around agency, timing, and audience engagement. These examples reveal that the score's mediating function depends not only on design but on the process architecture surrounding it—its iterative negotiation, its technological affordances, and its cultural framing.

This observation resonates strongly with the case studies in this dissertation. In Case Study 1 (Signifié–Signifiant), animated scores and projected text functioned as prompts for responsive interaction rather than prescriptive instruction, fostering a dialogic rather than hierarchical relation. In Case Study 2 (I See You), the score evolved through cumulative performer input: rehearsal excerpts were transcribed, reordered, and reframed, producing a hybrid artefact that reflected—and conditioned—the group's collaborative logic. In Case Study 3, score-like elements migrated into interface design: simplified digital GUIs replaced conventional notation, shifting the locus of interpretation from page to touch screen.
Nonetheless, many performers lack formal training in alternative notation systems. Magnusson (2019, Kindle Locations 2383–2393) notes that reliance on tradition or emulation can result in clichéd responses, diluting the intended openness. This issue became visible in the Ensemble Vortex project, where some responses to semi-open notation gravitated toward stylistic defaults. These outcomes support the view that scores do not merely encode information but shape interpretive culture—and that training, expectation, and context mediate how much openness is actually realized.

Ultimately, as Arnold (1999, 4) summarizes, scores function within a web of conventions, expectations, and interpretations. Their efficacy in collaborative settings hinges on how they are framed, shared, and negotiated. This became particularly evident in Case Study 2 (Ensemble ICE), where the score was progressively developed based on performer input and mutual feedback. Here, the score was not a completed work handed over for interpretation, but a dynamic artefact evolving through exchange. In such contexts, the score becomes a medium for negotiated interpretation, shaped not just by the composer's vision, but by the interplay of intentions, responses, and the communicative framework surrounding it.

4.7.5. The Role of Cultural Institutions in Shaping Collaboration

Successful collaboration requires a substantial allocation of time, resources, and financial support. In collaborative work, this requirement becomes even more pronounced due to the increased logistical and material needs, including accommodating larger groups, providing suitable space, and compensating multiple contributors for their time. John-Steiner (2000) emphasizes the relationship between institutions as "cultural organisms" and the development of personal and collective growth within collaborative projects. In the context of this research, the question is not whether institutions support collaboration in all fields of music, but how they do—or do not—enable reflective and co-creative processes. This issue becomes particularly relevant in the case studies presented in this dissertation, where institutional frameworks directly shaped both process and outcome.

While in composition, the history of institutional collaboration is often associated with electroacoustic music—particularly through research centers like the Groupe de Recherches Musicales (GRM) and IRCAM—these examples provide only one strand of a broader picture. They offer illustrative cases of how institutional structures can foster new models of authorship and production, yet they typically feature hierarchical relationships between composers and technical assistants, and rarely include performers in generative roles. For this reason, they serve more as historical contrast than as direct models for the horizontal and iterative practices encouraged by the IFMCC.

Nevertheless, such institutions have historically played a pivotal role in supporting high-resource collaborations. Delalande (2016, 458) describes them as "actual laboratories of shared creation." Examples include Symphonie pour un homme seul (1950) by Pierre Schaeffer and Pierre Henry, and the "concert collectif" (1960–63) involving nine composers in multi-authored works. IRCAM also hosted collaborations such as Sonus ex Machina, developed by Miller Puckette and Philippe Manoury, which contributed directly to the emergence of the Max software environment.

These institutions offered not just technology and space, but also a protected environment for high-risk experimentation. Zattra (2018, 287) notes the centrality of these frameworks, especially before personal computing made independent production more accessible. Yet the collaborative roles within these

institutions were often uneven. Zattra (*ibid*.) and Donin (2017) have emphasized how musical assistants such as Marino Zuccheri, Alvise Vidolin, and Carl Faia—despite being co-responsible for the realization of complex works—received limited credit. As Faia (2014, 53) recalls:

"I went from just listening to my colleagues complain... to becoming vocal and demanding... to have our names always associated with the works on which we collaborated... and to have a salary more in line with the role and the time that this role demanded."

This perspective is especially relevant for the present research, as it underscores the importance of institutional structures acknowledging all contributors—not just composers—as part of the collaborative effort. The discussion surrounding role recognition and shared credit aligns with the IFMCC's emphasis on distributed authorship and reflection on processes of making music together.

Rather than facilitating technical innovation or studio production, the IFMCC proposes a reflective, participatory framework that foregrounds interpersonal negotiation and evolving authorship. These concerns are also echoed in the research by Zattra and Donin. For such approaches to be meaningfully supported, institutions must shift their priorities—emphasizing process over outcome, duration over speed, and shared agency over the valorization of individual creativity.

This becomes especially relevant in academic environments, where some of this dissertation's case studies were developed. There, collaborative experimentation is more likely to be supported, particularly under the umbrella of artistic research. Nonetheless, even these contexts present tensions—for instance, when funding models privilege fast, quantifiable results over slow, exploratory development. For the IFMCC to function effectively, institutions must not only permit but actively sustain the temporal, dialogic, and iterative nature of collaborative music-making.

Beyond individual recognition, structural constraints remain a broader issue. Becker (1974, 2005) highlights how institutions often impose rigid formal parameters—such as instrumentation or duration—that may stifle artistic experimentation. Sennett (2012, 8) argues that this results in "de-skilling," where institutional habits inhibit the development of adaptive, participatory work forms.

Because collaborative work demands time, repetition, and shared reflection, it often clashes with the production models common to many cultural and educational institutions. Becker (2005, 772) illustrates this with the case of Harry Partch: under academic residencies, he could build instruments with students, train them in his notational methods, and present a full performance—but only over a full academic year.

Fitch and Heyde (2007, 94) underline a similar issue. They observe that even in academia, funders may question whether months of collaboration are justified if the final output—a ten-minute piece—might seemingly be produced in a much shorter time. They argue that this objection must be countered by

reframing the process itself as a research outcome. In this light, artistic research should not be judged solely on efficiency or on the final product, but on the new knowledge and understanding generated through the collaborative journey.

4.8. Authorship

This section explores how the perception of authorship—or shared authorship—influences participant interaction and involvement in collaborative creative processes. It also investigates possible alternatives to the normative models of authorship that dominate Western art music (WAM), particularly those that centre on singular authority and ownership.

While the idea of musical works as intellectual property originated in the 19th century, it continues to hold significant influence today, as the concept of authorship remains closely connected to the Romantic notion of the individual creator (Cook 2001 Cook 2013; Goehr 2007). Within this conceptualization, the author is considered the person who provides originality and uniqueness to the work. Such an approach becomes problematic in musical genres where improvisation or distributed creativity prevail, such as jazz or experimental forms (Arnold 1999; Becker 2005). Consequently, to navigate the complexities of contemporary music creation, several scholars—including Taylor (2016), John-Steiner (2000), Toynbee (2001), and Magnusson (2019)—advocate for a re-evaluation of authorship in ways that better reflect collaborative, process-based, and co-creative practices. These theories will be further explored in light of the case studies in this research.

While Magnusson (2019) suggests that system-based compositional frameworks may reinforce the composer's artistic signature, such systems can also be understood as creating shared creative spaces in which authorship is relationally constituted. This resonates with Nicholas Cook's (2001) argument that music should not be treated as the realization of a fixed work-object but as a processual practice shaped by dialogue, memory, and situated interaction. Within such a view, the musical "work" is not a static product but a contingent, emergent configuration of collaborative meaning-making.

This perspective closely aligns with the premises of the Iterative Feedback Model for Collaborative Composition (IFMCC) developed in this dissertation. The IFMCC views authorship not as a singular act of creation but as an evolving network of interactions across time, media, and roles. Scores, in this framework, do not operate as finalised representations of intention, but as open scripts—accumulative traces of shared exploration, shaped by negotiation and performer agency.

As Cook (2001) proposes, scores might be better understood as "scripts for performance" rather than "texts to be interpreted," emphasizing their provisional and dialogic function. In the case studies examined here, and particularly in *I See You*, this approach is operationalized through a process in which materials are continuously reshaped across multiple feedback loops. Authorship, in this context,

emerges not as the imprint of a solitary creator but as a relational dynamic—an outcome of ongoing exchange and shared decision-making.

As discussed throughout this dissertation, many scholars highlight the significance of equality and shared ownership in collaborative contexts (Taylor 2016; Barrett 2014; John-Steiner 2000; Hayden and Windsor 2007). Yet others, such as Zattra (2018), caution that perceived equality in collaboration can be influenced by experience, expertise, and institutional power. Faia (2014), for instance, argues that expecting all contributors to have equal command over all artistic or technical aspects is unrealistic.

Equality is not a given in collaborative work. It is shaped by socio-cultural factors such as education, gender, race, and professional background, long before the collaborative process begins. Rather than aiming to fully overcome these asymmetries, the IFMCC is designed to make them visible and negotiable within the process. By positioning equality as a guiding orientation rather than a fixed starting point, it fosters conditions where diverse contributions—regardless of technical mastery—can shape the outcome. In this model, an idea from a technically inexperienced contributor can become central, provided the group works together to realize it. The distinction between "ideation" and "execution" blurs, as both are co-constituted throughout the process.

Nonetheless, current frameworks for authorship—particularly legal and institutional—do not easily accommodate this complexity. Copyright systems tend to recognize contributions only when they align with predefined roles (e.g., music vs. lyrics), or they divide ownership equally by default. This reductionist approach fails to capture the interwoven nature of collaborative input. Toynbee (2017) and Redhead (2018) argue that decision-making in collective creative settings is distributed and recursive, often making it difficult even for collaborators to identify their discrete contributions.

Sawyer and DeZutter (2009) emphasize the importance of "moment-to-moment contingency," where each action builds on the previous one. John-Steiner (2000) similarly speaks of "mutual appropriation," in which ideas only become meaningful through their adoption and transformation by others. In this view, authorship is not an origin point but a dynamic relationship.

Some fields, such as theatre and film, navigate collaborative authorship through task-based crediting systems (Hick 2014; Hirschfeld 2001). Yet such systems rely on clear divisions of labour, which are difficult to apply in co-disciplinary collaborations where roles and responsibilities shift continuously.

While jazz and popular music often recognize multiple authors, contemporary classical music more rarely does so—though exceptions exist. Examples can be found in co-authored operas, collaborative improvisation projects, or ensemble-based works where roles are more fluid, such as those created by collectives or composer-performer hybrids. Nonetheless, the dominant model in WAM continues to emphasize the composer as sole author, particularly in institutional and legal frameworks. Partly, this is because financial incentives for sharing royalties are lower. More fundamentally, authorship in this context is linked to originality and structural coherence rather than specific materials (Hatzis 2007).

Even in works that allow performer agency, credit tends to remain with the composer as the originator of the form.

This tendency can deter performer participation. As Glover and Redhead (2018) note, when authorship is associated with structural design, performers may hesitate to contribute ideas that affect form, preferring instead to work within given material. This was evident in Case Study #2, where violinist Josh Modney initially resisted the inclusion of his improvisations—until the structure they inspired took shape.

New collaborative strategies attempt to counter this structural bias by actively integrating performer agency into the compositional process. This is a central premise of the IFMCC and is reflected in various projects that echo its principles. For instance, in Unter dem Boden by Yukiko Watanabe (created in collaboration with members of the International Ensemble Modern Academy), performers contributed urban legends from their hometowns to shape both the textual and sonic fabric of the piece (Watanabe, personal communication, May 2024). Similarly, in José Luis Escrivà's collaboration with the Fabrik Quartet, compositional material was derived from interviews exploring each performer's musical biography and interpretive preferences (Escrivà, personal communication, April 2024). These methods emphasize the composer's role as facilitator rather than sole originator and support more equitable forms of shared authorship.

Such practices reflect what Magnusson (2019) calls a move from linear works to system-based ones. Here, the composition is an assemblage, installation, or process that requires performer interaction to be activated. While Magnusson argues that this reinforces the artistic signature of the composer, I propose a complementary reading: that the system can also function as a shared space where authorship is redefined through relational exchange.

Still, the composer often retains structural authority—including the right to determine when the piece is complete. Some theorists link authorship to responsibility. Livingston and Archer (2010) and Hick (2014) distinguish between multiple authorship (divided tasks) and co-authorship (shared responsibility for the whole). Taylor (2016) draws a similar distinction between practical and conceptual influence.

Due to the lack of institutional consensus on authorship in collaborative music-making—and the challenge of accurately attributing co-developed contributions—there is currently no widely adopted legal model in WAM that accommodates collective creation. In most cases, composers retain sole copyright and artistic ownership, even when others have played significant roles in shaping the outcome. While copyright law often allows for flexible division of rights, the dominant practice tends to reinforce the composer's central authority.

This dynamic reinforces unidirectional workflows and limits opportunities for sustained creative exchange. By emphasizing premiere-driven models, institutions incentivize short-term output over iterative, reflective development. The IFMCC proposes an alternative approach that recognizes

authorship as an evolving process of shared responsibility and mutual construction—foregrounding collaboration not only as a method but as a mode of inquiry in itself.

Across the three case studies, questions of authorship required context-specific solutions negotiated with all participants. In Case Study 1 (Ensemble Vortex), the work was officially registered under the composer's name, reflecting institutional and legal norms, while performer contributions were acknowledged in program notes and presentations as integral to the process. This approach was agreed upon collectively as the most practical solution. In Case Study 2 (I See You), a similar consensus was reached: despite extensive performer input into material and structural design, formal authorship remained with the composer for copyright purposes, while co-creative contributions were explicitly credited in all media and documentation. In Case Study 3 (Lieder aus der Fremde), the project's open-ended format precluded the registration of a single work; here, authorship was treated as collective, with all participants credited for the installation rather than individual rights claims. In all cases, these decisions were taken transparently and in consultation with the group, underscoring that while the IFMCC redistributes creative agency in practice, legal frameworks often necessitate pragmatic adaptations.

Chapter 5: Case Study #1: *Signifié-Signifiant*. An Interactive Composition within the Artistic Residency "Composer's Next"

5.1. Introduction: Composer's Next

This first case study presents the pilot project of the dissertation and the first practical application of the Iterative Feedback Model for Collaborative Composition (IFMCC). The project was conducted in 2019 as part of the Composer's Next residency program hosted by the Geneva-based Ensemble Vortex. This setting provided the opportunity to implement the model in a professional, artistically rich, and logistically well-supported environment.

The aim was twofold: to assess how collaborative structures, as framed by the IFMCC, shape the interactions between participants, and to observe how these interactions influence the composition process and final outcome. As a pilot project, this case was also used to refine the IFMCC, surface potential challenges in collaborative authorship, and further develop the research questions in relation to the emergent themes observed in practice. To do this, I documented the process through participant observation, interviews, rehearsal recordings, and reflective journaling. The analysis in this chapter draws on these materials. For a selection of these materials, see Appendices A and B.

Composer's Next is an annual residency program designed to foster long-term, collaborative creation between emerging composers and Ensemble Vortex musicians. Several contextual factors made it particularly well-suited for testing the IFMCC. First, its temporal structure—three intensive sessions held between April and November 2019—enabled a phased approach to development, allowing feedback loops to take shape over time. Second, the program offered robust material support, including rehearsal spaces, sound equipment, and technical staff, thereby eliminating many of the logistical constraints that often inhibit experimentation. Finally, its strong collaborative ethos encouraged co-creation and artistic exchange, framing the ensemble not as mere executors of finished scores, but as active creative partners throughout the process.

According to artistic directors Daniel Zea and Arturo Corrales, the intention behind Composer's Next was to shift away from standard composer-performer hierarchies by embedding the ensemble in the compositional process. Anne Gillot, a long-time member of the ensemble, emphasized that the residency provided opportunities to better understand composers' ideas by shaping them together. These guiding principles framed the working environment in which the IFMCC was implemented—an environment where co-creation was both encouraged and institutionally supported. What follows is an examination of how these intentions materialized in practice, the challenges and ambiguities that emerged, and how the model helped navigate the evolving dynamics of collaboration.

5.2. The Concept of the New Creation: *Signifié-Signifiant*

My proposal to the ensemble centered on a conceptual framework inspired by Ferdinand de Saussure's theory of the linguistic sign. According to Saussure (2011), a sign consists of two elements: the signified (the concept or idea) and the signifier (the acoustic or visual image expressing it). Their relationship is arbitrary and governed by social convention.

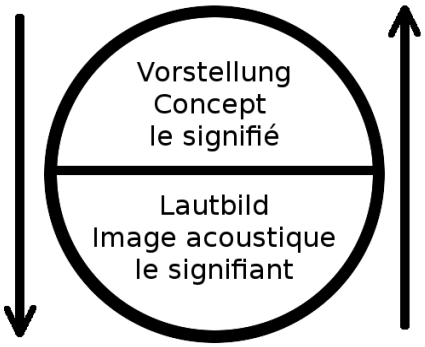


Figure 9. Diagram of Saussure's Signifier/Signified Model

The goal was to translate this linguistic dynamic into a musical context by inviting performers to respond instrumentally to written words. I was particularly interested in words with strong sonic connotations—onomatopoeias, acoustic descriptors, etc.—and how performers would react to them. Would responses be similar, based on shared conventions in contemporary music, or highly individual? Could these reactions be shaped into a collaborative musical system?

This exploration was informed by key themes discussed in Chapter 4, particularly tacit knowledge (Biasutti 2015), group conventions and complementarity (Zembylas and Niederauer 2017), and the dynamics of emergent interaction within creative groups (Sawyer 2003). Ensemble Vortex, with its long-standing experience in contemporary music, offered a compelling site to explore how collective practices and learned conventions affect the negotiation of meaning and creative response. These theoretical frameworks will be further developed in the subsequent sections of the chapter, where they are analyzed in relation to concrete phases of the collaborative process.

Practically, the IFMCC's phases were mapped onto three working periods:

Session 1: Idea generation, open-ended workshops with words and sound catalogues.

Session 2: Development of a multimedia score tool in Max/MSP and Jitter and iterative testing.

Session 3: Final shaping of the piece, rehearsals, and public presentation.

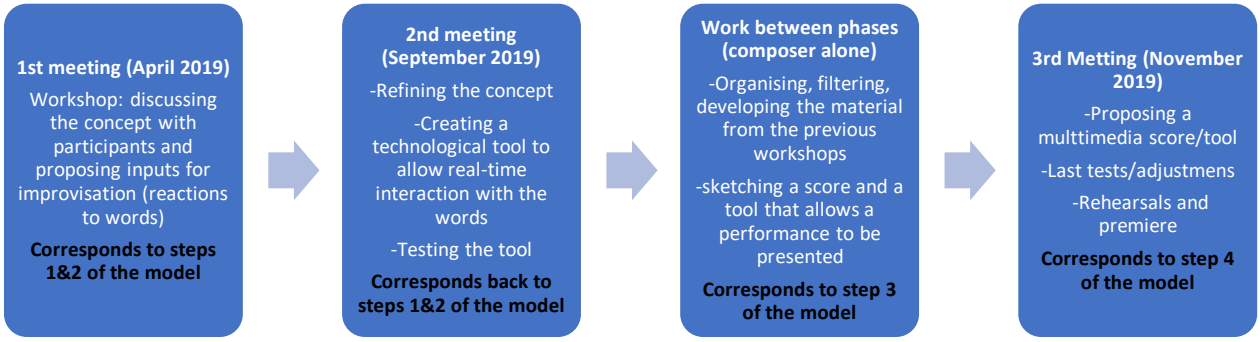


Figure 10. Project Timeline with IFMCC Phases Mapped to Residency Sessions

This structure enabled recursive input and adaptation, which proved essential in refining both the piece and the collaborative method. In the following sections, I analyze each phase of the process in detail, connecting back to the theoretical framework of this dissertation and examining the emergent questions around technology, authorship, performer agency, and institutional framing that arose during the creation of *Signifié-Signifiant*.

5.3. Initiating the Process: Proposing a System for Collaboration

The initial phase of the project, corresponding to the first encounter outlined in Figure. 10, was designed to initiate material generation and establish collaborative ground. In line with stages 1 and 2 of the Iterative Feedback Model for Collaborative Composition (IFMCC), this phase focused on proposing open tasks and creating conditions for idea development through performer input and dialogic interaction.

To introduce the conceptual framework described in Section 5.2, I asked the performers to create individualized sound catalogues in response to a series of written words. These words—selected for their strong sonic or metaphorical resonance—were sent in advance, accompanied by a sample chart (Figure 11) outlining possible directions. Each performer was encouraged to develop their own strategies, using their instrumental knowledge and intuition to associate specific gestures or timbres with the given terms.

Sound effects (abbr.)	Strings	E-Guitar	Woodwind	Percussion
(White) NOISE	Bowing on bridge, tailpiece etc, alu foil, cork	Mostly pedal effects?? e.g. Hiss, fuzz	Air sounds combinations (+fluttertongue, ZZZ, SH, etc)	Shakers, bowing on alu foil or other objects
DISTORTION (dist.)	overpressure	Fuzz, any kind of distort	Distorted Mfs, air and fricative consonts, etc...	Superball on tam-tam, cymbal
BEEP	Very high harmonics, close to the brige	Feedback, e-bow, compressor on very high pitch	Teeth on reed, very high harmonics	Bowing on cymbals
VIBRATION (vibr.)	Osc (4th, 8th tones), wide vibrato	Vibrato arm, whammy bar, tremolo bar, volume pedal on-of	Wide vibrato	Vibraphone (enhance with mouth effect)
INTERFERENCE (interf.)	Small oscillations very close pitches (on double stops)	Flanger,	Oscillatos (sing and play)	On vibraphone?
POP	snap pizz (less resonance)	Slap pizz	Slap, tongue rams	Hit wood or less resonant instruments
BANG	Tapping, dito (more resonance)	tapping	Open/resonant slap, dito	Hit more resonant instruments
POLYPHONY (poly)	Triple/qutriple strings	Chord. L.V.	Mfs, sing and play	On marimba, vibraphon, cortales, etc
DISSONANCE (diss.)	Double stops	Dissonant chord	dito	Dissonant chord
CONSONANCE (cons.)	Double stops	Consonant chord	dito	Consonant chord
CLICK	Fingernails on upper bout	Hitting the fingerboard	keyclicks	With nails or hard mallets on non-resonant surfaces
HARMONICS (Harm.)	Natural, artificial,...	Natural, artifical, squeeze, harmonics	Whistle tones, harmonic sweep,...	Bowing on vibr?

Figure 11. Proposed chart of sound-word associations

The session began with a video presentation where the words were projected in timed intervals, inviting real-time reactions from the performers using their prepared sound material. The aim was to introduce the process in a playful manner that encouraged spontaneous interpretation and interaction. This design drew on Sawyer's concept of "collaborative emergence," in which openness and unpredictability serve as catalysts for group-level innovation (Sawyer 2017). By prompting immediate decisions, the activity also mirrored real-world creative contingencies described in research on group flow and moment-to-moment responsiveness—conditions that prioritize attention, adaptation, and continuous mutual influence (Sawyer and DeZutter 2009).

While the session succeeded in generating a shared creative space, a number of structural tensions surfaced, particularly regarding the performers' interaction with time constraints, tools, and instructions. These tensions are significant not as isolated participant accounts, but as data points that illuminate

broader theoretical questions—namely, how conventions, tacit knowledge, and pre-existing group culture shape collaborative engagement.

For instance, some performers expressed concern that the time allowed for each word was insufficient for more deliberate interpretive choices, underscoring how performance tempo can affect perceived agency and depth of response. Others noted difficulty aligning their pre-prepared sound material with the evolving group dynamic. This reflects a challenge frequently discussed in group creativity models—namely, the negotiation between individual expectations and emergent collective meaning (Paulus and Nijstad 2003; John-Steiner 2000).

Another layer of feedback addressed the example materials I had shared in advance. These were seen by some performers as unintentionally directive, suggesting specific techniques rather than framing open possibilities. This dynamic illustrates the risk of convention reinforcement within group settings—where implicit cues from a facilitator or score can reassert genre-based norms rather than expand them (Magnusson 2019; Zembylas and Niederauer 2017).

As the session progressed, patterns of similarity began to emerge in how performers responded to certain words. This homogeneity was later discussed by participants as being rooted in shared training, aesthetic assumptions, and ensemble culture—an embodiment of what Zattra (2018) and Biasutti (2015) identify as the influence of tacit knowledge within professionalized musical groups. In this case, tacit knowledge operated less as a resource for innovation and more as a constraint, narrowing the field of responses through internalized stylistic norms and shared rehearsal histories.

Recognizing these issues, Daniel Zea (composer and artistic director of Ensemble Vortex) proposed the development of a flexible digital interface using Max/MSP and Jitter to replace the pre-sequenced video with a real-time tool. Rather than treating this as a technical upgrade alone, the suggestion was framed as a shift in the communication structure itself—aligning with Hayden and Windsor's (2007) observation that technology can reshape power dynamics in collaborative creation, depending on how and by whom it is deployed.

The proposal also responded directly to a key tenet of the IFMCC: adaptability through iterative feedback. The idea was not simply to "fix" logistical problems, but to redesign the system to better support performer agency, responsiveness, and collaborative shaping of the piece's sonic language. This became the foundation for the next stage of the process, where the role of digital mediation in structuring interaction would become a central concern.

5.4. Shaping the Process Through Technology

The second phase of the project focused on developing a technological interface that could facilitate real-time interaction between the performers and myself. Responding to the feedback from our first encounter (see Section 5.3), I collaborated with composer and artistic director Daniel Zea to design a Max/MSP and Jitter[5] patch that would allow me to send individualized word prompts to each performer's iPad. Each message—based on the terms in Figure. 11—was color-coded and timed, introducing a new layer of structural coordination to the previously fixed video model.

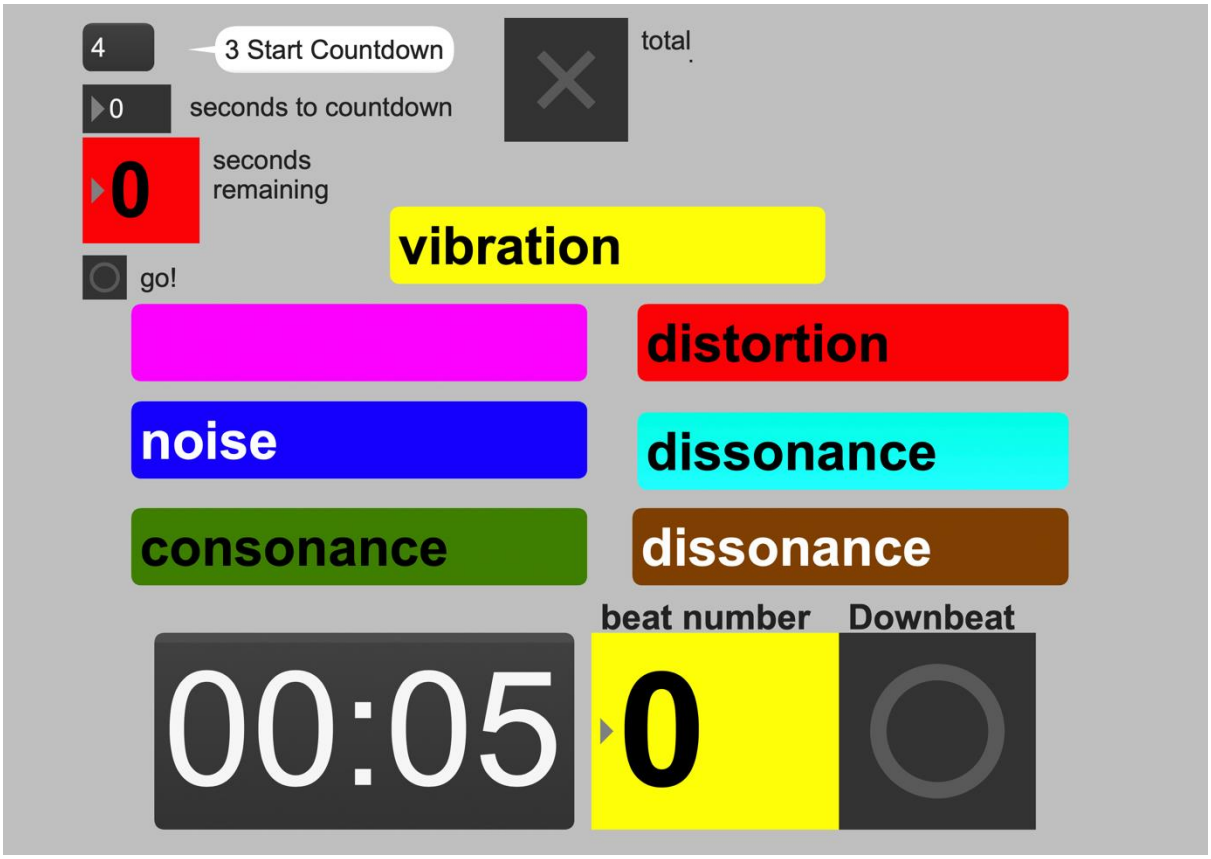


Figure 12. View from performers' iPads using the Max/MSP package MIRA

[5] Cycling '74. Max/MSP and Jitter. Computer software. 2024. https://cycling74.com

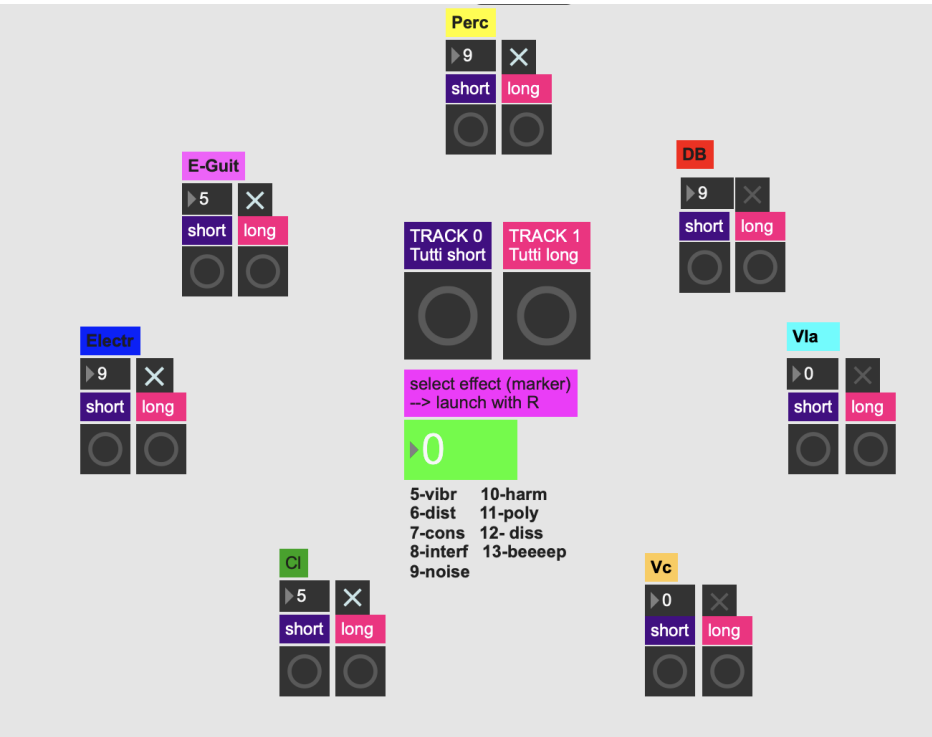


Figure 13. Max/MSP Jitter Main Patch (detail) from the perspective of the electronics performer

This approach introduced several novel affordances. As its operator, I could dynamically control timing, word selection, performer routing, and randomization using a MIDI interface. This allowed me to adjust interactions in real time and create or reshape musical textures based on performer response. As Faia (2014) might term it, this system functioned as a composing tool—a technical mechanism that mediates between composition and performance, expanding the possibilities for interpretive interaction.

Crucially, however, the system also reasserted a central point of control—namely, mine. Although it allowed for spontaneous responses and distributed execution, the sequencing of prompts, temporal framing, and performer roles were largely determined by the composer-operator. As Hayden and Windsor (2017, 13) note, technology in collaborative environments is never neutral. It can either flatten or reinforce hierarchies depending on how it is designed and deployed. In this case, while the tool enabled new forms of interactivity, it also preserved my control over formal structure—especially since I determined the rules and flow of interaction.

Theoretical perspectives on animated and responsive scores help frame this duality. According to d'Heudiers (2018), each notational medium creates distinct performer-score relationships, with real-time systems inviting more reactive, situated engagement. Magnusson (2019, Kindle Locations 4056–4058) further elaborates that animated notation blurs the boundary between performance and gameplay, projecting agency onto the performer while concealing constraints built into the score system. In the context of this project, the system did support real-time decision-making, but also produced scripted behaviors within those responses. While the performers were "free" to choose their

sound material, the rate, order, and distribution of prompts were largely fixed—an observation that resonates with Roe's (2007) discussion of pre-structured improvisation as a hybrid space, —a form that promises openness while determining many of its parameters.

During the second workshop, we focused on testing this system. Performer interviews suggest the tool succeeded in creating an engaging and reactive environment. Clarinettist Anne Gillot described it as "a unique playing environment" (personal interview, 2019) where the interaction felt distinct from typical rehearsals (personal interview). However, more critical reflections emerged as the process advanced. Several performers noted that my central control of the patch reasserted composer authority, despite the ostensibly open framework. They described the tool as ultimately directive—limiting not in content, but in pace, framing, and expectation.

In addition, the performers often responded to each other rather than solely to the prompts. As Anne Gillot noted, this tendency to converge on similar gestures undermined the independence the system was meant to foster: "we are not supposed to play together… but when you see someone do a gesture you recognize, it's hard not to join in." This effect—what Mauricio Carrasco referred to as "osmosis of ensemble work" (personal interview, 2019) —reveals the strong internal culture of Ensemble Vortex. After a decade of shared performance practice, their responses were not merely individual but deeply informed by collective tacit knowledge (Zattra 2018; Biasutti 2015).

The idea that too much homogeneity limits creative scope is supported by group creativity literature. Paulus and Nijstad (2003) suggest that diversity in expertise and background is a key factor in generating non-overlapping ideas. Yet the notion of "diversity" needs to be contextualized. In this case, the group's cohesion allowed for tight coordination, but also risked aesthetic predictability. What was gained in fluency may have come at the cost of surprise.

This issue became especially apparent in the responses to my chosen word prompts. Many performers found the terms—e.g., "distortion," "vibration," "white noise"—to be associated with familiar WAM gestures and extended techniques. As Daniel Zea commented, "they're all contemporary music clichés; something that could open the door to something else was missing" (personal interview). These responses led some performers to reflect on their own interpretive habits and the conventions they had internalized.

For me, this feedback revealed not just the performers' limitations but also my own. My word selections, although intended to provoke abstract or divergent interpretations, instead reinforced the very idioms I was hoping to interrogate. Mauricio Carrasco described this limitation poignantly: "Ultimately, each message is a crucial element of new music creation, influenced by tradition and past experiences… I realized that my range of possibilities for each item was limited." This recursive realization—of individual and collective boundaries—raises a larger question: can a collaborative structure dislodge aesthetic assumptions if its inputs are already coded by them?

This point touches directly on the function of feedback in the IFMCC. The performers' critical engagement with the system was not just a matter of troubleshooting but of conceptual recalibration. The proposal to revise the patch—rather than abandon it—underscored the project's methodological flexibility. Technology in this case was not merely a delivery mechanism, but a space of negotiation—of values, assumptions, and authorship.

Still, limitations remained. The interface—though more adaptable than the original video—imposed strict timing that constrained phrasing and performer pacing. The fixed format of word triggers, regardless of order or performer, encouraged standard patterns of reaction. Despite enabling flexibility in execution, the system struggled to support deeper listening, relational dynamics, or sustained development—key features of collaborative music-making as described by Sawyer (2017).

In this sense, the technology succeeded in generating interaction but fell short in cultivating reflection or emergence. The final section of the project sought to address this by introducing a gradual transition from real-time prompts to more developed structures—a compositional decision influenced directly by the critical feedback described here.

5.5. Crafting the Composition and Finalizing the Multimedia Score

This phase of the project corresponds to stages 3 and 4 of the Iterative Feedback Model for Collaborative Composition (IFMCC): analyzing, filtering, and developing the materials generated in previous sessions into a performable piece. It also marks a transition from collective experimentation toward structural decision-making. This section explores how the compositional process was shaped by performer input, shifting group dynamics, and the embedded feedback mechanisms of the IFMCC—responding to the second research question regarding the model's influence on composition and performance processes.

Following the second meeting, I began to structure the piece using the textures, gestures, and performative modes that had emerged during earlier improvisatory workshops. One aspect that had generated strong consensus among performers was the desire for more time to listen to each other and shape more complex textures. In one configuration, for example, performers collectively experimented with beginning from sparse, raw sonic gestures and gradually building toward denser material. This preference, discussed during post-session feedback, directly shaped the formal trajectory of the final work.

In response, I structured the piece as a temporal and formal progression. It begins with short, individualized reactions triggered through the software interface. It then transitions to a section that allows for overlapping gestures and inter-performer interaction, before concluding with a conventionally notated score. Each of these stages reflects not only a shift in performative modes—reaction,

coordination, interpretation—but also incorporates feedback received during the process, especially around pacing, role distribution, and perceived agency.

My compositional choices during this phase were less about realizing a pre-determined aesthetic and more about building a responsive system based on dialogue and shared reflection. For example, I modified the delivery rate and density of on-screen prompts to reduce the sense of overload that several performers had expressed. I also added cue-based instructions in the transitional and notated sections—inviting performers to react to each other's gestures, rather than treating the score as strictly linear. These choices were directly informed by the performers' inputs for more relational entry points, and mark a notable shift from my earlier, more top-down compositional habits.

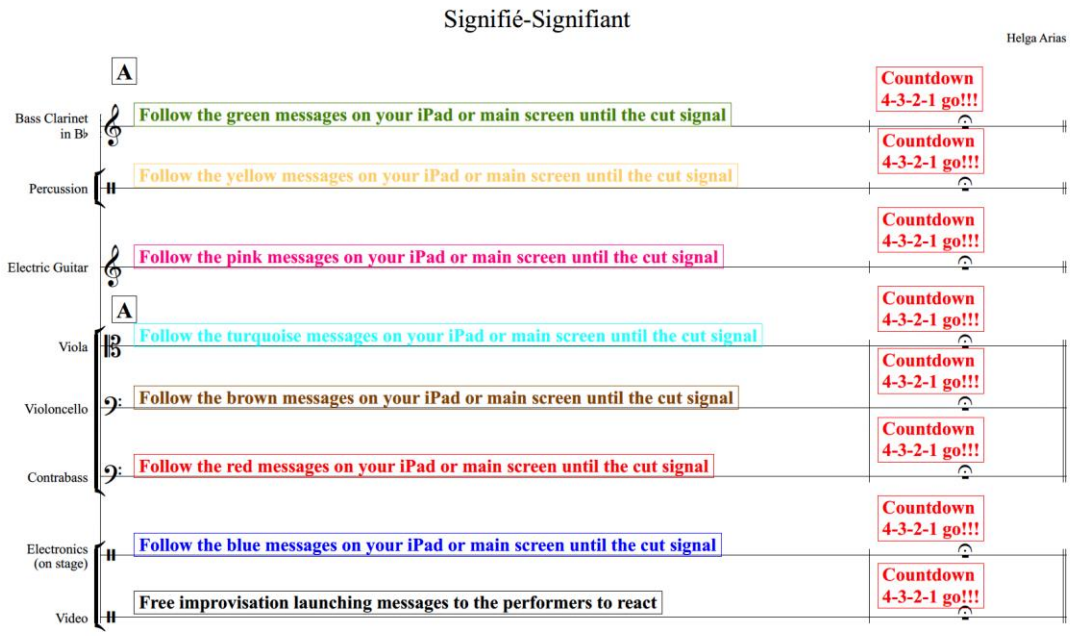


Figure 14. Initial phase—individual responses to real-time prompts

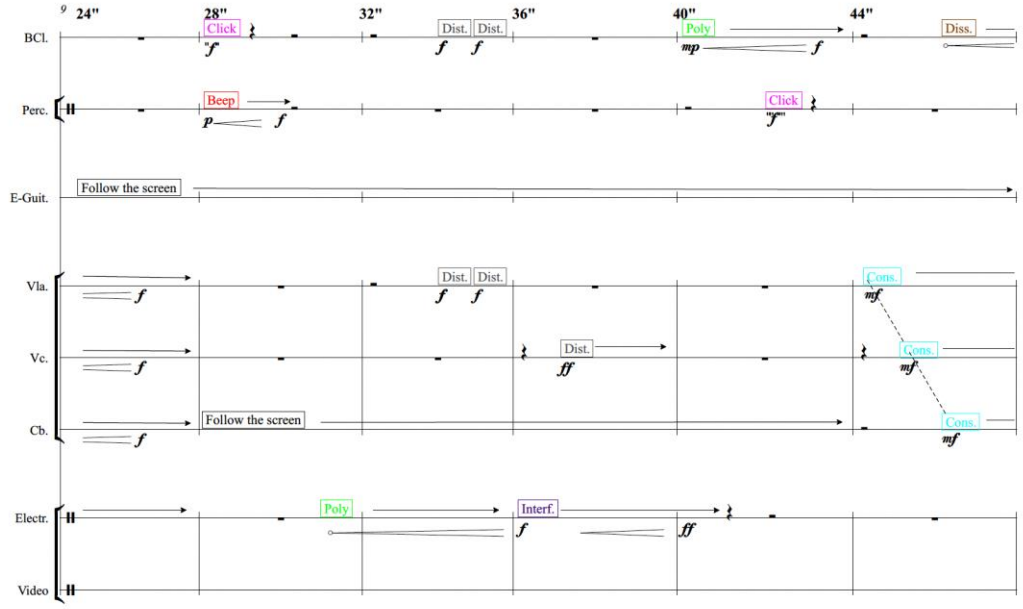


Figure 15. Transitional section—coordinated cues and dynamic shaping

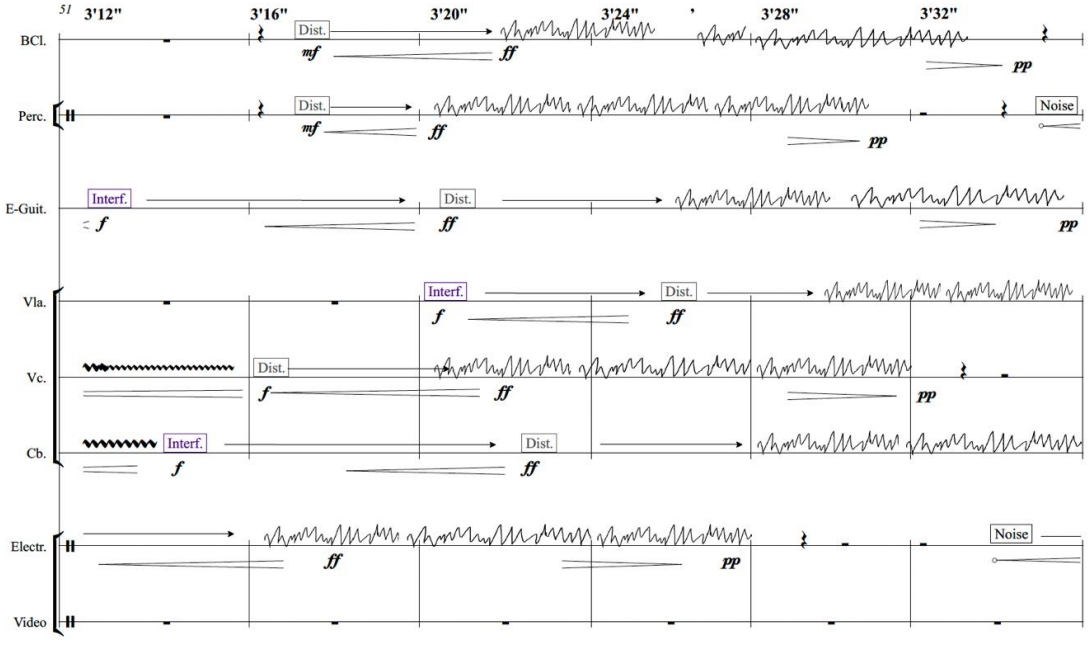


Figure 16. Expanded textures with interaction indicated in the score

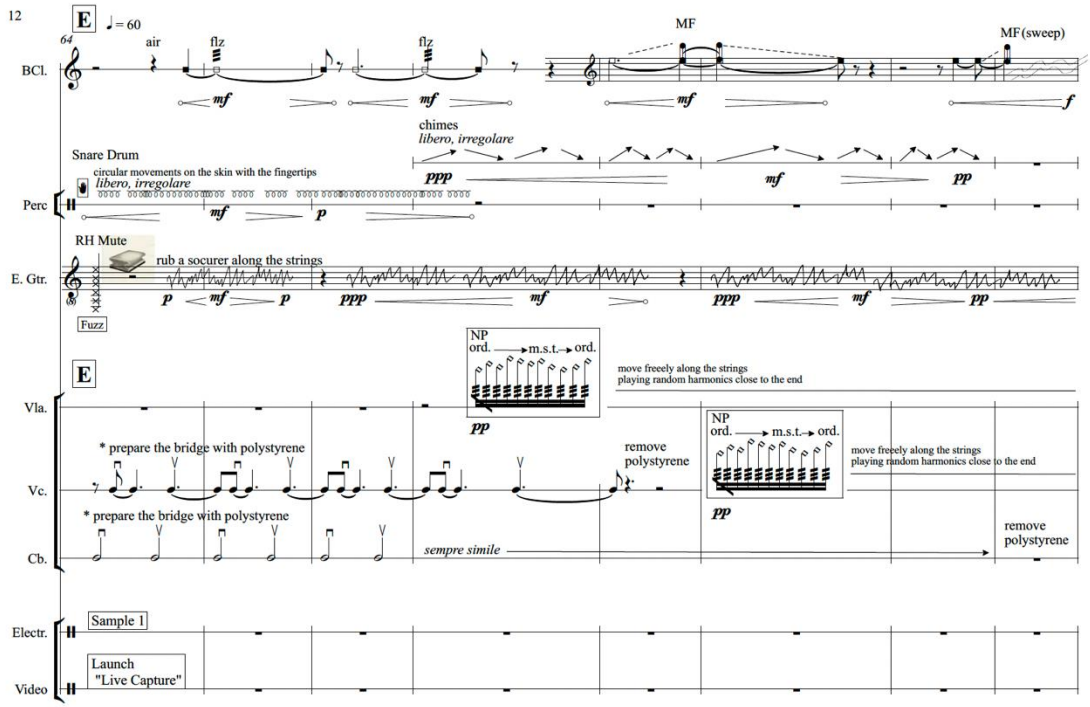


Figure 17. Fully notated score based on developed workshop material

A hypothesis embedded in this structure was that performers would experience varying levels of agency across the piece. In the early phase, where reactions had to be immediate and isolated, I anticipated a heightened sense of freedom—albeit within constraints. In contrast, the final notated section offered less overt freedom but allowed performers more time for shaping their sound and nuanced control. Post-concert interviews and reflections from the musicians partially confirmed this hypothesis.

Aurélien Ferrette, for example, reported feeling constrained during the animated score section due to the speed of message delivery, yet found the more structured parts of the score liberating by comparison. This may seem paradoxical, but it resonates with Sawyer's observation that creative flow often arises from situations with clear constraints and internal logic, rather than from unlimited choice (Sawyer 2017, 41). In other words, creative engagement doesn't depend solely on the absence of structure—it often emerges within structures that allow for subtle negotiation and adaptation.

Still, some transitions were experienced as abrupt. Anne Gillot and Benoît Morel noted that moving from a reactive mode to reading a fixed score required a rapid shift in mindset. They suggested that a longer transitional section could have facilitated deeper listening and smoother shifts in tempo and group behavior. Mauricio Carrasco described the piece as a funnel, starting from an open, experimental space and gradually narrowing toward a more defined structure—an image that captures how the work guided performers through a structured process of discovery. His metaphor—"from larva to butterfly"—emphasizes this transformation: from initial exploration to formed expression, from improvisational openness to articulated structure.

These reflections underscored a key design tension: although the IFMCC emphasizes iterative responsiveness, in this case, the transitions between performative states may have been too sharply drawn. While the structural logic made sense on paper, in practice, it sometimes left performers without adequate space to adapt. Future implementations might incorporate extended or blurred transition zones to better support performer recalibration.

This adjustment would not only respond to performative dynamics but also align with the iterative spirit of the IFMCC. The model does not conceptualize the premiere or the current version of a piece as a conclusive endpoint. Rather, it positions each realization as one moment within an evolving process—open to further feedback, reinterpretation, and structural rethinking. Performer responses gathered after a performance are not retrospective evaluations, but prospective material: insights that inform the next iteration of the work.

By embracing this openness, the IFMCC reframes composition as a recursive and dialogic practice. The work is not finalized, but situated—contextualized within the specific constellation of collaborators, decisions, and negotiations that shaped it at a given moment. Authorship, in this model, is enacted over time: not as a claim of ownership, but as a shared and revisable responsibility.

More broadly, this phase clarified the role of performer influence on compositional structure—not just in terms of sound material, but in determining how material is sequenced, layered, and related. However, it is important to recognize that despite the collaborative framing, decision-making authority remained partially centralized. The performers shaped and inspired much of the material, but within a system still mediated and filtered by the composer. Their contributions were real, but bounded by the parameters I had set.

This raises an important point: even in collaborative structures, authorship can remain asymmetric. Rather than full co-creation, the authorship here might better be described as “composer-curated, performer-informed.” While each decision was refracted through the lens of group dialogue, the compositional frame was ultimately mine. This is not a failure of the method, but a reminder that hierarchy does not automatically dissolve in collaborative settings—nor must it. Instead, its presence should be made explicit and thoughtfully negotiated, adapting to the needs, values, and objectives of each particular project.

From this perspective, the composition that emerged was not purely collaborative, but what Taylor (2016) and Hick (2014) would describe as a case of shared responsibility within asymmetrical authorship. My role was still curatorial, shaping the system and final form, but the performers’ input—particularly around pacing, transitions, and interaction—was fundamental to the piece’s logic. As the IFMCC proposes, this stage did not “close the circle” but invited further feedback and iteration. The finalized score was not a product, but a provisional articulation of an evolving process, open to reconfiguration in future performances.

5.6. Presenting the Piece to an Audience and Reflecting on the Result

This section addresses the final phase of the project in relation to Step 4 of the Iterative Feedback Model for Collaborative Composition (IFMCC): the performance and reflective assessment of the collaborative outcome. It considers how the implemented structure, performer input, and evolving system contributed to the final performance, and how this in turn generated new insights—particularly regarding authorship, system responsiveness, and collaborative framing.

In the final session, the group focused on preparing a public performance of *Signifié–Signifiant.* This included refining the transitions between message-driven improvisation and fixed notation, and developing visual strategies to communicate aspects of the process to the audience. Performers were seated around a table in a configuration echoing an interactive board game, highlighting the ludic aspect of the earlier workshops. Each wore a color-coded hoodie matching the message displayed on their tablets. These prompts were projected for the audience in real time (Figure 18), and the visual content gradually evolved—mirroring the shift from message triggers to more processed, interpretive states (Figures 19–20).

Figure 18. The Ensemble Vortex during the premiere of *Signifié–Signifiant*, Geneva

Figure 19. The projected words modulate visually in real time

Figure 20. Live video of the performers is captured and processed in the final section

These projections served not to involve the audience directly in the collaborative process, but to expose some of the system's internal logics—specifically, the link between instruction, response, and coordination. As d'Heudiers (Glover and Redhead 2018, 3–14) argues, multimedia scores can form part of a responsive score ecology, wherein notation extends beyond instruction to become part of a performative interface. In this case, visual layering duplicated elements of the interaction—gestures, timing, color-coded identities—rendering visible patterns of coordination and communication that would otherwise be perceptible only to the performers themselves.

Nevertheless, as Jocelyne Rudasigwa noted in a post-performance interview, this strategy remained limited: the audience might have seen inputs and responses, but not the iterative process that preceded them. Rather than conveying the collaborative system as a whole, the visuals mostly rendered its immediate surface. This distinction recalls John-Steiner's (2000) argument that collaboration is not only about co-presence but about cumulative transformation—an aspect difficult to "perform" without contextual scaffolding.

Other performers speculated on ways of making the system itself more porous. Anne Gillot suggested allowing the audience to trigger words via an interface, potentially blurring production and reception. Mauricio Carrasco proposed the possibility of removing the composer-operator altogether, shifting control to a third party or the performers themselves. These proposals raise the question of whether the piece could function in a modular way: recomposed each time, depending on who generates the initial materials.

From a compositional perspective, such a shift would require reconfiguring the system architecture itself, especially given the current patch's constraints. As explored earlier, the software tool embedded fixed vocabularies, limited response windows, and a specific aesthetic vocabulary rooted in WAM. These parameters shaped performer behavior regardless of group composition. When the system was tested with different performers (e.g. during a doctoral symposium at Anton Bruckner University), the results remained surprisingly consistent, indicating that design logic, not performer identity alone, was driving the material range.

This reflection links directly to the IFMCC's recursive orientation. The performers' reactions after the concert—particularly their suggestions about reconfiguring authorship and message flow—were not just post-mortem commentary but feedback mechanisms. As Sawyer (2017) points out, innovation often emerges when surprising questions arise and challenge the frame of the system itself. Here, the feedback prompted a conceptual revision: that the final piece should not mark closure, but a hinge for the next iteration.

In this sense, performance is not the endpoint of the IFMCC cycle but a phase within an open-loop structure. Performer responses, post-performance analysis, and proposed redesigns all feed into future applications. The process becomes cumulative, not linear—a dynamic space where authorship, structure, and system logics remain under negotiation.

While the audience itself was not directly part of the research, their encounter with the piece encouraged valuable reflections among both performers and myself. These reflections helped surface latent assumptions in the tool's design and opened new pathways for rethinking how performative space, control, and authorship function within shared creative systems.

5.7. Reconsidering Authorship in the Context of *Signifié–Signifiant*

This section examines how authorship was perceived and negotiated in the context of the project *Signifié–Signifiant*. It connects directly to the second research question, which asks how the application of the Iterative Feedback Model for Collaborative Composition (IFMCC) influences participant roles—particularly regarding responsibility, authority, and decision-making in the composition process.

As explored in Chapter 4.8, authorship in WAM remains closely tied to models of individual creative control. Even in collaborative settings, authorship tends to be identified with those who are recognized as making structural decisions or determining the final form of a work (Goehr 2007; Cook 2013; Stillinger 1991). Livingston and Archer (2010) and Hick (2014) argue that authorship involves more than simply contributing material—it is a function of framing, finalizing, and assuming responsibility for the totality of the outcome. This understanding strongly shaped how authorship was perceived in this project.

Interview responses indicated that all performers considered me the sole author of the piece. While they acknowledged that they had contributed materials and ideas during the workshops, they described their role in terms of collaboration rather than co-authorship. Their understanding of authorship appeared closely aligned with responsibility and final decision-making—those who define the formal architecture, not just those who help shape the content. The introduction of other voices, such as composer-collaborators Arturo Corrales and Daniel Zea, occasionally disrupted this perception, as performers questioned how many perspectives could be included before the authorship identity blurred too far. This reaction underscores how strongly the notion of singular authorship persists, even in settings with collaborative intentions.

This dynamic resonates with Roe's (2007) critique of the lingering "auteur" figure in WAM and with Taylor's (2016) distinction between mutual influence and shared responsibility. While many collaborative processes include negotiation, feedback, and co-creation at the material level, they do not necessarily lead to co-authorship unless participants share both credit and conceptual ownership.

The use of technology in this project complicated matters further. The interactive Max patch was co-developed with Daniel Zea, who played a critical role in translating the conceptual framework into technical form. However, as he noted in our conversations, he viewed himself more as a facilitator than a co-author. This distinction aligns with Hayden and Windsor's (2017) argument that technology often reinforces pre-existing power structures unless its design explicitly redistributes agency. While the system allowed performers to respond in real time, its parameters—the word list, the duration of prompts, the structure of transitions—were largely set by me.

This asymmetry was also visible in the performers' relationship to the interface. While they had substantial input in shaping the material that emerged during the workshops, they did not shape the system itself. The design of the interaction thus remained top-down, even if the execution was

distributed. In this sense, the IFMCC revealed both its potential and its limitations. It facilitated meaningful exchanges and produced a work deeply informed by performer input, but it did not dismantle conventional authorship hierarchies.

This raises a key question: can the IFMCC support more equitable forms of authorship in future iterations? If authorship is understood, as Taylor (2016) and Hick (2014) suggest, not only as contribution but also as the shared responsibility for the coherence and delivery of the final result, then more structural openness is needed. Future adaptations of the model might consider shared control over interactive systems, or pre-negotiated credit structures that better reflect the distributed nature of the process.

Rather than treating these asymmetries as shortcomings, they can be interpreted as valuable insight into how deeply embedded authorship norms shape collaborative practices in WAM. While this iteration of the IFMCC fostered material exchange and dialogic shaping, it did not fundamentally shift the performers' sense of ownership. What it did reveal, however, was the need to think beyond input and toward structures of recognition and responsibility.

5.8. Conclusions: Reflections on the Pilot Project *Signifié–Signifiant*

This case study presented the first implementation of the Iterative Feedback Model for Collaborative Composition (IFMCC), tested in a professional setting through the Composer's Next residency with Ensemble Vortex. While the practical outcome was the development of a performance-ready piece, the broader objective was to explore how collaboration can be structured and theorized as an investigative practice. The project aimed not only to apply the IFMCC but also to observe its limits, assess its impact on authorship and interaction, and refine its components based on lived experience. In this sense, *Signifié–Signifiant* was not just a compositional experiment, but a field test in collaborative methodology.

1. Structuring Collaboration: From Playfulness to Friction

The project began with a deliberately playful and game-like approach. Inspired by Creamer's (2004) research on informal exchange, the initial workshop activities sought to reduce hierarchy, encourage reactivity, and spark dialogue. This strategy did lower thresholds for entry, and all participants were quickly active. However, as Daniel Zea and other performers later observed, levels of engagement varied. This aligns with John-Steiner's (2000) and Paulus and Nijstad's (2003) findings that group size and motivation influence participation. A smaller group and more individualized preparation may have yielded deeper and more balanced collaboration.

2. Technological Mediation: Affordances and Constraints

The Max patch introduced a flexible and responsive framework for performer interaction. Yet this very framework re-centered authorship with the composer as operator. While Hayden and Windsor (2017)

argue that technology can redistribute roles, they emphasize that its design often embeds implicit hierarchies. However, technology is not merely a tool—it actively shapes what forms of interaction are possible and what are excluded. Although the patch allowed for improvisation, its parameters (timing, word selection, control) were narrowly defined and remained under my command. This reinforced the finding that technological systems, even when interactive, carry aesthetic biases and power structures.

3. Group Synergy and the Paradox of Homogeneity

Ensemble Vortex's cohesive working history facilitated smooth coordination, but it also introduced constraints. Shared experience can result in overlapping interpretations and reduced stylistic variation. As discussed in Chapter 4, tacit knowledge (Biasutti 2015; Zattra 2018) plays a double role: enabling fluency while constraining divergence. The performers' responses often aligned with familiar WAM extended techniques, confirming that even open prompts were filtered through a shared interpretive lens. Diversity—understood here as interpretive and experiential variance—proved difficult to activate in such a tightly knit ensemble. This points to a future need to experiment with more heterogeneous or cross-genre groups.

4. Impact on the Compositional Process

One of the key insights of the project was that performer input shaped not only the sound material but also the temporal structure of the piece. Feedback about pacing, density, and timbral development directly influenced the form. For instance, the decision to insert a gradual transition from reactive notation to fixed score was based on group reflection. Such structural revisions underscore how composition under the IFMCC is not only influenced by sonic contributions, but by performative and relational feedback loops. Indeed, this demands greater analytical clarity: how, exactly, was the piece composed differently as a result of collaboration? The answer lies in those iterative responses—in shifting the form to accommodate performer needs, and in treating rehearsal not as testing, but as co-development.

5. Authorship and Responsibility

The project revealed the persistent tension between collaborative practice and traditional models of authorship. While the IFMCC allowed for multiple entry points and iterative dialogue, the final decisions remained mine. This reflected performers' own views, who saw themselves as contributors rather than co-authors. As Taylor (2016) and Hick (2014) suggest, authorship is not simply about influence but about responsibility—about who is seen to "own" the whole. Despite a distributed process, the piece's conceptual arc and structural resolution remained within the composer's domain. Legal authorship was registered under my name for copyright purposes, a decision reached collectively with Ensemble Vortex, while acknowledging the ensemble's co-creative role in all credits and documentation.

This raises a difficult question for the IFMCC: can shared authorship emerge if the framing, integration, and documentation are still centralized? Moreover, what would a redistribution of authorship look like

in practice? One possibility is to design systems where control of the interactive score is rotated or shared. Another is to formalize authorship credits more inclusively, beyond dedication or mention. Yet another is to stretch the model further—to not only solicit feedback but to allow the group to shape the terms of the collaboration itself.

6. The Politics of Performance

If one goal of this research was to probe the politics of performance, *Signifié–Signifiant* revealed how deep these dynamics run. Even in frameworks designed to foster openness, hierarchies emerge not only from structural conditions but from ingrained expectations, habits, and role conventions. Technology, rehearsal formats, score conventions, and the framing of the project all reinforce roles. While the IFMCC challenged these structures, it did not eliminate them. Rather, it made their presence visible, turning them into sites of reflection. These frictions are not flaws to fix but indicators that help refine the model. Rather than eliminating tensions or standardizing outcomes, the IFMCC should be read as a framework in which such asymmetries, resistances, and redefinitions become part of the research data itself—guiding future iterations and adjustments in both practice and theory.

7. Future Directions and Evolution of the IFMCC

The model, as tested, functioned as a four-step cycle: ideation, co-development, refinement, and presentation. Yet its circular approach suggests that feedback at each stage should feed not only into the piece at hand but into future collaborations. One missing link in this pilot was the continuation of feedback after the premiere. As several performers proposed, expanding the model to allow audience members, other performers, or even software to take over key roles would destabilize authorship and open new horizons. The IFMCC should remain open-ended: a heuristic rather than a template.

More specifically, future adaptations may include:

- Distributed control of the interactive system;
- Extended transition zones to ease shifts between performative spaces;
- Inclusion of diverse musical backgrounds to counter stylistic uniformity;
- Clearer mechanisms for co-authorship recognition and decision-sharing;
- Reflection stages that occur post-premiere to reframe the process as evolutionary.

This first case study did not resolve the core tensions of collaborative composition—it surfaced them. In doing so, it fulfilled its function as a research-based artistic experiment. The IFMCC, like the piece itself, remains in process: shaped by critique, revised by reflection, and driven by the questions it continues to raise.

Chapter 6: Case Study #2*: I See You*. Creating a multimedia string quartet as a long-term remote online collaboration model

6.1. Introduction: Applying the Iterative Feedback Model for Collaborative Composition in Remote Settings

This case study documents the remote composition of a string quartet during a residency with the New York-based International Contemporary Ensemble (ICE) in 2021. Due to COVID-19 travel restrictions, most interactions were conducted online. While the original aim had been to develop a new piece for string quartet, the project became a unique opportunity to investigate how the Iterative Feedback Model for Collaborative Composition (IFMCC) could be implemented in a fully remote, asynchronous context.

In contrast to Chapter 5, where the model was tested in a face-to-face collaborative residency, this case explores how remote tools (surveys, improvisation prompts, and real-time feedback mechanisms) may replicate or reconfigure processes of interaction, authorship, and embodiment. The piece titled *I See You* was designed not only as a musical work but as a documentation of its own making—a recursive performance environment that would make visible the performers' contributions and the dialogic structure underpinning the process.

Crucially, the goal here was not only to compose a piece “inspired by” the personalities and techniques of the performers but to create conditions under which the performers' materials, decisions, and reflections could actively shape the process. While the idea of representing each musician's artistic identity served as a conceptual frame, the deeper focus was to explore how their engagement over time—in a setting defined by absence, delay, and technological mediation—would recalibrate traditional hierarchies between composer and performer.

To do so, the IFMCC was expanded into a sequence of four distinct stages:

1. Independent exploration (workshop 1) with no composer presence
2. One-on-one remote sessions with verbal feedback (workshop 2)
3. Collective remote interaction with integrated video materials (workshop 3)
4. In-person rehearsal and performance (final stage)

Each phase was documented through audiovisual recordings and interviews, which provided critical insight into how collaborative contributions evolved and how the model's design succeeded or failed in redistributing creative power. The project was intentionally structured to allow time between workshops—months rather than days—to enable reflection, testing, and revision. This temporal flexibility was essential in observing how ideas matured and how performer agency developed over time.

This chapter also contributes a second layer of analysis by reflecting on how the role of the composer is reframed in such a system. While I remained mostly responsible for structural decisions, filtering, and framing, the goal was to operate as a facilitator—designing the conditions under which creative material emerged and offering compositional responses that synthesized the contributions of others, rather than imposing a singular vision.

Finally, this chapter also considers how performance—both as practice and as event—is reshaped when authorship and decision-making are redistributed. In *I See You*, the final staging acts as a material trace of the collaborative process: score, media, and dramaturgy emerge from a series of iterative, negotiated interactions. Rather than treating performance as the endpoint of composition, this model reframes it as a continuation of co-creation—highlighting how the IFMCC reconfigures not only how works are made, but how they are performed and received.

6.2. Shaping the Collaboration: Structuring Remote Interaction through the IFMCC

In this case study, the Iterative Feedback Model for Collaborative Composition (IFMCC) was adapted to function entirely in a remote context, in response to the constraints imposed by the COVID-19 pandemic. As with the previous case study, the model served as both a conceptual and practical framework for initiating and developing collaborative relationships between composer and performers. However, the shift to online collaboration introduced a number of logistical, technological, and interpersonal challenges, prompting modifications in how the model's steps were implemented and how authority and input were negotiated across distance and time.

The initial phase of the project corresponded to step 1 of the IFMCC, which involves designing exploratory tasks that open the process to performer input while leaving structural decisions open. In this remote context, the performers engaged with a set of digital prompts—including audiovisual materials, surveys, and guided improvisation exercises—without any direct contact with me as the composer. This was a deliberate decision, made in consultation with ICE's artistic director Ross Karre, to reduce any early framing effect my presence might impose and to encourage performers to contribute freely, without concern for expectation or approval.

These early interactions were supported by a custom-designed toolkit built around accessible online platforms (e.g., Zoom, Google Surveys), coordinated with ICE's production team. The goal was to provide performers with a sense of autonomy and safety, encouraging them to respond both musically and personally in ways that reflected their own artistic instincts. One element of this process included the DISC personality test**,** a self-assessment tool commonly used in organizational settings to describe behavioral tendencies across four traits (Dominance, Inducement, Submission, and Compliance). While not used diagnostically, the test served as a playful entry point into questions of individual musical identity and interpretive behavior.

The collaboration unfolded over four structured stages—ranging from independent exploration to final in-person performance—each designed to deepen participant involvement and redistribute authorship through iterative feedback. Each stage was spaced over time to allow for reflection, iterative redesign, and conceptual refinement. Materials generated in one phase informed the structure and content of the next. This flexible progression allowed the collaboration to evolve organically while maintaining the methodological backbone of the IFMCC.

A visual summary of the entire process timeline is provided in Figure 21**,** illustrating how the stages unfolded and interlocked over the course of the collaboration.

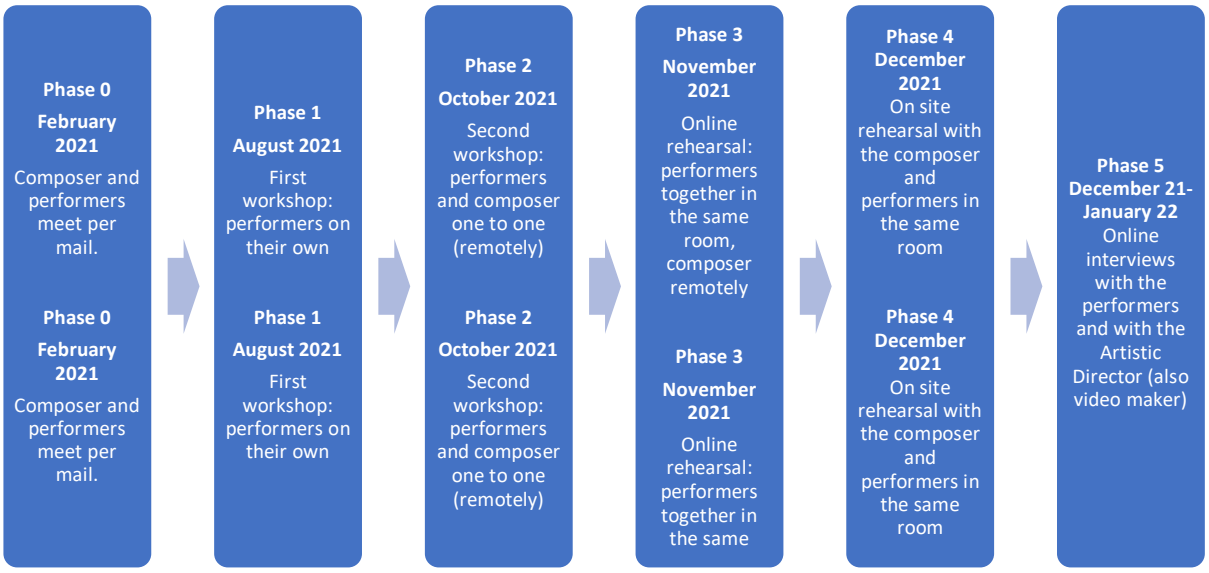


Figure 21. Timeline of the process

By withholding direct presence in the early stages and using structured tools to mediate interaction, the project sought to challenge traditional hierarchies in the composer-performer relationship—reconfiguring authority as something that would emerge gradually, in tandem with trust, familiarity, and mutual understanding. This section traces how those dynamics unfolded over time, with attention to the evolving interplay between process design, performer input, and artistic outcome.

6.2.1. First Workshop: Mapping Performer Identity and Musical Affinities

The first workshop marked the performers' initial encounter with the *I See You* project. Unlike conventional first meetings, this one was structured for full asynchronous participation and deliberately excluded the composer (myself) from the setting. This choice aligned with the IFMCC's first step—designing exploratory interaction—and sought to adapt it to a remote setting where conventional hierarchies and framing effects could be mitigated.

The performers were invited to complete a one-hour online experience (August 2021), which combined visual prompts, musical improvisation tasks, situational questions, and self-assessment tools. This package was developed in close collaboration with ICE's production team and the artistic director Ross Karre, who emphasized the benefits of providing personal space and minimizing directorial pressure in the early phases.

The workshop began with a three-minute video score—an abstract sequence of animated images and motion footage intended to trigger improvisatory reactions. This material was derived from the first case study (Chapter 5) but adapted with a clearer dramaturgical arc. It began with highly abstract textures—slowly shifting patterns of light and shadow—and gradually introduced more recognizable imagery: people walking, a forest trail, a child running across a beach. These later images were emotionally and symbolically charged, but not fully narrative. The goal was to explore how varying levels of visual ambiguity shaped the performers' sonic responses: how did they react when the visual material was entirely abstract, and how did they respond when it evoked more specific scenes or memories?

All performer responses were recorded locally and uploaded, forming the first entries in a shared audiovisual database.

Figure 22. Cellist Michael Nicolas during the first workshop reacting to a relatively abstract image

Immediately after the first improvisation, the performers completed the DISC personality test, originally developed to analyze behavioral dynamics in workplace contexts. It maps participant tendencies across four categories: Dominance, Inducement, Submission, and Compliance. I adapted it by asking performers to imagine themselves in typical chamber music settings—rehearsals, performances, or studio sessions—thus embedding the test within a performative framework. The purpose was not diagnostic but heuristic: results were not treated as empirical facts but as generative material for

drawing correlations across other inputs (e.g., musical taste, reaction styles, and improvisational gestures).

For example, violinist Josh Modney's test results suggested a highly analytical mindset, which was mirrored in his responses to video prompts—he paused before reacting and avoided repetition or cliché. In contrast, Jennifer Curtis's profile, which indicated risk-aversion, aligned with her tendency to stay in a restricted pitch range and default to familiar harmonic material. Such observations were not treated as conclusions but as interpretive tools for shaping the ongoing process. (For a complete performer summary, see Figure 24.)

A second video followed the DISC exercise, incorporating new visual material and refined variations—similar pacing, visual motifs, and mood, but presented in a different sequence or with new transitions. This variation aimed to observe how each performer might respond musically under slightly altered psychological and aesthetic conditions. In parallel, situational prompts invited musicians to reflect on personal listening habits—e.g., what music they might choose while jet-lagged in an airport or what piece evoked a strong sense of nostalgia.

Finally, each performer completed the Musical Universe test, a listening-based assessment developed by neuroscientist David Greenberg[6]. Participants rated short audio excerpts that evoke different genre idioms (avant-garde, folk, ambient, etc.). An algorithm generated a musical preference report, adding another comparative layer to each performer's profile. Again, the aim was not diagnostic accuracy but interpretive range. These reports, like the DISC results, were stored in a shared database and used to triangulate response tendencies across visual, musical, and verbal dimensions.

The combination of improvisation footage, verbal reflections, test scores, and affective reactions led to the creation of provisional performer profiles. These profiles grouped behaviors into categories of contrast and similarity: certain players responded similarly to harmonic material but diverged on gesture; others showed parallel interests in overpressure techniques despite different listening backgrounds. These clusters became the basis for later interaction design.

In hindsight, the absence of the composer was a double-edged strategy. While it enabled certain freedoms and reduced top-down framing, it also created discomfort for some performers. Michael Nicolas, the cellist, noted that it was unfamiliar to contribute so intimately without ever meeting the composer. Wendy Richman, the violist, described the process as unexpectedly formal and initially unsettling. Their discomfort highlights the tension between autonomy and connection in remote collaboration: removing the composer's authority also removed early opportunities to build relational trust. This echoes findings from Sawyer (2003) and John-Steiner (2000), who emphasize that while unpredictability is crucial for creative collaboration, it must be balanced with familiarity and shared understanding. Trust emerges not just from freedom, but from the knowledge that one's input is

[6] https://musicaluniverse.io

understood and contextualized by others. In this case, the lack of early interaction limited that trust for some. Other performers experienced the opposite. Josh Modney described the ambiguity of the setup as “liberating,” allowing him to interpret the project abstractly and without concern for fulfilling a brief. For him, the non-directive format created a fertile space for invention.

In sum, this first phase aimed at examining how authority, authorship, and interpretive agency are redistributed in asynchronous, mediated environments. The workshop created a context of autonomy and interpretive openness, but this also introduced uncertainty for some performers. These reflections became crucial for the design of the second workshop, where real-time feedback and composer-performer dialogue were reintroduced to rebuild trust and clarify the trajectory of the piece.

6.2.2. Second Workshop: Meeting the Performers Online

While the first workshop was conducted asynchronously and without the composer’s presence, this next stage introduced live, though still remote, interaction. It applied steps two and three of the IFMCC: generating new material through feedback loops and reorganizing previously gathered content. More precisely, the process established a circular movement between generation (step 2) and design (step 1), as the reflections and insights from the first workshop were fed back into the format and focus of this next encounter.

Conducted in October 2021—two months after the first session—this phase consisted of individual Zoom meetings with each of the four performers. I led these sessions, and ICE’s artistic director Ross Karre participated in the background. His dual role as a visual designer and conceptual co-initiator of the project helped bridge the musical and visual layers of the piece. In these sessions, his presence also allowed for shared evaluation of how the audiovisual materials developed in tandem, and how they might later integrate into the final score and staging.

Each session began by sharing the provisional performer profiles that had emerged from the first phase. These profiles were compiled from multiple inputs: video reactions to abstract imagery, situational questions, the DISC personality test, and musical preference data from the Musical Universe test. The goal was not to classify participants, but to create a provisional framework for dialogue—a structure that performers could affirm, reject, or complicate through discussion.

To facilitate this, I used an interactive audiovisual environment that allowed for dynamic playback of workshop excerpts, transcriptions, and improvisatory gestures. This made it possible to compare moments across different participants, insert snippets of notation, and pause for collective reflection. The format encouraged a dialogic rehearsal atmosphere in which performers could analyze the interpretation of their earlier contributions and explore how their individual materials resonated—or conflicted—with those of their peers.

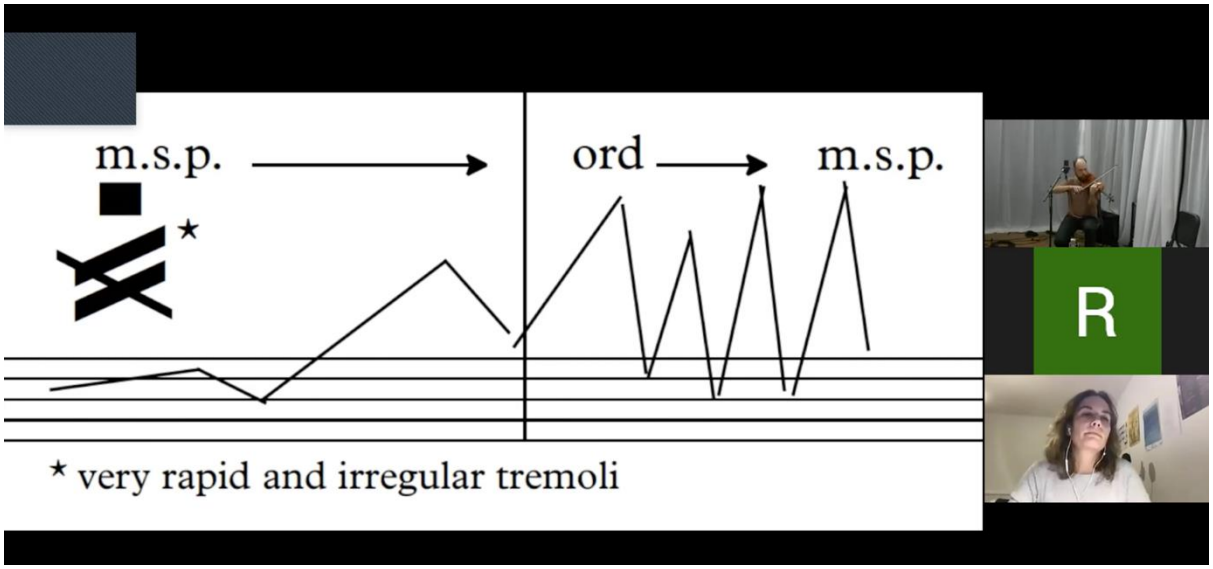


Figure 23. Screenshot from the second workshop: Violinist Josh Modney, Artistic Director Ross Karre (in the background), and the author during a one-on-one session.

The second workshop served three interrelated objectives. First, it provided an opportunity to revisit and refine the interpretations that had emerged from the initial workshop's materials. Second, it introduced the performers to each other's expressive vocabularies, encouraging mutual awareness and recognition of individual artistic approaches. Finally, it initiated experiments with audiovisual correspondences and emergent structures, laying the groundwork for shaping the evolving form of the piece.

As part of this process, a comparative table was developed (see Figure 24). This summary juxtaposed data from the tests and responses, highlighting points of contrast (e.g. personality, sonic preferences) and convergence (e.g. textural techniques or gestural patterns). While not a prescriptive tool, this matrix provided an overview that helped me structure the emerging dramaturgy. It became, in effect, a reference map that informed both the initial layering of material and the proposed interaction arcs within the score.

Performer	DISC Test	Musical taste Test	Situational questions. Music you listen to when:	Responses to videos
Josh Modney, violin	-Clear thinker -Objective and analytical -Determined in achieving goals -Good at handling challenging technical assignments	-Preference for mellow and sophisticated music	-Jet lagged: Buke and gase -Nostalgic: Rocky Mountains -Energetic (Star Trek opening Theme)	-Preference for overpressure, work with overtones and very high pitches. -Slow and smooth transitions, mellow sounds. Very agile and reactive to quick sounds, always different reactions. He thinks before playing even if this makes his reaction slower (bold, not repeating sounds).
Jennifer Curtis, violin	-Desire to create and implement new ideas -Innovative but tend to avoid risk taking.	Preference for Sophisticated music (Intellectual, classic, avant-garde)	-Jet lagged: Mathieu boogaerts, avant que je m'ennuie -Nostalgic: Verklärte Nacht -Energetic: Sublime "don't push"	-Very sequential approach. No transitions, clean cuts. -Consonance, tonal music. -Irish/American folk playing techniques -Similar reactions to materials, repetition, plays safe.
Wendy Richman, viola	-Socially oriented - Strong self-motivation to get to know people -Natural enthusiasm for all types of ideas and projects - Gregarious, persuasive and optimistic	Preference for Sophisticated music (Intellectual, classic, avant-garde) and Intense Music (Distorted, loud, aggressive)	-Jet lagged: Bach Goldberg Variations -Nostalgic: Brahms G Major string sextet -Energetic: Andriessen «de Stijl»	- Strong preference for very "quiet" and delicate sounds - Lots of experimentation on "white noise" in combination with overtones/harmonics and different bow pressure EST - Smooth transitions, slowly evolving materials, interpolations -Absence of pitch
Michael Nicolas, cello	«When responding to the questions you placed an equal value on all four of the personality traits measured. This is a very unusual pattern of response. It occurs when people are not answering in a spontaneous and uninhibited way.»	Preference for Contemporary music	-Jet lagged: Brahms -Nostalgic: Brahms op. 60 3rd movement -Energetic: The Rite of the Spring	- Preference for transitions and developing the sound (similar to Wendy), but much louder and energetic. - Interesting work on double stops (dissonances, beatings, mixing with harmonics, overpressure techniques, slow transitions and generally bow speed and pressure)

Figure 24. Summary of the performers' answers during the first workshop

Importantly, this workshop marked the reintroduction of the composer's voice, not as a director, but as a facilitator. By this point, my role shifted toward mediating between interpretation and synthesis, not imposing compositional authority but actively engaging in the feedback process. This allowed for what Sawyer (2003) describes as emergent collaboration: a process in which the structure arises through shared iteration rather than pre-determined planning.

Rather than seeking consensus, this phase welcomed divergence. As Nicolls (Clarke and Doffman 2017) and Creamer (2004) suggest, durable creative collaboration requires sufficient temporal space for the development of shared language, but also tolerance for interpretive distance. By sustaining asynchronous material generation alongside live feedback, the project's second phase laid the groundwork for the hybrid vocabulary—both sonic and visual—that would anchor the composition and its eventual performance.

6.3. Setting Up the Materials for the Performance

Following the two workshop phases, the project transitioned into the phase of consolidating and preparing the materials for performance. This stage was not merely technical but conceptual: it tested how the outcomes of the Iterative Feedback Model for Collaborative Composition (IFMCC) could be stabilized into formats that retain their collaborative origins while functioning within a concert setting. This section thus responds directly to the second and third research questions of the dissertation—namely, how co-creative processes influence compositional structure, and how authorship and agency are redistributed in performance contexts.

Rather than viewing the score or the accompanying video as endpoints, both were approached as mediating artefacts, composites of earlier interactions that reflect the distributed nature of decision-making throughout the collaboration. As the composer, I assumed responsibility for curating and assembling the score. However, the materials were not authored from scratch; they emerged from the workshops, from performer improvisations, annotations, and negotiated decisions. Likewise, Ross Karre's video component developed in tandem, drawing on the same archive of images, gestures, and conceptual anchors. Together, we coordinated to ensure a dialogic relationship between sound and image, rooted in the collaborative memory of the project.

This phase also extended the IFMCC beyond the workshop setting: the score and video did not simply represent the performers, but aimed at encoding traces of their earlier contributions—structurally, symbolically, and materially. As such, they reflect the broader ambition of the project: not only to facilitate participation, but to reshape how compositional authority and interpretive agency are distributed across the rehearsal and performance process.

6.3.1. The Score

The score for *I See You* did not arise from a singular compositional vision, but evolved through the iterative curation and transformation of materials developed across the workshop phases. Rather than merely a performance script, it embodies the collaborative process itself—capturing the interplay of sonic ideas, interpretive strategies, and performer contributions that unfolded over time.

Structurally, the piece unfolds as a sequence of arcs, each initiated by a performer and responded to by others through augmentation, contrast, or imitation. This form was not predetermined, but emerged through the performers' interactions across the workshop phases. For example, in the first workshop, violinist Josh Modney—whose DISC profile identified him as analytical and precise—frequently gravitated toward high-pitched, overtone-rich materials. These gestures, often initiating musical exchanges, became recurring elements in group interaction. One such phrase was transcribed and served as the starting point of the proposed performance version, illustrating how individual preferences were interwoven into the evolving structure.

Each performer's opening gesture within their respective arc was based on transcriptions of their workshop improvisations. These materials, which initiated musical sequences, were rendered in semi-open notation—combining graphical shapes, extended symbols, short verbal cues, and embedded visual prompts. This allowed performers to retain interpretive flexibility while preserving a recognizable connection to their earlier contributions. Rather than instructing performers what to play, the score scaffolded spaces for further development of material they had already generated, keeping continuity with the open-ended ethos of the workshops.

In addition, each initiating gesture was accompanied by a quotation drawn from the performer's DISC assessment, not as a literal psychological statement, but as a poetic framing device that symbolically linked identity and sound. These quotations, visible in both the score and the performance video, were not intended to define performers by fixed traits, but to mark symbolic moments where individual identity intersected with collaborative process. Rather than static reflections, they function as temporal markers—evidence of how performers' artistic voices emerged and evolved through interaction. In this sense, identity, response, and authorship are not predetermined but enacted over time, shaped by a cumulative network of decisions, reactions, and feedback loops across the workshops and rehearsals. This resonates with Sawyer's (2003, 2017) concept of *collaborative emergence*, in which creative ideas arise from the dynamics of group interaction rather than from isolated individuals.

This also reflects a model of *relational authorship*, as articulated by John-Steiner (2000) and further developed by Taylor (2016), where authorship is understood not as the property of a single creator but as the product of sustained negotiation and mutual responsiveness. Within this framework, creative agency is co-constructed, continuously shifting in response to contributions from others. The score and accompanying video thus do more than document a finalized work—they trace the evolving network of aesthetic, social, and conceptual exchanges that underpin the piece's formation. Performer profiles and

behavioral patterns became compositional constraints—not in a prescriptive sense, but as a way of shaping the architecture of the piece around actual dynamics observed in the collaboration. In this sense, the score does not "represent" the process—it is the process, reframed for performance.

Formally, the score was implemented as a video file with a timed page-turn structure. It included images and excerpts from the workshops, graphic symbols, and open instructions. This multimodal format echoed the participatory conditions under which the material had been developed and preserved the performers' autonomy in shaping the final sonic output. While the score brought greater fixity in duration and sequencing, it maintained the open, dialogic character of the original sessions.

Visually, elements from the workshop footage—gestures, diagrams, even moments of play—were embedded into the score pages. This served not as documentation but as continuity: the performers' earlier reactions, explorations, and choices remained symbolically active within the final version. The resulting score thus resisted closure; it did not signify the endpoint of a process but acted as a hinge between generation, interpretation, and performance.

This echoes Nicholas Cook's (2001) proposal that musical scores in collaborative settings act less as closed texts and more as open "scripts"—frameworks for interpretive action rather than fully determined objects. Rather than encoding a fixed musical meaning, the *I See You* score functions as a scaffold for interaction, where agency is distributed across performers through time. This conception directly supports the IFMCC's methodological aim to treat authorship relationally—as a dynamic process embedded in ongoing social negotiation rather than a singular act of composition.

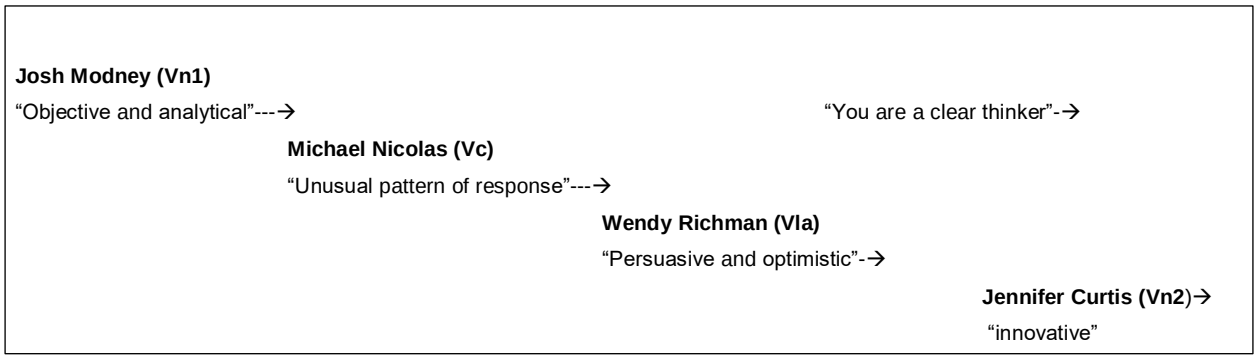


Figure 25. Structural arcs showing performer-initiated gestures

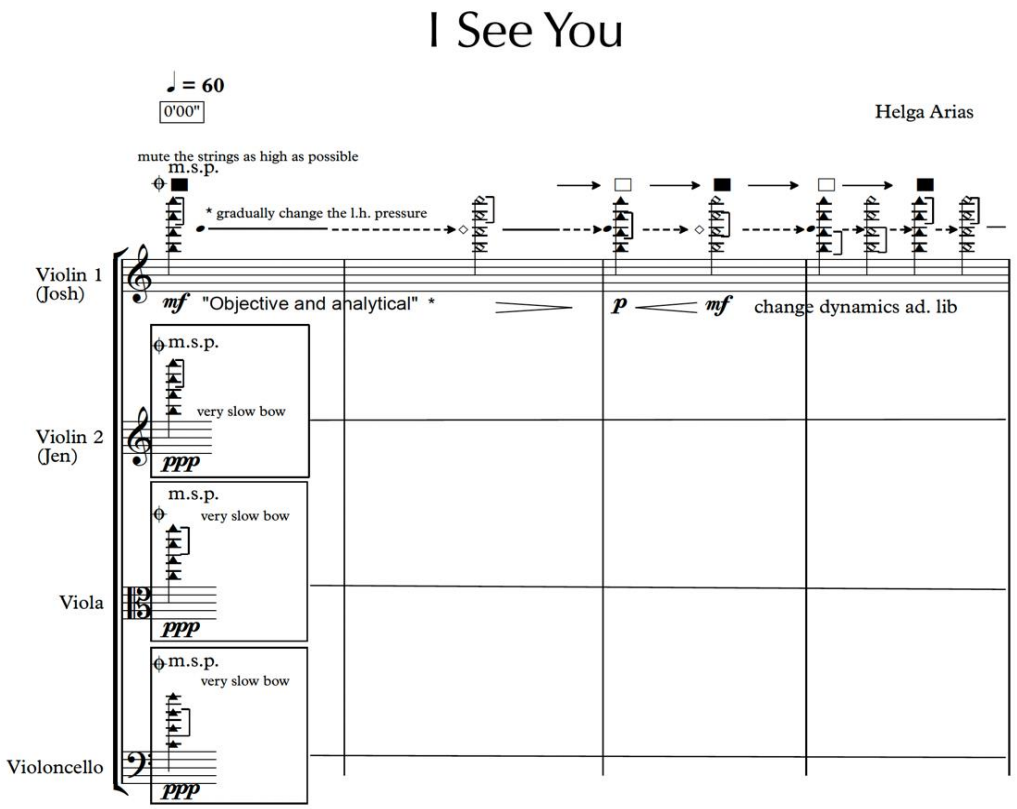


Figure 26. Opening score segment with Josh Modney's input and DISC quote

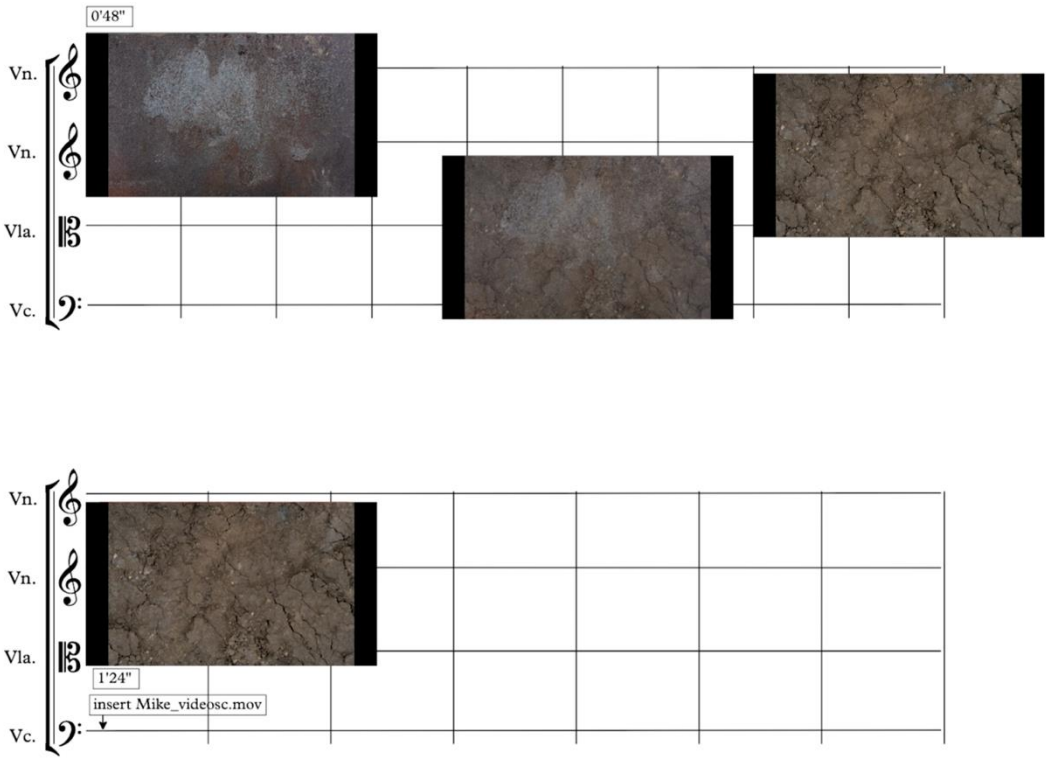


Figure 27. Sample score page with graphical notation and embedded visual material

6.3.2. The Video

The video component of *I See You* was developed in parallel with the score and functioned not merely as a backdrop but as an integral, performative element of the work. Created by Ross Karre in close collaboration with myself, the video served multiple purposes: it reinforced structural elements of the score, provided a visual continuity with the workshops, and externalized certain conceptual threads of the collaboration—especially those related to identity, response, and authorship.

All of the video content was drawn directly from the audiovisual material produced in the two workshop phases, including footage of performers' gestures, video prompts, and animated text quotations from the DISC personality assessments. When a performer initiated a formal action in the score, the corresponding video projection displayed either an excerpt of their recorded material or a brief textual marker summarizing an aspect of their self-description.

Figure 28. The projected quotation from Josh Modney's DISC report during rehearsal

These quotations were visible not only to the performers (via the score) but also to the audience (via the video), creating a dual layer of reference. While it is difficult to assess definitively how these markers were interpreted by the audience, their presence reinforced the continuity of process: the piece invited both audience and performers to encounter the performance as something shaped through ongoing exchange rather than fixed authorial design.

The inclusion of these quotations did not aim to reduce performers to personality traits but to poetically echo the individualized processes that led to the final material. This reflects the idea of processual authorship (Pearson 2010)(Cook, 2001) in which meaning and agency are enacted cumulatively, through time, and remain visible in the resulting work.

Ross Karre's approach to the video emphasized responsiveness over illustration. Using the live-performance software Isadora[7], he programmed the visuals to react to certain sonic parameters—volume, density, and pacing—captured during performance. The video was split across four quadrants, each aligned with a performer and containing visual material specific to their workshop input. These visual segments included slow-motion footage, gestural abstraction, and iconographic hints derived from their situational responses. For example, a visual nod to Star Trek was included for Josh Modney, based on his reference to its theme in the nostalgic music segment of the first workshop.

Figure 29. The four video quadrants projected above the performers]

Ross described the video as "a coherent statement that sneak-peaks a huge amount of material" (Karre, personal interview, December 2021). In this sense, the video did not seek to exhaustively represent all prior phases, but to compress and re-contextualize them. The result was a kind of performative interface—a curated surface that carried fragments of the performers' earlier decisions, gestures, and identities into the concert setting.

The compositional and visual elements were co-developed in a way that resisted hierarchy. While I determined the formal structure of the score and selected many of the sonic materials, Ross enjoyed considerable autonomy in assembling and designing the visuals. This exchange reflected the broader methodological orientation of the project—non-linear, feedback-based, and responsive to contributions.

[7] TroikaTronix. 2000. Isadora. Version 3.0. https://troikatronix.com/

As Ross put it, “I would never have made a video like this without the workshops. The visuals are not decorative; they emerge from the same generative system” (Karre, personal interview, December 2021). The video, then, was not an addition to the music but a parallel thread within a hybrid composition. It extended the processual logic of the workshops, reactivating gestures and statements made earlier in new, performative contexts. Rather than simply supporting the sound, it framed the act of performance itself as a site of relational authorship.

6.4. Performers’ Reactions to the Piece Proposal: Negotiating the Score and Embodying the Materials in Rehearsal

Approximately one month after the second workshop, the finalized score and accompanying performance video for *I See You* were shared with the performers. These materials represented not just the culmination of the creative process but also a reactivation of the collaborative ethos that shaped them. Rehearsal exchanges took place both remotely (at the ICE headquarters in Brooklyn) and in person at the Sonic Matter Festival in Zurich. These sessions were documented and later analyzed through interviews and annotations, focusing specifically on how participants engaged with the score, interpreted the material, and embodied the collaborative process during performance.
This chapter directly responds to Sub-question 2: How does early performer involvement influence interpretation, engagement, and a sense of co-authorship? It builds on theoretical perspectives that view authorship not as a fixed origin but as a relational, performative construction enacted over time (Cook 2001; Taylor 2016; Sawyer 2003).

Reframing the Score: From Instruction to Memory Trace

For all participants, the score was not merely a tool for decoding musical information; it functioned as a scaffold for memory, embodiment, and recognition. Rather than being perceived as a closed set of instructions, it was received as an interface that encoded traces of previous interactions and feedback cycles. In this sense, the performers did not encounter the score as an unfamiliar object, but as an archive of their own prior contributions. The materials had been shaped by them and now returned in a new form—rearranged, structured, but still resonant. Rather than prescribing meaning, they cue it—drawing upon previous relational and interpretive experiences.

As Josh Modney articulated during the interview, the familiarity of the notation was not merely due to genre conventions, but because the process had established a shared syntax and repertoire of gestures that the performers could immediately access. The legibility of the score was less about decoding and more about remembering, linking visual prompts and notation directly to previously embodied responses.
“It was very contemporary music standard so I recognized the symbols easily, but on the other hand, all the background work made me know where that was coming from and informed me differently. At that point, I was not always aware of other people introducing the generative materials of the piece yet,

but I knew the background. If I didn't know all the process behind the piece, it would be just reading a contemporary music score, and here there was much more implicit information informing my practice." (Josh Modney, individual interview)

Conventions and Emergent Language

Violist Wendy Richman emphasized that the score's openness—particularly its space for improvisation and interpretive variation—allowed her to engage expressively without feeling constrained. The process had introduced shared conventions and visual prompts that she could easily interpret. However, what stood out to her most was the ability to listen and respond dynamically to others. She described this as an opportunity to "complement" her colleagues' sounds, illustrating what John-Steiner (2000) identifies as integrative collaboration: individual voices shaping, and being shaped by, a shared sonic context.

For Richman, contribution was not about foregrounding her own contributions but about aligning with the group's emergent aesthetic. This form of engagement also aligns with Glover and Redhead's (2018) emphasis on mutual recognition and reflective listening as markers of collaborative authorship in performance.

The perceived coherence and accessibility of the score reflected not just the clarity of notation, but the shared conventions that had developed through the workshops. Certain symbols and visual cues had already been explored and tested collaboratively, lending them intuitive resonance. This aligns with Redhead's (2018) and Biasutti's (2015) observations that shared artistic languages often emerge informally through accumulated rehearsal experience and non-verbal exchange, rather than being codified in advance. The process also affirmed the role of tacit knowledge (Chugh 2015), particularly in how gestures, tone colors, and dynamics were understood across individuals without explicit instruction. While the final score used recognizable idioms from contemporary music notation, its real intelligibility stemmed from the performers' familiarity with the collaborative context. Their actions during rehearsal drew on memories of the improvisational sessions and visual prompts used during earlier stages—demonstrating how co-developed conventions shaped rehearsal fluency and interpretive confidence.

Revisiting the Material: Reverse Engineering and Ownership

Several performers noted that encountering the score allowed them to recognize materials that had originated in their own improvisations or those of their colleagues. Rather than encountering something entirely new, they were "reintroduced" to gestures they had once proposed, but now reframed through the compositional process. This recognition fostered a sense of mutual ownership and affirmed their agency within the final structure—confirming one of the IFMCC's key premises: that embedding performer contributions early on strengthens interpretive autonomy later.

Cellist Michael Nicolas initially expressed unease with the process, citing the unfamiliarity of the composer and the absence of traditional roles as sources of disorientation. However, when he finally received the score, he described it as providing "the necessary clues to reverse-engineer" the piece. The materials allowed him to trace back how his improvisations had informed compositional choices—essentially reframing the composer-performer feedback loop. This resonates with Taylor's (2016) concept of collaborative authorship in which contributors shift from idea generation to interpretive realization in a recursive process. Nicolas articulated this shift clearly: the performers had offered material, the composer reorganized it into structure, and then the performers re-entered that structure through rehearsal and performance. This loop reflects the IFMCC's recursive architecture and underlines how even initial skepticism can transform into co-ownership when prior contributions become recognizable in the final artifact.

Rehearsal as Co-Creation

The final rehearsal—held in Zurich the day before the premiere—functioned less as an instructive session and more as a site of reciprocal exchange. Performers contributed interpretive suggestions, adjusted dynamic balances, and explored expressive arcs collaboratively. Their familiarity with both the sonic and conceptual material meant that decisions were made efficiently, yet not mechanically. Discussions were not framed by requests for clarification but by shared evaluation of meaning and intention.

This fluid interaction reflects Sawyer's (2003) notion of "contingency"—where creativity emerges through moment-to-moment adaptation—and Frisk and Östersjö's (2006) argument that performance is a continuation of composition when collaborative authorship is at play. The short rehearsal time required did not reflect reduced preparation, but rather the accumulation of shared understanding. As in Creamer's (2004) and Roe's (2007) collaborative strategies, prolonged early investment in dialogue ultimately produced efficiency and cohesion downstream.

Seeing Through Others: Comparison and Transferability

Violist Rosa San Martín joined the project at a late stage, replacing Richman shortly before the premiere. Unlike the others, she had not participated in the workshops and had no prior relationship to the piece's developmental history. During rehearsal, she noted that while the score was technically accessible, much of its depth remained opaque without the background knowledge others had accumulated. What helped her integrate was listening to the way the other performers framed and discussed the material.

This contrast exemplifies a key finding: while the IFMCC fosters deep co-authorship for embedded collaborators, it also creates a context-dependent framework. San Martín's experience underscores the importance of documentation, mediation, and possibly supplementary onboarding processes if the work

is to be transferred to new performers. The model's recursive intimacy is a strength, but also a potential challenge when longevity or scalability is desired (see Chapter 7).

Performative Traits and Relational Authorship

Across rehearsal and performance, certain performative traits observed in earlier stages re-emerged with remarkable clarity. Josh Modney's analytical phrasing mirrored traits associated with his DISC responses—particularly a preference for precision and structured exploration—while his use of noisy and distorted textures reaffirmed patterns observed during his earlier improvisations. Jennifer Curtis displayed a sensitivity to tonal framing and lyrical pacing. Wendy Richman maintained her exploratory approach to timbral nuance, while Michael Nicolas alternated between leading transitions with distinct musical inputs and responding sensitively to ensemble cues.

These patterns were not prescriptive outcomes of the DISC test—nor were they imposed by the composer—but rather reflections of performer agency shaped through a cumulative process. As Cook (2001) argues, performance is not a realization of pre-existing meaning but a social practice in which meaning is co-constructed. In this light, the performers' traits became compositional forces that extended beyond initial material generation into the temporal and embodied space of the performance itself.

Rehearsal as Relational Negotiation

The final rehearsal, held just one day before the performance, required less than two hours. While brief, it was deeply effective—owing not to efficiency in the conventional sense, but to the depth of shared knowledge already established within the ensemble. Performers made interpretive decisions independently, initiated rehearsal adjustments, and debated dynamics and articulation based on mutual understanding rather than instruction. This horizontal rehearsal dynamic demonstrates Sawyer's (2003) principle of group creativity, where moment-to-moment contingency and feedback replace unilateral decision-making.

Rather than directing, I found myself responding to performers' insights. Their questions were not about clarification but about intention; their proposals were not requests but interventions. This shift in relational dynamic—from composer as authority to composer as participant—fulfills one of the IFMCC's central aims: redistributing authorship through process, interaction, and trust.

Interpretation and Evolving Performers' Tendencies

Rehearsals and performance revealed how individual expressive tendencies—initially surfaced through responses to the DISC questions and early improvisation tasks—continued to inform phrasing, pacing, gesture, and responsiveness throughout the process. These tendencies did not serve as fixed psychological profiles, but rather as flexible points of reference, helping shape early relational dynamics within the ensemble.

For me as composer-facilitator, they provided a provisional map of each performer's stylistic inclinations, which could be drawn upon and re-examined as the collaborative process unfolded. The IFMCC's structure was designed to accommodate precisely this kind of evolution—not by assigning rigid roles, but by creating a space where behaviors could be expressed, tested, and reconfigured through feedback and interaction.

What emerged was not the stabilization of performer traits, but their reactivation within a shifting relational context. As Cook (2001) notes, authorship in such settings is not tied to origin or individuality, but enacted through interaction—between performers, material, and setting. *I See You* thus became not only a co-constructed work, but a living archive of shared choices, evolving dynamics, and dialogic authorship.

Figure 30. From left to right, Michael Nicolas, Rosa San Martín, Jennifer Curtis, and Josh Modney performing *I See You* at the Sonic Matter Festival Zurich, 2021.

6.5. Crafting a Performance-Ready Iteration and Discussing Adaptation Strategies for Diverse Settings

This section addresses the question of how the process influences the final outcome, particularly in terms of reproducibility and adaptability—an issue central to both performer engagement (Sub-question 2) and the sustainability of collaborative practices. As shown in the previous chapters, the compositional result of *I See You* cannot be understood as a standalone product, but rather as the culmination of a long-term, iterative, and dialogic process that shaped both form and content. The resulting piece was not simply composed for the performers, but with and through them. This raises the issue of how to transfer such a processual and participant-dependent work into new settings or ensembles.

The performed score—combining semi-open notation, embedded workshop traces, and flexible visual media—was designed to encapsulate the collaborative interactions without freezing them into fixed prescriptions. This reflects the notion that the score is not the work itself, but a trace of the shared practices and decisions that gave rise to it. As such, any future performance is not simply a reproduction, but a reenactment, requiring new negotiation, understanding, and performer agency.

When imagining how the piece could be performed again, two possible strategies emerged:

1. **Restarting the IFMCC process with a new quartet**, which would involve initiating new workshops and regenerating material based on the personalities, preferences, and dynamics of the new ensemble. In this case, the piece would evolve into a different version or potentially an entirely new work. Here, the composer functions less as a content creator and more as a facilitator of co-creative systems (Magnusson 2019).
2. **Transmitting the existing score to a new group**, along with documentation of the original process (e.g., interviews, recordings, or annotations), to support the performers in crafting their own interpretation. While the material remains the same, the emphasis shifts to how it is embodied, contextualized, and negotiated within the new group.

Each option carries different implications for authorship, agency, and fidelity. In interviews, performers shared nuanced views on this question. Josh Modney acknowledged that much of the original improvisatory material had been transformed through iteration and editing, to the extent that its origins were no longer clearly traceable. This, he noted, made it easier to imagine others performing the piece without it feeling like an appropriation of the ensemble's authorship. In contrast, Ross Karre emphasized the importance of adapting the visual layer to suit new players, suggesting that any re-performance must preserve the processual ethos of the piece, not just its surface.

Violist Rosa San Martín offered a third perspective: she suggested that the interpretive latitude granted to the performers would allow other groups to find their own path through the score. Whether they aimed to recreate the original atmosphere or produce something entirely new would depend on their ensemble

dynamics. This aligns with research on intersubjectivity and emergence in collaborative creativity (Sawyer 2003), which emphasize the relational and situated nature of meaning-making.

Cellist Michael Nicolas, reflecting on his experience as a long-standing member of Brooklyn Rider string quartet, reinforced this idea. For him, it was not the material itself but the rehearsal dynamics and collective shaping of interpretation that defined the performance. His view echoes Sennett's (2012) argument that the most compelling outcomes of ensemble work stem from "blended egos" and finely tuned responsiveness among participants.

These reflections suggest that *I See You* does not resist adaptation but instead calls for re-contextualization. The piece does not prescribe a single path, but outlines a terrain—open to traversal via different routes, depending on the social and artistic configuration of the group. In this sense, adaptation is not a threat to the work's identity, but a continuation of its core logic.

Yet, this adaptability reveals an institutional challenge. Several composers consulted during this research—such as Escudero & Moreno-Gil (group interviews 2021), Yukiko Watanabe (personal correspondence 2024), and José Luis Escrivà (personal correspondence 2024)—emphasized that collaborative works like this often lack post-premiere viability. Because funding and commissioning models tend to prioritize novelty and singular authorship, works that require re-contextualization or re-negotiation with performers often fall outside standard production frameworks. These composers report that, despite being conceived for continuous development, such pieces rarely receive support for subsequent iterations—unless they are framed as entirely new works, which creates both conceptual and logistical friction.

This problem is compounded by the ambiguous ontological status of collaborative pieces: they resist being archived as finished objects, yet often lack the institutional support to be treated as living processes. This paradox mirrors issues raised by Goehr (2007) and Cook (2001), who critique the persistent valorization of fixed "works" in musical culture and the undervaluation of process, interaction, and adaptation.

In light of these tensions, *I See You* highlights both the potential and fragility of process-based composition. It demonstrates that collaborative frameworks like the IFMCC can produce richly personalized and responsive works—but also that such works challenge prevailing assumptions about value, authorship, and reproducibility in contemporary music culture. As such, questions of adaptation are not secondary but intrinsic to understanding the sustainability of collaborative practice itself.

6.6. The Question of Authorship

The question of authorship in *I See You* emerges not simply as a matter of credit attribution but as a structural and relational challenge woven throughout the collaborative process. As discussed in Chapter 4, authorship in Western Art Music (WAM) has historically been framed through the figure of the composer as an autonomous originator—a model rooted in Romantic ideals and reinforced by institutional frameworks (Goehr 2007; Cook 2001). This framework positions the composer as both conceptual initiator and final arbiter, creating a default hierarchy that can persist even within collaborative models.

The Iterative Feedback Model for Collaborative Composition (IFMCC), as implemented in this project, sought to decenter this hierarchy by foregrounding performer agency and embedding authorship into dialogic structures. Rather than composing a fully predetermined work, I created a flexible system designed to evolve through multi-phased performer input, reflexive adaptation, and feedback loops. As Magnusson (2019) suggests, system-based composition can shift the composer's role from creator of content to designer of conditions. However, the question remains: does reconfiguring compositional authority in practice actually lead to a redistribution of authorship in perception?

In this case, the answer proved to be complex. While performers contributed improvisations, conceptual reflections, and embodied strategies that directly shaped the score and video, most still perceived the final piece as authored by the composer. Josh Modney and Michael Nicolas both articulated this distinction in interviews, observing that while the improvisational materials had emerged from them, the final form—its shape, pacing, and media synthesis—reflected decisions that were unmistakably mine. Modney noted: "Even if the material was coming from us, it was filtered through you, through time, through others. It took on a life of its own." Nicolas similarly reflected: "We gave you the raw material, but you recontextualized it, you shaped it. So it's your piece. I wouldn't claim authorship."

This reflects a recurring theme in authorship theory: the persistence of structural authorship, even when material authorship is distributed (Taylor 2016; Hick 2014). In other words, because I retained responsibility for shaping the arc, combining media, and framing the system itself, participants did not view themselves as co-authors—despite their deep involvement in the piece's emergence. As Taylor notes, authorship is often linked less to the origin of material than to decision-making power and aesthetic accountability.

The IFMCC allowed for distributed ideation, but the compositional architecture still bore my signature. This aligns with Toynbee's (2001) assertion that collaborative authorship is rarely perceived as symmetrical, even in co-creative contexts. It also confirms Zattra's (2018) argument that equality in collaboration is complicated by existing hierarchies of expertise, responsibility, and institutional visibility. In our case, the transparency of my editorial role and the visibility of the system's design served to reinforce—rather than obscure—my authorial status in the eyes of the performers.

That said, this dynamic was neither rigid nor uncontested. Ross Karre, who co-developed the video material, described the process as one of "social de-hegemonization." In his words: “Because you stayed exploratory and let others lead at different points, the social pressure to impress—on both sides—disappeared. We were learning together. That changed the feeling of authorship: not erasing it, but softening its power.”

In this context, authorship becomes relational rather than positional—a function of trust, mutual adaptation, and continuous negotiation. As Cook (2001) argues, performance is not the realization of a fixed text but a site of meaning-making shaped by history, interaction, and social practice. In *I See You*, authorship unfolded as what John-Steiner (2000) calls “mutual appropriation”—a series of ideas that passed hands, changed shape, and accrued new meanings across time. Yet this fluidity was constrained by the lingering cultural scripts of composer-centered creation.

The DISC profiles and workshop improvisations also contributed to this tension. They helped me develop aesthetic and structural frames tailored to the performers—an approach akin to what Taylor (2016) calls conceptual influence. However, this very process of filtering individualized inputs through a unifying framework may have paradoxically reinforced the perception of singular authorship, especially as the materials became increasingly abstracted and embedded within a tightly constructed system.

Notably, the performers’ perception of authorship also reflected different levels of personal engagement. Some, like Modney, embraced their role as collaborative catalysts, while others, like Richman, expressed appreciation for the process but maintained a clearer boundary between their contributions and mine. This confirms Redhead’s (2018) assertion that authorship in collective work is not only distributed but also variably assumed. Levels of perceived responsibility, investment, and identification differ across collaborators and phases. Importantly, *I See You* was designed to accommodate these differences. The system worked regardless of whether a performer was “super generous or withholding,” as Ross put it. This resilience reflects the flexibility of the IFMCC: it supports emergent co-creation while acknowledging the real-world variability of participation.

In the end, the project occupies a hybrid authorship model: conceptually, I maintained the formal responsibility for structure and integration; materially, the performers shaped the content; relationally, authorship emerged through negotiation. As Hick (2014) and Taylor (2016) observe, this tension is not a flaw but a defining feature of collaborative practice in the arts. Rather than claiming shared authorship in a legal or formal sense, this case study reveals how authorship can be distributed, situated, and contingent—shaped not only by action but by perception, language, and institutional norms. Who takes the credit, then? In conventional terms, the composer does. But within the project’s internal dynamics, authorship was relational—an ecology of influence rather than a single origin. The performers’ voices, gestures, and ideas are embedded throughout the piece, not as citations or contributions, but as constitutive forces. As such, *I See You* does not erase authorship; it reframes it as a space of entangled agency.

6.7. Conclusions

This case study tested the application of the Iterative Feedback Model for Collaborative Composition (IFMCC) in the context of remotely creating a multimedia string quartet. Its purpose was to investigate how the model shapes composer–performer interactions, how it influences the compositional and performative dimensions of the piece, and how it engages the politics of authorship and creative agency in technologically mediated settings.

Process and Framing

Due to the constraints of the COVID-19 pandemic, the collaboration began in a fully remote format, necessitating the design of asynchronous, digitally mediated workshops. Informed by research into distributed creativity (Sawyer 2003), the first phase deliberately excluded my direct presence. The hypothesis was that minimizing the composer's visibility would reduce traditional hierarchies and allow performers to respond freely, unconstrained by perceived expectations. While this approach generated rich, diverse responses, it also highlighted an unanticipated obstacle: the lack of early interpersonal connection delayed the development of familiarity and trust—conditions that are vital to meaningful collaboration and shared risk-taking (Sawyer 2017; Zattra 202, John-Steiner 2000).

This suggests that authority in creative systems is not simply eliminated by absence; it must be consciously restructured through relational scaffolding. A composer's withdrawal does not automatically lead to egalitarian collaboration unless balanced by processes that foster mutual understanding and sustained interpersonal engagement.

Compositional Dynamics

One of the central aims of the IFMCC is to expand the composer's role from that of originator to that of facilitator—designing frameworks for participation, rather than dictating materials. In this case, my task shifted toward curating and transforming sonic and conceptual material generated by the performers, filtering these through my perception of their contributions and personalities. This transformation process—mediated by workshops, feedback loops, and dialogic reflection—allowed compositional meaning to emerge cumulatively and relationally over time.

A central aim of this case study was to explore whether collaborative frameworks could meaningfully disrupt traditional compositional authorship and support a more facilitative role for the composer. In this project, my task shifted toward designing conditions for contribution and filtering performer-generated material through ongoing dialogue and workshop feedback. Rather than producing content from scratch, I mediated relationships among ideas, participants, and phases. What emerged was not distributed authorship in any definitive sense, but a layered constellation of creative influences—what might be more accurately described as distributed contribution or shared creative agency. These contributions were not equally recognized nor equally attributed by the participants, but they nonetheless shaped the evolving character of the piece.

Performer Engagement and Situated Ownership

A key research question asked how early involvement would influence performer interpretation and agency. Responses suggest that embedding performers from the outset produced not just deeper engagement but also a sense of situated authorship. As seen in their workshop responses, interpretive choices, and reflections, performers articulated their roles not as mere executors of a score, but as contributors to a shared history of decisions, images, and gestures.

However, the question of authorship remained complex. While performers played a significant role in shaping both material and structure, interviews revealed that authorship was still often understood in terms of who controls form, structure, and framing—an interpretation consistent with Western art music conventions (Pearson 2010; Hatzis 2007). This distinction underscores the gap between collaborative input and perceived ownership, showing that distributed creative labor does not necessarily translate into symmetrical attribution.

Ross Karre described the ensemble's dynamic as one where "everyone was a passenger." This metaphor aptly captures the flattened social field made possible by processual ambiguity, but also indicates how the notion of authorship was softened rather than redistributed.

For practical and legal reasons, the work was ultimately registered under the composer's name, a decision reached collectively, while public-facing materials emphasized shared creative authorship to reflect the collaborative nature of the process.

Operational Continuity and Adaptability

The final performed version of *I See You*, with its integration of semi-open notation, video score, and responsive media, extended the logic of the workshops rather than closing it. The piece acted less as a culminating product and more as a continuation of the process. By retaining visual, sonic, and procedural elements from previous stages, the performance maintained a traceable link to the collaborative journey.

This continuity raises important questions about adaptation. Could other ensembles perform this piece? Performers themselves offered different perspectives. Some saw the work as modular and re-interpretable; others worried about the appropriation of personalized materials. What became clear is that authorship here is not merely about score ownership, but about co-presence in the creative process. Without this shared history, the piece risks becoming a conventional object, detached from its method of generation.

Institutional Conditions

The process underlying this work—long, layered, and iterative—is rarely accommodated within conventional models of artistic production. As highlighted by performers and peers alike, institutional infrastructures continue to favor speed, singular authorship, and fixed outcomes. Works that require ongoing negotiation and re-composition—such as those emerging from the IFMCC—are at risk of being marginalized due to their demands on time and process. Composers such as Escrivà (personal correspondence, 2024), Watanabe (personal correspondence, 2024),, and Escudero/Moreno-Gil (group interviews 2021) articulate similar challenges: without dedicated funding and institutional flexibility, works designed to remain open struggle to live beyond their first performance.

For models like the IFMCC to gain legitimacy, institutions must be willing to recognize and support process-oriented labor, not just products. This includes funding repeated iterations, valuing adaptive authorship, and enabling relational timeframes.

Final Reflections

Case Study 2 shows that the IFMCC can support a form of relational authorship where material, interpretation, and structure emerge collectively—albeit unevenly. It also underscores the limitations of structural neutrality: even in distributed processes, power and attribution tend to coalesce around conventional roles unless intentionally questioned. By embedding feedback, dialogic structuring, and openness into both the compositional and performative layers, the model fostered a co-creative environment grounded in mutual responsiveness. Yet sustaining such authorship calls not only for careful design, but also for conceptual clarity, long-term commitment, and institutional support.

These findings feed into the broader aims of the dissertation: to develop compositional methodologies that reflect the relational politics of performance, and to propose viable strategies for equitable, process-centered artistic practice in contemporary music.

Chapter 7: Case Study #3: *Lieder aus der Fremde*. A participatory composition project within a pedagogical setting

7.1. Introduction: Collaborative Composition in Broader Creative Settings

This final case study investigates how the Iterative Feedback Model for Collaborative Composition (IFMCC) functions in large, heterogeneous groups, particularly outside professional contemporary music contexts. In contrast to the previous cases involving trained performers and ensembles, this project was developed in a non-specialist setting with participants from diverse musical and educational backgrounds.

Initiated by the Heidelberg University of Education as part of the Artistic Music Pedagogy module, the project brought together three module leaders—Prof. Stefan Zöllner-Dressler, Florian Stricker, and Kathrin Schweizer—alongside students and myself as a composer-in-residence. Institutional partners included the Musikakademie Trossingen and the Donaueschinger Musiktage Festival, where the resulting work was later presented.

The goal was not to implement an educational curriculum, but to test the IFMCC's capacity to support co-creation across varying levels of experience. A modular technical setup allowed participants to generate and manipulate sonic material collaboratively. Through iterative feedback and revision, these contributions developed into an interactive media installation that invited new forms of engagement and performance, refined through structured feedback loops into a functional system for interactive performance.

7.2. Employing the Iterative Feedback Model for Collaborative Composition to Enable Processes for Participatory Composition in Pedagogical Settings

This project occupies a hybrid position at the intersection of pedagogical, artistic, and research-based approaches. Its design engages not only with music creation but also with the reflective and performative dimensions central to both artistic research and artistic music education[8]. This convergence of domains foregrounds the potential for reciprocal exchange between artistic practice, educational aims, and structured experimentation.

Artistic music education, as practiced in this context, places emphasis on performative and inquiry-based learning, grounded in situated and open-ended pedagogical questions (Stange and Zöllner-Dressler 2021). Rather than privileging fixed outcomes, this approach frames creation as a means of

[8] Own translation of "Künstlerische Musikpädagogik," a recent pedagogical trend in Germany that places artistic practice in the foreground over theoretical knowledge and encourages children to think and exercise artistically (Stange and Zöllner-Dressler 2021).

experiential learning, an evolving process in which artistic decisions emerge through exploration and iterative reflection.

Artistic research similarly foregrounds the entanglement of artistic and epistemic processes. It understands the generation of knowledge as something embedded in the artist's sustained engagement with practice: through the act of making, the artist reflects on methods, material, and meaning (Crispin and Gilmore 2014). This creates an overlap between learning, experimentation, and artistic articulation—an overlap well-suited to iterative and participatory models.

In parallel, the Iterative Feedback Model for Collaborative Composition (introduced in Chapter 3) structures the collaborative process into modular and recursive phases. These phases are designed to generate material (Step 2), open spaces for reflection (Step 4), and support flexible trajectories toward diverse outputs, including performance, documentation, and reapplication.

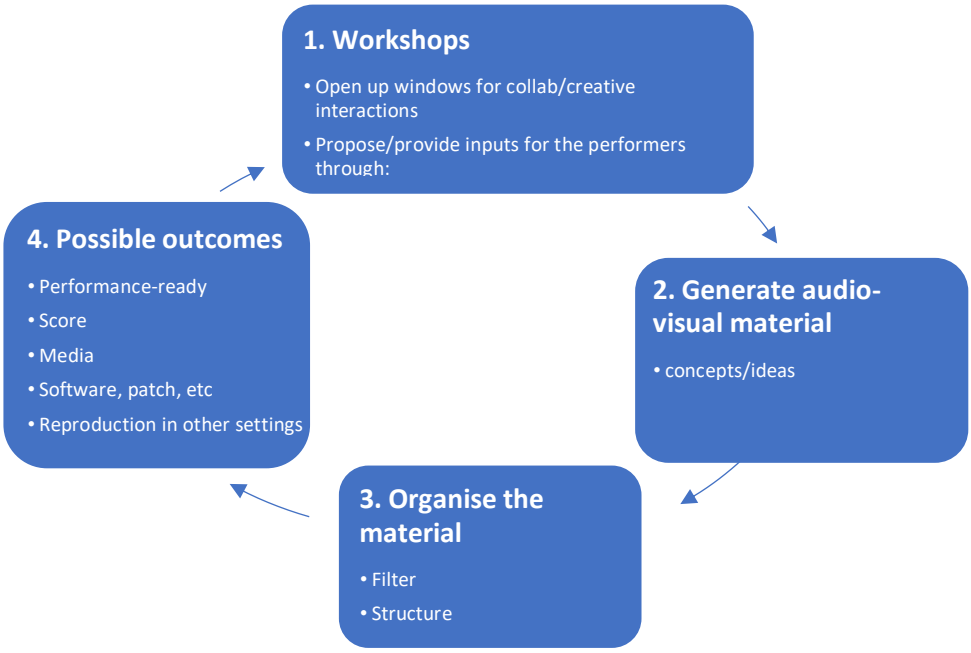


Figure 31. Simplification of the Iterative Feedback Model for Collaborative Composition (see Chapter 3)

Within the framework of this project, the IFMCC functioned primarily as a compositional scaffold. It shaped the evolution of the audio setup, structured group interaction, and supported a dynamic environment in which roles—composer, facilitator, and participant—were fluid and responsive to the process. Rather than prescribing content, the model provided a flexible structure for co-creation, accommodating a wide range of experiences and encouraging cross-disciplinary collaboration.

7.3. Collaboration in Heterogeneous Environments: Different Backgrounds, Common Goals, and Familiarity

What are the challenges of working within a group where tacit knowledge is less homogeneous than in contemporary music ensembles? What opportunities emerge from such diversity?

In contrast to the previous case studies in this dissertation—where participants were closely embedded within the WAM (Western Art Music) scene and therefore shared a relatively unified set of aesthetic assumptions and working conventions—the group involved in this project brought together a notably heterogeneous range of backgrounds. This heterogeneity created both challenges and generative possibilities for collaborative engagement.

1. Divergent Backgrounds and Tacit Knowledge

One of the initial challenges was navigating the group's differing forms of tacit knowledge. As Chugh and Ritesh (2015) define it, tacit knowledge arises primarily through experience and manifests as skills and understandings that are difficult to codify or articulate explicitly. In collaborative settings, this kind of knowledge becomes foundational to how tasks are approached and completed, how goals are understood, and how communicative norms are established (Zembylas and Niederauer 2017).

Although the group shared a general goal—to develop a participatory composition within a performative setting—our interpretations of that aim varied. For example, the music pedagogy students and instructors were principally oriented toward educational concerns: they emphasized designing sequences of graded difficulty with specific didactic aims, often focusing on the classroom transferability of musical activities. By contrast, my concerns centered more on conceptual clarity, sonic aesthetics, and the broader compositional and performative coherence of the proposed material. As a result, articulating intentions and aligning expectations sometimes proved difficult—especially given the relatively large size of the group (over 12 participants), which magnified the complexity of mutual understanding. This dynamic supports Sawyer's (2017, 56) observation that when shared knowledge is limited, large groups often struggle to meet collective goals unless compensatory scaffolding is introduced. In response, we implemented several structural measures—including smaller working groups and guided conceptual support—which will be detailed in the following sections.

2. Varied Levels of Expertise and Professional Experience

A second challenge arose from differing levels and domains of expertise. In many interdisciplinary art projects, participants may have distinct professional orientations but equivalent levels of experience or training. In such contexts, collaboration often takes the form of a division of labor based on skill, or a reciprocal exchange of disciplinary knowledge (Taylor 2016). However, in this project, the range of expertise extended from seasoned university professors to undergraduate students, many of whom had minimal experience in artistic music education or collaborative artistic production.

Despite these differences, the students made meaningful contributions throughout the process—conceptually, organizationally, and artistically. Their input included shaping the sound material, designing pedagogical frameworks, and participating in the final installation. My role, along with that of the professors, was to guide and support this development. For example, I advised students on structural coherence, introduced alternative notational forms suited to their concepts, and developed user-oriented digital tools to facilitate the realization of their ideas. Meanwhile, the module professors ensured that pedagogical experimentation and mediation remained at the center of the educational sequences being developed.

3. The Role of Familiarity in Group Dynamics

A third key issue was familiarity—both interpersonal and disciplinary. As John-Steiner (2000) notes, familiarity can refer either to previous personal/professional acquaintance or to participants' habituation to a given practice or medium. Both forms of familiarity significantly impact communication and efficiency. Interpersonal familiarity fosters ease of dialogue and negotiation, while disciplinary familiarity enhances problem-solving and task execution (Becker 2005; Sawyer 2006, 2017).

In this project, many participants were unfamiliar not only with one another but also with the methods and expectations of collaborative composition in a contemporary music context. This unfamiliarity necessitated more trial-and-error stages, longer exploratory phases, and extensive clarification of terms, roles, and intentions. To address this, the three professors and I established smaller working groups that enabled focused discussion and peer exchange. We also introduced artistic reference examples that resonated with the students' pedagogical goals, helping bridge the conceptual gap between their experiences and the domain of experimental sound-based composition.

4. Diversity as a Resource

Despite these challenges, the group's diversity proved to be an asset in expanding the creative possibilities of the collaboration. It fostered unconventional approaches to composition and yielded innovative connections between pedagogical goals and artistic forms. As John-Steiner writes, "Collaboration thrives on diversity of perspectives and on constructive dialogues between individuals negotiating their differences while creating their shared voice and vision" (2000, 6). In this case, the multiplicity of viewpoints deepened our attentiveness to each phase of the process. Our understanding of shared objectives evolved iteratively, and unexpected solutions emerged organically from collective exploration.

While familiarity often promotes efficiency and convergent thinking (i.e., problem-solving), diversity stimulates divergent thinking and novelty, what Sawyer (2017, 49-50) terms problem-finding creativity. This subchapter has outlined how those conditions played out in the current project and previewed how subsequent phases of the process were shaped by this interplay between difference and convergence. The following sections will provide detailed documentation and analysis of those outcomes.

7.4. Inscribing the Iterative Feedback Model for Collaborative Composition into a Media Setup Accessible to an Audience

As outlined earlier, this project pursued not only artistic outcomes but also pedagogical applicability. The aim was to develop a flexible media setup that could facilitate participatory composition in educational environments, ranging from primary classrooms to high school groups. This included enabling music education students to translate their collective compositional ideas into material that could be accessed and reinterpreted by younger, less-experienced performers.

This dual-purpose output created a fitting context for applying the Iterative Feedback Model for Collaborative Composition (IFMCC). The model supports the development of outcomes that can be documented and transferred through various media—such as scores, instructions, audio or video prompts, or interactive interfaces—while retaining processual logic rather than prescribing fixed results.

This emphasis on flexibility and iterative development made the IFMCC especially appropriate for a pedagogical setting, where openness to exploration and adaptation is central. In this context, the model's structure—particularly Steps 2 and 3—enabled cycles of feedback, documentation, and collaborative revision that continuously shaped the evolving work. Although Step 4 focuses on producing a performance-ready outcome, the model's reflective mechanisms do not imply closure; instead, they support ongoing reassessment.

7.5. Describing the Process Through Multiple Perspectives: Digital Portfolios and Online Blogs

Documentation for this case study followed the IFMCC's second phase, which calls for continuous generation of audiovisual and textual material to support iterative development and later analysis. Recordings of online sessions, in-person workshops, and seminar discussions formed a foundational archive.

However, given the size and diversity of the group, traditional narrative interviews were not feasible. Instead, each student developed a digital portfolio in the form of an individual online blog**,** an approach suggested by Prof. Kathrin Schweizer. These blogs functioned both as pedagogical assessment tools and as rich sources for artistic research.

According to Schweizer (Stange and Zöllner-Dressler 2021), blogs offered the following advantages:

- Professors could monitor students' evolving reflections and contributions in real time.
- Students could document their process as it unfolded, offering candid insights into uncertainties, changes, and breakthroughs.
- The non-linear nature of blogging encouraged students to stay goal-oriented without becoming fixated on a specific product.

- Blogs integrated text, audio, video, sketches, scores, diagrams, and images—producing a multimodal chronicle of the artistic process.
- Each post was timestamped, providing chronological structure and continuity.

For the purposes of this dissertation, the blogs not only serve as documentation but also as reflective artefacts of situated learning. They illustrate how participants negotiated ideas, developed ownership over emerging work, and grappled with the unfamiliar terrain of collaborative sound-based creation. In the following subchapters, excerpts and insights from these blogs are interwoven with my account of the process to offer a polyphonic perspective.

7.6. Designing a Flexible Audio Setup for Participatory Sound-Making

The technical and conceptual foundation of this project centered on the creation of a modular audio installation capable of supporting diverse pedagogical and artistic goals. Designed as a flexible, multi-station system, the setup was intended to enable the development of small-scale performances or semi-structured soundscapes, while also remaining adaptable to a variety of educational settings and user expertise levels.

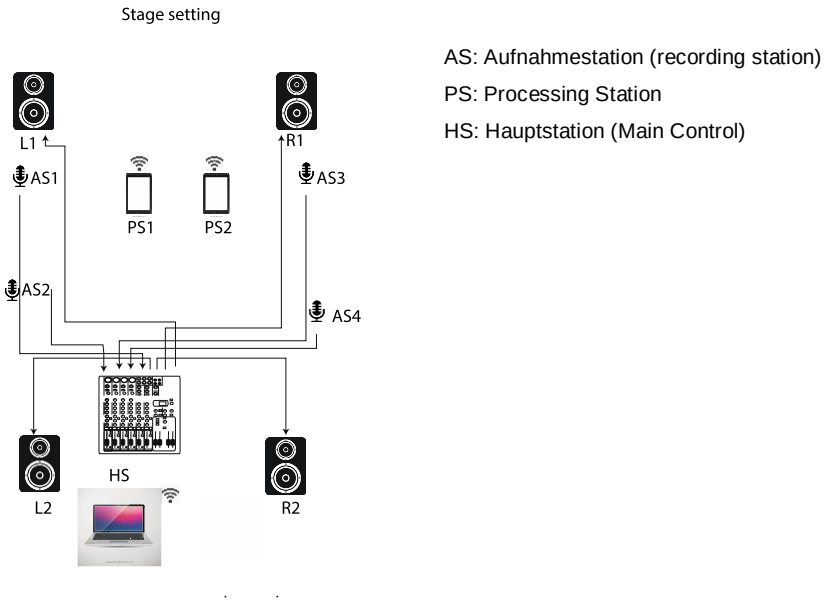


Figure 32. Proposed audio setup diagram

At its core, the installation comprised multiple sound production and recording stations, each of which could be populated with student-generated material. These stations were designed to feed into a central control hub—referred to as the "main station"—which aggregated, processed, and projected sound into the performance space. The use of Max software provided real-time processing and routing capabilities,

while the integration of wireless interfaces (tablets and smartphones) allowed intuitive interaction with sound effects and buffers.

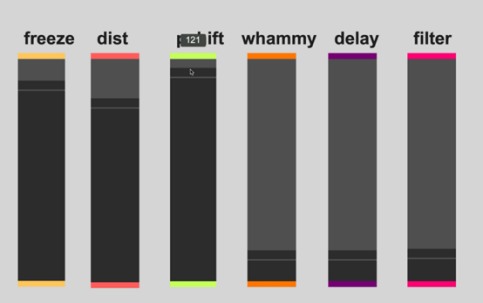


Figure 33. Interface shown on the tablets using the package MIRA

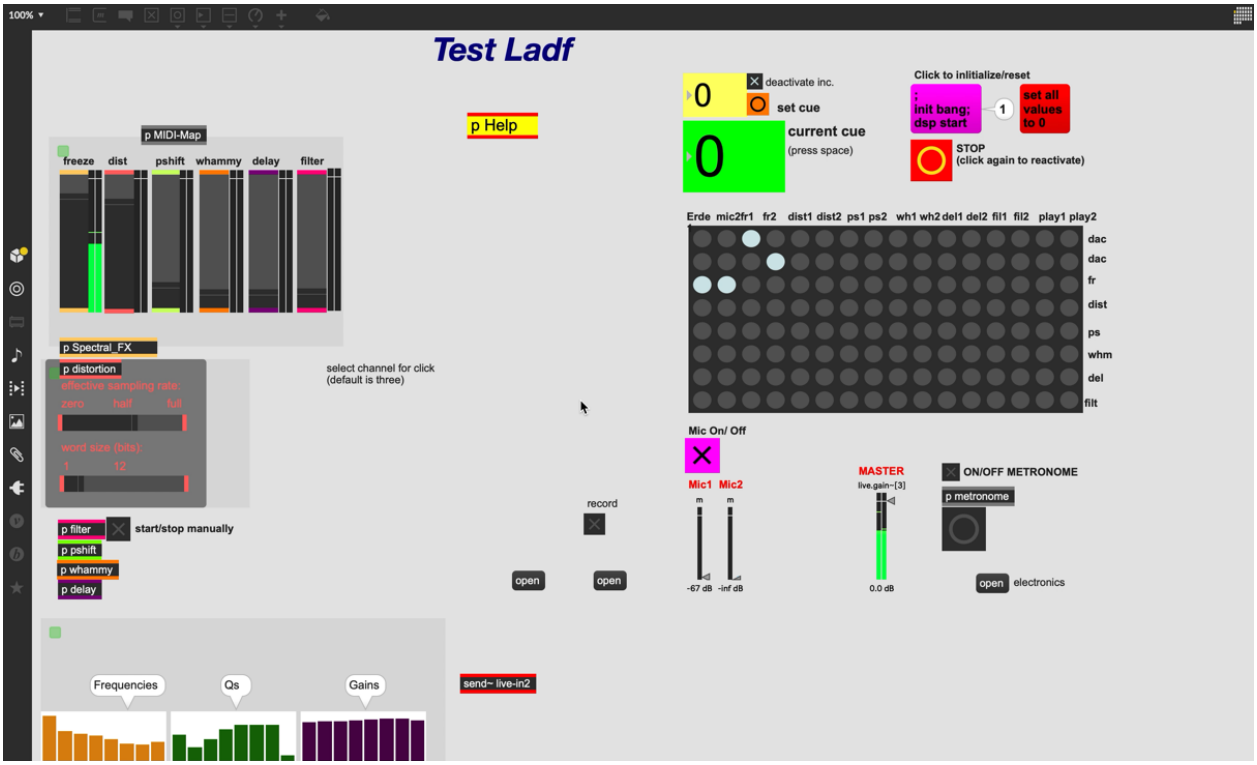


Figure 34. First version of the Max patch (main control)

This system architecture was guided by several interrelated aims:

- Support for exploratory engagement: The setup was conceived to accommodate open-ended interaction and intuitive sound-making. It encouraged users—whether students, young

audiences, or amateur participants—to engage creatively with the materials, emphasizing playfulness and responsiveness over technical precision.

- Mediation between heterogeneous inputs: The central hub was not merely a technical control unit but a conceptual layer that mediated between divergent ideas. This allowed multiple artistic or pedagogical concepts to coexist within the same installation while maintaining a coherent output structure.
- Adaptability and accessibility: The setup was purposefully open-ended in terms of technical specification. It could be expanded with additional stations or effects depending on the needs and constraints of a given group. At the same time, its user-facing components were designed to be easily operable, with simplified control interfaces minimizing barriers to participation.
- Alignment with reflective pedagogies: In line with the educational orientation of the project, the setup was designed to support rehearsal, rehearsal-based assessment, and iterative refinement. Students could practice at the stations, reflect on their sonic outcomes, and progressively tailor their performance strategies.

Following the introduction of the technical design, the group collaboratively established a set of guiding criteria for the installation, reflecting the pedagogical values of the course. As summarized by student Jonathan Büchler (personal blog, 2021), the installation should:

- Encourage experimentation and openness to new sounds;
- Allow assessment and progress tracking;
- Enable users to familiarize themselves with the tools and tasks in advance;
- Maintain open-endedness while guiding toward a defined aesthetic or sonic identity;
- Prompt reflection on staging and presentation for an audience.

These goals shaped both the final layout of the installation and the subsequent stages of the collaborative process, in which the pedagogical and artistic components of each station were further developed.

7.7. Preparatory Lessons: Getting in Touch with “Artistic Music Education,” Abstract Sound Worlds, and Sound Installations

For many of the students involved in this project, engaging with experimental sound production and artistic music education principles represented a significant departure from familiar pedagogical and musical practices. As Kathrin Schweizer observed, the associative, perceptive, creative, intuitive, playful, and spontaneous approaches emphasized in the seminar were new to many participants, especially within the context of a music education course (Schweizer 2021, 196).

To prepare students for these challenges, the module's professors curated a sequence of preparatory seminars before the next group meeting. These included theoretical readings on artistic music education and focused listening sessions featuring examples of contemporary classical works and audiovisual documentation. Among the pieces studied were *Liebe* by Hannes Seidl and Daniel Kötter (2016), *The Pianohouse* by Trimpin (2014), and my own *Milk Spilt on a Stone* for saxophone quartet (2017), although I was not involved in the selection of materials or present during this phase, which was embedded in the course's existing curriculum.

Nevertheless, this selection played a subtle yet significant role in shaping students' aesthetic expectations for the project. The university's ongoing partnership with the Donaueschingen Festival—where the installation would ultimately be premiered—implicitly aligned the project with a particular institutional aesthetic. As Born emphasizes (1995; 2010b), cultural institutions not only provide logistical infrastructure but also transmit artistic values and norms that can influence participants' creative framing before the collaborative process formally begins. In this context, students were not only engaging with unfamiliar sound materials but also internalizing a curated aesthetic discourse that would shape their later contributions.

Alongside aesthetic exposure, the students also studied key theories in artistic music education. While an exhaustive overview of this literature exceeds the scope of this dissertation, student responses documented in their blogs suggest strong resonances between the theoretical material and their expectations for the installation. Based on Buschkühle's (2021) argument that both teaching and learning in artistic education constitute unpredictable, non-linear processes, Laura Löffelmann emphasized that the installation's flexibility offered a uniquely personal and open-ended learning experience (blog 2021). Other students, such as Wolf (blog 2021), likewise identified experimentation and sensory engagement as central features of the installation's pedagogical potential. The installation needed to create space for unexpected results and accommodate the specific needs of younger users, such as school children. In this sense, students connected artistic education with a readiness to accept uncertainty—particularly by embracing the idea that learning outcomes and compositional results could not be predetermined but would emerge gradually through exploration. This aligns closely with Sawyer and De Zutter's (2009) notion of "collaborative emergence," which highlights how new ideas and structures often arise through real-time interaction, unpredictability, and mutual adaptation within a group.

In response to these reflections, I understood that my role in the project would involve more than simply shaping technical parameters; it also required designing a system that could accommodate risk, indeterminacy, and nonlinearity. Specifically, the audio setup needed to support unstructured exploration, respond flexibly to group input, and allow results to remain unresolved or in flux across multiple phases.

To deepen their engagement with sonic abstraction, students also participated in a series of listening seminars, during which they reflected on selected works using the "stream of consciousness" method.

This technique, originally developed in literature to record spontaneous mental activity, was used here to elicit unfiltered reactions to unfamiliar soundscapes. According to Schweizer, the goal was to emphasize aesthetic experience over formal analysis and to treat bodily and sensory perceptions as valid foundations for learning (2021, 195).

Students' responses to the selected works varied from confusion to fascination. Some found the listening material "overwhelming," "confusing," or "intellectually demanding," which highlights a broader issue in music education: the unfamiliarity many students have with experimental or non-tonal music, particularly when their training has been rooted WAM traditions. As Goehr (2007) and Born (1995) have noted, WAM's institutional frameworks often prioritize tonal, structured, and historically canonized repertoires, marginalizing practices that embrace abstraction, open form, or non-linear time. The challenge here was not just aesthetic but epistemological—students had to move from an interpretative to an exploratory stance, engaging with works not as fixed texts but as experiential environments.

This shift marked an early step toward collaborative authorship and process-based composition.David Schneider (blog 2021), for example, noted that temporal shifts, non-figurative sounds, and medial transformations contributed to an ever-changing experiential space. Inspired by these ideas, the students collectively identified a number of core characteristics they wished to incorporate into their installation:

- Spatial and temporal variability
- Medial layering and transformation
- Emphasis on noise and non-figurative sound
- Freedom from tonal or rhythmic constraint

In summary, this preparatory phase laid the conceptual groundwork for the collaborative process that followed. Through exposure to theoretical texts, curated aesthetic frameworks, and unstructured experiential reflection, students were gradually introduced to a set of unfamiliar practices and perspectives. This phase also clarified the dual role of the installation as both a compositional tool and an educational resource—one that required careful mediation between divergent forms of expertise and evolving group goals.

7.8. Generating the First Ideas for the Installation

At this stage in the process, students were tasked with generating a thematic framework for the installation and translating it into a sound-based concept. While the collaborative environment had been carefully scaffolded through phased workshops, small-group assignments, and continuous guidance from the facilitators, the open-ended nature of the brief proved challenging for many participants. With no predefined aesthetic framework, instrumentation, or target group, some struggled to conceptualize a direction for their work, revealing the need for iterative framing even in ostensibly open structures. The openness of the brief proved challenging for many participants. Some blog entries expressed uncertainty about parameters such as the intended audience, time structure, and overall goals of the piece. This ambiguity occasionally hampered the students' ability to develop concrete ideas, as highlighted by Anna-Theresa Arnold, who reflected:

"Without information that clarifies the age of the students, the size of the group, or the time available, it is still difficult for me to gain an idea for the composition project" (Arnold, blog 2021, translated by the author).

These uncertainties triggered a wave of fundamental questions from students, including: What should the theme be? What are our educational goals? Who is the project really for? And perhaps most importantly, how can we mediate between instruction and open-endedness while maintaining a participatory ethos? (Friedrich, blog 2021).

While many of these variables remained necessarily undefined—partly due to the COVID-related unpredictability of schedules and audiences—the open-ended format also mirrored a core principle of both the IFMCC and the project's pedagogical context: the design of a structure that encourages conceptual exploration and creative ownership, rather than prescribing outcomes. Within this frame, my role was to offer students a range of tools and mediation strategies—such as different types of scores, prompts, and instruction formats—without steering them toward a single vision.

The first group's suggestions centered on formal or geometric principles, particularly symmetry and shape-based structures such as triangles, circles, or rectangles. These were initially approached as abstract compositional ideas—e.g., building rhythmic patterns from shapes or imagining texture through visual contours. However, students soon expressed difficulty in developing these into sonic experiences. As Arnold (blog 2021) and others noted, translating such abstract forms into sounds was not intuitive, particularly without prior experience in electroacoustic or experimental practices. This reflects findings by Graça Mota (Barrett 2014), who observes that in participatory education contexts, students often struggle when the artistic outcome is not defined materially but arises as an experience shaped through exploration.

Rather than stepping in with fixed compositional solutions, I adopted a facilitative stance akin to the roles described by Partti (2014) and Lucas (2018)—supporting the group's own decision-making without

asserting stylistic control. In my role as mediator, I deliberately refrained from proposing predefined concepts or outcomes, as this would have interfered with the process of discovery and hindered their capacity to shape meaning through experience. Partti (2014) underscores this tension, noting that the composer in participatory contexts must balance two roles: diagnosing conceptual or compositional obstacles while resisting the imposition of stylistic direction. Lucas (2018, 24) similarly argues that maintaining accessibility in both conceptualization and implementation enables the composer to act as a facilitator rather than an authority figure—nurturing environments for collaborative creativity rather than prescribing artistic products. This facilitative posture aligns with Sawyer's (2017, 41–54) characterization of the composer not as a top-down coordinator but as a responsive presence—someone who listens actively, scaffolds emergent decisions, and supports shared authorship by decentralizing control.

With this approach in mind, I proposed reorienting the conceptual framework toward metaphors that could be intuitively grasped and sonically explored. Rather than beginning with abstract or symbolic forms, the group was encouraged to draw from sensory experiences—textures, natural elements, and environmental geometries—which could be more readily connected to sound. While the initial idea of using geometric forms proved difficult to translate sonically, the students ultimately converged on a set of elemental themes—earth, air, fire, and water— This reframing opened up richer possibilities for embodied and material engagement, inviting participants to interact with sound through familiar sensory and visual associations. In doing so, the installation became a platform for collective inquiry, where unfamiliar artistic practices could be explored via tactile experimentation, metaphorical interpretation, and iterative reflection. Rather than requiring fluency in experimental music, the setup allowed students to build understanding through physical interaction and shared meaning-making.

Ultimately, the elemental framework allowed students to express their musical ideas in ways that connected more directly with personal, sensory, and pedagogical references, reinforcing the iterative and inclusive nature of the model.

7.9. Choosing a Topic and Creating Tasks and Sequences for the Workstations

Following the selection of the overarching themes—air, earth, fire, and water—the student participants were divided into groups, each assigned to develop one of these conceptual areas into a sonic station. These thematic orientations were not treated as symbolic "elements," but rather as experiential metaphors guiding the creation of sounds and interactions. Groups were formed around these four themes, with one professor (including myself) supporting each as a mentor and mediator throughout the process.

The aim at this stage was twofold: to explore how abstract themes could be rendered in sound and to begin shaping concrete actions, materials, and performative ideas for the installation. What emerged

from this process was not simply a thematic structure, but a map of how differently participants thought through sound. These associative leaps—between medium, metaphor, and material—were the result of collective brainstorming and extended discussion, made possible by early investment in a reflective, collaborative framework. As Creamer highlights, although this may seem time-consuming initially, it promotes long-term vitality and productivity within the team (2004, 569).

The challenge for participants was to transform metaphorical associations—e.g., "the sound of fire," "the texture of earth"—into musical strategies. The resulting approaches revealed a broad range of conceptual logics. Some groups worked with symbolic imitation: the water group, for example, used rice to simulate rain, or glass to evoke dripping. Others approached the theme through sonic metaphor, like the fire group associating crackling and explosions with fear or warmth. Still others drew on physical resemblance, as in the air group's use of hairdryers, fans, and wind instruments to render air movement audible. The earth group prioritized material associations—stones, leaves, soil—emphasizing textural interplay rather than literal sound references. These varied perspectives made clear that sound was not treated as autonomous but deeply entangled with visual, tactile, and emotional frameworks.

This diversity of interpretation is captured in a blog entry by student Marie Friedrich (2021), who catalogued ideas across the four stations:

Element	Ideas & Materials	Conceptual Approach
Air	Fans, whistles, breath, chimes, bottles	Movement-based sound generation and natural wind imitation
Fire	Sparklers, balloons, paper, screams	Emotional associations: danger vs. warmth
Water	Rice (rain), chimes, voice, bowls	Textural and processual: dripping, flowing, pouring
Earth	Stones, sand, bark, wood, leaves	Material presence and embodied gesture

Figure 35. Ideas discussed for the stations (translated by the author)

This preference for multimodal thinking—associating sound with other sensory modalities—reflects the diverse pedagogical and disciplinary backgrounds of the group. This process also exemplifies the role of tacit knowledge, as described by Zembylas and Niederauer (2017), who highlight how embodied, experience-based understanding enables participants to navigate unfamiliar or ambiguous creative settings. Rather than relying on abstract formal systems, students drew on sensory associations and personal metaphors to shape the sound tasks collaboratively.

The next step was to operationalize these ideas into instructional formats usable by children in the installation. Each group designed a station for their assigned theme and developed a sequence of tasks

aligned with their pedagogical goals and the installation's technical conditions. These tasks would invite pupils to explore materials, create sounds, and record them in short, guided improvisations. At this stage, the distinction between students and pupils was carefully maintained: the students functioned as designer-facilitators, while the pupils—envisioned as end-users—would later enact the sound sequences.

To support the pedagogical structuring of this phase, the students adapted Hans Schneider's (2017) five-step model for experimental music-making:

1. Explore: Develop new materials and sonic possibilities through improvisation.

2. Imagine: Reflect on potential use or combinations of those sounds.

3. Shape: Refine and rehearse sound events and actions.

4. Structure: Sequence those actions into a cohesive form.

5. Transfer: Develop instructions or scores that allow others to realize the concept.

A meaningful resonance can be observed between Hans Schneider's five-step methodology for experimental music-making and the Iterative Feedback Model for Collaborative Composition (IFMCC) employed throughout this project. While Schneider's pedagogical framework—Explore, Imagine, Shape, Structure, Transfer—was developed with educational contexts in mind, its processual nature closely aligns with the IFMCC's recursive cycle of material generation, reflection, and transformation. Both models emphasize experimentation in the early stages, encouraging participants to explore sonic possibilities before assigning formal or structural constraints.

As the process unfolds, each framework supports a move from raw material to structured form through shared decision-making and incremental refinement. Importantly, Schneider's final phase, "Transfer," which focuses on the mediation of ideas through verbal or graphic notation, parallels the IFMCC's emphasis on documentation and interpretability—key for reproducing collaborative work in varied settings. Underlying both approaches is a commitment to scaffolding autonomy, where facilitators help guide participants without imposing fixed outcomes, thus fostering environments of distributed authorship and collaborative emergence.

This parallel can be traced in the students' application of Schneider's model during the design of the installation's workstations, where pedagogical and compositional thinking intersected. For example, students applied Schneider's model not abstractly but in concrete instructional tasks—developing sonic materials through exploration, reflecting on how to shape them, and ultimately devising notational or procedural systems to communicate their ideas.

One representative example of how these phases were envisioned is the Earth station (see Figure 36). Here, a variety of tactile materials—leaves, soil, stones, metal, wood—were selected to be explored and sounded. The children would be invited to match images or words (e.g., sand, branches) with corresponding sonic gestures and record these improvisations in timed sequences. These instructions were prepared in the form of visual scores (see Figure 37) and included graphical and verbal prompts designed to facilitate embodied interpretation, performative decision-making, and creative self-direction.

Station	**Materials**	**Description-Procedure** *The operation of the stations is either described in text form or explained by the supervisors (PH students posted at every station)	**Phase** according to Schneiders methodology (2017)
Earth	-Several boxes of materials with stones, different-sized pieces of wood, sand, earth, leaves, bark mulch, fir branches (needles & cones), metals (rods, wires), guitar strings, parts/keys from baton sticks (made of wood) -score as Pdf -Score stand with iPad (for the score)	**Procedure: The pupils (2 to 4 each) can first try out the materials provided. What sounds can be produced? In what ways can these materials sound?** **Task: Look at the materials in the box. What sounds can you make with them? Try everything out! The terms and pictures are displayed on a large screen and are to be set to music. The pupils can interact with each other and support each other. (see score)** **Task: Now use the materials from the box to create sounds to go with the words and pictures on the screen. Feel free to find a partner for this! Once the children have tested themselves enough, they go individually or with a partner to the recording boxes. There they can choose at least 3 words/pictures, put them in order and set them to music. Each word/picture is automatically displayed in the recording box for 30 seconds and then automatically changes to the next selected word/picture.** **Task: Select three words or pictures that you would like to set to music and record. This way, after a practice phase, the children can create and record their own sounds - these are then at least 1:30 minutes long. The sounds can be assigned to the pictures and terms. The individual scores can then be further processed at the processing stations.**	**EXPLORE** **IMAGINE** **SHAPE** **STRUCTURE** **TRANSFER (see score below)**

Figure 36. Sequences and tasks for the station «Earth». (Kristina Predikant, Blog 2021).

Figure 37. Excerpt from the instructional score for the Earth station, created by Kristina Predikant (2021). The visual and poetic prompts guided children in shaping sonic interpretations of tactile materials. Translation of the text:

Thick tree bark

provides old trees with protection quiet

peaceful armor

The diversity of strategies and approaches taken during this phase was one valuable outcome of the collaboration. No single interpretation of what a given element should sound like prevailed. Instead, through iterative testing, the proposals were shaped by pedagogical goals, practical logistics, and the interpretive latitude of the station participants. This reinforced the notion that process-oriented collaboration allows for a multiplicity of sonic identities to emerge from a shared theme—an important deviation from more traditional composer-led design.

The setup enabled these diverse conceptual approaches to converge into a coherent structure, not by enforcing uniformity, but through iterative scaffolding—what Sawyer (2017) identifies as a process of dynamic support that allows collaborative creativity to unfold across different levels of experience. Rather than imposing fixed solutions, instructors acted as mediators, helping participants refine their concepts within a framework that remained open to reinterpretation. This structure provided enough constraint to support cohesion while allowing flexibility for individual and group decisions to evolve over time.

As the composer in residence, I acted as an advisor during this process—offering suggestions on notation formats, the use of sound transformations, and feasible performance strategies. In many cases, technical or spatial limitations—such as the number of microphones, the duration of the tasks, or the size and acoustic behavior of materials—necessitated revisions to the students' initial proposals. These adaptations underscore the importance of balancing creative ambition with logistical pragmatism—especially in group-based, pedagogical installations. Although some ideas initially exceeded what could be realized within the setup's parameters, the iterative process of testing, feedback, and adjustment supported learning at both technical and conceptual levels.

As Creamer (2004) suggests, sustained investment in process-oriented collaboration fosters long-term ownership and quality, even when the trajectory involves course corrections. In this case, that meant moving from divergent concepts to a cohesive installation—without flattening the diversity of perspectives that made the process so generative.

7.10. Final Testing: Preparing the Installation for Performance

The final workshop served as a full-scale rehearsal and diagnostic session for the installation. Its primary purpose was to refine technical functionality, test the conceptual consistency of each station, and stage a cohesive performative structure. Adjustments were required on three levels:

- Logistical: How to physically arrange and display the materials at each station so that they remained both visually compelling and sonically accessible.
- Technical: How to balance microphone placement, sound amplification, and the interaction between recording and digital processing across the space.
- Conceptual: How to ensure that the sound manipulations aligne with each group's artistic and pedagogical intentions.

The installation was assembled in a medium-sized hall at the Heidelberg University of Education. Each station was equipped with contact microphones or small diaphragm condensers, feeding into a centralized digital audio patch designed in Max. This patch functioned as both signal processor and control interface, distributing tasks across tablets via MiraWeb[9] for participant use.

[9] Cycling '74. MiraWeb: Interactive Control for Max. Accessed July 14, 2025. https://cycling74.com/products/mira.

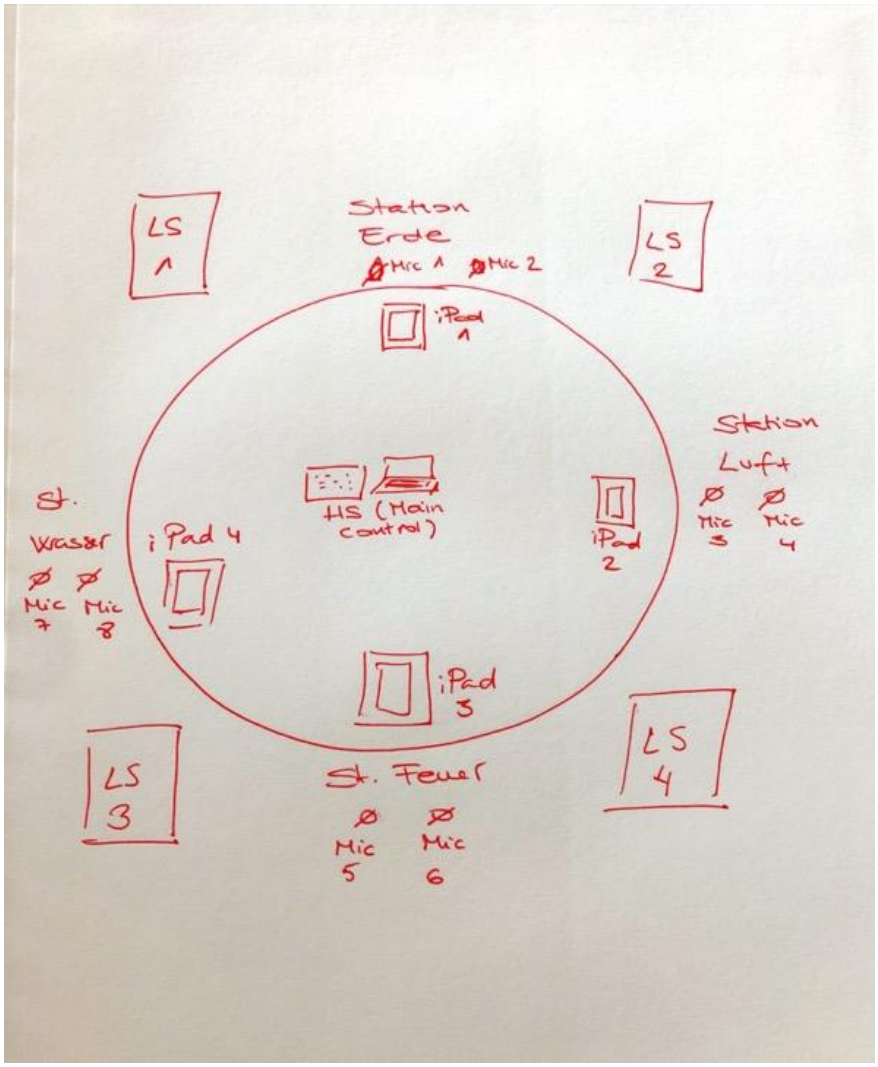


Figure 38. Sketch of the first version of the built-up installation

At this stage, participants interacted with their stations in two modes: first, exploring amplification alone to become attuned to subtle sonic gestures that might otherwise go unnoticed; second, layering live effects using a simplified digital interface. These effects—such as distortion, delay, pitch shifting, spatialization, and granular synthesis—were tested and then narrowed down to one or two per station. This decision was guided not only by practical considerations—ensuring intuitive interaction and sonic focus—but also by critical reflection on how different digital sound processes (DSP) transformed the original acoustic sources. Through hands-on experimentation and listening, participants evaluated which effects best aligned with their intended sonic atmospheres and conceptual expectations. This stage embodied a form of situated learning through trial and reflection, resonating with the adaptive structure of the Iterative Feedback Model for Collaborative Composition (see Chapter 3), particularly in its emphasis on iterative refinement (Step 3) and responsive tool development.

In facilitating this decision-making process, I adopted what Lucas (2018) terms a facilitative role, wherein the composer does not dictate content but creates enabling conditions for others to take aesthetic ownership. Rather than functioning as a director or adjudicator, the composer in this model actively supports emerging ideas—by offering options, mediating constraints, and fine-tuning technical tools—to empower participants' autonomy within a shared creative space. In this context, the refinement of the DSP options became not merely a technical adjustment but part of a broader negotiation of roles, responsibilities, and expressive possibilities.

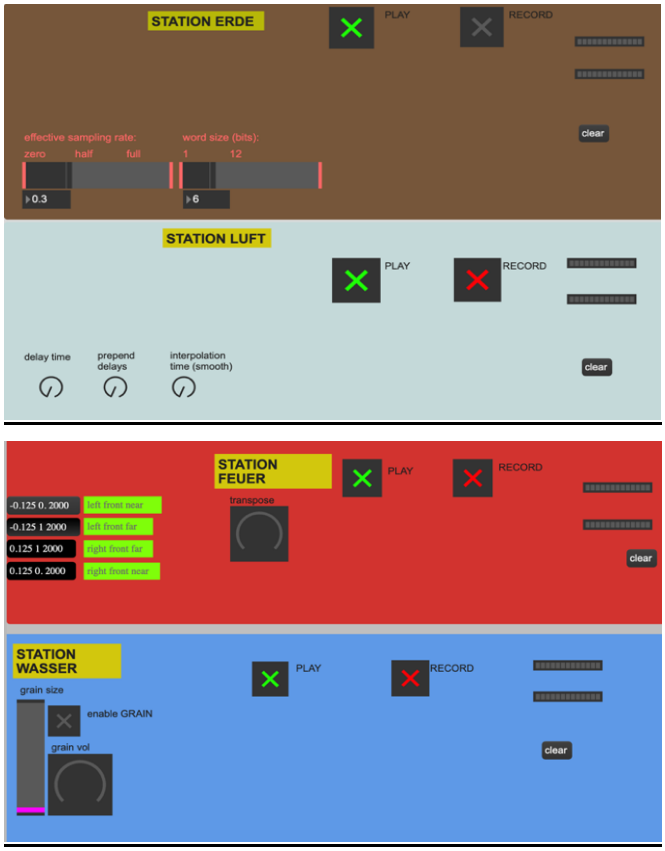


Figure 39. Tablet interface view (Max/MSP with MiraWeb)

This preparatory process revealed the significance of direct, tactile interaction with the system. Participants began tailoring their performance structures not only around sonic content but also around the spatial and temporal affordances of the installation. Consequently, the decision was made to integrate the exploration phase into the public performance itself, foregrounding process over product.

To facilitate this, a four-phase performative format was developed:

1. Station-based Exploration: Each group interacted with their station independently, rehearsing gestures and testing sounds. During this phase, only the performers could hear the full amplified output through monitors, preserving an atmosphere of discovery for the audience.

2. Sequential Performances: Each group presented a structured or semi-structured performance, one at a time. These were recorded in real time, amplified, and digitally processed on the spot. Timing and coordination were managed collaboratively, usually by a professor or a designated student.

3. Looped Playback and Extended Processing: The recorded material was stored in audio buffers and projected spatially using an automated panning system. While these loops played, participants could further shape the output through their station interfaces.

4. Meta-performance via Central Control: In the final phase, control of the entire installation shifted to a single performer (usually the composer). From the central station, the pre-recorded loops were dynamically layered, modulated, and spatialized to create an overarching sonic arc.

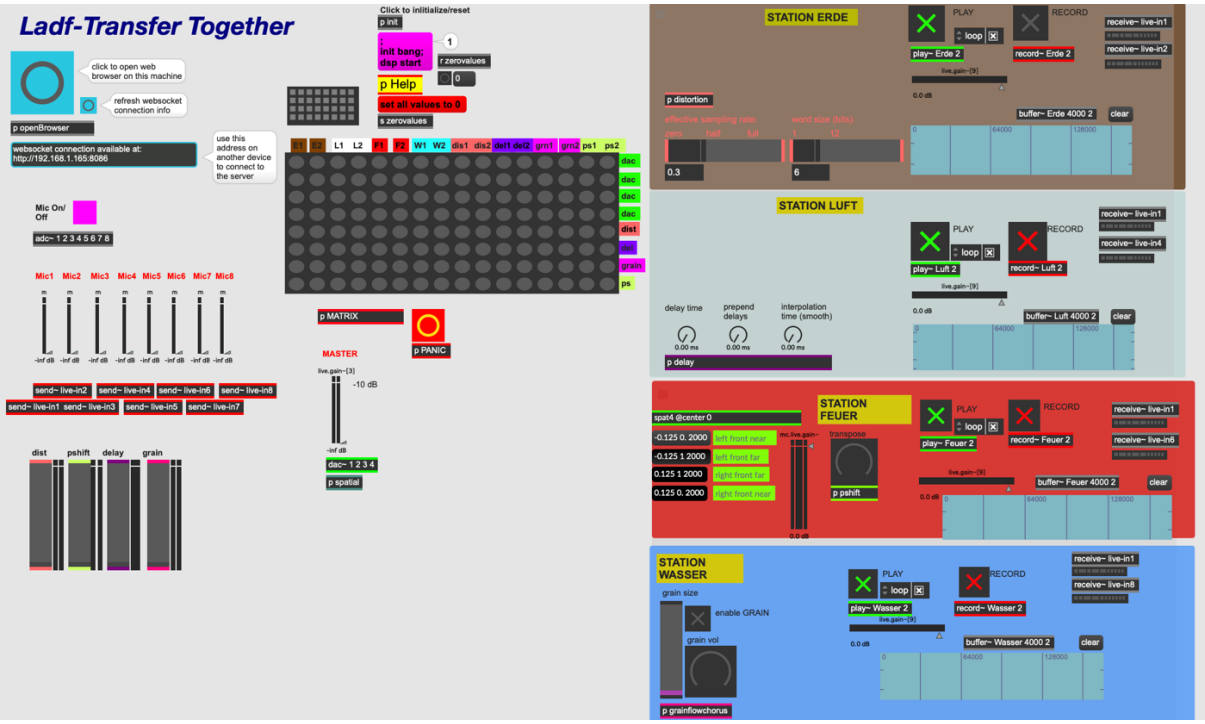


Figure 40. Main patch (Max/MSP) for central control and buffer playback

This performance architecture allowed for a continuous interplay between individual contributions and collective shaping. The layered design mirrored the collaborative process that led up to the installation: each element retained its autonomy, but the overarching system offered a framework for coherence, transformation, and re-contextualization.

7.11. Presenting the Installation to an Audience

The installation was presented one week later at the Federal Academy for Musical Youth Education in Trossingen, as part of the Vermittlung (education and outreach) program of the 2021 Donaueschingen Musiktage Festival. The audience consisted primarily of music educators, musicologists, composers, performers, students, and members of the general public, all interested in the pedagogical and artistic applications of the project.

The event unfolded in four distinct stages: (1) a presentation of the concept and setup, (2) a guided demonstration by the students, and (3) a participatory phase in which audience members engaged with the installation themselves (4) a feedback round amongst the participants.

Prof. Zöllner-Dressler opened the event by outlining the theoretical premises of the project, with particular emphasis on its participatory and exploratory character. As described on the project website, the installation functioned as a space of encounter and experimentation, where diverse inputs could interact on equal footing and participants were empowered to shape sonic structures and atmospheres through their own decisions and actions (Lieder aus der Fremde, accessed 28.3.23)[10]. The students then introduced the four stations, describing the objects and materials chosen as well as their conceptual frameworks.

Figure 41. The objects displayed for the recording stations

[10] https://www.liederausderfremde.de/partizipation-und-interkulturalitaet-offene-musikalische-spielraeume-gestalten/

The installation was activated in accordance with the performative plan discussed in Chapter 7.10. While functioning, it allowed for open circulation: the audience moved freely through the space, observing and listening as students operated their stations. I concluded this first phase with a brief demonstration from the main control, combining and processing the students' recorded materials in a short performance.

In the third part of the event, the audience was divided into small groups and invited to engage with the installation directly. With support from the students and instructors, the guests navigated the stations, exploring their interaction possibilities. Due to their unfamiliarity with the setup and materials, audience participants required extended exploration time, which led to lively discussions around how to operate the objects, interpret the sonic prompts, and organize actions collectively.

Figure 42. Members of the audience experiencing the installation

This scenario highlighted several dynamics relevant to collaborative learning and creative participation. Trust and vulnerability emerged as central concerns, as audience members were asked to improvise in a semi-public environment using unfamiliar tools. As Schweizer (2021) points out, artistic learning in pedagogical contexts requires creating spaces in which experimentation and failure are not only tolerated but structurally integrated into the process. This aligns with Sawyer's theory of group flow (2017, 57–59), which emphasizes that productive improvisation arises from conditions where failure is absorbed into collective exploration.

A final discussion round addressed questions of how outcomes might be interpreted and developed in an open-ended, process-oriented framework. Rather than evaluating the installation in terms of success or failure, participants were invited to revisit their original ideas, reflect on how these had evolved through the interaction, and consider possible future directions. This approach echoes the IFMCC's fourth step, where reflection and revision are integral to shaping outcomes. In this context, assessment functioned less as a conclusion than as an invitation to continue the collaborative process—reinforcing the model's emphasis on responsiveness, dialogue, and transformation.

From a technical perspective, the diversity of materials and tools—ranging from microphones and physical objects to real-time software processing—introduced both logistical complexity and creative potential. This setup required adaptability from participants and offered a wide range of sonic and performative options. As Schweizer (2021, 97) notes, "creative spaces promote creative processes," and the configuration of the installation can be understood as contributing to this dynamic. Rather than serving merely as a neutral container, the environment shaped how participants explored ideas, negotiated interpretations, and made artistic decisions. In this way, the spatial and technical infrastructure aligned with the IFMCC's emphasis on iterative feedback, flexible structuring, and embedded reflection throughout the compositional process.

7.12. Conclusions

This case study implemented and tested the Iterative Feedback Model for Collaborative Composition (IFMCC) within a heterogeneous group. In contrast to earlier chapters focused on WAM professional ensembles, this project involved music education students with diverse levels of musical and compositional experience. The research aimed to explore how the IFMCC operates in such diverse contexts, and how group diversity and institutional framing affect collaborative dynamics, authorship, and creative process.

Based on the case study's findings, the collaboration unfolded as a process-oriented inquiry, consistent with Sawyer's (2017) view of group creativity as socially emergent and iterative. Here, aesthetic output was not predefined but shaped through cycles of experimentation, reflection, and adaptation. The project's open-ended design created space for personal engagement and unpredictability, revealing both the potential and complexity of implementing collaborative models beyond the professional music field.

The diversity within the group—of disciplinary background, skill level, and conceptual approach—proved to be an important creative driver. As research on group creativity suggests (Paulus and Nijstad 2003), heterogeneity fosters innovation through divergent thinking. This was evident not only in the sonic material but also in the different modes of associating concepts, metaphors, and actions with

sound. For instance, participants developed tactile and metaphorical mappings for the four stations—earth, air, fire, and water—without relying on established compositional frameworks.

At the same time, the project highlighted some limits to horizontal collaboration. Despite the emphasis on collective experimentation, not all decision-making was shared equally. Differences in expertise between students and faculty meant that some moments remained guided by implicit hierarchies. Zattra's (2018) notion that collaborators must acknowledge and negotiate gaps in knowledge was especially relevant here. While the students' input shaped many stages of the process, their deference to instructors during more technical or conceptual decisions demonstrated that full peer-to-peer exchange was not always attainable. Importantly, however, this dynamic did not preclude meaningful engagement. Rather, the project revealed how facilitators can help participants grow into new roles—particularly through iterative feedback and sustained co-presence.

Crucially, this case also marked a significant shift in authorship dynamics. Unlike the two previous studies, where the composer ultimately retained control over structure and curation, here the students' agency extended well into later stages. For example, in the testing and refinement of digital signal processing (DSP) effects, students were not only generating ideas but evaluating and filtering materials, deciding which effects (e.g., distortion, delay, granular synthesis) best resonated with their sonic intentions. While this step corresponds to Stage 3 of the IFMCC (refinement and integration), its execution here was distinctly collective. What might traditionally be a moment of individual authorship became instead a shared curatorial practice. As the installation was conceived as an open and evolving system, all contributors were credited equally for the creation and realization of the project. In this case, legal authorship was attributed to the Heidelberg University of Education, which retained the rights to use and adapt the installation for future educational purposes. This arrangement was agreed upon collectively with the participants.

This shift in authorship dynamics was made possible by the composer's role not as an author in the traditional sense, but as what Lucas (2018) describes as a creative enabler. Rather than defining outcomes, I provided structures through which participants could discover and refine their own trajectories. Importantly, this redistribution of decision-making authority was not resisted—as in earlier cases where performer input was bounded by WAM hierarchies—but emerged naturally, precisely because such hierarchies were not culturally assumed. The absence of pre-existing WAM roles allowed authorship to evolve more fluidly, emerging through engagement rather than position. In this way, the project contributes to a more flexible understanding of authorship as a variable, processual construct—especially in participatory and educational settings. This framing also connects to the final public presentation. By integrating reflection criteria focused on conceptual clarity, experiential resonance, and developmental potential, the group rehearsed a model of evaluation that aligned with the iterative, feedback-based logic of the IFMCC. Here, assessment itself became part of the creative process: a dialogic act rather than a summative verdict. This model repositions evaluation as co-authorship, opening new pathways for participatory composition in educational settings.

Nevertheless, certain structural tensions remain. While collaboration was encouraged, the uneven distribution of expertise, institutional hierarchies, and academic pressures shaped how agency played out in practice. As Zattra (2018) notes, collaboration often requires acknowledging the limits of one's own knowledge while relying on others' expertise. In teacher-student or professional-amateur contexts, such as this one, those limits are not symmetrical. Students often defaulted to accepting suggestions from instructors without fully contextualizing or questioning them—especially when under pressure to prepare for a public event like the Donaueschingen Festival.

These dynamics point to a key limitation: the academic framework itself introduced new forms of conformity and hierarchy. While WAM composer-performer roles were less relevant here, they were replaced by pedagogical and institutional expectations. Future applications of the IFMCC in non-academic settings—such as schools or informal education spaces—may offer greater room for distributed authorship and less pressure to conform to external criteria.

Finally, the experience underscored the importance of target group awareness. Students repeatedly expressed the need to better understand who the eventual users of the installation would be. This highlights the relational nature of participatory work: designing for others requires more than technical foresight—it demands responsiveness, dialogue, and anticipation of diverse needs.

In sum, this case demonstrates the adaptability of the IFMCC to pedagogical contexts and heterogeneous groups. It validates the model's capacity to scaffold collaborative processes across conceptual, technical, and social dimensions, while also surfacing the limitations imposed by educational hierarchies and institutional norms.

Chapter 8: Conclusions

This chapter synthesizes the main findings of the dissertation by analyzing how the Iterative Feedback Model for Collaborative Composition (IFMCC) functioned as a methodological framework across three distinct case studies. The goal is to assess how this model facilitated interaction, co-authorship, and structural decision-making between composers and performers, and to evaluate its broader implications for compositional and performative practice. In doing so, the chapter revisits the original research questions and reflects on unanticipated insights that emerged during the implementation process. It concludes by proposing refinements to the model and highlighting directions for future work.

8.1. Synthesizing Core Findings

This dissertation set out to investigate the affordances and limitations of the Iterative Feedback Model for Collaborative Composition (IFMCC) as both a conceptual and practical framework. The primary research question examined how the IFMCC influences collaborative interactions between composers and performers, and whether it has a measurable impact on compositional and performative outcomes. A set of sub-questions explored the model's application across distinct settings and its implications for authorship, communication, process structure, and reproducibility.

Findings in Relation to the Compositional Process

Across all three case studies, the model fostered more flexible and responsive modes of composition than traditional score-based practices. Particularly in Steps 2 (material generation and feedback) and 3 (iterative restructuring), the IFMCC enabled decision-making to be redistributed across participants. This was evident in how performers' input—whether in the form of sonic prototypes, workshop dialogue, or performative experimentation—shaped both the material and structural logic of the resulting works.

A key outcome was that performer involvement did not merely "influence" the composition process; it altered its architecture. The pieces developed through IFMCC were not drafted in isolation and later interpreted; rather, they emerged through cycles of proposal, revision, and reflective integration. This had consequences for the formal design of the works, particularly in Case 2 and Case 3, where non-linear and modular structures were preferred to accommodate iterative change.

The challenges of shared authorship—particularly in regard to control over material and form—were addressed not by eliminating hierarchy, but by structuring when and how decisions were made. As a result, authorship became contingent on context: in Case 1, final structural decisions remained the composer's domain; in Case 3, these were collectively mediated.

Performer Engagement and the Role of Early Involvement

The model also influenced how performers engaged with the material. When involved early in the process, performers reported greater clarity about the work's objectives, as well as a stronger sense of co-ownership. This supports previous findings (Roe 2007; Glover and Redhead 2018) that suggest performer investment increases when their input shapes the work itself, not just its interpretation.

In Case 2, early engagement allowed the performers to embed their physical and sonic vocabulary into the piece, which in turn fostered more fluid rehearsal processes. In Case 3, where performers were less experienced, the model created a space for learning through experimentation, highlighting the pedagogical value of iterative feedback and scaffolded authorship.

Comparative Positioning and Model Refinement

Rather than positioning feedback as a post-compositional step, the IFMCC fosters an iterative structure in which material generation and evaluation unfold in parallel. Across the case studies, this recursive approach supported reflective practice, allowing participants to adapt creatively as the work evolved. Specific refinements emerged in response to practical and conceptual challenges:

- The concept of scaffolding (Sawyer 2017; Lucas 2018) became more prominent, particularly in Case 3, where participant familiarity with compositional norms varied widely.

- The need for target group awareness became evident when evaluating how compositions might be transferred to new ensembles. As Sawyer (2017) suggests, shared goals and communicational fluency are essential to achieving "group flow"—a concept particularly salient when reflecting on Case 3's heterogeneous participant pool.

- The value of Step 3 (Iterative Restructuring) was reaffirmed, not as a stage for "polishing," but as a zone for redistributing creative decisions. In several instances, participants shaped not only the content but also the underlying systems of interaction—revealing the IFMCC's potential as a compositional method as well as a collaborative tool.

Unanticipated Insights

While many of the model's strengths aligned with its theoretical foundations, some outcomes were unexpected:

- Collaboration did not always rely on prior familiarity or stylistic common ground. In fact, the structured use of the model helped create shared understanding in contexts where none initially existed.

- The composer's role shifted significantly across cases—not simply from "author" to "facilitator," but often to "observer," "system designer," or "listener," depending on context. This fluidity was not anticipated at the outset but proved critical to adapting the model to different group dynamics.

8.4. Authorship as Distributed and Evolving: A Comparative Framework

One of the most revealing outcomes of this dissertation is the transformation of authorship across different contexts and stages of collaborative composition. Rather than functioning as a fixed, pre-defined role, authorship emerged as a set of negotiable, task-specific responsibilities—distributed among participants in different ways depending on context, process design, and institutional scaffolding. To clarify this evolution, the following taxonomy of distributed authorship is proposed. It organizes authorship into five overlapping domains observed in the case studies:

Domain of Authorship	Description	Who Participated	Variation Across Case Studies
Ideation	Contributing conceptual frameworks, thematic direction, or guiding metaphors	Composer, performers, students	Centralized in Case 1, shared in Case 2, student-led in Case 3
Material Generation	Creating sonic or performative material	Primarily performers or students	Strongly composer-led in Case 1; group-generated in Case 2 and 3
Structural Design	Decisions about form, sequence, spatial layout, or sonic architecture	Composer, Artistic Director, students	Centralized in Case 1; distributed in Case 2; co-constructed in Case 3
Technical Mediation	Designing or interacting with tools (software, scores, interface), adapting to user needs	Composer, performers, students	Composer-managed in Case 1; increasingly shared in Case 2 and 3
Evaluation & Refinement	Assessing and shaping output, revisiting earlier steps, integrating feedback	Composer, all participants	Composer-led in Case 1; collaborative in Case 2 and 3

Figure 43. Taxonomy of Distributed Authorship Across Case Studies

This typology does not suggest a binary opposition between composer and performer roles, but rather a spectrum of interaction along which authorship can shift fluidly depending on the design of the process.

Evolution Across Case Studies

- **Case Study 1:** emphasized ideation and structural authorship as composer-driven, with performers offering material-level feedback. The composer retained primary authority across stages.
- **Case Study 2:** involved a more shared authorship structure, especially in the refinement stage. Structural input from performers and the Artistic Director modified initial ideas and challenged the composer's assumptions. Authorship was negotiated but uneven**,** complicated by remote communication and unclear familiarity.
- **Case Study 3:** offered the most fully distributed model. Material generation, tool design, and even evaluative criteria were shaped by the participants. The composer's role was more curatorial and technical—supporting rather than directing.

Observations

- **Structural authorship** is often the last to be shared. Even when material or conceptual input is distributed, final shaping tends to revert to composer authority—unless consciously scaffolded otherwise.
- **Technical authorship** (e.g., patch design, DSP design, etc.) tends to centralize authority if left unexamined. In Case 3, designing interfaces for non-specialists allowed for the redistribution of technical authorship through usability.
- **Evaluation** became a crucial site of authorship, particularly when embedded as a dialogic activity. Reflective tools (e.g., blogs, feedback prompts) made this possible.

This evolving distribution reflects not only changes in how pieces are made, but also in how musical authority is legitimized. Rather than emanating from score or composer prestige, it often arose from procedural insight, technical mediation, or pedagogical framing**.**

8.5. Processual Output and Redefining the 'Work'

One of the most distinctive outcomes of applying the Iterative Feedback Model for Collaborative Composition (IFMCC) was a reconfiguration of how musical "works" are conceived—not as fixed artefacts authored by a single individual, but as evolving processes shaped through collective engagement (Cook, 2001). Across the three case studies, the outputs developed under the IFMCC framework retained a strong connection to their generative pathways, often embedding traces of feedback loops, improvisational materials, and workshop-based interactions. In this sense, each piece functioned less as a finalized composition and more as a performative document of the collaboration that produced it.

This orientation toward process does not imply an absence of structure. On the contrary, the IFMCC emphasizes iterative phases of filtering, framing, and re-evaluation (particularly Steps 3 and 4), which introduce coherence without enforcing rigidity. Structural elements emerge not from unilateral invention, but from successive cycles of negotiation—balancing participant contributions, contextual constraints, and aesthetic continuity. This distinction is essential: the IFMCC differs from open or aleatoric compositional approaches not merely in degree of freedom, but in the way freedom is scaffolded. While aleatoric scores often relinquish control to chance or performer discretion, the IFMCC maintains a shared authorship model that relies on intersubjective decision-making and reflective iteration.

This processual orientation also invites reconsideration of how notions of 'completion' and 'success' are defined within collaborative musical contexts. In many traditional performance settings, emphasis is often placed on aspects such as technical precision, interpretive clarity, or fidelity to a predefined score. In contrast, within the IFMCC, the focus shifts toward how the outcome embodies the evolving interactions, shared decision-making, and contextual negotiations of the group. Performance is not positioned as a final endpoint, but rather as a temporal expression of the process up to that moment.

In this regard, the IFMCC aligns with recent perspectives in Artistic Research that frame compositional artifacts as documents of inquiry rather than singular achievements. It also echoes Sawyer's (2003) notion of emergence in group creativity: structure and meaning arise not in spite of distributed agency, but because of it. By formalizing the collaborative process without determining its content, the IFMCC allows composers and performers to co-construct works that are both bounded and adaptable—sufficiently structured to retain identity, yet open enough to be contextually reinterpreted. This positions the IFMCC as a distinct contribution to participatory composition practices: neither fully open nor conventionally closed, but durational, processual, and reflexive.

8.6. Reflection and Evaluation as Creative Acts

A key feature of the Iterative Feedback Model for Collaborative Composition (IFMCC) is its integration of reflection not as an afterthought, but as an active and iterative element embedded throughout the process. Particularly in Step 4, evaluation functions less as a final judgment and more as a prompt for reassessment and potential revision of both materials and methods. In all three case studies, reflective moments—whether via feedback sessions, informal discussion, or performative review—often led to new compositional decisions and collaborative insight.

In the third case study, this dynamic took on an especially explicit form through the use of structured, open-ended questions developed in collaboration with the pedagogical team. Questions such as "Does the output correspond to the imagined concept?" or "Which developments are needed?" (Zöllner-Dressler 2021, 38), became generative prompts for reconfiguring sound materials, adjusting effects, or altering interaction modes. While the framing drew on educational tools, the participants' responses remained grounded in artistic concerns. In this way, reflection and evaluation operated less as external

commentary and more as compositional tools, converging with how such processes unfolded in the other two projects.

Importantly, this reflexive structure supported a redistribution of creative agency. Evaluative input came not only from the composer or facilitators but from all participants, shaping the evolving contours of the work. The process encouraged a shared sense of authorship, where feedback loops fed directly into structural and aesthetic outcomes.

In many traditional composition and performance contexts, evaluation tends to occur after the fact—through critical reception, documentation, or retrospective analysis. By contrast, the IFMCC situates reflection within the creative arc itself. When participants engage in real-time evaluation that leads to structural or performative shifts, assessment becomes part of the composition process rather than external to it.

This approach carries broader implications—not only for collaborative composition but for research-led and educational practices that seek to dissolve the boundary between process and outcome. Within the IFMCC, reflection serves as an instrument of artistic development, capable of transforming direction, structure, and intention across evolving iterations.

8.7. Wider Impact and Future Directions

The findings of this dissertation, and the development of the Iterative Feedback Model for Collaborative Composition (IFMCC), contribute to a growing discourse on participatory artistic processes, offering practical and conceptual tools to support more dialogic, inclusive, and adaptive modes of composition. While the three case studies varied widely in their artistic and institutional contexts, a number of common insights emerged that have implications not only for composers but also for performers, educators, arts administrators, and artistic researchers.

For composers, the IFMCC offers a structured yet flexible roadmap for integrating performers into multiple stages of the creative process. Rather than prescribing a rigid sequence, the model supports recursive loops between material generation, feedback, and structural refinement. This process allows composers to move beyond the traditional paradigm of isolated authorship, engaging instead in collaborative authorship frameworks that retain artistic coherence while expanding creative agency across a broader group. The model's ability to maintain structure while enabling collective shaping of the work is one of its most transferable features.

For performers, the model opens up additional avenues for engagement in the compositional process, encouraging forms of participation that extend beyond conventional roles. These include involvement in shaping formal structures, influencing the configuration of digital tools, and contributing to decisions around presentation and interaction. Rather than assuming a fixed hierarchy, the IFMCC provides a

framework in which roles can be negotiated and adapted over time. The case studies demonstrate that when such participation is supported through shared goals, familiarity, and iterative reflection, performers often develop expanded interpretive and collaborative literacies, contributing not only to the execution but also to the conceptual development of a piece.

For artists, educators, and facilitators working in participatory or interdisciplinary contexts, the IFMCC offers a flexible framework for integrating open-ended exploration with reflective structuring. As shown in the third case study, the model supported creative collaboration within a large and diverse group, enabling contributors with varying levels of experience to participate meaningfully in the development of an artistic outcome. Its built-in feedback phases and reflective cycles encouraged critical engagement and responsiveness, without prescribing content or requiring uniform expertise. Elements of the model—such as its iterative sequencing and dialogic scaffolding—can inform creative processes beyond professional contexts, while remaining rooted in artistic inquiry and co-creation.

For institutions and commissioners, the findings challenge conventional models of artistic production that prioritize speed, novelty, and premiere-oriented funding. The model promotes an alternative culture of process-based creation that values development over deliverables and supports works that can be revisited, restructured, and co-developed across time. This invites institutions to reconsider how resources and timelines are allocated—particularly in supporting collaborative, durational, and pedagogical initiatives that may not result in a single definitive "work."

8.8. Limitations, Risks, and the Question of Failure

While the IFMCC demonstrated considerable potential across varied collaborative contexts, the research also revealed critical limitations—both practical and conceptual—that must be acknowledged. These limitations do not negate the model’s relevance, but they highlight essential tensions in its application and underscore the conditions necessary for its sustainable and ethical implementation.

Creative authorship and the composer's voice

One of the most profound challenges concerns the composer's evolving role in a collaborative environment. In all three case studies, but especially in the third, the role of the composer shifted from originator of content to enabler of structures—a “facilitator of emergence” rather than a generator of materials. While this redistribution of agency fostered rich interactions and co-authored outcomes, it also posed a risk: the composer’s distinctive voice—often regarded as a defining asset in the context of artistic reputation, programming, and funding—became harder to trace. In professional environments shaped by competition, personal style, and “signature works,” this openness to uncertainty and distributed authorship may run counter to prevailing models of artistic success.

Economic and institutional risks to authorial identity

The question of authorship is not merely aesthetic—it is economic. Within Western art music (WAM) institutions, authorship functions as a mechanism of attribution, legitimacy, and compensation. When authorship becomes diffuse, as in the IFMCC's framework, the composer risks ceding not only creative control but also the cultural capital and legal recognition traditionally linked to "the work." In academic, publishing, and commissioning contexts, where value is frequently tied to clearly attributable outputs, this model may render collaborative composers less legible to the systems meant to support them. While the IFMCC redefines what authorship can mean, it does not yet resolve how such authorship can be credited, compensated, or preserved in institutional terms.

Sustainability and resource constraints

The IFMCC depends heavily on iterative dialogue, extended rehearsal time, sustained contact between participants, and technological infrastructure that can accommodate adaptation and feedback. These requirements stand in contrast to many real-world conditions in WAM institutions, where creation cycles are compressed, performer time is tightly scheduled, and technical resources are limited or outsourced. All three case studies were made possible by exceptional conditions: dedicated residencies, academic support, and motivated collaborators. Without such scaffolding, the demands of the IFMCC may prove unsustainable. This raises ethical questions about access: who can afford to work this way, and under what conditions?

Power is never fully neutralized

Although one of the goals of the IFMCC is to examine and renegotiate hierarchical roles, this does not eliminate power dynamics. Even in the most open phases of the projects, the composer retained a form of structural influence, whether through curating tools, framing choices, or mediating dialogue. Moreover, when collaboration is initiated by the composer, it inevitably carries a degree of asymmetry. Participants may interpret the invitation as directive or feel uncertain about how much authorship is "allowed." These ambiguities surfaced most clearly in Case Study 2, where performers expressed both empowerment and confusion about their agency. Collaborative structures, then, must be continuously reflected upon, not only designed.

Unpredictability is generative, but also uncomfortable

Finally, perhaps the most elusive but important challenge was the emotional and cognitive experience of letting go. Embracing failure, contradiction, or unexpected outcomes can be intellectually defensible but affectively destabilising, particularly for composers trained in environments that valorize control, coherence, and consistency. At times, it was difficult to distinguish between a productive loss of authorship and a dissolution of focus. This points not to a flaw in the IFMCC, but to a fundamental tension in collaborative work: the desire to share versus the need to guide. Finding ways to hold space for both remains an ongoing task.

The problem of fixity and the paradox of sustainability

The collaborative pieces generated through the IFMCC do not aim at resulting in definitive, finalized works in the traditional WAM sense. Instead, they are procedural artefacts—traces of dialogue, experimentation, and context-specific negotiation. While this openness enhances the creative potential of each performance, it presents significant practical and institutional challenges. WAM infrastructures are built around the notion of the "fixed work": pieces that can be rehearsed, premiered, archived, and programmed with clarity. Composers, performers, and ensembles alike rely on this framework to organize their professional lives, from securing funding to building a repertoire.

When a piece resists closure—because it is designed to be re-shaped by future performers or reconfigured in each new context—it complicates that model. Ensembles may find themselves continuously investing time and labor into re-adapting the same work. Performers must shift from interpretation to re-invention. Composers must relinquish the clarity of a single output in favor of ongoing responsibility for mediation and revision.

While these demands may initially appear burdensome—requiring continuous reinterpretation and logistical adaptability—they also reflect a potential redefinition of artistic roles, affirming core capacities of all collaborators: the composer as someone who constantly reinvents compositional systems; the performer as someone who rediscovers and reimagines, rather than merely reproduces.
In this sense, the absence of a fixed endpoint becomes not a failure, but a deliberate compositional strategy—one that privileges responsiveness over replication and views unresolvedness as a productive condition.

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Appendices

Appendix A. Pilot Project Interview design

Interview design:

Points to be studied in the interview:

- Composer's strategies helped/ influenced in the creative part of the performers? How?
- Composer's strategies helped in the interaction?
- Role of the score? Influence?
- Role of technology, how did it influence the process?
- Group dynamics?
- Role of participants? Well-established roles? Flexible? Hierarchies?
- How much do you think you contributed to the piece?
- How could you have contributed more?
- Was it beneficial? To what extent? group dynamics, relationship composer-ensemble, group flow and creativity, aesthetic openness, creation process (global), final result, others?
- Disadvantages of working this way? --> instructions clear? Misleading? Technology? Structures not clear?
- Description of success? Interaction with the music?

Appendix B. Sample of interviews. First Case study

Interview to Anne Gillot.

H: I will start recording now and I will explain to you what it's about, so you know, the interview is not a guided interview, which I asked you to prepare questions. It's more open. So everyone of you can express your own opinion much more openly, and you can be more spontaneous, you know, because maybe you have ideas that I didn't think about, so this is why I didn't prepare. It's more like a narrative interview, interviewing you and wishing you more. Are you are more explaining your experience? Okay, so sometimes if I see that something is very relevant for my study or if something is not clear or I think something it's very interesting. Perhaps you could elaborate a bit more. I may ask you a follow-up questions. But otherwise, I just asked you very general questions. Okay?

A: Okay.

H: Okay good. So well, to begin with, if you could explain generally, you know the experience with the composer's next and more concretely with the piece we did together, in general. So what was your experience?

A: In general, composers' next is always a really huge adventure because yeah, I think I really want to understand what composers, what you want, what they want and try to offer also the opportunity to develop, also, I think we have a lot of expectations. Yes, because all the composers are very young. And so, it's really nice for us to have a few fresh ideas and I think I'm really excited every time to discover what will happen. And the thing is, to be at the same time the most open as possible and to try to figure out what are the expectations of the composers and how we can do something together. And so yeah, that's why for me, it's really a really nice project. And what I like especially is when we try to build something during these weeks really together. And yeah, it's not just only to have the score and then to prepare it and then to play but to really prepare it as well as we can and then to develop together and to put in contact everything.
Regarding your project, I think especially the idea of the game was really really nice, I think. And I think it's a process we could have developed for a longer time, because it's different. How do you say? There are different steps and also our reaction has to be spontaneous, how we react and then how we develop the sound. We have to be reactive with the screen and then also with all together, so we have different inputs.
This was from really interesting and to develop a kind of speed from something really quick and to change it each time to develop things.
I think we couldn't prepare more at home because it was really difficult to practice alone these things because alone you can find different things but with the others is different.
And then I think what was really interesting when we reached this point, sometimes not always, but when you feel that you're really reactive, you have ideas, you feel good with your instrument and then

you can react to the others at the same time. I think it's really nice. Yeah, and so I think this moment was really, really nice.
Also, I think what was also really interesting was to change your energy and your dynamic of playing or your strategy of playing, maybe from the point when we had these inputs to later, then we had more fixed things. And then I think also this part could have been played a little longer to find really the correspondence with each other and to develop real musicality with it. And then I really liked the fixed things with notes because in our brain it's really different and so I think it's really nice. I think it does impact the playing. I don't know if it's what you had in mind in terms of psychoacoustics, I don't know.
H: Yeah

A: You know, I did my master on graphic scores and I realized that in the middle age they did music scores with different forms. Sometimes it was a heart. Sometimes a flower and something like that to have an impact on the musician's brain, did you know that?

H: Yes, I did.

A: There's something really interesting in it. Also in improvising, because I'm an improviser. So I think that the conditioning is really important.

H: This is very interesting, what you said about the score. I mean the score had a lot of different elements, like it was kind of multimedia. It has open parts. It has also parts that are completely written. But of course, these written parts are coming from elaboration of the materials you had, so could you describe more in detail how the score, what kind of impact do you think the score has on the way you perform or in the way you react? I mean not only as a performer, but for example your creative part, in your freedom, your attitude … the score, all maybe if you can be more concrete about the things you were mentioning? because this is very interesting

A: I think first of course you are a gamer, but you can prepare yourself. But if you want to play the game, for me, I it was my impression if I really want to play the game, I I don't fix everything. I had a few instruments: the clarinet, the flutes, the head just the mouthpiece of the clarinet…For example, just the head or another flute, a recorder, I mean, and I did know what I wanted but very often my strategy changed. I say, okay. Now I say just with the head of the recorder, just to try it. Can I do what she wants just with that? For example, just like «vibration». Can I do that and very often? It's a question of state of mind. It's like a a sport. It's busy. You really have to be ready at the same time. Really dynamic, really ready and sometimes, because you are always too late, of course, sometimes you're good for a few I had the impression I was playing (synchronized) with you for a really a short amount of time but I was really like, okay I could see what you wanted what you were building with the others also, but it never lasts because of course you're not…so this is something really in the first part

really ephemeral. But it's I think it asks a lot of this possibility of creativity and of t you have to be really fast, really quick, really reactive. And I don't know how we can try that.
I think it's really interesting to be really, really reactive, but you need to be in the right mood because you have to be really reactive, but sometimes play piano or softer with a way of playing which is not just explosive. We have to change a lot.
Regarding the time, I think this change was for me the most difficult, after finding the pulse. Not in terms… I was not lost but to find really the piece inside to be really in a pulsation and to enter into another way of making music that I think is something totally different.

H: Are you talking about this transition between the first part and the second third, right?

A: Yes, I think maybe I will have needed a maybe a part with only a big texture, something just like drone, something like that, because we are really agitated by then and then you have to focus, listen to the others in another way. And so maybe it could have helped me to have a transition part.

H: In the score, there is a transition part, actually. I don't know if you remember, it's around the letter C. But is it too short?

A: No. I mean, the beginning was not stressful at all, but you have to follow the pulse and then transfer. Oh, so you are like, okay! here is the 1 2 3 4, here is right, here is my line, here is what I have to do. Okay, first I have to do this instrument.
Also, in connection with the others, because at the first part we're not supposed to play together. But of course as a musician you want to, and so when you see that oh! we play together and you have a the same gesture, the same color or not the same but you are just creating something

spontaneously…and it is really difficult to play together because you have to count, you have to listen and first you have to find the pace.

H: Yes, the pace… so I think I understand what you mean. So, it could be like this transition part may not be longer, but maybe freer in terms of giving you more time to elaborate on something without having to count or being together. Maybe more flexible? Something like that?

A: Maybe, it's an idea, but it's the idea, maybe, for example, you have this white noise thing. Yeah, like I don't remember the term you used it was like…

H: interference? Or…

A: Yes, interference. So maybe transitions: play interference and develop and interference become harmonics, so we do a very long transition between interference and harmonics and we have to listen to each other…and then something else. And then when we're in sync (flow?) we can play…

H: Do you have the score with you. Do you?

A: Yes, I have it.

H: I'm saying because, that was exactly what I had in mind. What you're saying is actually what I tried to do from part C and on…

A: Alright.

H: I don't know if you remember… you start with the clicks then they become harmonics, but I don't know….

A: Yes, I do.
H: The problem is maybe that you still have too many instructions, or the changes are still happening too suddenly?

A: No, for me it was really clear, but my inner state was really agitated and that's it. But yeah, you …

H: you're still in the previous mood…

A: Yeah, maybe it's just me. I don't know. I may be the only one who is able to.

H: No, you're not the only one saying that, actually I think it was Joce, she told me something, it's not exactly the same, but she said something like, also talking about the same part, that she would have liked this part to be longer and also maybe more improvised so maybe you can find sounds with each other.

A: Yes, because the opportunity of listening to each other is really quite a challenge. Yeah, but it's good. I think it's really really interesting.

H: Yeah, so maybe I think here the score here in this part, if you remember, was quite graphic, with bubbles and lines, but was still very, you know, with bars and time yet. So I don't know, this is just an

idea coming to me, maybe if I add a more open part where you can interpret everything more freely and experiment with the sounds, find each other in terms of sounds…

A: And maybe the pulse can come a little bit later, because I think when it first comes it was really interesting also for the energy in the music. Suddenly you feel it. And it's really nice.

H: Yeah, yeah, especially when you go towards the last part in which everything is almost written.

A: Yes. And also, I think you also in the last parts you found some texture interaction and was very nice, but it was really short too.

H: I know, I had the same feeling, you know, when I was listening to the score and performing on stage with you, I didn't have this feeling but when I heard the recording II thought: oh, this is short. I completely agree with you. So for me, I also had like different experiences. You know, like I think the first time I really listened to the piece was when I listened to the recording because I was also with you playing everything and doing the performance, so yeah.

A: Yeah, of course, of course, but it's also good that you played with us. I don't know how it was for you…

H: I was very interesting. I mean, it was having really another insight of the piece, completely different. Okay, so let me think. What would you say for example in this sense about the role of technology? I mean, I know you are very used to work with technology. But do you think this influenced somehow the way you played as an ensemble or yourself as a performer?

A: You mean, which technology, the screen?
H: Yeah, yeah.

A: For me, it was really a score, a visual score. I think the big thing is that the public, the audience can see at the beginning and this is something I think really interesting that never happened. So for them, it was really easy to understand. I think that there is this relation. And so I had read the impression that they were expect something else, a development of it, but I don't think that you should have developed it, I'm not saying that but maybe we have to affirm that little bit more.
So yeah, it's yellow, short and loud (puff!) and it's is simple I like that very much. But this part has to be very clear in terms of intention and form, and it wasn't so clear, for example, the intention of what you wanted with the visual part. What is the meaning of this first part for the audience?
What I think is good is that the technology is really used in a way that we are not used to, to create a space of conditions for playing. This is good. But we are already used to it with Daniel, when he's doing his score, he changed the score himself and we cannot do anything. For example: track! off we go. So, because when you play a score you can see in advance, you can play with it. It's your score.

It's yours, it's really personal. You can write your own things on it you but when the composer is just adding something at one time and then no and then yes, and so on this is something different. This is really something special. I don't know but it could be interesting to develop it so maybe the audience can play also with us. Maybe it could be something interesting. And then you go somewhere else, which I like very much because we are not only slaves ahahaha…because with Daniel sometimes we are only slaves ahaha, I'm kidding. But the game notion can be funnier, what do you think?

H: Yeah. I mean, of course, this is a system. So the possibilities are almost endless.

A: Yeah and the technology with the electronics on stage for instance. Arturo was playing just next to me and I have to say that I couldn't have a lot of interaction with him. He was really preoccupied so maybe he's tool was not the right tool.

H: Yeah, he was also very stressed with how to deal with the whole thing. I realized that. Maybe for the electronics on stage, it could be useful to develop another tool.

A: Sure, he wasn't used to it, maybe you have to find another tool or another guy (laughing).

H: Yeah, and you said something about, that was funny, about being slaves. You use also the word choice. To have a choice, to be creative… to what extent do you think that was possible may be compared to traditional pieces in which you just get the score? do you think you had some freedom? How was your feeling about that?

A: I think I had a lot of freedom because I could really choose, as an interpreter, I really like also to develop different sounds different, textures. This is really what I like. I like that a lot. And so I had a lot of choices with your piece. After, it's really nice to be guided, to be driven, with the time, with the connections with that and then you have to react, and then of course this part of the game but I think we had a lot of freedom because your propositions were really open. It was the idea of what we may do with multiphonics, harmonics, we could choose. No, it was really a lot of freedom comparing to traditional piece where you have to play what is written.

H: And what do you think was the reaction or the effect of this concept in the group dynamics? Not on you as a single performer, but if you could maybe you know describe a little bit how was the group dynamic for you? how everybody was reacting the communication among you and also with me as a composer? because we had like different levels. Also, Daniel was also there…

A: Yeah, you mean in the work?

H: Yeah. I mean, you know during the process, the group dynamics. I think this is an important point because ,you know, the the grounds of the concept were very open and we were a lot of people with

different ideas, with strong opinions, different backgrounds, different levels of involvement. So how do you describe the group dynamics? I mean in general, you don't have to tell me names.

A: I was so in my world that I couldn't say specifically. I think in this context we should have a training as comedians do: to jump, to move, to prepare ourselves for the reaction… with the body all together. We had a lot of freedom to choose the sound but after that, the direction or the energy that we put in this sound, like the emotion we want to put in the sound was difficult to achieve. It's like we do something but we can never develop really, we put it away.
So, when you try to find a common harmony with someone…it's gone! so for me it was hard to find the energy. The jumping energy there. Wow. Yes because we need really to be in good shape. I mean we have to be really physical. You see what I what I mean?
The right state of mind like the comedians do if they have to play something funny. They are in the shape of playing something funny. They're not too tired to do it even if they didn't sleep or whatever….
So, I think very often when the group doesn't know really…or don't feel it, you have to find something to put everybody together. To give them the right energy. I don't know but I could have helped.
What is difficult is that with technology you always have to solve some problems. So you have a fake starts and then wait a lot… I mean with the theater also with the lights and everything you have to wait a lot but you have to find a way to instigate the performers from these on and off states.

H: Yeah to set up the mood, the atmosphere. Joce also said something like that. That's interesting. Now that you are the last interviewee it's very nice, to see some things in common and some things that are not. Okay. So, let me see if there is something else. Oh, yeah, there is still a thing that it's important. What do you think about the hierarchy, the roles in general? But I mean concretely in this piece.

A: between the composers and the instrumentalists?

H: Yeah. Maybe we can say roles between for example, the members of the ensemble, the composer, the tutors because of course it was a bit special. Because also we had two people that were tutors and that was a bit special.

A: This is really difficult… probably I missed a lot of what you were talking between Daniel and the tutors about technical stuff. For example, I did not like the way they worked with Isandro…like you have to do everything on yourself, show us what you have… so I talked to Daniel and told him that he should help him, because it was not fair.
But I have the impression that with you was different. You knew very well the way to communicate with with them, which is not so easy sometimes, I think and so I thought that's that was really nice because I think Daniel was really respectful and very happy with your your project. And I felt it. I think he was really enthusiastic about your piece so I had the impression there was a good interaction. So, the hierarchy was not so strong, we were playing the same game, of course with different roles, but

the way you were talking to us was always really positive so nice, so after we were discussing that we would like to collaborate with you in the future. We liked a lot working with you and we think the communication was so good and you would be a good “vortex” composer.
But for you I can imagine that sometimes it's not so easy to deal with different energies and so strong characters.

H: I really loved it because everybody had a strong, you know character musically and artistically but at the same time everybody was very respectful and I think this is very enriching because honestly, I prefer that than having musicians that they just play with you, especially for this project. I mean, I don't know, maybe in another piece when you have everything very decided you feel it differently, but no, for me was one of the most enriching experiences I had with an ensemble also it was very special because we had a lot of time.

A: Yeah. Yeah, and this is true.

H: This is also very special because how to develop such a communication such a relationship in in one week? Maybe it's not possible.
We had so many rehearsals and time in between. So I think the whole context was great and special and unique.

A: Do you know we asked ProHelvetia for more time? For one one more day, one meeting more. Because we do the concert and then we don't have the time do the feedback round, to talk, and it's hard to ask people to give more time for that. So we ask for more money for one more day.

H: Exactly! As I am doing with the interviews ahaha. So I think we covered everything. Would you like to talk about something else that we didn’t mention?

A: No. No, I wanted to know the way you felt. I know we had great time together. but yeah, I know that Vortex is strange animal. So…

H: No, I wish all ensembles were like you. I mean, what to do now also, I mean, I also loved working with our tool and Daniel and Arturo because I learned so much. Yeah, I learned so much. It was it was the possibility to say: okay, I can leave my my comfort zone. But at the same time I feel I have a backup. I'm not so scared. Yeah, I mean I feel comfortable without my comfort zone and that was really nice. I mean, yeah, this is nice not to have this panic you understand what I'm saying? it was a possibility to learn a lot and of course I think the piece was not perfect. I mean, I see a lot of things I could have done better also because it was very experimental for me. You know, like a lot of things were changing from meeting to meeting, I mean, I had the feeling the piece was a work in progress until.. even during the concert, you know, always progress, always progressing, so now after the interviews with you, I have I have another overview. So this is also very important for my PhD, for my

research because it gives me the tools that I need to think about my next project, you know, like I have a reflection and I can use it, and this is usually also something that you cannot do. you write a piece and then yeah, okay. You see things that maybe don't work. You usually don't have this profound feedback after the performance, so this thing you are doing with the next composers next It's great. I mean it's very important. I think it's a great idea.

Interview to Daniel Zea

D: A mí lo que me gustó desde la experiencia que me parece que es lo más importante de trabajar contigo, aparte de toda la experiencia composer's next, que digamos que es un poquito más largo y que viene haciéndose más años. Esta es la tercera edición, ustedes son la tercera generación.
El proyecto es una obligación moral de Vortex, porque la génesis de Vortex era servir la creación joven. Y casi que nosotros nos inventamos Vortex como un útil para nos tocaran nuestras piezas cuando estábamos saliendo del conservatorio y siempre nuestra bandera fue tocar compositores jóvenes desconocidos que están empezando su carrera, etcétera, etcétera, pero como ya tenemos 15 años, nosotros ya no somos los compositores jóvenes buenos compositores somos, jóvenes, pero ya hay otras generaciones que vienen en el mismo caso, que estábamos nosotros cuando salimos de la escuela. Entonces el producto Composers Next es una respuesta obvia, a la naturaleza principal y primogénita del ensamble, qué es servir como un orden de creación para los jóvenes compositores que no son conocidos que no se sabe realmente quien son y que no van a recibir una llamada del intercontemporain mañana porque si te acabaste de graduar eso no sucede.
Habiendo dicho eso, en el caso de tu pieza lo que me gustó mucho de tu approach fue tu actitud de decir: ¿o qué?
Muchas piezas desarrollan muchas cosas de diferentes maneras, pero esta era la ocasión de dejar de desarrollar algo de una manera diferente y me gustó mucho. Que cuando tú llegaste tenías una idea, pero ya se fue permeando completamente de los impulsos y velocidad que nosotros imprimimos.

H: Muchas gracias.

D: El sistema que habías pensado, en lo que yo les pongo un vídeo, se suben las palabras y tienen que reaccionar si ven lo que ven, yo te dije bueno sí chévere, pero ya la tercera vez que ven el video, ya se lo saben y ya no van a ser igual de espontáneos y se volverá aburridísimo. Tú me dijiste, sí. Sí pero cada vez que hago el video, me demoro 40 años en un montaje, no puedo sacar un video cada 10 videos…pues hagamos una aplicación que funcione en tiempo real, que tú les pongas a tocar y que ellos respondan.
Sabes, para mí lo más interesante tu proyecto es el desarrollo de esa herramienta que hicimos tú y yo para tener una estrategia de composición instantánea o de improvisación. Fue muy bonito poder

tenerte en esa actitud de Okay vamos a hacer eso yo abandonó todas mis cosas porque me están proponiendo decir porque no? como intentar

H: y en ese sentido es interesante tu experiencia porque tú no eras performer en la pieza, aunque tuviste un papel muy muy activo como estabas diciendo, pero no era instantáneo, o sea que no estabas tocando en la pieza, pero al mismo tiempo observaste mucho porque estuviste en casi todos los ensayos casi todo el tiempo. De hecho, el patch lo desarrollamos juntos, la idea vino inicialmente del patch que empezaste a desarrollar tú, yo luego lo continué, tú volvías a desarrollar…

D: Bueno no. La idea vino de ti, que era ponernos a tocar a partir de una especie de cliché semántico, esa es tu idea. Lo que hice yo simplemente fue a partir de ver tu idea decir: oye, lo que tú quieres es hacer un útil de composición, instantáneo de improvisación dirigida o lo que sea, pero en la manera como lo estás haciendo, no te lo permite porque después de que miras tu video tres veces ya no hay espontaneidad. Sí ya sabes que tú siempre dices improvisación finalmente, le pones eso los músicos cuatro veces y después tienes una pieza escrita que te la van a tocar, igualita, casi igualita y para ellos va a ser súper aburrido. Y para ti también y probablemente para el que escucha también. Porque si el músico está aburrido, el espectador se va a aburrir, digo eso es una hipótesis, pero bueno, eso ya es otra cosa. Interesante fue que tú te montaste en el bus y yo te dije bueno desarrollemos esta cosa y lo fuimos desarrollando de a poquito para ver cómo es que es mejoramos los controladores que son botones, botones, botones, nos poníamos las preguntas, que es lo mejor que yo puedo tener y cómo puedo controlarlo porque es que uno tiene 5 dedos y un cerebro, entonces hay que generar una especie de interfaz que te permita generar esa estructura formal y de composición instantánea que te permite que la puedas controlar… de hecho, te diste cuenta que muchas veces no te alcanzaban los dedos o te hacía falta alguna cosa.
Mi idea fue simplemente la implementación de la tuya.

H: Por otra parte, lo que también es interesante en tu caso es que viste mucho todo desde fuera. Entonces quizás eres el único de todo el grupo que tiene una visión global incluso más que yo, porque yo estaba también bastante metida tocando y haciendo todo en tiempo real, una situación casi privilegiada de verlo todo desde fuera además conociendo bien la pieza. En ese sentido quizás podrías hacer alguna observación sobre el comportamiento, por ejemplo, del grupo incluyéndome, a mí, las dinámicas de grupo, los roles.

D: Primero esto te lo digo porque me parece que hay algo muy valioso en lo que tú hiciste, muy valiente y muz generoso de tu parte, más que por el hecho de que esto sea para tu PhD.
Yo tengo varias críticas muy fuertes porque yo pienso que el ensamble no estaba preparado para tu pieza en su totalidad. Entonces yo pienso que hay algunos músicos que no estaba siendo generosos

contigo o con tu idea, no contigo, sino con tu pieza entonces para mí un 60% del ensamble estaba muy generoso contigo y un 40% del ensamble estaba… (hace gestos para indicar la pasividad). Entonces en un ensayo me dio rabia, pero lo que pasa es que yo era el único que tenía esa escucha crítica. Porque tú al estar metida dentro, tocando con ellos pierdes esa escucha crítica. Porque yo estoy aquí, yo estoy mirando, estoy escuchando, conozco la herramienta que estás usando porque yo la hice contigo, conozco a esos güeyes que están tocando en frente porque son los que tocan conmigo hace 15 años y sé lo que pueden darse lo que no pueden darse. Entonces yo me doy cuenta de muchas cosas. Entonces para mí, ya no quiero dar nombres personales, no quiero los nombres propios porque no se trata de eso… finalmente…decir ah este sí, éste lo hice bien, este lo hizo mal porque para el punto de tu de tu de tu investigación de doctorado no es muy relevante, pero para una estructura como la que tú propones toca generar una estrategia para que todo el mundo se monte en el barco.

H: Eso es interesante porque de hecho te iba a preguntar si podrías profundizar un poco más en eso. ¿Qué tipo de estrategias crees que ayudaron o ayudarían en el caso de que no funcionara la puesta en práctica?

D: Bueno, entonces te decía que yo para mí, el primer error tuyo es de casting. Yo para desarrollar una pieza así la había establecido con más poquita gente. Porque el tiempo que les dimos a ustedes es mayor al tiempo promedio que da cualquier ensamble para un concierto. Para desarrollar un proyecto, si en vez de tener 8 intérpretes tienes tres o cuatro, tienes más tiempo para profundizar y si estás en esta onda colaborativa, no es porque tengas más colaboradores que va a ser mejor si no es por lo que puedas potencializar. Acá colaborador, ¿qué es lo que puede ofrecer cada colaborador para sacar lo más profundo de él? Entonces por ejemplo yo tu pieza la hubiera hecho sin percusión, sin electrónica, sin alto, sin CB. Entonces es mucho más lo que te puede dar un músico como Anne que un músico como Arturo, para ese tipo de cosas. Eso no lo puedes tú saber a priori, lo tienes que investigar.

H: ¿Y en ese sentido cómo describirías la dinámica de grupo más concretamente?

D: Yo creo que, si yo no estoy ahí para regañarlos, se hubiese estancado un poquito el proceso, porque el problema es piezas colaborativas para mí es que cuando todo el mundo participa hay mucha riqueza, pero cuando uno de los músicos empieza a tirar para atrás también tiene una inercia. Alguno reaccionaba como si la culpa de lo que tienen que tocar fuera tuya, y tú lo que les pedías era colaborar y crear, da un poco de generosidad, ¡qué falta de fantasía!
Por otra parte, tenías músicos que sí respondían…otros entre medias… pero tampoco es culpa suya. Tú estás un poco en el medio porque había gente como X que llega con sus partituras que nadie puede tocar porque están mal y por otro lado Salomé que no sabe escribir partituras porque es artista gráfica y luego estás tú que sí sabes escribir partituras, pero no quieres escribir partituras porque quieres experimentar otra cosa. Entonces en ese sentido, tú eres la más lúcida de todos porque

sabes lo que estás haciendo, no porque que no puedas hacer otra cosa, ¿me entiendes? y en eso te convierte un personaje muy interesante para mí. Lo que tú estabas buscando es muy interesante en términos composicionales.
Pero entonces para que funcione tienes que hacer algo diferente: primero disminuir la cantidad de músicos para poder tener más tiempo de trabajo. Segundo, me hubiera pasado más tiempo con cada uno de los personajes preparando el vocabulario común porque se está trabajando sobre la semántica del significado y el significante y pasaron demasiado tiempo practicando la cosa pero no trabajando sobre los significados de los significantes. La última cosa es que los significantes hubieran podido ser de pronto menos evidentes, menos idiomáticos.

H: ¿dices por ser clichés de un sistema, como es la música contemporánea?

D: Sí. Todos van a tener una respuesta similar. Pero ¿qué pasa si tú pones un Significante que va a abrir… escondido entre toda esa… que todavía unos que eran casi onomatopeyas? Como un primer grado… después otros como el poliphony que ya tienen un grado más de interpretación… pero Entonces yo, si tuviera que hacer la pieza, cambiaría un poco el input, porque está muy interesante el útil.
Hubo una pieza similar que hicimos John (DJ Muchacha), donde hablaba a los músicos desde un audífono, pero él pasó más tiempo trabajando en los conceptos con los músicos
pasó un poco de tiempo más que tú con cada músico generando ese vocabulario común. hubo más tiempo para trabajar con cada uno de los personajes.

Por eso yo hubiese escogido un trío, trabajando tres horas con cada uno e investigando qué es el amarillo para ti, qué es X para mí, para poder elegir. Entonces el riesgo de estas estructuras es que necesitas apoyo.

H: Es interesante también el rol que juega la partitura tecnología, todo lo que estabas hablando, que crea un sistema en sí y tiene un efecto distinto en cada músico dependiendo del tipo de músico que eres, pero también del tipo de personalidad. Más allá de la técnica instrumental.

D: Sí, Bueno pero también diría que es de generosidad de amor a lo que haces. Y por qué siento que es muy difícil trabajar con estos putos músicos de conservatorio…

H: En ese sentido, ¿que qué rol juega la partitura?

D: Si les escribes una partitura muy difícil se van a poner a trabajar. Si no bueno, no van a pasar el mismo tiempo porque entonces no les gusta pensar a los pendejos porque están educados para ser unos f…. ejecutantes.
Conozco ejemplos de un compositor (M. Suarez) que me dice: yo siempre le pongo un pedazo instrumental súper difícil durante cada pieza para que si tengo que estudiar y entonces yo estoy

seguro de que todo el mundo va a llegar más o menos preparado y es absurdo. Entonces está supeditado una estrategia de trabajo a tus ideas estéticas. Pero porque si lo que tienes que hacer es pensar y ser generoso entonces no lo vas a hacer.
Entonces yo trabajaría con músicos que van a trabajar porque quieren llegar a crear algo. Lo que tú estás haciendo no es para todo el mundo. Entonces si quieres seguir desarrollando este tipo de proyectos tienes que pensar en cuáles son las personas indicadas para desarrollar eso porque eso es como las cosas lindas de la vida, que no son para todo el mundo.

H: Bueno, es una de las cosas que quiero investigar y probar, de hecho, es una de las cosas que estoy intentando estudiar.

D: No vas a llevar de camping a alguien que odia las fogatas y el campo…

H: Pues sí, pero es cierto que a veces es difícil sacar a la gente de sus roles aprendidos.

D: Entonces por un lado tienes que mirar cuales son esos roles y por el otro desarrollar técnicas para venderles tu idea para que entren en tu juego y eso no es fácil. Porque finalmente todos ellos son gente con la que se puede hacer cosas, pero dentro de ellos hay mucha diferencia y yo sé que le puedo hacer una persona a otra.

Cuando yo escribí una pieza para ellos que tomé unas decisiones que tú no podías tomar cuando hiciste lo tuyo porque tú no los conocías, porque yo llevo con ellos trabajando 15 años y sé que funcione y que no funciona.
Yo traje un músico a tocar que sabía que funcionaba e iba a tirar de los demás, iba a crear esa dinámica. Era una estructura abierta, colaborativa…pero mi idea sonó como yo lo tenía en la cabeza, porque tomé una serie de decisiones como traer a X, como controlar el registro, el tiempo, los silencios…

D: otra cosa, cómo controlar los silencios… algo muy pendejo que tú no tenías en tu vocabulario era tacet. No tenías silencio.

H: Bueno, no tenía silencios porque los silenciosos los creaba yo cuando no les daba input. Además, el silencio no es el mismo cuando el músico está preparado para hacer algo en expectativa, que el silencio de “closure”, la actitud es distinta…

D: también tú piensa me faltaron tacets. Como esa tensión y atención que trae el silencio. Y en esta pieza están esperando… si mirando su partitura y repente: silencio… y tome, por ejemplo, otras decisiones diferentes… en una parte les mostraban, cuánto debía durar la nota que deberían tocar y en otra parte no sabiendo… que yo lo sé porque yo conozco el tiempo, el algoritmo… que cuando no sepan que es lo que va a pasar cuanto va a durar estén así con una actitud súper tensa… y si estoy

haciendo silencio, cuánto tiempo, tengo que hacer silencio? y no Simplemente relax, cómo cuándo le dices al percusionista: 101 compases de silencio antes de tu golpe en los timbales entonces saca la revista y se pone a ver Facebook y cuando la directora se prepara pues ya casi…
Si no sabes si estás haciendo silencio y no sabes si va a durar 10 o 20 segundos y te va a cambiar y no sabes lo que viene entonces estás preparado. Entonces el silencio es súper eficaz. Están siempre así como con una tensión y funciona muy bien porque no se pueden ir.
Y en tu cosa había a veces esos momentos de tensión, pero como que no había una manera más para apretarlos… Tú lo sentiste en las partes de tu pieza, en un momento así (se refiere al principio, a la tensión), después se iban soltando porque ya lo tenía en escrito. Había ese cambio de actitud, que eso es súper interesante. Pero para mí lo más interesante, o sea, casi que valía la pena hacer tres piezas distintas.

H: Con los otros músicos con los que he estado hablando, surgió el tema de la libertad, tanto desde el punto de vista sobre todo creativo, como ellos como músicos, y algunos decían que donde menos libre se sentían eran las partes más abiertas. Porque no podían… estaban tan tensos que la tensión no les dejaba desarrollar, no los dejaba expandir o llevar al máximo su técnica musical.

D: ¿Viste? Y eso es muy diciente porque eso es lo que te está queriendo decir es que… es que hay algo en tu hipótesis que tiene algo que es muy bonito y yo no te estoy diciendo que tu hipótesis no funcione, porque funciona, sino que para que funcione mejor hay que hacer todo un trabajo con los intérpretes para que puedan encontrar la libertad ahí dentro.

Appendix C. Workplan for Survey and Tests. Second case study

Survey ICE

(30-45 min experience)

- Impartiality of the composer: they don't know me so they do not know what I expect from their answers/reactions. This is already a statement, because usually the reactions of the musicians are strongly determined by their willingness to "please" the composer or to fulfill her musical ideas.

Tasks:

1) Watch this video and respond sonically with your instrument to the screen inputs (2-3')

2) Take this DISC test. You have to put yourself in an imaginary situation that fits into your work as a group musician (a jam session, a rehearsal, etc…). It can refer to only one of the musical genres you play (classic, jazz, contemporary, pop, rock, etc). All your answers have to be consistent with this situation.

After taking the test, send us the results and describe the situation you had in mind.

https://www.123test.com/disc-personality-test/index.php

3) Watch this video again and respond sonically with your instrument to the screen inputs (2-3')

4) Answer the following questions

- You are jet-lagged in the Tokyo airport, sitting and waiting for your next flight. You are listening to some music with your headphones on. What song/piece are you listening to?
- Which is the song/piece that makes you nostalgic?
- Which is the song/piece that makes you feel most energetic?

5) Take the following test:

https://musicaluniverse.io/basic/

6) Watch this video again and respond sonically with your instrument to the screen inputs (2-3')

Appendix D. Musical test result. Wendy Richman (excerpt)

These traits are not a classification or psychopathology, but are rather a description of characteristics that are present to some degree in all people. These traits emerge across cultures around the world and are caused by genetic and environmental factors.

Your Openness score: Average (25 to 75th Percentile)
Those high on Openness have an appreciation for aesthetics and the arts. They tend to be liberal, have active imaginations, and are inner-directed. The opposite of Openness is closed-mindedness.
Your Conscientiousness score: High (76 to 91st Percentile)
Those high on Conscientiousness are self-disciplined, strive for achievement, and prefer order. They like to have things planned in advance rather than to do things spontaneously.

Your Extraversion score: Very High (92 to 97th Percentile)
Those high on Extraversion are talkative, sociable, and assertive. The opposite end of Extraversion is Introversion. Whereas Extraverts get energy from being with other people, Introverts get energy from being alone.

Your Agreeableness score: Average (25 to 75th Percentile)
Those high on Agreeableness get along with others. They are be modest, cooperative, and tender minded. However, because of their avoidance of conflict they can find leadership positions challenging and difficult.

Your Emotional Stability score: Low (9 to 24th percentile)
Those high on Emotional Stability are self-assured, confident, and do not have difficulty with self-esteem. The opposite pole of Emotional Stability is Neuroticism. Those high on Neuroticism tend to be easily upset, angry, and anxious.

Music Facts.
• People high on Openness have the most diverse playlists.
• On average, people high on Openness prefer music that is more complex and sophisticated.
• Jazz musicians and their fans tend to be high on Openness because the moment-to-moment shifts of improvisation is appealing to the yearning for new experiences orientation of the Openness mindset.

• Openness is a significant predictor of musical ability in both musicians and non-musicians.
• Science has shown that some of the foremost musical geniuses of the 20th century scored high on Openness, including the jazz saxophonist, John Coltrane.
• On average, people who score high on Extraversion prefer music that is more contemporary and is more energetic and rhythmic. Vocalists tend to score higher on Extraversion than other personality traits, coinciding with the role of most singers who are “center stage” and in the “spotlight”.
• Jazz musicians are typically low on Conscientiousness.

Appendix E. DISC test results (sample)

Jennifer Curtis (excerpt).

DISC Personality Model

To help you understand the DISC model of personality here are definitions of the four factors measured.

Dominance Describes the way you deal with problems, assert yourself and control situations.

Influence Describes the way you deal with people, the way you communicate and relate to others.

Steadiness Describes your temperament - patience, persistence, and thoughtfulness

Compliance Describes how you approach and organize your activity, procedures and responsibilities.

Your DISC personality type

Your unique sequence of scores characterizes you in a specific way. The positive impact you are likely to make on people is:

You have a strong inner motivation to assertively create and implement new ideas.

Josh Modney (excerpt).

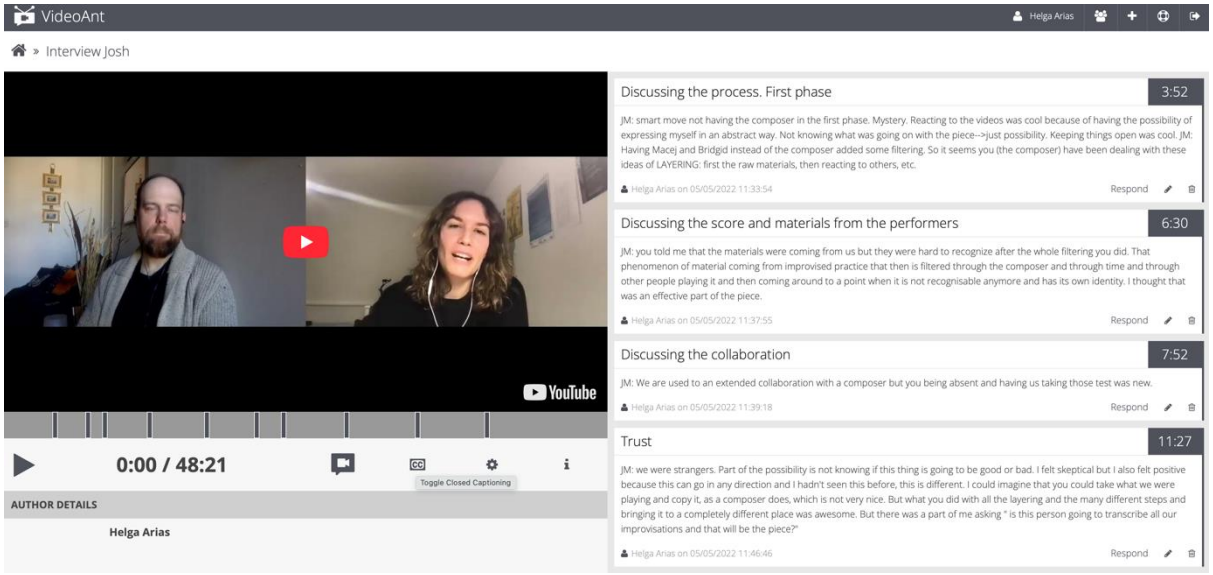
Your DISC personality type

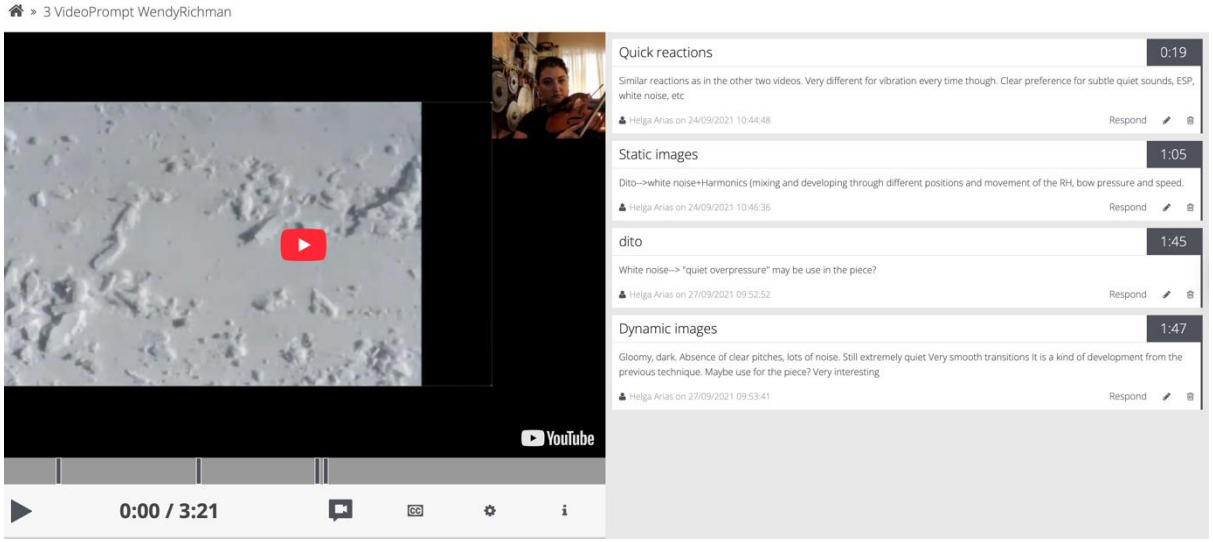
Your unique sequence of scores characterizes you in a specific way. The positive impact you are likely to make on people is:

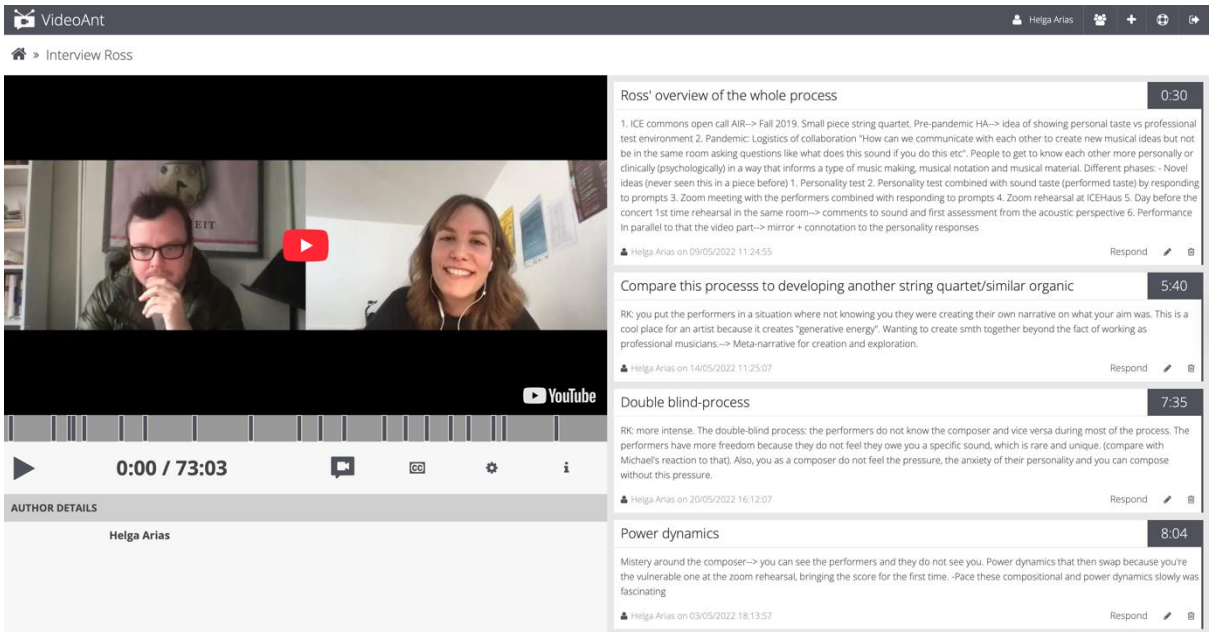
You are a clear thinker. You have an inner need to be objective and analytical. You like to pursue a definite course of action.

You respond to logic rather than emotion. You are likely to be particularly good at handling challenging technical assignments. You have a strong inner motivation to attain personal goals.

Appendix F**. Examples of Video annotation on interviews. Second case study**

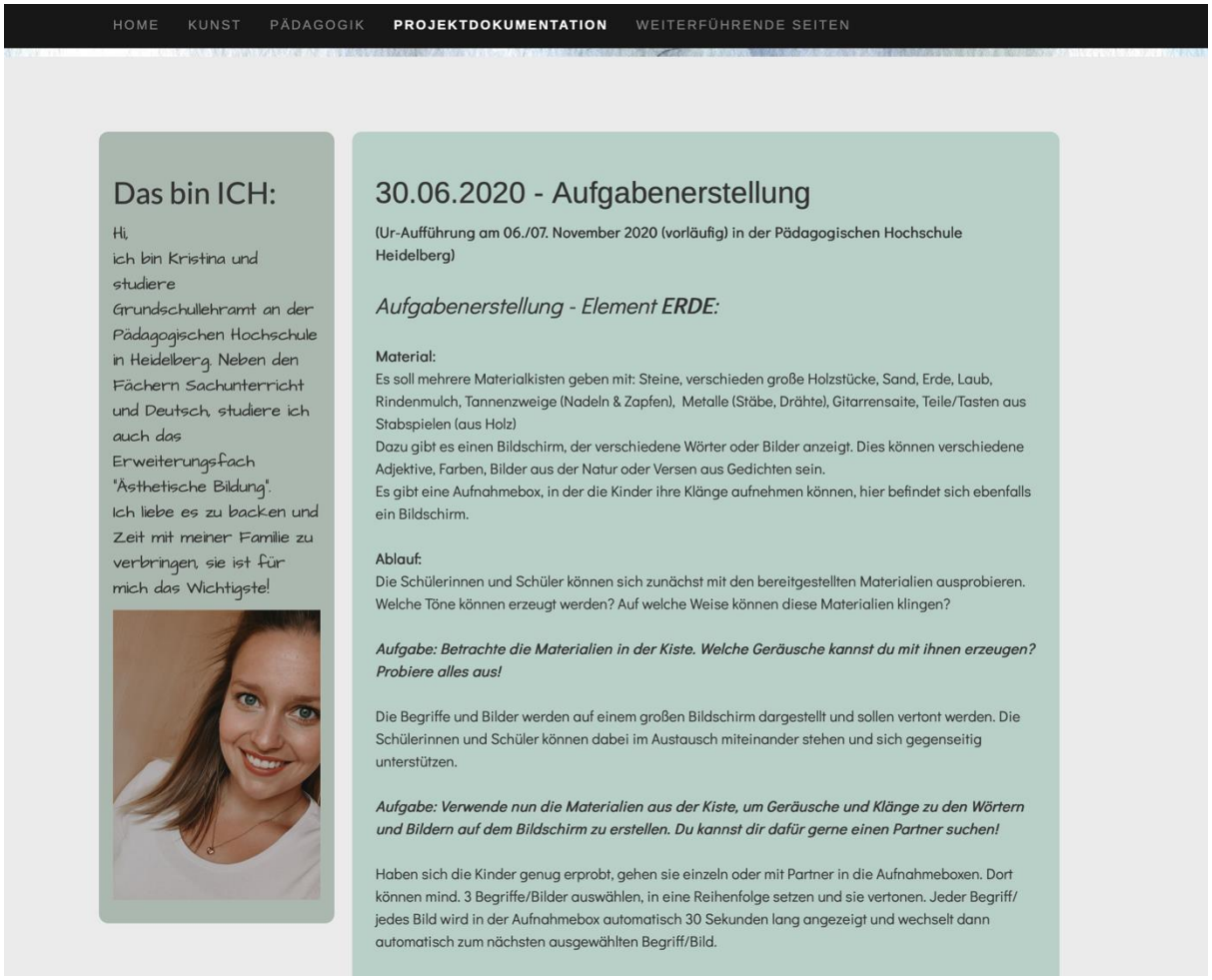






Appendix G. Excerpts of students' blogs. Third case study.

Kristina Predikant



Aufgabe: Wähle drei Wörter oder Bilder aus, die du vertonen und aufnehmen möchtest. Bei der Aufnahme müsst ihr ganz leise sein, damit nur eure Klänge zu hören sind! (Genauere Instruktion zur Funktion der Aufnahmestation notwendig)

Somit können die Kinder, nach einer Übungsphase, ihre eigenen Klänge erzeugen und festhalten - diese sind dann mindesten 1:30 Minuten lang. Die Klänge können zu den Bildern und Begriffen zugeordnet werden. Die einzelnen Partituren könnten dann an den Processing-Stations weiter bearbeitet werden.

Partitur:

Bildschirm-Präsentation
Ich könnte mir vorstellen, dass eine Präsentation dieser Art auf dem Bildschirm abläuft. Die Kinder sollen Klänge zu den einzelnen Begriffen/Bildern/Versen erstellen.
Element_Erde.pdf
Adobe Acrobat Dokument [2.3 MB]

Download

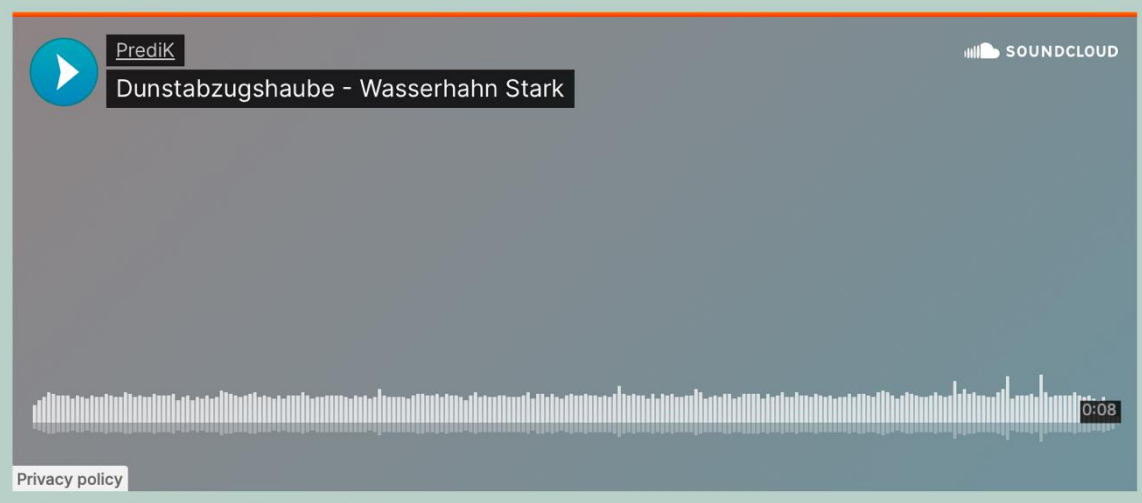
Beispiel Partitur:

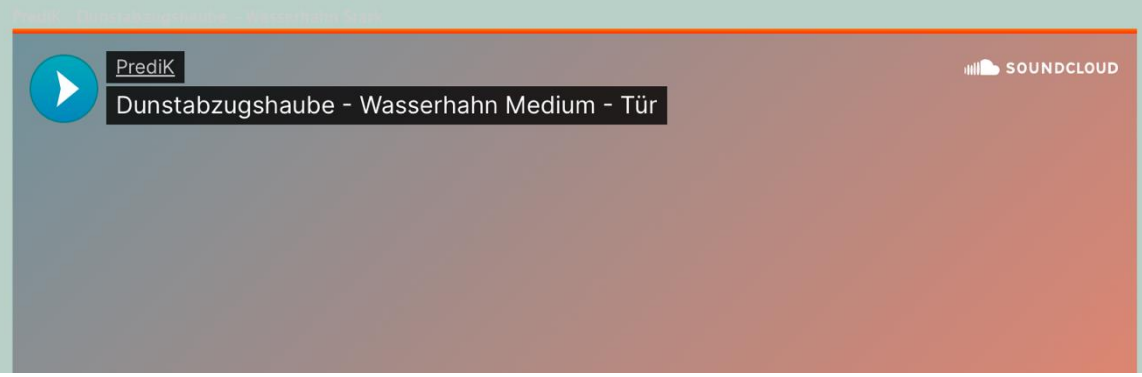
3. "Waldes Nacht": Waldstimmung, mit dem eigenen Körper und den Elementen des Waldes eine "Waldstimmung" erzeugen
4. Cello, Kontrabass (auch Element Holz wird aufgenommen), Töne erzeugen auf Saiten, Korpus verwenden, genauere Anweisungen notwendig

- Zwei Eimer mit Matsch: Rhythmus damit erzeugen
- Dunkle, schwere Töne die man mit dem Begriff "Erde" assoziiert
- Holz reiben, klopfen, reiben, kratzen > Erden + Feuer, Vermischung der Elemente
- Sand auf Metallplatte rieseln lassen
- Dunkle Töne auf Saiten streichen lassen oder mit Münze kratzen
- Wald: Schall, Laub; kleinen Wald aufbauen mit Laub am Boden

TO DO:
- Didaktische Ideen zur Klangerzeugung

15.06.2020 - Remix





Erzeuge mit einem Partner ein eigenes Echo. (Kinder spiegeln sich)
-> Wie nah muss ich am Mikrophon stehen, wenn ich die Hauptstimme und das Echo bin?

Station 4:

Materialien: Cello, Kontrabass, komplette Instrumente und Einzelteile, Orchesterstellen die die Möglichkeiten des Instruments zeigen > Sample daraus erstellen und weiter Töne hinzufügen und mitmachen
> freie Ergänzung
> Töne von Helga Arias die begleitet werden sollen?

Aufgabenstellung:

1. Unterstütze das Orchester mit weiteren Tönen/Klängen!
2. Bereichere das Orchester mit experimentellen Klängen auf dem ...!

Reflexionsphase:
Wie agieren deine Töne mit der vorhandenen Melodie?

16.06.2020

- zwei Kreise der Komposition: **äußerer Kreis** > Klänge erzeugen; **innerer Kreis** > Struktur, Komposition findet statt

Erklärungen zu Komposition/ Struktur der Klanginstallation:

- Aufnahme-Stationen: Mikrofone; Platz zur Klangerzeugung; bekommen Aufgaben bzw. Nachrichten mit Anforderungen (Helga Arias entscheidet, was die Nachricht anzeigt); **WIR:** *Aufgaben hierfür erstellen;* 4 Aufnahmestationen: Wasser, Luft, Erde, Feuer , **maximal 3 SuS** zusammen an einer Station
- Processing-Stationen: ist mit einer Aufnahmestation verbunden, es gibt eine direkte Verbindung, Klänge werden manipuliert; App mit "MAX MSD" (Beispiel: Foley Sound Effects); jede Processing-Station hat unterschiedliche Möglichkeiten zur Tonbearbeitung > wir können entscheiden, wie viel Freiheit gegeben wird

Mögliche Aufgaben für die Aufnahme-Stationen (Anweisungen zur Klangerzeugung): ***ERDE***

1. Freie Station mit Materialien (Aus Alltagsgegenständen Töne erzeugen) "Erzeugt einen ... Klang", kann wechseln und evtl. mit Bildern verknüpft werden (ästhetische Erfahrungen sammeln, Gefühle & Zustände vertonen)
2. Rhythmisches "Matschen"

23.06.2020

Zielformulierungen für die Aufgabenerstellung/Unterrichtsmodule:

- Förderung von Offenheit für neue Klänge (Schneider zitiert Radu Malfatti: "wenn wir mit Kindern arbeiten ist es wichtig - meines Erachtens -, dass wir sie mit neuen Parametern konfrontieren. Nicht das Allgemeingültige nochmals wiederholen, sondern sie mit neuen Formen vertraut machen. Kinder sind naturgemäß offen für neue Impulse, sie sollten sie auch bekommen." (19)
- Im gesamten Arbeitsprozess sollten Gespräche/Reflexionen/Beurteilungen über das Vorgehen, die Ergebnisse, die Ideen eingebunden sein.
- Wie werden die Ergebnisse besser? Gibt es Möglichkeiten zum Üben? (Katalog bei Schneider, S.14)
- Sind die Aufgaben, die in den Modulen stehen, offen? Fördern sie die Suche nach neuen, unkonventionellen Klängen? Fordern sie das Gestalten einer eigenen ästhetischen Klangwelt?
- Wird künstlerisches Denken und Handeln ermöglicht?
- Die Frage der Präsentation/Inszenierung der Ergebnisse sollte thematisiert werden

ERDE

Station 1:

Materialien: Steine, verschieden große Holzstücke, Sand, Erde, Laub, Rindenmulch, Tannenzweige (Nadeln & Zapfen), Metalle (Stäbe, Drähte), Gitarrensaite, Teile/Tasten aus Stabspielen

Begriffe vertonen: Farben, Adjektive, Verse aus Gedichten

- Brauntöne
- bedrohlich
- finster
- dunkel

Präsentationsform:
- "Begriffe" auf PowerPoint zum selbstständigen Weiterklicken und Auswählen
- gleichbleibender Platz für Aufgabenstellungen? Gibt Sicherheit und Orientierung

Aufgabenstellung:

1. Verwende die Materialien aus der Kiste, um die Begriffe und Sätze auf dem Bildschirm zu vertonen.
2. Verwende die Materialien aus der Kist, um Klänge/Töne/Geräusche zu den Begriffen auf dem Bildschirm zu erzeugen.
3. Lass dich von den Begriffen auf dem Bildschirm inspirieren und erzeuge Klänge, Geräusche und Töne.

4. Nutze die Gegenstände aus der Kiste, um deine Gefühle/Empfindungen die die Begriffe in die auslösen, auszudrücken

Wie werden die Töne aufgenommen?
- Mikrophon bei Kiste aufstellen
- Klebemikrophon auf Gegenstände

Offene Fragen:
- Wie findet eine Reflexion statt?

Station 2:

Thema: Punkte und Striche, Symmetrie

- graphische Partituren
- Vorgegebene und Freie > auf Magnetwand (offenes Setting mit Möglichkeit zum Ausprobieren)

Materialien:
- Matsch-Eimer
- Magnetwände + Stifte

Aufgabenstellung: (Müsste im Workshop vorher erklärt werden)

1. Versuche die geometrischen Formen auf der Magnetwand in einen Rhythmus zu verwandeln. Unten findest du Platz um dir auch einen eigenen Rhythmus auszudenken.

Reflexionsphase:
Könnte jemand, der die Formen nicht kennt, deinen Rhythmus aufzeichnen? (Rhythmusdiktat)
Hat die Größe der Form eine Auswirkung?
Klingt ein Kreis immer gleich?
Wie ordnest du die geometrischen Formen den Klängen zu?
Gibt es unterschiedliche Matschtechniken, die unterschiedliche Klänge erzeugen?

Station 3:

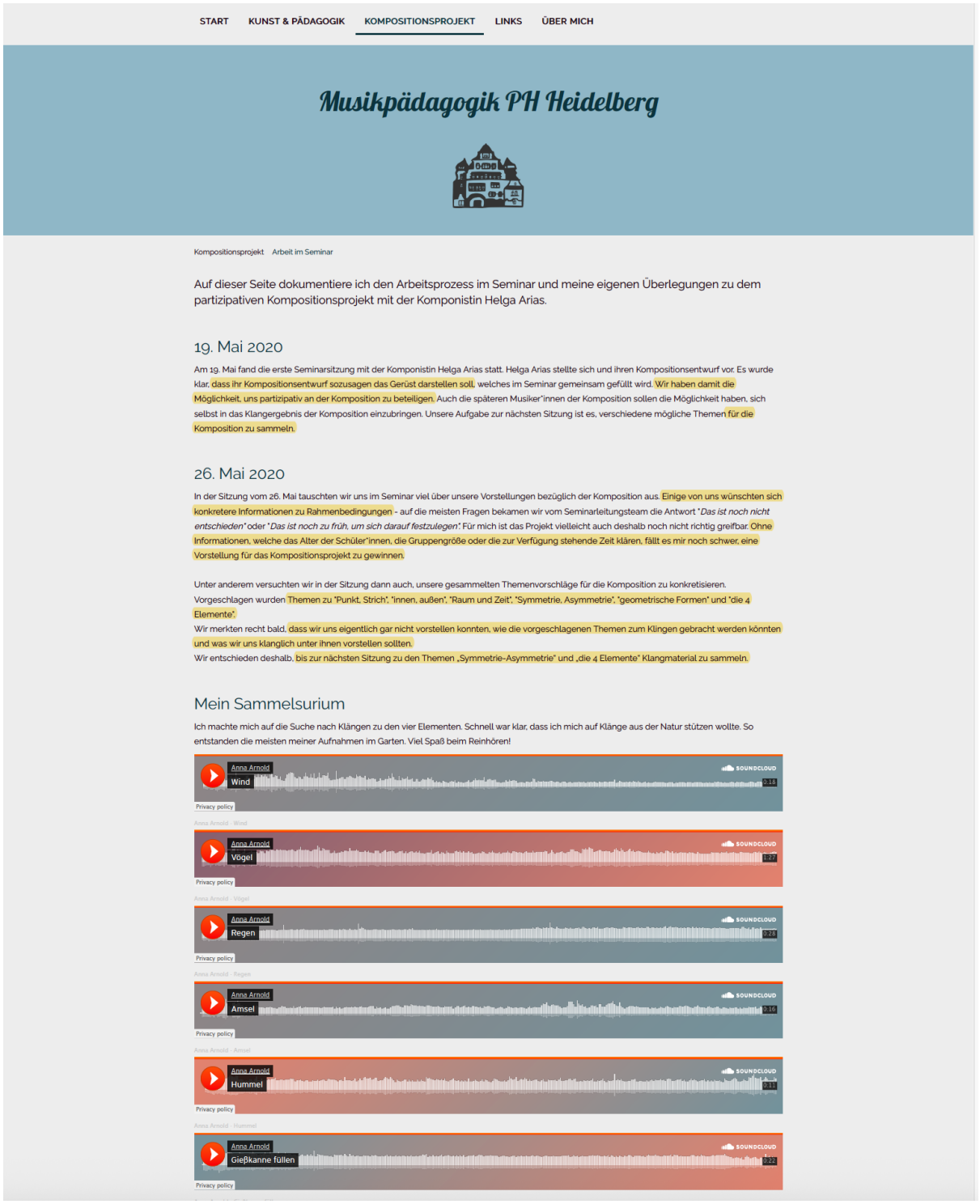
Materialien: die eigene Stimme und den eigenen Körper, Technik die die Stimme zum "hallen" bringt, arbeiten mit Echoeffekt; zu Beginn Töne nachstellen über Kopfhörer, sich erproben

Aufgabenstellung:

1. Erzeuge mit deiner Stimme und deinem Körper Geräusche und Töne des Waldes.
2. Erstelle ein Echo zu dem, was du hörst.

Reflexionsphase:
Aus den kennengelernten Klängen und Tönen etwas Eigenes herstellen.

Anna- Theresa Arnold



START KUNST & PÄDAGOGIK KOMPOSITIONSPROJEKT LINKS ÜBER MICH

Musikpädagogik PH Heidelberg

Kompositionsprojekt Arbeit im Seminar

Auf dieser Seite dokumentiere ich den Arbeitsprozess im Seminar und meine eigenen Überlegungen zu dem partizipativen Kompositionsprojekt mit der Komponistin Helga Arias.

19. Mai 2020

Am 19. Mai fand die erste Seminarsitzung mit der Komponistin Helga Arias statt. Helga Arias stellte sich und ihren Kompositionsentwurf vor. Es wurde klar, dass ihr Kompositionsentwurf sozusagen das Gerüst darstellen soll, welches im Seminar gemeinsam gefüllt wird. Wir haben damit die Möglichkeit, uns partizipativ an der Komposition zu beteiligen. Auch die späteren Musiker*innen der Komposition sollen die Möglichkeit haben, sich selbst in das Klangergebnis der Komposition einzubringen. Unsere Aufgabe zur nächsten Sitzung ist es, verschiedene mögliche Themen für die Komposition zu sammeln.

26. Mai 2020

In der Sitzung vom 26. Mai tauschten wir uns im Seminar viel über unsere Vorstellungen bezüglich der Komposition aus. Einige von uns wünschten sich konkretere Informationen zu Rahmenbedingungen - auf die meisten Fragen bekamen wir vom Seminarleitungsteam die Antwort *"Das ist noch nicht entschieden"* oder *"Das ist noch zu früh, um sich darauf festzulegen"*. Für mich ist das Projekt vielleicht auch deshalb noch nicht richtig greifbar. Ohne Informationen, welche das Alter der Schüler*innen, die Gruppengröße oder die zur Verfügung stehende Zeit klären, fällt es mir noch schwer, eine Vorstellung für das Kompositionsprojekt zu gewinnen.

Unter anderem versuchten wir in der Sitzung dann auch, unsere gesammelten Themenvorschläge für die Komposition zu konkretisieren. Vorgeschlagen wurden Themen zu "Punkt, Strich", "innen, außen", "Raum und Zeit", "Symmetrie, Asymmetrie", "geometrische Formen" und "die 4 Elemente".
Wir merkten recht bald, dass wir uns eigentlich gar nicht vorstellen konnten, wie die vorgeschlagenen Themen zum Klingen gebracht werden könnten und was wir uns klanglich unter ihnen vorstellen sollten.
Wir entschieden deshalb, bis zur nächsten Sitzung zu den Themen „Symmetrie-Asymmetrie" und „die 4 Elemente" Klangmaterial zu sammeln.

Mein Sammelsurium

Ich machte mich auf die Suche nach Klängen zu den vier Elementen. Schnell war klar, dass ich mich auf Klänge aus der Natur stützen wollte. So entstanden die meisten meiner Aufnahmen im Garten. Viel Spaß beim Reinhören!

Anna Arnold Wind
Anna Arnold Vögel
Anna Arnold Regen
Anna Arnold Amsel
Anna Arnold Hummel
Anna Arnold Gießkanne füllen

Mögliche didaktische Umsetzung

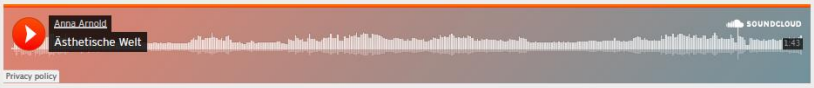
Den vier Aufnahmestationen der partizipativen Komposition könnte je ein Element zugeordnet werden. Die Stationen würden dann bestückt mit verschiedenen Materialien und Instrumenten. Beispiele für solche Materialien und Instrumente sind im Folgenden zu finden.

Station Wasser
Schalen mit Wasser, Eiswürfel, Becher, Gießkanne, Löffel, Röhrchen, Regenrohr, Ocean Drum, Sprühflasche
Station Luft
Föhn, Windspiel, Staubsauger, Blasebalg, Fächer, Blasinstrumente oder verschiedene Mundstücke
Station Feuer
Streichhölzer, Wunderkerzen, Kamingeräusche → evtl. vorher aufnehmen lassen, Feuermelder, Geräusch Martinshorn → evtl. vorher aufnehmen lassen
Station Erde
Globus, Erde, Schaufeln, Rechen, Sieb

Die Klangkörperauswahl könnte mit der Teilnehmer*innengruppe in der Vorbereitung auf das Klangprojekt gemeinsam erarbeitet werden. So könnte man mit dem Musikprojekt in der Grundschule beispielsweise fächerübergreifend an ein Sachunterrichtsthema Natur und die vier Elemente anknüpfen. Es könnten gemeinsam Klangkörper gesammelt und hergestellt werden. Die Teilnehmer*innen sollten die Möglichkeit haben, eigene Klangideen einzubringen und damit teilzuhaben an der partizipativen Komposition.
Des Weiteren müsste man sich Gedanken darüber machen, ob den Stationen in irgendeiner Form Partituren zur Verfügung gestellt werden sollen, und wenn ja, in welcher Form.
Möglich wären beispielsweise Videos von Sturm, Bilder und grafische Notationen. Die Partituren könnten von den Teilnehmer*innen selbständig gesammelt und zusammengestellt werden. So könnten sich verschiedene Gruppen schon vorher intensiv mit einem der Elemente auseinandersetzen und während der Recherche bereits Vorstellungen zum Klang ihres Elements und möglichen Umsetzungen sammeln.

Meine ästhetische Klangwelt

Aus meinen gesammelten Klängen zu den vier Elementen habe ich eine ästhetische Klangwelt zusammengebastelt. Sie kann in der folgenden Audiodatei angehört werden.



Anna Arnold · Ästhetische Welt

ARBEITSGRUPPE „FEUER"

Im Seminar entschieden wir uns gemeinsam für das Thema "die 4 Elemente". Dieses Thema ist für verschiedene Altersgruppen greifbar und sowohl mit Grundschulkindern, als auch mit Schüler*innen mit sonderpädagogische Förderbedarf, aber auch mit Schüler*innen in der Sekundarstufe und mit Erwachsenen geeignet. Wir teilten uns im Seminar in vier Arbeitsgruppen auf, die sich jeweils mit einem Element beschäftigten. Ich bin Teil der Arbeitsgruppe zum Element "Feuer".

16. Juni 2020

In der Sitzung vom 16. Juni machten wir uns Gedanken über das Element Feuer und überlegten, wie man „Feuer" mithilfe von Alltagsgegenständen, (präparierten) Instrumenten und der eigenen Stimme zum Klingen bringen kann, welche für die experimentelle Musik geeignet sind.

- Funkensprühen (Wunderkerzen)
- Rascheln (Kassenbon zerknüllen, Konsonantenaneinanderreihungen)
- Prasseln (Snare Drum mit Tuch, Besen)
- Zusammensturz von Verbranntem, beispielsweise umfallendes Holz (morsches Holz, Rinde)
- Feuerwerk (platzende Luftballons/Luftpolsterfolie, Luft aus Ballon entweichen lassen → Raketenpfeifen, Oboenrohr aus Strohhalm → Quietschen, Glissando singen)
- Feuer als Gefahr (Sirene, Feuermelder)
- Waldbrand/bedrohlicher Klang (Saiten eines präparierten Klaviers)
- Gefühle (Schreie, „Au" → Verbrennung, Wohlklänge „mmm...")

Ideen für didaktische Anleitungen

Beispielsweise könnten die Teilnehmer*innen im Workshop selbst im Anschluss an das Experimentieren mit Feuerklängen ihre eigene Feuerwerkspartitur erstellen, welche ihnen später in der Aufnahmestation Orientierung gibt. Nebenstehende Partitur ist mit wässrigen Wasserfarbkleksen auf Papier entstanden, welche mit dem Mund in verschiedene Richtungen gepustet wurden.

So könnten die Klänge zur Feuerwerkspartitur klingen. Verwendet wurde ein aufgepusteter Luftballon, aus dem schubweise durch Auseinanderziehen der Luftballonöffnung die Luft gelassen wurde. Dies produzierte quietschende Geräusche, welche an steigende Feuerwerksraketen erinnern können.

Anna Arnold - quietschender Luftballon

23. Juni 2020

In der Sitzung vom 23. Juni fühlten wir uns abermals vor viele offene Fragen gestellt. Wir taten uns unglaublich schwer, ein didaktisches Konzept zu erarbeiten, ohne genaue Rahmenbedingungen der Komposition und zum Workshop zu kennen, der der Musikzieraktion vorgeschaltet werden soll. Hier unser aktueller Ansatz mit Ideen, Fragen und Unsicherheiten:

Element Feuer

Aufgabenstellung:

- Eine konkrete Aufgabenstellung zu formulieren fällt uns zu aktuellem Zeitpunkt schwer, da einige Parameter noch nicht geklärt sind und wir eine mögliche Aufgabenstellung gerne auf unsere Zielgruppe und die Gegebenheiten zuschneiden würden.

Ziele:

- klangliche Parameter erfassen und erforschen
- Gefühle, Atmosphäre, ästhetische Erfahrung
- aus alltäglichen Materialien "Feuerklänge" entstehen lassen
- Transformation: Idee-Klang-Spielpartitur
- Offenheit, Freiräume, in die sich die Teilnehmer*innen einbringen können
- Durchbrechen von Hörgewohnheiten, Abkehr von rein tonalen Elementen

Erwartungen und Hoffnungen:

- Die Teilnehmer*innen sollen von sich aus Klänge entwickeln, Raum und Anregungen dazu sollten vorhanden sein.
- Die Teilnehmer*innen sollen selbst über verwendete (Klang)materialien entscheiden und diese evtl. auch selbst beisteuern oder herstellen.

Rahmenbedingungen:

- Die Klänge werden an den Aufnahmestationen aufgenommen und an den Prozessingstationen nochmals verfremdet. An den Hauptstationen werden die Klänge der verschiedenen Stationen zusammengeschnitten. Wer entscheidet über die Verfremdung? → Umgang mit Frustration
- Im Workshop entsteht kein endgültiges Ergebnis. Jeder Aufführungsprozess mit Workshop führt zu einem anderen Klangergebnis.
- An den Stationen sollen inspirative Bilder, Partituren o.ä. liegen, an denen sich die Teilnehmer*innen bei der Klangerstellung orientieren können oder sollen.

Offene Fragen:

- Soll die Klangfindung an der Aufnahmestation oder im Workshop stattfinden?
- Findet im Workshop bereits eine Differenzierung nach Aufnahmestation (Element) statt?
- Welche Rolle spielt der Workshop genau im Rahmen dieser partizipativen Komposition?
- Reicht die Zeit? Sollte die Beschäftigung mit den Elementen und das Experimentieren mit Klängen ausgelagert werden? Wie viel Zeit steht in dem Workshop zur Verfügung?

Didaktische Überlegungen:

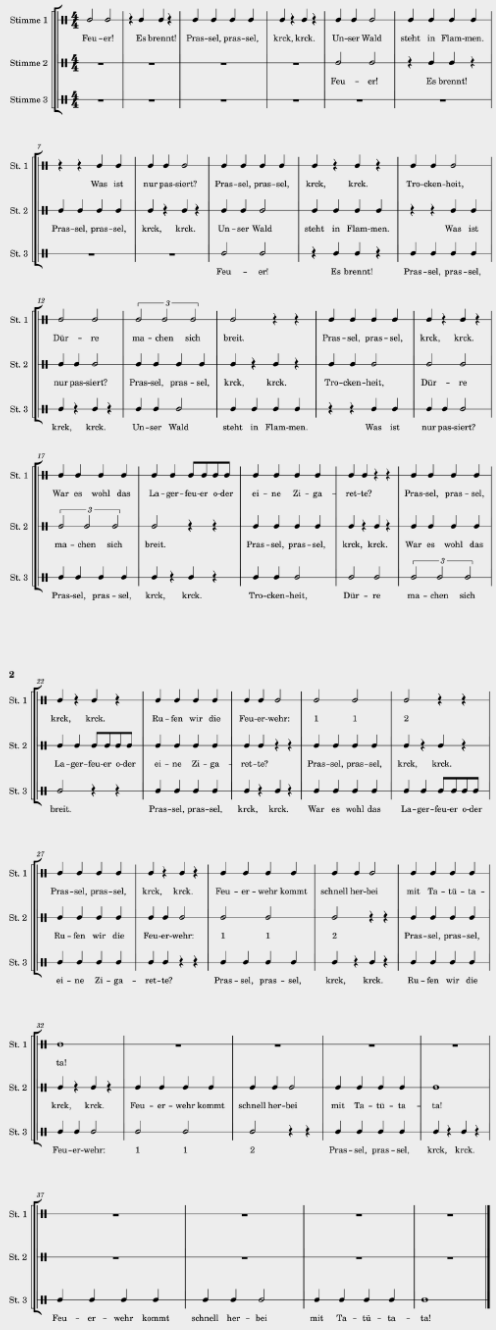
- Greifen wir einen Aspekt von Feuer heraus? Oder wollen wir die ganze Bandbreite unserer Ideen mit in den Workshop und die Aufnahmestationen nehmen?
- Wie schaffen wir ein richtiges Maß zwischen Offenheit und Führung der Teilnehmer*innen?

Inspirationen im Workshop und an der Aufnahmestation: Kunst/Bilder/Literatur/Musik

- Wasserfarben und Strohhalme für Pustebilder
- Papier in Feuerfarben
- Fotos
- Matchbox Feuerwehrauto
- Geruch von Feuer (z.B. angezündetes Streichholz)
- Gedichte zu Feuer
- Zeitungsartikel über Waldbrand o.ä.
- Video von Kamin und Feuerprasseln
- Ausschnitt Feuerwerksmusik von Händel
- Idee zum Thema Waldbrand: Sprechfuge

- Feuer lebt von den Elementen Luft und Erde, denn ohne diese beiden kann es nicht entstehen und nicht bestehen bleiben

Waldbrand-Fuge



30. Juni 2020

In unserer Zoom-Sitzung am 30. Juni trafen wir uns nur für eine kurze Einführung und Klärung des Arbeitsauftrages.
Unsere Aufgabe ist es, eine Musizieraktion zu gestalten. Endlich bekamen wir konkretere Angaben, die unsere Ideen nach und nach in eine Struktur brachten. Die folgenden Rahmenbedingungen gaben uns den Ansporn, unsere Ideen zu filtern und mit der konkreten Umsetzung zu beginnen. Die Unterrichtseinheit soll circa 20-30 Minuten lang sein. Aus ihr sollen 1-3 Minuten Klang entstehen, welcher an den Aufnahmestationen genutzt werden soll. Die Teilnehmergruppe wird aus etwa 6 Personen bestehen, von denen 1-3 Personen gleichzeitig an die Aufnahmestation können. Entweder wird in zwei Gruppen hintereinander aufgenommen oder die anderen Gruppenmitglieder werden Aufgaben an der Prozessingstation bekommen.
Als Grundidee für die Gestaltung der Musikzieraktion zu "unserem" Element Feuer orientieren wir uns an der Musikzieraktion "Steinklänge" von Hans Schneider. Bei ihm wird das Musiziermaterial in einen Kreis gelegt, in dem die Musizieraktion zu großen Teilen stattfindet und der den geschützten Rahmen gibt, um sich mit dem Instrumentarium auszuprobieren. Der geschlossene, mit Steinen gelegte Kreis "[erzeugt] eine fast magische Wirkung" (Schneider, 2017, S. 62). Auch wir möchten mit unserem Setting gerne eine magische Wirkung erzeugen und die Teilnehmer*innen eintauchen lassen in eine ästhetische Erfahrungswelt.

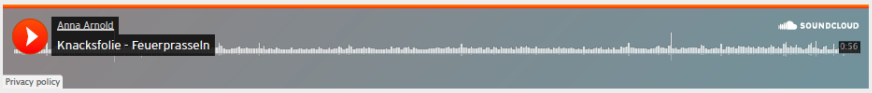
Didaktische Anleitung der Musizieraktion

Prasseln des Feuers

Setting: Atmosphäre wie in einer dunklen Höhle. Zurückversetzen in eine alte Zeit (z.B. die Steinzeit). Es herrscht Dunkelheit und Kälte. "Feuer" spendet Wärme und Geborgenheit in diesem Setting. Das Feuer ist für die Zubereitung des Essens für die Menschen damals lebensnotwendig.
In einem abgedunkelten Raum ist ein Kreis mit Hockern gestellt. Besonders eindrücklich wäre als Raum ein alter Steinkeller oder eine Jurte. Auf jedem Hocker liegt ein Stück Luftpolsterfolie (Maße mindestens 20x20cm). Unter jedem Hocker steht ein elektrisches Teelicht, damit die Teilnehmer*innen die Plätze finden. In der Mitte des Kreises ist eine Feuerstelle angedeutet. Hier sind mehrere elektrische Teelichter beieinander aufgestellt und Transparentfolie in den Farben orange, gelb und rot als Feuer drapiert. Der Weg vom Eingang zu den Plätzen ist mit Luftpolsterfolie ausgelegt.

Die Teilnehmer*innen kommen gemeinsam ruhig in den Raum. Sie laufen barfuß über die Luftpolsterfolie.
Am Platz werden die Teilnehmer*innen dazu aufgefordert, mit den Händen über die Luftpolsterfolie auf ihrem Hocker zu streichen. Anschließend nehmen die Teilnehmer*innen ihre Luftpolsterfolie in die Hand und setzen sich.
Die Lehrperson zerknüllt ihre Luftpolsterfolie langsam und ausdrucksstark und lässt einzelne Luftpolster platzen. Die Teilnehmer*innen machen es nach. Danach wechselt die Lehrperson die Tempi und die Teilnehmer*innen machen mit. Anschließend laufen alle durch den Raum und zerknüllen die Folie in unterschiedlichen Tempi. Die Idee ist, dass dies dem Klangeffekt von prasselndem Feuer nahekommt.

Wie Feuerprasseln mit Luftpolsterfolie auch schon mit einer Person klingen kann, ist in der folgenden Audiodatei zu hören.



Anna Arnold - Knacksfolie – Feuerprasseln

Am Ende des Feuerprasselns durch Luftposterfolie wird das Licht heller gestellt, alle gehen auf ihre Plätze zurück.

Die Lehrperson stellt Impulsfragen:

- Wie geht es euch in der Dunkelheit? Was bewirkt das Licht/Feuer?
- Wir haben gerade verschiedene Geräusche mit Luftpolsterfolie hergestellt. Was könnten diese mit Feuer zu tun haben?

Die Teilnehmer*innen kommen darüber ins Gespräch.

Arbeitsphase 1:
Welche Geräusche lassen sich noch mit Luftpolsterfolie herstellen?
Es schließt sich eine kurze Ausprobierphase an. Jede*r Teilnehmer*in wird dazu aufgefordert, sich einen Klang auszusuchen, der für sie*ihn nach Feuer klingt. Diese Klänge werden reihum präsentiert. Jede*r soll sich seinen*ihren Klang merken.

Gemeinsam wird überlegt, was man machen kann, um sich die Klänge zu merken. Es kann darauf eingegangen werden, dass Komponisten Partituren erstellen, um ihre Ideen festzuhalten und damit auch andere sie spielen können.

Arbeitsphase 2:
Den Teilnehmer*innen steht festes Papier in der Größe A5 und Wachsmalkreiden zur Verfügung. Zunächst wird gemeinsam überlegt, wie der Luftpolsterfolienklang der Lehrperson aufgemalt werden kann. Anschließend malt jede*r seinen*ihren Klang.
Jede*r zeigt reihum seine*ihre Partiturkarte und macht den Klang zweimal vor. Die anderen wiederholen den Klang einmal und versuchen ihn sich zu merken. Der*die Komponistin des Klangs darf die anderen bei Unklarheiten korrigieren (auf wertschätzenden Umgang achten). Anschließend werden die Karten eingesammelt. Die Lehrperson hält abwechselnd einzelne Karten hoch, dessen Klang die Gruppe dann gemeinsam produziert.

Im Anschluss an den Workshop werden die Karten an die Aufnahmestation gelegt. Dort dürfen sich die Teilnehmer*innen dann fünf Karten aussuchen, sie in eine Reihenfolge bringen und diese Klangreihenfolge dann zu einem Klangergebnis von 1-3 Minuten aufnehmen.

Klangbeispiele

Mögliche Geräusche mit Luftpolsterfolie könnten sein:

- Zerknüllen der Luftpolsterfolie
- mit Händen an Luftpolsterfolie reiben
- platzen lassen der Luftpolsterfolie
- Laufen auf Luftpolsterfolie
- mit Luftpolsterfolie wedeln
- Luftpolsterfolie auf den Boden patschen

Die Audiodateien geben einen Einblick in eine mögliche klangliche Umsetzung. Die dazugehörigen möglichen grafischen Partiturkarten sind am linken Rand der Audiodatei zu sehen.

Anna Arnold - Zerknüllen der Luftpolsterfolie

Uraufführung der partizipativen Komposition

Die Uraufführung der partizipativen Komposition, die wir im Rahmen des Seminars mit Inhalt und Leben gefüllt haben, fand Mitte Oktober 2021 in der Bundesakademie für musikalische Jugendbildung in Trossingen statt. Aufgrund eines Praktikums konnte ich selbst nicht dabei sein. Ich möchte hier dennoch einen Einblick in das Ergebnis des Projektes geben, mit dem wir uns als Seminargruppe ein Semester lang beschäftigt haben. Mit einem Video der Uraufführung soll der Blog an dieser Stelle seinen Abschluss finden. Tiefere Einblicke in die Uraufführung und die Arbeit der einzelnen Stationen zu den vier Elementen finden Sie hier.

arnolda@ph-heidelberg.de
Pädagogische Hochschule Heidelberg

Appendix H. Example of Mail correspondence.

José Luis Escrivà

Quartet Més enllà de la quarta dimensió

1 mensaje

Jose Luis Escrivà Córdoba <rioescriva@hotmail.com> 6 de marzo de 2024, 14:26
Para: "aphelga@gmail.com" <aphelga@gmail.com>

Querida Helga,

Soy Jose Luis Escrivà. Te paso la grabación y la partitura de mi cuarteto de cuerda, en el cual trabajé de forma colaborativa con los músicos del Fabrik Quartet, incluso más allá de la parte técnica-instrumental. En mis últimas obras estoy trabajando algunos aspectos psicológicos y de la personalidad desde diferentes prismas.

Para arrancar el proceso de composición hicimos un primer encuentro por videoconferencia para conocernos, descubrir nuestras inquietudes musicales y discutir sobre proceso de composición de la obra.

Algunas de las preguntas que plantemos fueron:

- Compositores y compositoras preferidos/das de música clásica preferidos/das
- Obras del repertorio clásico que nos habían marcado a nivel personal y/o profesional
- Obras de música clásica y contemporánea que nos gustaría interpretar, sea a solo, para cuarteto o en otras formaciones
- Músicas escondidas preferidas. Otras músicas, fuera de la clásica contemporánea que nos gsuta y escuchamos habitualmente.

Fruto de esta entrevista, hay algunas músicas que aparecen citadas en el cuarteto (de manera más o menos explícita), como por ejemplo Schubert Fantasie in C Major, Mozart Clarinet Quintet K581 movement 1, Brahms Trio for Klavier, Klarinet und Cello op 114 ,4th movement, Fantasia para violín y piano op. 47 de Schönberg.

Hablamos estos días.

Un saludo,

JL

https://www.youtube.com/watch?v=ujtAYiweqK0&list=PL9ngJW1EH7w49EyM_4QY4xShR87GjZD2j&index=4

Meës enllaĚ de la quarta dimensioë revisioë definitiva final editada amb portada.pdf
2947K

Appendix I. Audiovisual documentation of the case studies.

The recorded audio and video examples are included in the Research Catalogue Exposé:

https://www.researchcatalogue.net/shared/6c82214c089a8c6d224d9c5923a84fdf